RP 289 – Local Calibration of “C-Values” for Common Idaho Soil Types for Use in Mechanistic-Empirical Pavement Design

- Project Description:
  This project will collect C-Value data from ITD projects over time. The C-Value is a ratio utilized by AASHTOware software to correlate laboratory-established resilient moduli with moduli back-calculated from field tests. There are three hierarchal levels of data accuracy for pavement mechanistic-empirical (ME) roadway design methodology, which is currently used by ITD. Level 1 is site or project-specific. Level 2 is based on local data. Currently, ITD uses Level 3 C-Values, which are a best estimate for a global default value. Developing a database of C-values within a dedicated stand-alone project would be cost prohibitive due to the costs of labor, traffic control, drilling, testing, and data processing involved. However, if C-values are leveraged from projects that are already planned or in process over the course of three years, a reliable database of C-Values can be created and maintained in a more cost-effective manner. Establishing this database of accurate C-values will allow for more specific and reliable data available to project designers.

- Project Objective:
  The objectives of this project include:
  - Collect C-Value data from ITD projects over a three-year period, and incorporate those values into a database for use by ITD, LHTAC, local highway districts, and Idaho municipalities.

- Estimated Completion Date: April 30, 2022

- Budget: $36,000 (total ITD share)
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