AV Safety Subcommittee Update

• Met in July and September

• Current Co-chairs
  » Kenton Brine, NWIC
  » Captain Dan Hall, WSP

• Three primary focus areas
  » Public Education
  » RCW 46.37.480 Television viewers—Earphones
  » Vehicle Crash Data for Safety Analysis
Public Education
Challenges

Lack of understanding

Confusing driver assistance with “self-driving”
Public Education Plan

- Audience groups
- Key messages
- Existing resources and channels
- Prioritization
- Action plan
RCW 46.37.480
Television viewers—Earphones
(1) No person shall drive any motor vehicle equipped with any television viewer, screen, or other means of visually receiving a television broadcast when the moving images are visible to the driver while operating the motor vehicle on a public road, except for live video of the motor vehicle backing up. This subsection does not apply to law enforcement vehicles communicating with mobile computer networks.

(2) No person shall operate any motor vehicle on a public highway while wearing any headset or earphones connected to any electronic device capable of receiving a radio broadcast or playing a sound recording for the purpose of transmitting a sound to the human auditory senses and which headset or earphones muffle or exclude other sounds. This subsection does not apply to students and instructors participating in a Washington state motorcycle safety program.

(3) This section does not apply to authorized emergency vehicles, motorcyclists wearing a helmet with built-in headsets or earphones as approved by the Washington state patrol, or motorists using hands-free, wireless communications systems, as approved by the equipment section of the Washington state patrol.
Vehicle Crash Data for Safety Analysis
New Data

• To measure the safety effects of ADAS and AV's requires gathering a completely new set of data

• Questions:
  » What automated technology did the vehicle have?
  » Were any automated systems engaged at the time of the crash?
  » Was the system being used in an area where it was designed to be used (operational design domain)?

• How will this information be obtained?
Insurance Institute Highway Safety (IIHS) Research

Advanced Driver Assistance Systems

- Forward automatic braking
- Rear automatic breaking
- Lane keeping
- Lane departure warning
- Blind spot detection
- Rear-end injury crashes 56%
- Backing crashes 62%
- Single-vehicle, side, head-on injury crashes 21%
- Lane change injury crashes 23%

Source: IIHS Real-world benefits of crash avoidance technologies
Data Project

Goals:

• Develop safety performance measures for ADAS and AVs
• Identify the data needed to measure the safety effects of ADAS and AVs on crashes, injuries and fatalities
• Explore the various possible methods of obtaining this data, and potential challenges and opportunities
Questions?

Captain Dan Hall, WSP
Daniel.Hall@wsp.wa.gov

Debi Besser, Program Manager, WTSC
dbesser@wtsc.wa.gov