My Car Does What?

Ryan Pietzsch
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ADTSEA 2020 Virtual Conference
• Access ADAS Resources
• MyCarDoesWhat
• Be the Hero for your students
Saving Lives Now With Automation
When Will You Own A Fully Self-Driving Car?

• Highway Data Loss Institute (HDLI) reveals how slowly ADAS Technologies are achieving penetration in the US fleet.

• Normal turnover of inventory
  • average age of cars in the US fleet = 11.6 years old.

• Electronic stability control has been available for decades and was mandated on all new passenger cars by the 2012 model year
  • in 2015 only 40% of registered vehicles were equipped with ESC.
  • full fleet penetration is not predicted until the 2040s.
How Can We Speed Adoption?
It is going to be difficult
It is going to be difficult
ADAS Deployments Work

ADAS systems appear to be working

• Backup Cameras cut backing crashes 17%
• Lane departure warning lowers all typical crashes (single-vehicle, sideswipe and head on crashes) by 11 percent and injury crashes by 21 percent
• Electronic Stability Control lowers the risk of fatal single-vehicle crashes by half and roll overs as much as 80 percent

Education is the key to adoption and proper use
What Does This Icon Represent?
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TPMS
What Does This Icon Represent?
What Does This Icon Represent?
What Does This Icon Represent?

Drowsiness Alert
What Does This Icon Represent?
What Does This Icon Represent?

Automatic Emergency Braking
Adoption Challenges

Safety Features Have Different Brand Names
Safety Features Have Different Capabilities across Manufacturers, Trim Levels and Time
Safety Feature Limitations May Not Be Intuitive or Obvious
Warning or Icon standardization issues
Automobile SAFETY FEATURES Timeline

1885 – Karl Benz invents the first automobile

1899 – First electric headlamp is introduced as option on Columbia electric car

1901 – First automobile speedometers introduced by Duesenberg

1914 – First traffic signal is installed in Cleveland

1930 – Car-mounted safety glass becomes standard on Ford to limit windscreen shattering

1938 – General Motors conducts first vehicle crash test in Milford, MI, USA
   - First driver’s education program in U.S. is launced at a HS in State College, Penn.

1939 – Quick release hand signals with the introduction of short-turn signals
   - Legislation requiring hand signals is present for the first time

1951 – First example zone concept is patented by Mercedes Benz

1958 – Chrysler Imperial is first car introduced in U.S. with anti-lock disc brakes as standard

1966 – National Traffic and Motor Vehicle Safety Act is signed into law

1968 – U.S. law requires 3-point belt in front seat of all new vehicle makes

1970 – Law requires all new vehicles in U.S. to include head restraints

1973 – General Motors introduces first commercially available air bags in Chevrolet Impala
   - Law requires all new vehicles to offer 3-point seatbelt for driver/passenger

1974 – U.S. law requiring a tailwarner system on all new vehicles
   - Law, which required bulb to flash before engine could start, was repealed

1978 – Mercedes-Benz introduces the safety belt pre-tensioner – the belt tightens in the event of intense braking or a collision

1987 – Electronic Stability Control (introduced by BMW, Bosch, Mercedes)

1995 – Volvo introduces first modern three-point seatbelt that restrains lap and shoulder
All About Today's Car Safety Features

High-tech eyes and ears that can keep you safe on the road.
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