UTC Project Information

Project Title	MPC-605 – Validation of Smartphone AlertMeter® Fatigue Assessment Device for Transportation Workers
University	University of Denver
Principal Investigator	Patrick Sherry, Ph.D. Jesse Owen, Ph.D.
PI Contact Information	Patrick Sherry, Ph.D. Research Professor, NCIT University of Denver Phone: (303) 871-2495 Email: patrick.sherry@du.edu ORCID: 0000-0001-9346-6931 Jesse Owen, Ph.D. Professor University of Denver Phone: (303) 871-2495 Email: jesse.owen@du.edu ORCID: 0000-0003-2307-9447
Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT, Office of the Assistant Secretary for Research and Technology $119,597 Predictive Safety, Inc. $119,597
Total Project Cost	$239,194
Agency ID or Contract Number	69A3551747108
Start and End Dates	January 29, 2020 to July 31, 2022
Brief Description of Research Project	Driver fatigue led to two commuter train crashes in the New York area in 2016 including a Long Island Rail Road crash, which was also attributed in part to fatigue, injured over a 100 people and killed an innocent bystander. The need to identify operators fatigue levels and potential for decreased performance due to fatigue before they begin to operate a vehicle is of considerable importance as well. Once an individual has begun to operate a vehicle even more risk is encountered. The purpose of this project is to gather data designed to validate a state-of-the-art smart phone base electronic vigilance test, wherein the stimulus is presented to the study participant visually within 2 min. The proposed project will build on previous research to demonstrate the accuracy of a measure of fatigue and alertness in the transportation industry and hopefully lead to a reduction in accidents and injuries.
Describe Implementation of Research Outcomes (or why not implemented)	Having demonstrated the validity of the instrument researchers are seeking volunteers to utilize the smartphone-based app in the operational environment.

Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	The use of the AlertMeter® in operational transportation settings will increase the likelihood that driver operators will begin work at an optimal level of alertness thereby reducing the risk of drowsy driving, traffic or rules violations and crashes. Further adoption of the AlertMeter® in the operational setting will contribute to a greater degree of safety in the US Transportation system.
Web Links • Reports • Project Website	• MPC Research Report