Session 15: CAV Scenarios for High Speed Controlled Access Facilities

- Panel providing perspectives
  - Infrastructure owner/operator (Caltrans)
  - Infrastructure vendor (3M)
  - Vehicle/supplier (DENSO)
  - Emerging technology/toll collection (VTA)

- Discussed four high-speed scenarios from an operational perspective
  - work zone/incident
  - truck automation/platooning
  - mixed traffic
  - transit/shared mobility

Sponsoring TRB Committees:
- Freeway Operations
- Managed Lanes
- ITS
- Highway Capacity & Quality of Service
- Traffic Control Devices
Session 15: CAV Scenarios for High Speed Controlled Access Facilities

Summary of Breakout Discussion:

- CAVs offer improvement in safety, throughput, and congestion
- Consider the entire transportation network
- Many opportunities in data sharing, but also challenges
- Need for simulation tools to assess impacts / operations
- When/where can platoons operate (truck, car, bus, mixed)
- Change the way we design work zones based on CAV
- How to integrate CAVs into managed lane operation spectrum
Session 15: CAV Scenarios for High Speed Controlled Access Facilities

Recommended Action Items:

• No significant changes in infrastructure geometry in the near term
  • Opportunities for better planning, road markings, and signing
• Need to continue dialogue between OEMs/Suppliers and Infrastructure Owners/Operators
• 2 Synthesis Topics Identified
• Great input for Research Needs Statements for the sponsoring committees