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FOR HIGHWAY  
& AUTO SAFETY

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

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Advocates for Highway and Auto Safety  
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Who is Advocates

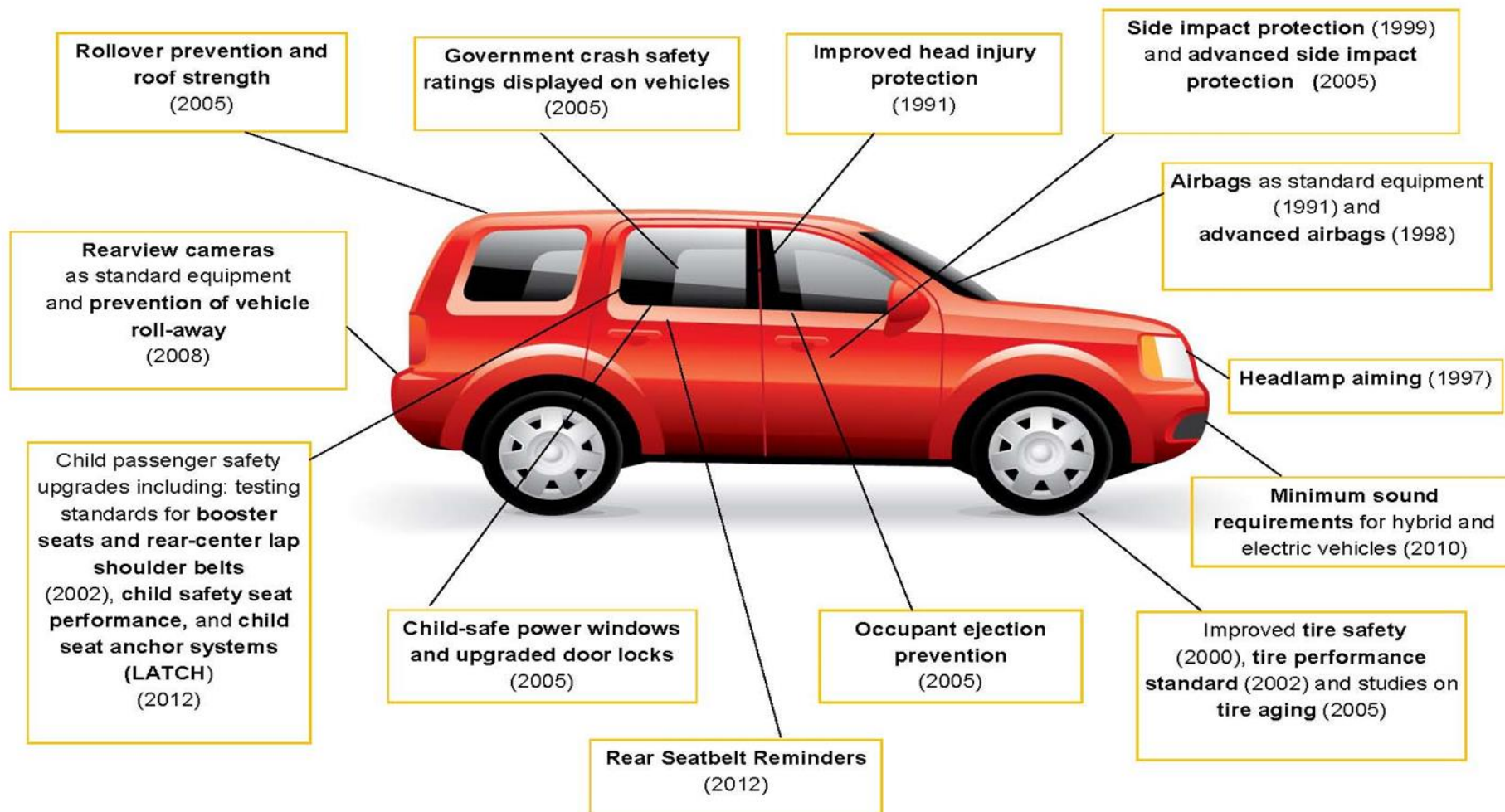
## **Driving the Safety Agenda:** ***Accelerating Solutions, Putting the Brakes on Problems, Getting Results***

- **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)



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# Three Decades of Advocacy & Safety Successes





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# 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





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### 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 vehicles

### 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 vehicles



Source: Insurance Institute for Highway Safety

# Crash Avoidance Technology

### 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 vehicles



### 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





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# Crash Avoidance Technology

## **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



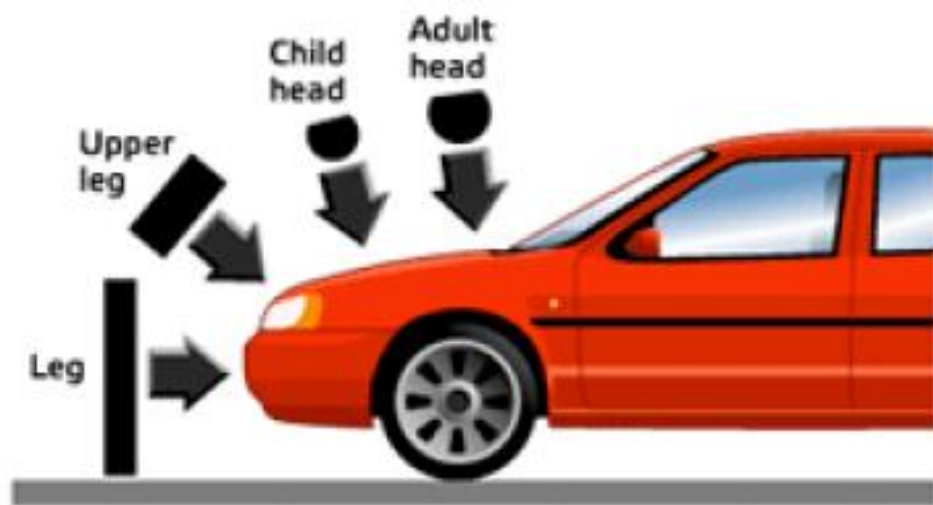
**Urge Congress to enact the  
21<sup>st</sup> Century Smart Cars Act, H.R. 6284 and  
the Protecting Roadside First Responders Act, S. 2700/H.R. 4871**



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# Vehicle Design Changes

## 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





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# Improved Testing and Consumer Information

## **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

✓	Accommodating Child Seats	✗
✓	Seat Belt Reminders	✗
✓	Pedestrian Safeguards	✗
✓	Child-sized Crash Test Dummies	✗
✓	Whiplash Test Results	✗
✓	Automatic Emergency Braking	✗
✓	Forward Collision Warning	✗





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# Improved Testing and Consumer Information

**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**





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# Vehicles of the Future – Safety of Driverless Cars

## Safer than the status quo?

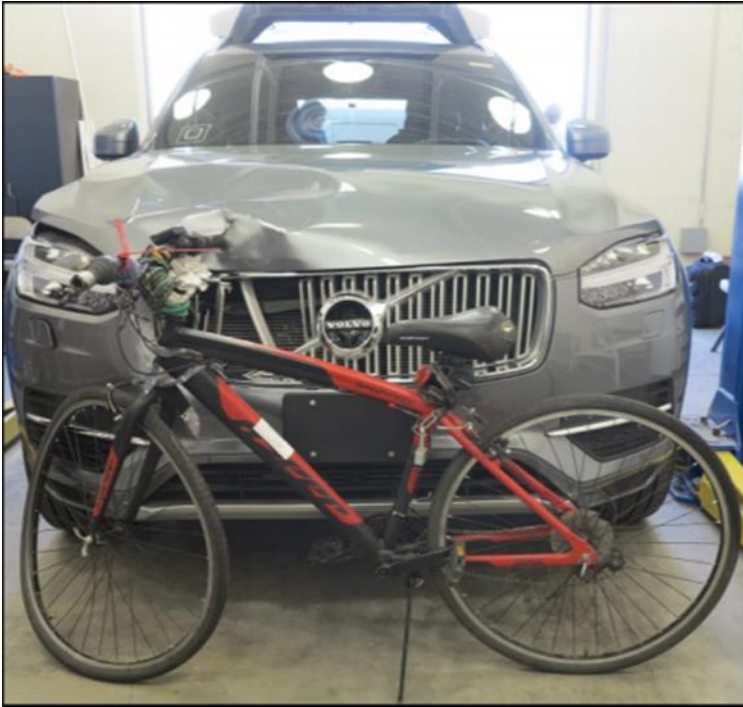


Photo Source: NTSB

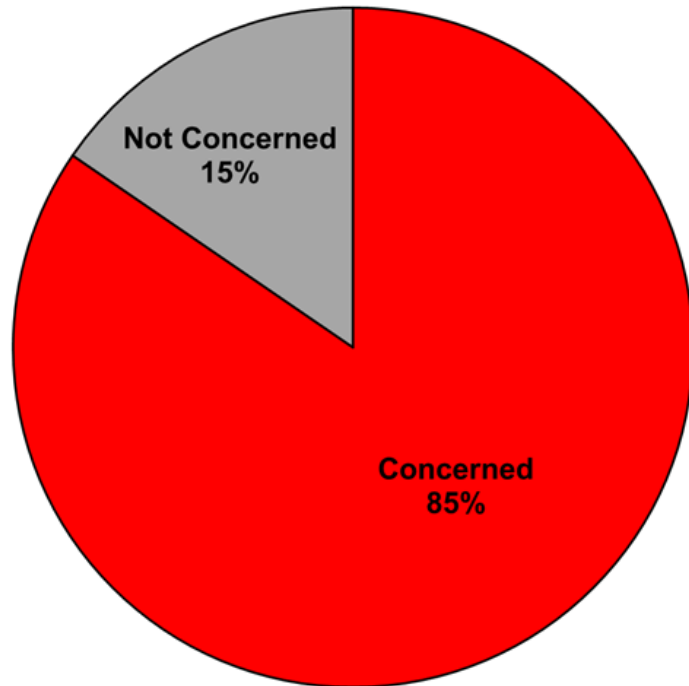
- **A number of fatal crashes involving cars equipped with automated features have occurred**
  - Advocates is hopeful for the promise of autonomous vehicle (AV) technology, but it is not yet ready for primetime & should not be “beta tested” on public roads and streets
- **Minimum performance requirements including a “vision test” for driverless cars are needed**
- **Legislation thus far has been woefully insufficient to protect all road users**



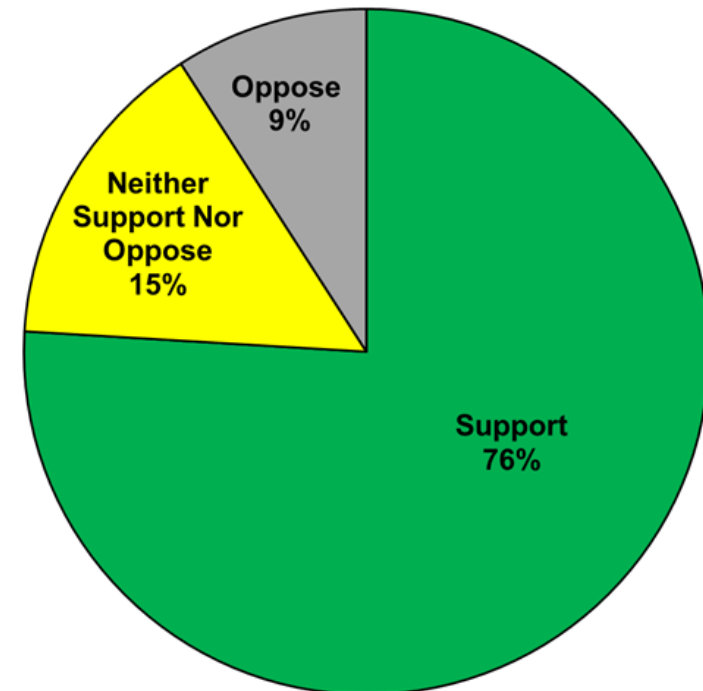
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# Vehicles of the Future – Safety of Driverless Cars

**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.**







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## Actions You Can Take

### **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



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# Thank you

## Questions?

Reach out: [cchase@saferoads.org](mailto:cchase@saferoads.org)

Visit us at: [www.saferoads.org](http://www.saferoads.org)

Follow us at: @SafeRoadsNow