

**DANIEL B. FAMBRO STUDENT PAPER AWARD**

**MD SHAKIR MAHMUD**

**“A COMPREHENSIVE EVALUATION OF DYNAMIC SPEED FEEDBACK SIGNS ON  
FREEWAY INTERCHANGE RAMPS”**



Congratulations to Md Shakir Mahmud for being selected to receive the 2022 Daniel B. Fambro Student Paper Award for his paper titled “A Comprehensive Evaluation of Dynamic Speed Feedback Signs on Freeway Interchange Ramps.” This award recognizes a significant paper prepared by a student member of ITE and honors the work of Daniel B. Fambro, who was a professor at Texas A&M University and an associate research engineer at the Texas A&M Transportation Institute and passed away in 1999. In naming the award in Dan’s honor, ITE recognizes his exemplary service to ITE, and his dedication to his students and the profession. The award provides ITE a means to encourage student members to investigate transportation subjects and report on independent and original research.

The Dan Fambro Award recognizes outstanding accomplishment in this area and ITE is pleased to shine a spotlight on young and talented transportation researchers.

Md Shakir Mahmud is a Ph.D. student and Graduate Research Assistant in the Department of Civil and Environmental Engineering at Michigan State University. His research interests cover topics in traffic operation and safety, traffic control devices, and intelligent transportation systems. He is currently working on multiple research projects that include evaluating the operational costs and benefits of speed feedback signs and evaluating the impacts of the 2017 legislative mandated speed limit increases in Michigan. He has served as the President of the ITE MSU Student Chapter.

His award-winning research paper examined the effectiveness of dynamic speed feedback signs (DSFS) as countermeasures to reduce curve speeds and subsequent lane departures at freeway interchange ramps. He researched the effect of DSFS installed at freeway interchange ramps on measures of driver behavior, particularly speeds approaching and entering the ramp curve, and conducted field evaluations at three freeway interchange ramps. Various DSFS configurations were tested, including longitudinal positioning of the sign with respect to the point of curvature (PC), lateral positioning of the sign at the side of the ramp, sign dimensions, interchange types, sign effects on the mainline vehicles, and temporal changes in driver behavior.

Congratulations to Mohammed for this achievement! An article based on his research will be published in an upcoming issue of *ITE Journal*.