

**Wednesday,
July 26th, 2017
12:00-1:00pm**

**UC Center
Sacramento
1130 K Street
Room LL3
Sacramento, CA 95814**

Lunch will be served

For questions contact
Brooke Miller-Jacobs at
(916) 445-5161 or
bmmillerjacobs@ucdavis.edu

**To register go to:
uccs.ucdavis.edu/events
RSVP by
July 23rd!**

“The Future of Connected and Self-Driving Cars: Assessing the Tradeoffs Between Safety, Mobility, and Environmental Innovation”

**Professor Matt Barth
University of California, Riverside**

Safety, mobility and environmental sustainability represent the three cornerstones when evaluating the effectiveness of connected and automated vehicles (CAV). Most CAV applications are typically developed with the major goal of improving one of these key elements. However, very few CAV studies have been conducted that provide a holistic assessment of all three of these elements. Many CAV applications may have co-benefits in the sense that they can improve a combination (usually two) of safety, mobility and environmental sustainability. On the other hand, some CAV applications may actually have trade-offs between these different elements. We describe a holistic assessment and examine the co-benefits and tradeoffs between safety, mobility and the environment for a variety of CAV applications. Historically, much of the policy on new transportation technology is driven by enhancing safety as put forth from the National Highway Traffic Safety Administration (NHTSA). In terms of CAV technology, it is important for policy makers to also realize the potential mobility and environmental benefits.

Matthew Barth is the Yeager Families Professor at the College of Engineering, University of California-Riverside. He is part of the intelligent systems faculty in Electrical and Computer Engineering and is also serving as the Director for the Center for Environmental Research and Technology (CE-CERT). He received his B.S. degree in Electrical Engineering/Computer Science from the University of Colorado in 1984, and M.S. (1985) and Ph.D. (1990) degrees in Electrical and Computer Engineering from the University of California, Santa Barbara. Dr. Barth joined the University of California-Riverside in 1991, conducting research in Intelligent Systems.

Dr. Barth is active with the U.S. Transportation Research Board serving in a variety of roles in several committees. He was awarded the TRB Pyke Johnson Award for TRB outstanding paper in 2007. In 2011, he was one of the winners of the Connected Vehicle Technology Challenge sponsored by U.S. Department of Transportation’s Research and Innovative Technology Administration (RITA). He has also served on a number of National Research Council (NRC) Committees. Dr. Barth has also been active in IEEE Intelligent Transportation System Society for many years and member of the IEEE ITS Society Board of Governors.

