Emerging Transportation Technologies & Their Potential Impacts to Traffic Safety

Abstract
This is a challenging time in the field of transportation – during the past decade, U.S. has more than 30,000 traffic fatalities on our roadways annually and many cities are experiencing traffic congestion and delays. This is also an exciting time to be part of transportation profession as new and emerging technologies are being introduced that could drastically reduce traffic related injuries and fatalities and alleviate delays, moving people and goods from point A to point B safer and quicker. This presentation will explore some of potential safety benefits on emerging transportation technologies such as advanced driver assistance systems as well as connected and automated vehicles. Additionally, impediments that could prevent the realization of full potential on these emerging technologies and future research gaps will be discussed.

Speaker
Dr. C. Y. David Yang is the Executive Director of AAA Foundation for Traffic Safety and he oversees the day-to-day operations of this non-profit research and education organization. Previously, he was with U.S. Department of Transportation (U.S. DOT), Federal Highway Administration (FHWA). Dr. Yang was the recipient of FHWA Administrator’s Leadership Award and U.S. DOT Secretary’s Partnering for Excellence Award in 2014. Prior joining FHWA, David worked in private consulting firms and U.S. DOT’s Volpe National Transportation Systems Center.

Dr. Yang has authored/co-authored more than 50 peer-reviewed journal articles, conference papers, and government reports on subjects related to transportation safety, operations, planning, and Intelligent Transportation Systems. Dr. Yang is currently on several advisory boards of transportation research centers/programs. He attended Purdue University and received his Bachelor of Science, Master of Science, and Doctor of Philosophy degrees in the field of civil engineering. In April 2018, he was honored with the Civil Engineering Alumni Achievement Award from Purdue University.