

ITE STUDENT PAPER AWARD IN HONOR OF DANIEL B. FAMBRO

Md Roknuzzaman

“Pedestrian-Oriented Sight Distance Requirement for Safe Crossing at Mid-Block Crosswalks: Insight from a Case Study”



ITE—A Community of Transportation Professionals is proud to announce **Md Roknuzzaman**, a Ph.D. student in the Department of Civil and Environmental Engineering at Auburn University, as the recipient of the [2026 ITE Student Paper Award in Honor of Daniel B. Fambro](#).

The Daniel B. Fambro Student Paper Award recognizes a significant paper prepared by a student member of ITE and honors the legacy of Daniel B. Fambro, whose exemplary service to ITE and dedication to students and the transportation profession continue to inspire young researchers. Md’s winning paper, **“Pedestrian-Oriented Sight Distance Requirement for Safe Crossing at Mid-Block Crosswalks: Insight**

from a Case Study,” reflects the purpose of the award by advancing independent, original research on a critical transportation safety issue.

Md’s paper examines whether traditional stopping sight distance criteria, which are primarily designed around vehicle needs, adequately support safe pedestrian crossing decisions at midblock crosswalks. The study introduces and evaluates the concept of Pedestrian Crossing Sight Distance (PCSD), focusing on how the distance between an approaching vehicle and a crosswalk at the moment a pedestrian begins crossing influences driver yielding behavior.

Using an observational case study at a marked midblock crosswalk on South Gay Street in Auburn, AL, USA, Md conducted 256 staged crossing events under controlled pedestrian conditions. The site included a two-lane, two-way urban street with rectangular rapid flashing beacons, bike lanes, and a posted speed limit of 35 mph. Data were collected through video review, manual measurements, and a portable speed detector to capture vehicle speed, vehicle position, lane, vehicle type, and yielding behavior.

The research found that driver compliance is strongly influenced by both approach speed and vehicle-crosswalk distance. Overall, drivers yielded in 144 of the 256 staged crossing events, for a compliance rate of 56.3 percent. Yielding was highest when vehicles were beyond the calculated PCSD and lowest when vehicles were within shorter stopping-distance ranges. The paper’s statistical analysis showed that, at 35 mph, the probability of yielding ranged from 25 percent to 60 percent when vehicles were at stopping

sight distance, but increased to 50 percent to 80 percent when vehicles were at the calculated PCSD of 337 ft.

By connecting sight distance, pedestrian decision-making, and observed driver yielding behavior, Md's research offers timely insights for transportation professionals working to improve pedestrian safety at uncontrolled crossings. His findings suggest that future pedestrian crossing guidance and infrastructure evaluations should consider empirically observed driver compliance, rather than relying solely on vehicle-centered stopping-distance criteria.

Md Roknuzzaman's paper demonstrates the kind of thoughtful, data-driven research the Daniel B. Fambro Student Paper Award was created to recognize. ITE congratulates Md on this achievement and celebrates his contribution to advancing pedestrian safety, student research, and the future of the transportation profession.

Learn more about [ITE's Awards Program](#).