# **BYU** | CIVIL & ENVIRONMENTAL ENGINEERING

## IRA A. FULTON COLLEGE

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

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

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

Two main challenges were identified in the preliminary phase of our project:

- 1. We recognize the necessity of tracking our progress and lead measures in a way that is organized, effective and professional. At this point in time our team does not have a systemic tool or method by which to record our goals and progress
- 2. As a collective unit our knowledge on the topic of asphalt pavement design and failure methods is narrow due to inexperience

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

Our approaches to the individual problems are summarized below:

- 1. Through brainstorming our team was able to propose several potential options for tracking our lead measures. As a team we agreed that a gantt chart would be the best way to map out the tasks that lie ahead, and would allow us to visualize the critical path of the project. Our team is currently deciding on how to implement the gantt format
- 2. We decided that our best source of knowledge would be our faculty advisor and sponsor Dr. Guthrie. We will proactively ask Dr. Guthrie to point us towards materials that will train us for the tasks at hand, and help us to think critically about the asphalt design. As a team we decided on ASTM tests to review as study until we are able to get more information from Professor Guthrie

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

- Our team is deciding between one of the three options for a gantt chart template
  - a. Borrow a template from the Construction Management program
  - b. Utilize SmartSheet software's pre-built spreadsheet
  - c. Create a gantt chart in-house

Each of these methods has its own pros and cons and as a team we are currently weighing these options with a decision still pending

- 2. This weekend we determined to read standards for the following tests:
  - a. ASTM D2041 Rice method for max. specific gravity
  - b. ASTM D6927 Marshall stability test

We will read and discuss these as a group over the weekend

### 4) Project status & summary

We feel positive that the steps we took this week will help us work towards our goal of 50% project completion before the end of the year. Our next main hurdle will be to collect field data with Dr. Guthrie and his research assistants.

Once we have obtained samples from the field our work will become more autonomous as we will be able to test the samples in the laboratory and contribute to the report write up individually.

At this time we are planning next steps and coordinating with Dr. Guthrie regarding field testing

9/28/18