

UTC Project Information	
Project Title	MPC-701 – Relation between Dynamic Modulus of Asphalt Material and Its Cracking Tolerance
University	University of Utah
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Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT, Office of the Assistant Secretary for Research and Technology \$40,000 Utah Department of Transportation \$50,000
Total Project Cost	\$90,000
Agency ID or Contract Number	69A3551747108
Start and End Dates	October 13, 2022 to July 31, 2023
Brief Description of Research Project	This project seeks to develop a relation by which the characteristics of the dynamic modulus of asphalt materials could be selected from a single point value such as the cracking tolerance index. The dynamic modulus is one of the primary inputs for pavement design using AASHTOWare Pavement ME®; however, obtaining those values is time consuming and requires extensive resources. Therefore, such values are often not measured and averages or default values are used instead. Not using actual values results in over/underprediction of performance and limits the capabilities of the designs. Relating the results from simpler tests that are currently used as part of the material's quality control process will allow the incorporation of local material properties into the mechanistic pavement designs resulting in more economical designs and the incorporation of life-cycle analysis.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none"> • Reports • Project Website 	