ARTS22 Breakout Session Title:

250-Shark Tank: Is it Time for AVs to Grow Up?

Session Contact/Organizers:

- Richard Mudge, President, Compass Transportation and Technology Session Contact
- Alain Kornhauser, Professor of Operations Research and Financial Engineering, Director of the Program in Transportation, Princeton University.
- Brad Templeton, technology guru.
- Kara Kockelman, Professor of Transportation Engineering, University of Texas, Austin
- Steve Polzin, Research Professor, Arizona State University
- Baruch Feigenbaum, Senior Managing Director Transportation Policy, Reason Foundation
- Marc Scribner, Senior Transportation Policy Analyst, Reason Foundation

Session Description

Four 45-minute debates, each on a different topic, each with "sharks" to help stimulate an active and open conversation. No long speeches (max ten minutes). Active audience participation encouraged. The topics cover policy issues that have strategic implications but have received limited attention within the AV community.

A panel (sharks) begins the debate. Rather than developing a consensus, the goal is to provide insights on the topic and stimulate reactions from the audience. A sense of humor is encouraged.

Goals/Objectives/Outputs

An open debate regarding the policy, economic, and technology implications of several AV topics with strategic implications for the economy and society. Topics for this year cover the strength of the economic and social implications for AVs and implications for how the public sector might best manage the industry – plus a review of which technology will win the day.

- Is there a business case for aTaxis?
- AVs differ from tradional cars and trucks in many ways. Do these fundamental differences justify a new Automated Vehicle Administration?
- Given the hype regarding AVs, is there a case for AVs in general?
- The leading AV firms promote different technologies lidar versus cameras, for example. Is there a winner here? Will AI help solve this?

Agenda

Shark Tank emphasizes non-stop debate. Gaining new insights is our goal, rather than reaching consensus. The debate will be interesting and we hope entertaining. Most importantly, we expect to stimulate response from the audience.

Richard Mudge will moderate each session – and add his own opinion from time to time.

1:30 PM – 2:15 PM: Is there a business case for automated taxis? Description:

- Private firms have raised billions of dollars based on this belief but to date all we have seen are a few demos, field tests, and a stream of simulation studies. The academic community and many consultants agree. Mercedes and others now say they plan to sell AVs to individuals All this makes one wonder whether or not there is a fundamental problem here?
- Speaker Susan Shaeen, University of California, Berkeley; Professor, Civil and Environmental Engineering

*** 5 Min Break ***

2:15 PM – 3:00 PM: Should we establish an Automated Vehicle Administration in US DOT?

- Automated vehicles have different operating, regulatory, and economic characteristics than do traditional cars and trucks. An independent AVA (Automated Vehicle Administration) would allow DOT to encourage more rapid deployment. Rather than covering all vehicle types, regulations would focus on the unique characteristics of AVs.
- Speaker Finch Fulton, Locamation; Vice President of Policy and Strategy

*** 5 Min Break ***

3:00 PM - 3:45 PM: Is there a general case for automated vehicles?

- Are we still lost in a world of hype? Public relations have played an important role in the development of cars for many decades. The debate over greenhouse gases has encouraged concern for increased use of cars (SOVs and ICEs in particular). This often seems to generate skepticsm about AVs.
- Speaker Daniel Sperling, University of California, Davis; Director of the Institute of Transportation Studies.

*** 5 Min Break ***

3:45 PM - 4:30 PM: Tesla vs. Waymo vs. Mobileye

- Which of these radically different approaches to collecting real-time data win the day? How much of this debate is based on cost differences? How will costs and capabilities change over time? Will Al help solve these issues?
- Speaker Jack Weast, Mobileye; Vice President and CTO, Corporate Strategy Office.



Sharks:

- Richard Mudge Moderator, President Compass Transportation and Technology.
- Alain Kornhauser, Princeton University; Professor of Operations Research and Financial Engineering,
- Brad Templeton; Consultant on Robocars and Exponential Technology.
- Baruch Feigenbaum; Reason Foundation; Senior Managing Director Transportation Policy.
- Allanté Whitmore; SAFE; Director Autonomous Vehicle Initiative.