

MyCarDoesWhat Background

About MyCarDoesWhat

The world of driving safety is changing rapidly. New car safety technologies are being added to cars faster than any earlier generation. Even features that have been around for years are getting smarter and changing into new features entirely.

But how do these safety features work? When should they be used? How can they help me? Do I have them in my car? And, how can I find answers to these questions?

MyCarDoesWhat helps drivers answer these questions.

MyCarDoesWhat is a national campaign to help educate drivers on new vehicle safety technologies designed to help prevent crashes. These technologies range from increasing the stability and control of cars to providing warnings about crash threats to automatically intervening to avoid or reduce the severity of a crash.

The campaign's website, <u>MyCarDoesWhat.org</u>, includes educational videos and other information about a variety of safety technologies including back-up cameras, blind spot monitoring systems, forward collision alerting and other systems that help drivers avoid or reduce the severity of a crash.

The National Safety Council and the University of Iowa partnered to launch *MyCarDoesWhat* to educate the public on how to best interact with these safety features to have better, safer driving experiences.

About the National Safety Council

The National Safety Council (NSC), founded in 1913 and chartered by Congress, is a nonprofit organization whose mission is to save lives by preventing injuries and deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. NSC, advances the mission by partnering with businesses, government agencies, elected officials and the public in areas where we can make the most impact – distracted driving, teen driving, workplace safety, prescription drug overdose and Safe Communities.

About the University of Iowa

Vehicle safety researchers at the University of Iowa have done research and development of automotive safety technologies for more than 20 years. They work to improve vehicle technology design through a better understanding of how drivers perform and behave in crash situations. Their research-driven program works at the intersection of safety technology and public policy. The program's areas of research include: human factors and human behavior, advanced in-vehicle safety technologies, driver distraction, teen driving, crash analysis and automated vehicle research and policy.



Tips for Common Safety Technologies and Features

Back-up Cameras help you see objects directly behind you while backing up and can help you judge how far away from objects you are—or even predict where your car may be steering.

- Always be sure that you've physically checked behind the car before backing out of a
 driveway or parking spot. There are some objects that the back-up camera may not
 detect, especially if they are close to the ground or under the car.
- Remember to always look over your shoulder and in your mirrors as you back up.

Blind Spot Monitors warn you of cars driving in your blind spots. They may provide an additional warning if you use your turn signal when there is a car next to you in another lane.

- Make sure that your blind spot monitor's sensors are not blocked by moisture, snow, dirt or other material.
- Read your owner's manual for more information on what the blind spot monitor's various warnings mean.
- Blind spot monitors are optimized for highway driving and highway speeds; they may not work as well with slow-moving or extremely fast vehicles.
- Some blind spot monitors are not optimized to detect motorcycles, bicycles or pedestrians. This is why you should always look over your shoulders to check your blind spots before making a lane change.

Forward Collision Warning can alert you of an impending collision with a slower moving or stationary car in front of you.

- Your forward collision warning system's sensors can be blocked by ice or snow, so be sure to clear any build-up off your feature's sensors before you begin driving.
- If you aren't sure where your forward collision warning's sensors are located, you can always check your owner's manual or with your dealership.
- Some forward collision warning features are vulnerable to glare at sunrise and sunset, so don't rely on this feature exclusively. Always pay attention to the road ahead. Rearend crashes are the most common crash type in the United States.

Anti-lock Braking Systems (ABS) help you steer in emergencies by restoring traction to your tires.

- If your car doesn't have ABS or the ABS is not working, make sure to pump the brakes if your car begins to skid.
- ABS works most effectively when the tires are properly inflated and in good condition.

Rear Cross Traffic Alert warns you if a car is about to enter your backing path.

- Rear cross traffic alert relies on ultra-sonic sensors that can look across your backing path. Keep in mind that they do not typically work in angled parking spaces – only where your car is parked straight in.
- Always be sure that you've physically checked behind the car before backing out of a driveway or parking spot.
- Read your owner's manual for more information about scenarios in which your rear cross traffic alert may not have been designed to function.

Adaptive Cruise Control (ACC) is an advanced version of cruise control that not only maintains your set speed, but your following distance as well. Depending on the system, it will provide some level of braking relative to the car ahead.



- Be aware that ACC will turn itself off in certain weather conditions. Some examples of these include heavy fog or rain; having dirt, snow or ice covering the sensors; or when the roadways are slippery.
- ACC allows you to spend less energy maintaining your following distance with the cars
 in front of you. You should use this opportunity to pay more attention to the traffic mix,
 including cars ahead of you and in adjacent lanes.
- Check your owner's manual to see if your ACC is capable of slowing your car some can do it all the way to a stop, or if you need to stop on your own.

Automatic Emergency Braking System applies the brakes to their maximum to avoid a stopped car ahead or a car turning in front of you.

- Automatic emergency braking systems rely on sensors to be clear of dirt, ice or snow.
 So, be sure to clear any build-up off your feature's sensors or windshield before you drive.
- Not sure where your automatic emergency braking's sensors are located? You can always check your owner's manual or with your dealership.
- Some automatic emergency braking features are vulnerable to glare from sunrise and sunset, so don't rely on this feature exclusively during those times – or any other time of the day.

Lane Departure Warning systems alert you if you're drifting out of your lane using visual, vibration or sound warnings.

- This feature relies on lane markings to operate. This feature is not designed to work on unpaved roads or roads without lane markings.
- If the roadway is covered with snow, leaves, fog or debris, the system turns itself off.
- Using your turn signal will override the lane departure warning.

Tire Pressure Monitoring Systems (TPMS) may warn you if your tires are under- or over-inflated, helping you prevent a tire blowout.

- When you see your TPMS dashboard light come on, you don't need to pull over immediately. You can wait for a safe break in traffic before you pull over to inspect your tires
- You should still check the pressure of each tire manually if you're planning on taking a
 long trip or after returning from a long trip. Long use especially in very cold and very
 warm climates can change your tires' pressures enough to affect their functionality.
- Make it a habit to check your tires' pressures at the beginning of every new season.

You can visit <u>MyCarDoesWhat.org</u> to learn about more safety features and technologies.



Car Safety Features

Today's safety technologies are designed to increase safety and assist drivers.

Information on the following technologies can be found on <u>MyCarDoesWhat.org</u>.

Forward Collision Prevention

- Collision Prevention and Mitigation
 - o Anti-Lock Braking System
 - o Forward Collision Warning
 - Adaptive and Active Suspension
 - Adaptive Headlights
 - Automatic Emergency Braking
 - Cornering Braking Control
 - o Electronic Braking Assistance
 - Obstacle Detection
 - Pedestrian Detection
 - Traction Control
- Speeding
 - Curve Speed Warning
 - High Speed Alert
- Headlights and Vision
 - Adaptive Headlights
 - Night Vision
- Cruise Control
 - Adaptive Cruise Control

Braking, Tire Pressure and Anti-Rollover

- Braking and Anti-Rollover
 - Anti-Lock Braking System
 - Automatic Emergency Braking
 - Cornering Braking Control
 - Electronic Braking Assistance
 - Electronic Stability Control
 - Traction Control
- Terrain and Wheel Information
 - Tire Pressure Monitoring System
 - Road Surface Warning
 - Terrain Management
- Hill Assisting
 - Hill Descent Assist
 - Hill Start Assist
- Steering and Suspension
 - Active Steering
 - o Adaptive and Active Suspension

Driver State Monitoring and Communication

- Driver Communication Assistance
 - o Tire Pressure Monitoring System
 - o Curve Speed Warning
 - High Speed Alert



- o Obstacle Detection
- Road Surface Warning
- Driver State Monitoring and Assistance
 - Drowsiness Alert
 - o Health and Workload Monitoring
- Other Driver Support
 - Push Button Start

Parking and Backing Assistance

- Backing Assistance
 - o Back-up Camera
 - o Back-up Warning
 - o Rear Cross Traffic Alert
- Parking Assistance
 - o Automatic Parallel Parking
 - Parking Sensors

Lane and Side Assisting

- Lane Assisting
 - o Lane Departure Warning
 - Drowsiness Alert
 - o Lane Keeping Assist
- Side Assisting
 - o Blind Spot Monitor
 - o Sideview Camera



Recent Press Releases

<u>MyCarDoesWhat.org</u> Educates Drivers about New Vehicle Safety Technologies

National Safety Council and University of Iowa Campaign Helps Drivers Learn about Life-Saving

Safety Technologies

Itasca, III. and Iowa City, Iowa – July 7, 2015 – The National Safety Council and the University of Iowa today launched a new website, <u>MyCarDoesWhat.org</u>, to help educate consumers about new automotive safety technologies and how they work. <u>MyCarDoesWhat.org</u> includes educational videos and other information about a variety of safety technologies including back-up cameras, blind spot monitoring systems, forward collision alerting and other systems that help drivers avoid or reduce the severity of a crash. The goal of the website is to teach drivers how to most effectively use these safety technologies, leading to safer driving.

"The fact is that safety technologies save lives, yet many drivers don't know what they are or how to use them," said Deborah Hersman, president and chief executive officer of the National Safety Council. "Knowledge is power. <u>MyCarDoesWhat.org</u> puts motorists in the driver's seat to make our roads safer."

The number of new safety technologies included in vehicles is growing daily, yet there is little information available to consumers about these technologies.

"These technologies increase safety and assist drivers by preventing or lessening the severity of crashes," said Daniel McGehee, director, Transportation and Vehicle Safety Research Program at the University of Iowa Public Policy Center. "MyCarDoesWhat is designed to raise awareness of the technologies and how they can be used to keep us all safer on the roads."

Some of the safety technologies featured on <u>MyCarDoesWhat.org</u> include:

- Back-up Camera: provides a view of the blind zone directly behind the car when the vehicle is in reverse.
- Blind Spot Monitor: alerts drivers when there may be something located in their blind spot.
- Forward Collision Warning: warns drivers when they are closing in on the vehicle ahead too quickly.
- Anti-lock Braking Systems: prevents wheels from locking up, helps avoid uncontrolled skidding and provides some steering control in slippery conditions like snow.
- Rear Cross Traffic Alert: provides an alert to the driver that traffic is approaching from the left or right when the vehicle is in reverse.
- Adaptive Cruise Control: maintains the speed set by the driver and a pre-set following distance.
- Automatic Emergency Braking Systems: automatically applies moderate to hard braking when the system detects that a collision is imminent.
- Lane Departure Warning: alerts drivers when they drift into another lane when the turn signal is not activated.

The website is part of a larger national education campaign set to launch in the fall. The datadriven campaign includes academic and consumer research, videos, graphics, animation, social media, a game, an app, and advertising to educate drivers.



For more information on automotive safety technologies go to <u>MyCarDoesWhat.org</u>. Follow <u>MyCarDoesWhat</u> on Twitter and Facebook.

About the National Safety Council

Founded in 1913 and chartered by Congress, the National Safety Council, nsc.org, is a nonprofit organization whose mission is to save lives by preventing injuries and deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. NSC advances this mission by partnering with businesses, government agencies, elected officials and the public in areas where we can make the most impact – distracted driving, teen driving, workplace safety, prescription drug overdoses and Safe Communities.

About the University of Iowa

The Transportation & Vehicle Safety Research Program at the <u>University of Iowa</u> Public Policy Center works to improve technology design through a better understanding of how drivers perform and behave in crash situations. Their research-driven program works at the intersection of safety technology and public policy. The program's areas of research include: human factors and human behavior, advanced in-vehicle safety technologies, driver distraction, teen driving, crash analysis and autonomous vehicle policy.

###



Study: Consumers Do Not Understand Vehicle Safety Features

Drivers Report Unexpected Vehicle Behaviors in Research by the University of Iowa

Iowa City, Iowa – August 13, 2015 – A new, one-of-its kind <u>study</u> from the University of Iowa found that a majority of drivers expressed uncertainty about how many potentially life-saving vehicle safety technologies work. The survey also showed that 40 percent of drivers report that their vehicles have acted or behaved in unexpected ways.

The study, conducted by the <u>University of Iowa Transportation and Vehicle Safety Research Division</u>, examined drivers' knowledge of vehicle safety systems, as well as their understanding and use of defensive driving techniques. The study combined a literature review, the input of industry and academic experts in human factors research with an in-depth survey of more than 2,000 adult drivers across the United States.

The study found that a majority of respondents had heard of, been exposed to, or interacted with at least one of the nine vehicle safety features studied, but expressed uncertainty about all of the technologies.

"As technologies like rear-view cameras and lane departure warning systems advance and become more prevalent in the cars we're driving there is a tremendous need to improve consumer understanding of these critical safety features," said Daniel McGehee, director of the Transportation and Vehicle Safety Research Division at the UI Public Policy Center.

Consumers reported they least understood adaptive cruise control (65%) and lane departure warning systems (36%). They were uncertain about features that have been standard in American cars for years – such as anti-lock braking systems and tire pressure-monitoring systems, according to the survey.

"The level of confusion about features that have been standard in American cars for quite awhile was really surprising," McGehee says, noting that tire pressure monitoring and anti-lock braking systems have been in vehicles for some time. "The little details about how some of these systems work are really important when we're talking about safety. We need to do a better job of making sure consumers are comfortable with them."

To address that need, the University of Iowa recently partnered with the National Safety Council to launch <u>MyCarDoesWhat</u>, a national campaign aimed at educating consumers about new safety technologies and how they work. The campaign website, <u>MyCarDoesWhat.org</u> includes educational videos and other information about safety features that help drivers avoid or reduce the severity of a crash. The website is part of a larger national education campaign set to launch this fall. The data-driven campaign includes academic and consumer research, videos, graphics, animation, social media, a game, an app and advertising to educate drivers.

The safety technologies included in the study were:

- Back-up Camera: provides a view of the area directly behind the car when the vehicle is in reverse.
- Blind Spot Monitor: alerts drivers when there may be something located in their blind spot.



- Forward Collision Warning: warns drivers when they are closing in on the vehicle ahead too quickly.
- Anti-lock Braking Systems: prevents wheels from locking up, helps avoid uncontrolled skidding and provides some steering control in slippery conditions like snow.
- Rear Cross Traffic Alert: provides an alert to the driver that traffic is approaching from the left or right when the vehicle is in reverse.
- Adaptive Cruise Control: maintains the speed set by the driver and a pre-set following distance.
- Automatic Emergency Braking Systems: automatically applies moderate to hard braking when the system detects that a collision is imminent.
- Lane Departure Warning: alerts drivers when they drift into another lane when the turn signal is not activated.
- Traction Control: Works in the background to help accelerate and prevent wheel slippage (or "over-spinning") when driving on slippery surfaces.

For more information on automotive safety technologies go to <u>MyCarDoesWhat.org</u>. Follow <u>MyCarDoesWhat</u> on <u>Twitter</u> and <u>Facebook</u>.

The full technical report of the National Survey can be found here: ppc.uiowa.edu/tvs/nationalsurvey

About the University of Iowa

The Transportation & Vehicle Safety Research Program at the <u>University of Iowa</u> works to improve technology design through a better understanding of how drivers perform and behave in crash situations. Their research-driven program works at the intersection of safety technology and public policy. The program's areas of research include: human factors and human behavior, advanced in-vehicle safety, driver distraction, teen driving, crash analytics and autonomous vehicle policy.

About the National Safety Council

Founded in 1913 and chartered by Congress, the National Safety Council, nsc.org, is a nonprofit organization whose mission is to save lives by preventing injuries and deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. NSC advances this mission by partnering with businesses, government agencies, elected officials and the public in areas where we can make the most impact – distracted driving, teen driving, workplace safety, prescription drug overdoses and Safe Communities.

###



Bios

Deborah A.P. Hersman

President & CEO, National Safety Council

Deborah Hersman is president and chief executive officer of the National Safety Council. The National Safety Council saves lives by preventing injuries and deaths at work, in homes, communities, and on the roads through leadership, research, education and advocacy.

Prior to joining the National Safety Council, Ms. Hersman served as chairman of the National Transportation Safety Board. Ms. Hersman was first appointed as an NTSB board member by President Bush in 2004 and was reappointed to two additional five-year terms by President Obama in 2009 and 2013. Among her many initiatives as chairman, Ms. Hersman focused attention and actions on distracted driving, child passenger safety and helping victims and their families. Ms. Hersman was an NTSB board member on-scene for more than 20 major transportation incidents, chaired scores of NTSB hearings, forums and events and regularly testified before Congress.

Ms. Hersman was a senior advisor to the U.S. Senate Committee on Commerce, Science and Transportation from 1999-2004. She served as staff director and senior legislative aide to West Virginia Congressman Bob Wise from 1992-1999. Her efforts contributed to the passage of milestone bills such as the Motor Carrier Safety Improvement Act of 1999, Pipeline Safety Improvement Act of 2002, Transportation Equity Act of the 21st Century and Amtrak Reform and Accountability Act.

Ms. Hersman holds Bachelor of Arts degrees in political science and international studies from Virginia Tech, and a Master's of Science degree in conflict analysis and resolution from George Mason University. She is a certified child passenger safety technician and holds a commercial driver's license (with passenger, school bus and air brake endorsements) as well as a motorcycle endorsement.



Daniel V. McGehee, PhD Director, Transportation and Vehicle Safety Research Program University of Iowa Public Policy Center

Daniel McGehee has been obsessed with car crashes for over 25 years. He is interested in every aspect of them - from how, when and why they occur, to technologies for avoiding them altogether. Over his 25 vehicle safety

careers he has studied every aspect of crashes—from developing original systems to examining ways to enhance public policy around one of the most important public health issues of our day. over the last 10 years he and his colleagues have used naturalistic driving research methods to understand driver error and how crashes occur. His driver performance, distraction, and technology development projects have led to innovative, interdisciplinary collaborations involving engineering, medicine, and public health. Results from his research have helped policy makers to improve government safety standards, as well as state and federal laws.



Dr. McGehee is the Director of the Transportation and Vehicle Safety Research Division at the University of Iowa Public Policy Center. He holds adjunct appointments in three departments: Mechanical and Industrial Engineering, Occupational Health, and Emergency Medicine.

Media Contacts

National Safety Council: Maureen Vogel, 630-775-2226

University of Iowa: Hayley Bruce, 319-384-0072

MSL GROUP: Lisa Gill, 248-458-8622 or <u>Jennifer Baskerville</u>, 703-967-2590