TriDurLE

National Center for Transportation
Infrastructure Durability & Life-Extension

UTC Project Information – National UTC TriDurLE	
Project Title	Development of Holistic Methodologies for Improving Asphalt Mix Durability (Yr 1)
University	Missouri University of Science and Technology (S&T) Texas A&M University the University of Utah
Principal Investigator	Drs. Jenny Liu, Fujie Zhou, and Pedro Romero
PI Contact Information	jennyliu@mst.edu, 573-341-6442 f-zhou@tti.tamu.edu, 979-317-2325 pedro.romero@utah.edu, 801-587-7725
Funding Source(s) and Amount Provided (by each agency or organization)	TriDurLE: $178,102 Missouri S&T, Texas A&M University, and the University of Utah: $178,102
Total Project Cost	$356,204
Agency ID or Contract Number	
Start and End Dates	5/1/2020-6/30/2021
Brief Description of Research Project	Asphalt mix durability have always been major concerns of all State DOTs, and they cost taxpayers billions of dollars each year to repair cracking and rutting problems. To have a durable mix, one needs to address three aspects: durable mix design, production, and placement. The objective of this project is to develop holistic methodologies for addressing all three aspects with an ultimate goal to improve asphalt mix durability. As a minimum, this project will develop (1) a systematic methodology for designing durable mixes in the laboratory, (2) a performance-related methodology for production quality control and quality assurance (QC/QA) at asphalt plants, and (3) an innovative methodology for placement acceptance in the field.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	All the methodologies and findings from this project will be summarized and documented in the final report. To facilitate implementation and transfer the technology coming out this project, the research team will reach out DOTs, contractors, and other stakeholders through publications, presentations at different conferences (such as TRB) and webinars.
Impacts/Benefits of Implementation (actual, not anticipated)	Expected research results include three holistic and implementable methodologies for durable mix design, production and placement. DOTs and contractors can use these methodologies to improve mix durability and extend pavement lives by at least 15%.

Web links • Reports • Project website	