



Harnessing Technology to Keep Roads Safe

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Who is Advocates: Our Board



Joan Claybrook, President Emeritus, Public Citizen, and former Administrator,
National Highway Traffic Safety Administration

R. David Pittle, Product Safety and Regulatory Consultant, and former
Commissioner, Consumer Product Safety Commission



Tiger Woods Owes His Life to Decades of Government Safety Standards

From the three-point belt to all those airbags, cars today are safer than ever.



BY [MARK VAUGHN](#) ♦ FEB 26, 2021

“The details of Tiger Woods’ crash are still being sorted out by investigators, but in general, the world’s greatest golfer can thank more than 50 years of government-mandated safety advances that he is alive.”





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Solutions: Crash Avoidance Technology

To reduce all types of crashes, set minimum performance requirements for crash avoidance technology, require all new cars to be equipped.

- Automatic Emergency Braking (AEB)
- Rear AEB
- Rear Cross Traffic Alert
- Lane Departure Warning
- Lane Keeping Assistance
- Blind Spot Warning
- Improved Headlamps

Advocates is working to enact legislation requiring technology in new vehicles with a minimum performance standard to ensure it detects and responds to vulnerable road users.



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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

Solutions: 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



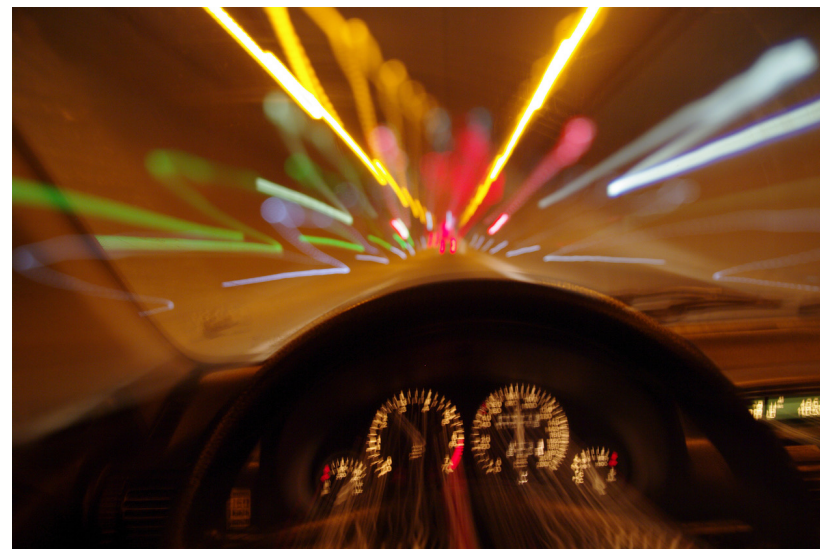


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Solutions: Reducing Impaired Driving

Alcohol-impaired driving is responsible for nearly one-third of crashes each year.

- Advanced impaired driving prevention technology can save more than 9,000 lives annually
- Systems can detect the presence of alcohol or can use mechanisms like driver monitoring, eye tracking, hands-on-the-wheel or other indicators to identify impairment



Advocates, along with Mothers Against Drunk Driving (MADD), is working to enact legislation requiring this technology in all new cars.



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Solutions: Curbing Distracted Driving



Crash risk increases significantly – as much as four times higher – when a driver is using a mobile phone.

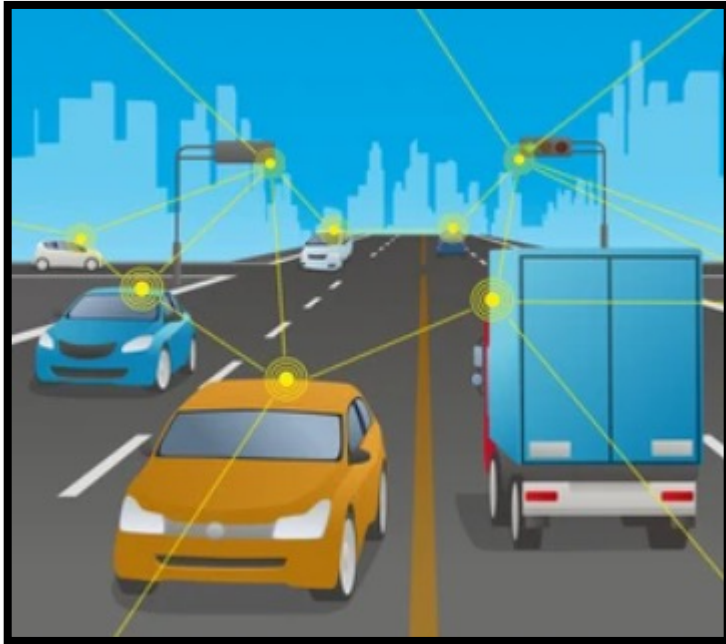
- Public use of devices has been described as an addiction.
- Technology can mitigate distracted driving now, as well as impaired & drowsy driving.
- Level 2 and 3 automated driving systems.

Advocates supports legislation to research and advance driver monitoring technology.



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Solutions: Infrastructure Based Safety Technology



LIGHT CAMERA PROGRAM CHECKLIST

Photo enforcement is a proven, effective tool to make roads safer. Well-controlled before-and-after studies have found that red light cameras reduce violations and injury crashes, especially the violent front-into-side crashes most associated with red light running.

Successful programs have a strong public information component, are transparent, and emphasize safety over revenue. In fact, communities should expect that revenue will decline over time as fewer drivers run red lights. Some, though not all, studies indicate that rear-end crashes increase initially, but rear-enders are typically low-severity crashes compared with the high-speed right-angle collisions targeted by red light camera programs.

This checklist assumes your community is already legally authorized to set up a program. It is intended to help you operate a program to reduce crashes, prevent injuries, save lives, and maintain strong public support.

☒ FIRST STEPS

☐ Identify problem intersections:

- Assess violation and crash data.
- Conduct field observations.
- Collect resident input.

☒ SECOND STEPS

- ☐ Select appropriate sites based on data from first steps.
- ☐ Publicize the extent of the safety problem and need for innovative solutions.

☒ IMPLEMENTATION

- ☐ Hold a kickoff event with advisory committee members. Introduce a sustained public education campaign focused on improving safety by changing driver attitudes

☒ LONG TERM

- ☐ Publicize changes, including new camera locations. Reinstate the probationary period before ticketing begins at new locations.



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Advocates supports expansion of automated enforcement systems, rulemaking for V2V technology and research to advance V2X.