Give Bicyclists a Brake –
the Role of Vehicles in #VisionZero

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Advocates for Highway and Auto Safety
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Driving the Safety Agenda:
Accelerating Solutions, Putting the Brakes on Problems, Getting Results

• **Our Board:**
  • Leading Property Casualty Insurers
  • Public Health, Consumer & Safety Groups & Experts

• **Our Focus:**
  • Safer Drivers, Passengers & Road Users
  • Safer Vehicles
  • Safer Roads

• **Our Strategy:**
  • State Legislatures
  • Congress
  • Executive Branch (U.S. DOT)
Three Decades of Advocacy & Safety Successes

- Rollover prevention and roof strength (2005)
- Government crash safety ratings displayed on vehicles (2005)
- Improved head injury protection (1991)
- Side impact protection (1999) and advanced side impact protection (2005)
- Airbags as standard equipment (1991) and advanced airbags (1998)
- Headlamp aiming (1997)
- Minimum sound requirements for hybrid and electric vehicles (2010)

- Rearview cameras as standard equipment and prevention of vehicle roll-away (2008)
- Child-safe power windows and upgraded door locks (2005)
- Occupant ejection prevention (2005)
- Rear Seatbelt Reminders (2012)
Reducing Deaths, Injuries & Costs on our Roadways

What Can be Done Now?

• Crash avoidance technology
  • Minimum performance requirements
  • Standard in all new vehicles

• Vehicle design changes
  • Crashes don’t have to be as traumatic or deadly

• Improved testing and information
  • Updating the New Car Assessment Program (NCAP)
Set minimum performance requirements for crash avoidance technology, require all new cars to be equipped

- **Automatic Emergency Braking (AEB)** – detects potential collision, warns driver, applies brakes if necessary. Must be responsive to all road users (vehicles, bicyclists, pedestrians, and others)
- **Rear AEB** – functions if vehicle is moving in reverse
- **Rear Cross Traffic Alert** – detects if road user is approaching from side and rear while moving in reverse, warns driver
- **Lane Departure Warning** – warns driver as vehicle approaches or crosses lane markers
- **Lane Keeping Assistance** – keeps vehicle within driving lane
- **Blind Spot Warning** – warns driver of road user in blind zone
- **Improved Headlamps** – provide better illumination of roadway and driving environment
Crash Avoidance Technology

**Forward collision warning**
- 27% Front-to-rear crashes
- 20% Front-to-rear crashes with injuries
- 9% Claim rates for damage to other vehicles
- 16% Claim rates for injuries to people in other vehicle

**Forward collision warning plus autobrake**
- 50% Front-to-rear crashes
- 56% Front-to-rear crashes with injuries
- 13% Claim rates for damage to other vehicles
- 23% Claim rates for injuries to people in other vehicle

**Lane departure warning**
- 11% Single-vehicle, sideswipe and head-on crashes
- 21% Injury crashes of the same types

**Blind spot detection**
- 14% Lane-change crashes
- 23% Lane-change crashes with injuries
- 7% Claim rates for damage to other vehicles
- 8% Claim rates for injuries to people in other vehicle

**Rear automatic braking**
- 62% Backing crashes
- 12% Claim rates for damage to the insured vehicle
- 30% Claim rates for damage to other vehicles

**Rearview cameras**
- 17% Backing crashes

**Rear cross-traffic alert**
- 22% Backing crashes

Source: Insurance Institute for Highway Safety
Why are minimum performance requirements important?
• Without them, anyone can put a system on a car and call it “AEB” without any assurance of proper function or reliability
• Will require all systems to meet a baseline level of functionality, including operating at a range of speeds and in response to all road users, including bicyclists

Why is it important they be required on all new vehicles?
• Absent a mandate, these systems will continue to be sold in high-end models or as part of luxury packages, making them cost-prohibitive for many consumers

Urge Congress to enact the 21st Century Smart Cars Act, H.R. 6284 and the Protecting Roadside First Responders Act, S. 2700/H.R. 4871
Making crashes more survivable.

• Vehicles can be designed, specifically in their front end, to lessen the severity of impacts – NHTSA should issue safety standards for the hood and bumper areas of motor vehicles for head and leg protection

• Should consider vulnerable populations including children and seniors

• Other countries are advanced in this area
New Car Assessment Program (NCAP) created in the U.S. over 40 years ago.

- “Stars on Cars” – provides consumers with a tool to determine vehicle safety

- Incentivizes safety improvements – by testing slightly above minimum requirements, with the goal of pushing manufacturers to go beyond to achieve top ratings

- Emulated by countries across the globe
NEW CAR ASSESSMENT PROGRAM (NCAP)
40th Anniversary (1979-2019)

STARS ON CARS

TIME FOR AN UPGRADE

E.U. CAR RATINGS  vs.  U.S. CAR RATINGS

✓ Accomodating Child Seats  ❌
✓ Seat Belt Reminders  ❌
✓ Pedestrian Safeguards  ❌
✓ Child-sized Crash Test Dummies  ❌
✓ Whiplash Test Results  ❌
✓ Automatic Emergency Braking  ❌
✓ Forward Collision Warning  ❌
U.S. was leader in creating NCAP; however, we have fallen behind.

- Advocates supports upgrading U.S. NCAP to modernize it and bring it in line with other countries that are superior – specific proposals include:
  - Require inclusion of advanced driver assistance systems
  - Develop safety ratings for vulnerable road user safety
  - Improve crash testing
  - Create ratings for older adults
  - Establish regular updating and public input

Urge Congress to enact H.R. 6256 to upgrade NCAP
Vehicles of the Future – Safety of Driverless Cars

Safer than the status quo?

• A number of fatal crashes involving cars equipped with automated features have occurred
  • Advocates is hopeful for the promise of autonomous vehicle (AV) technology, but it is not yet ready for primetime & should not be “beta tested” on public roads and streets

• Minimum performance requirements including a “vision test” for driverless cars are needed

• Legislation thus far has been woefully insufficient to protect all road users
The public is overwhelmingly concerned about sharing the road with driverless vehicles as motorists, bicyclists and pedestrians.

Driverless cars should be required to pass a “vision test” to assure they can see and respond to the operating environment.

Poll conducted January 2020 by ENGINE INSIGHTS, Commissioned by Advocates for Highway and Auto Safety
Contact your members of Congress:

• Urge support of H.R. 6284, S. 2700/H.R. 4871, & H.R. 6256
• Tell them to ensure AVs are safe for all road users, and that they pass the “vision test”
• Call on them to direct U.S. DOT to implement vehicle design changes

Write the National Highway Traffic Safety Administration:

• Comment on their proposed upgrade to NCAP highlighting improvements necessary for bicyclist safety
Thank you

Questions?

Reach out: cchase@saferoads.org
Visit us at: www.saferoads.org
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