SAFER-SIM

TRB 2017 Program

Tier 1 University Transportation Center

Promoting Safety

SAFETY RESEARCH USING SIMULATION
UNIVERSITY TRANSPORTATION CENTER

Transportation Research Board

96th Annual Meeting

January 8—12, 2017

Washington D.C.

The University of Iowa

UMASS Amherst

University of Central Florida

Wisconsin — University of Wisconsin–Madison

This program organizes the sessions that include SAFER-SIM researchers or students at the Transportation Research Board 96th Annual Meeting

SAFETY RESEARCH USING SIMULATION
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Consortium Members:

University of Iowa

University of Central Florida

University of Massachusetts—Amherst

University of Puerto Rico—Mayagüez

University of Wisconsin—Madison

Session 245	Monday, January 9th | 8:00 AM—9:45 AM Convention Center, 103B Lectern

Transportation Innovations May Improve Safety

SAFER-SIM Presentation:

Implementation of Active Traffic Management Strategies for Safety of a Congested Expressway Weaving Segment

(17-00248)

Ling Wang, University of Central Florida
Mohamed Abdel-Aty, University of Central Florida
Jaeyoung Lee, University of Central Florida

Session 400	Monday, January 9th | 1:30 PM—3:15 PM Convention Center, Hall E Poster—H317

Simulation and Measurement of Vehicle and Operator Behavior

SAFER-SIM Poster:

Bicycle Infrastructure from the Driver's Seat: Evaluating Bicycle Infrastructure Using a Driving Simulator

(17-01981)

Nicholas Fournier, University of Massachusetts—Amherst
Eleni Christofa, University of Massachusetts—Amherst
Michael Knodler, University of Massachusetts—Amherst

Session 400 (continued)	Monday, January 9th | 1:30 PM—3:15 PM Convention Center, Hall E Poster—H329

Simulation and Measurement of Vehicle and Operator Behavior

SAFER-SIM Poster:

Comparative Analysis of Toll Plaza Safety Features in Puerto Rico and Massachusetts Using a Driving Simulator *(17-05393)*

Didier Valdes, University of Puerto Rico—Mayaguez
Benjamin Colucci, University of Puerto Rico—Mayaguez
Donald Fisher, OST-R
Michael Knodler, University of Massachusetts—Amherst
Bryan Ruiz-Cruz, University of Puerto Rico—Mayaguez
Johnathan Ruiz Gonzalez, University of Puerto Rico—Mayaguez
Enid Colón Torres, University of Puerto Rico—Mayaguez
Ricardo Garcia Rosario, University of Puerto Rico—Mayaguez
Foroogh Sadat Hajiseyedjavadi, University of Massachusetts—Amherst

Session 459	Monday, January 9th | 3:45 PM—5:30 PM Convention Center, Hall E Poster—L402

Current Research on User Information Systems

SAFER-SIM Poster:

Safety Investigation of Combining Ramp Metering and Variable Speed Limits Strategies on Urban Freeways: A Simulation Study *(17-01045)*

Kirolos Haleem, University of Alabama, Huntsville
Mohamed Abdel-Aty, University of Central Florida

Session 459 (continued)	Monday, January 9th | 3:45 PM—5:30 PM Convention Center, Hall E Poster—L409

Current Research on User Information Systems

SAFER-SIM Poster:

Analysis of the Impact of Fog Warning systems on Driver Behavior Under Reduced Visibility Conditions Using a Driving Simulator *(17-02698)*

Yina Wu, University of Central Florida
Mohamed Abdel-Aty, University of Central Florida
Juneyoung Park, University of Central Florida
Ryan M. Selby, University of Central Florida

Session 650	Tuesday, January 10th | 1:30 PM—3:15 PM Convention Center, Hall E Poster—P501

Traffic Control Device Challenge: Promote Innovation in Traffic Control Devices to Accommodate Both Human and Machine Drivers

SAFER-SIM Poster:

Supplemental Warning Traffic Signal to Improve Pedestrian and Bicycle Safety *(17-22039)*

Ibrahim Alsghan, University of Wisconsin—Madison

Session 802	Wednesday, January 11th | 8:00 AM—9:45 AM Convention Center, Hall E Poster | Practice Ready Paper—G299

Highway Safety Performance

SAFER-SIM Poster:

Effects of Using High Occupancy Toll Lanes on Safety Performance of Freeways *(17-06894)*

Muamer Abuzwidah, University of Sharjah
Mohamed Abdel-Aty, University of Central Florida

Session 805	Wednesday, January 11th | 8:00 AM—9:45 AM Convention Center, 103A Lectern | Practice Ready Paper

Vehicle Technology, Communication, and Automation

SAFER-SIM Presentation:

Evaluation of Vehicle Owners' Understanding of their Advanced Vehicle Safety Technologies: Knowledge Score Analysis *(17-03777)*

Ashley McDonald, University of Iowa
Julia Friberg, University of Iowa
Daniel McGehee, University of Iowa
Natoshia Askelson, University of Iowa