



Recent Accomplishments

- Researchers developed a hardware-in-the-loop (HIL) system to conduct field testing of connected and automated vehicle (CAV) applications. In October 2017, they completed HIL testing of the signalized intersection approach/departure (SIAD) application at Turner-Fairbank Highway Research Center (under "**Hardware-in-the-Loop Testing of Connected Automated Vehicle Applications**" project).
- In October 2017, "**Developing Analysis, Modeling, and Simulation (AMS) Tools for CAV Applications**" began. This project will develop and validate model logic for selected CAV applications—and conduct real-world AMS case studies of CAV implementation scenarios.
- In-house researchers submitted 10 papers to be considered for the upcoming 2018 Transportation Research Board (TRB) Annual Meeting. Seven papers have been accepted for presentation, and three are in review for publication in the *Transportation Research Record*.

Upcoming Notables

- The first release (a beta version) of the Federal Highway Administration (FHWA) Driver Model Platform will be available (on the [OSADP](#)) in January 2018. The platform houses and interfaces specialized driver models with existing microsimulation packages. It includes the FHWA Work Zone Driver Model (under "**Developing the FHWA Driver Model Software for Practical Application**" project) and will soon include in-simulation diagnostics and post-simulation analysis tools.
- A new effort, funded by the Traffic Analysis and Simulation Transportation Pooled Fund (TPF) (see [TPF-5\(176\)](#)), "**Trajectory-Level Investigation of Recurring Bottlenecks for Calibration and Cost-Effective Remedies**", will begin soon. Researchers will collect and analyze vehicle trajectories during the formation, continuation, and dissipation of congestion at freeway sites—to enhance microsimulation algorithms for improved accuracy and to seek less costly mitigation strategies.
- Draft "critical needs" chapters of the *Transportation System Simulation Manual* will be developed in November 2017 and finalized in January 2018. Please contact [David Hale](#) if you would like to be involved in the review process (under "**Development of a Transportation System Simulation Manual (TSSM)**" project).

News

- Chris Melson will be leaving FHWA in November 2017. He will become the Program Manager for the Transportation Consortium of South Central States ([Tran-SET](#)), located at Louisiana State University (LSU).

Getting Involved

- These updates are associated with follow-up, biannual webinars. The first webinar is tentatively scheduled for November 27, 2017, from 2 to 3 p.m. (eastern standard time). A meeting invite will be sent out a week prior.
- Please provide feedback on what should be presented and/or discussed at this webinar by completing a short [survey](#).
- Please provide feedback on what research we should be conducting by using this [link](#). Feedback will be collected, analyzed, and summarized—and will help guide future research efforts.

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<https://www.fhwa.dot.gov/research/tfhrc/projects/operations/ams/index.cfm>

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