



ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

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**Advocates for Highway and Auto Safety Releases
Annual Roadmap Report Grading Highway Safety Laws in Every State and DC**

***Adopting Proven State Safety Laws and Existing Advanced Vehicle Technology is
“Safest Route” to Curbing 100 Daily Crash Deaths and 6,500 Injuries***

Today, Advocates for Highway and Auto Safety (Advocates), released the *2018 Roadmap of State Highway Safety Laws*. This is the 15th edition of an annual report that rates all 50 states and the District of Columbia (D.C.) on the adoption of 16 fundamental traffic safety laws. This “report card” exposes over 400 missing safety laws nationwide. It is an essential tool that state elected officials should use to improve roadway safety for all motorists as 2018 state legislative sessions kick off.

Additionally, the *Report* highlights the need for advanced vehicle technologies in all cars. Automakers and technology company executives have been promoting autonomous vehicles, (AVs) also known as driverless cars, as a panacea that will end vehicle fatalities. However, even they admit that driverless car technology is still many years away from a safe mass deployment. Meanwhile, known and lifesaving equipment exists right now that can save lives, prevent debilitating injuries, and eliminate the billions in related costs to society. They include collision avoidance and automated enforcement as well as means to improve large truck and rear seat safety.

“Advocates has spent decades fighting for vehicle safety technology and we too believe driverless cars have the potential to one day make our roads a dramatically safer place,” said Advocates’ President Cathy Chase. “Yet, in the meantime, approximately 100 people are killed and 6,500 more are injured in crashes every day, on average, even though we have proven safety solutions highlighted in our *Roadmap Report*. Further, this comes with a significant economic burden on society. Each person in America pays an annual ‘crash tax’ of \$784. When loss of life, pain, and decreased quality of life are factored in, society shoulders \$836 billion a year. This significant emotional and economic toll must be addressed with urgency and immediacy.”

The *2018 Roadmap Report* paves a dual-track path to preventing deadly crashes. The first track involves the adoption of effective state highway safety laws that encourage the use of seat belts, motorcycle helmets, and child safety seats. These laws also provide safeguards for teen, distracted, and impaired drivers. Colleen Sheehey-Church, National President of Mothers Against Drunk Driving (MADD) said, “MADD is pleased to work with the Advocates to encourage and advocate before federal and state legislators to stop the tragedies on our roadways. It will take all of us working together to ensure that we are protected from drunk drivers and other dangerous behavior that pose a threat every day to our children, our families and our future.”

The second track to safer roads, safer vehicles, and safer drivers outlined in the *Roadmap Report* is the widespread adoption of advanced safety technologies that are already on the market. This includes collision avoidance, automated speed and red-light enforcement systems, and ignition interlocks. Jackie Gillan, President Emeritus of Advocates, said, “The reality of our entire vehicle population being replaced with cars operated by computers instead of humans is still decades away. And, until that happens we face the reality that motor vehicle crashes will continue to kill hundreds of thousands of people, cause millions of injuries and cost billions of dollars in societal costs. Our country is approaching 9 years without a single death caused by a commercial aviation crash. Yet, today, we can’t go 15 minutes without a single death caused by a motor vehicle crash. Going forward, the most promising and pragmatic strategy at hand is adopting safety laws and advancing available safety technologies, as highlighted in Advocates’ *2018 Roadmap Report*. We cannot allow lawmakers and policymakers to hide behind tomorrow’s promise of driverless cars by prolonging adoption of laws and technology that could be saving thousands of lives today.”

Advocates’ *Report* gives every state and D.C. a rating in five categories (Occupant Protection, Child Passenger Safety, Teen Driving, Impaired Driving, and Distracted Driving) as well as an overall grade of: Green (Good); Yellow (Caution); and Red (Danger). With 13 out of 16 safety laws on the books, Rhode Island earned the top green rating. Other states with a green rating include Delaware, Oregon, Washington, California, Louisiana, and the District of Columbia. States that earn a red rating lag seriously behind when it comes to adopting Advocates’ recommended laws. South Dakota, having adopted just two of 16 safety laws, tops this year’s worst list. Other states with a red rating include Wyoming, Arizona, Missouri, Montana, Florida, Nebraska, Virginia, Idaho, Iowa, New Hampshire, Ohio, and Vermont.

Nearly 250 key safety laws have been passed by states since the first edition of the *Roadmap Report* was published in 2004, but as this year’s *Report* shows, lawmakers in even the green-rated states have more work to do. Alan Maness, Vice President of Federal Affairs for State Farm Insurance and an Advocates Board Member, stated, “We urge state lawmakers to seize this opportunity to close safety gaps that put everyone at risk and make passage of these laws a top legislative priority this year.” Maness further said, “The mounting toll of fatalities, injuries, and costs should be a major wake-up call to lawmakers at all levels of government. The problems we are facing are clear but so are the solutions. State Farm is committed to protecting families. We are committed to making our streets safe and preventing crashes. And, we are committed to supporting the passage of laws that will reduce the death and injury toll on our streets and highways.”

One major change for the *2018 Roadmap*, is that states are now graded on whether they have a law that requires child passengers to be restrained in a rear facing safety seat through age two. Janette Fennell, Consumer Co-Chair of Advocates and the Founder and President of KidsAndCars.org, said at the release, “Children younger than two are at an elevated risk of injuries because of their body structure, and rear-facing car seats provide the best protection in a crash.”

Though 13 laws were passed in 2017 that met the criteria of the *Roadmap Report*, 407 more laws are missing across the nation:

- **Primary Enforcement of Seat Belts:** 16 states lack an optimal primary enforcement seat belt law for front seat passengers, while 31 states need an optimal primary enforcement seat belt law for rear seat passengers;
- **All-Rider Motorcycle Helmet Law:** 31 states need an optimal all-rider motorcycle helmet law;
- **Rear Facing Through Age Two:** 41 states and D.C. are missing a rear facing through age two child protection law;
- **Booster Seats:** 35 states and DC need an optimal booster seat law;
- **Graduated Driver Licensing (GDL) for teen drivers:** 192 GDL laws need to be adopted to ensure the safety of novice drivers. No state has all six optimal provisions of a GDL law;
- **Impaired Driving:** 32 important impaired driving laws covering all-offender ignition interlocks, child endangerment, and open containers are needed;
- **All-Driver Text Messaging Restriction:** seven states need an optimal all-driver texting ban; and,
- **GDL Cell Phone Restriction:** 19 states and D.C. lack optimal laws restricting cell phone use for teen drivers.

Fennell also stated, “Prevention is the key to achieving meaningful progress in saving lives and reversing the upward trend of motor vehicle deaths. I urge every state elected official to pick up this report and take action to enact proven state traffic safety laws that advance the use of effective safety technologies.”

The 16 optimal laws recommended and rated by the report are backed by rigorous scientific studies and data analysis, as well as decades of real-world experience. Unfortunately, road users continue to die while far too many states choose not to adopt these practical laws. Melissa Wandall, President of the National Coalition of Safer Roads and Founder of The Mark Wandall Foundation, added, “It makes no sense to me that the commonsense solutions provided in this report are not embraced and enacted with urgency.” She continued, “I traveled from Florida to come here today to join Advocates for Highway and Auto Safety and the other tremendous safety leaders on this panel to urge policymakers, community leaders, and citizen advocates to take action to save lives. You don’t have to wait until tragedy strikes your family when we have the safety solutions at hand.”




Motor vehicle crashes killed over 37,000 people in 2016 and preliminary figures for the first half of 2017 don’t reveal any substantial reversal to this carnage. This is major public health epidemic by any measure. Dr. Georges Benjamin, Executive Director of the American Public Health Association, said, “As with every other public health challenge, we must look to solutions that are shown to be effective in saving lives and preventing injuries. The Roadmap Report is a compilation of lifesaving and cost-saving strategies for every state to use right now.” Dr. Benjamin added, “A doctor would never needlessly withhold an effective treatment that could save a life or mitigate an injury. Similarly, legislators shouldn’t delay the implementation of these proven cures to the public health crisis occurring every day on our roadways.”

The *2018 Roadmap of State Highway Safety Laws*, speaker statements, handouts and video of the news conference can be found at [SafeRoads.org](https://www.SafeRoads.org).

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A map of the United States with states colored in red, yellow, or green. The red states are MT, WY, SD, NE, IA, MO, OH, VA, FL, AZ, and VT. The yellow states are WA, OR, CA, NV, UT, CO, KS, OK, TX, NM, ND, MN, WI, MI, IL, IN, KY, TN, SC, GA, AL, MS, AR, LA, HI, AK, ME, NH, MA, RI, CT, NJ, MD, DE, and DC (green). The green states are WA, OR, CA, LA, and DC (green).

-  11 to 16, with both (front and rear) primary enforcement seat belt laws, **or** 9 or more, with both (front and rear) primary enforcement laws and all-rider helmet law (6 states and DC)
-  6 to 10, with both (front and rear) primary enforcement seat belt laws, **or** 7 and above, without both (front and rear) primary enforcement seat belt laws (31 states)
-  Fewer than 7, without both (front and rear) primary enforcement seat belt laws (13 states)



LEGISLATIVE ACTIVITY IN 2017

In 2017, there were 13 laws passed that meet the criteria for the optimal safety laws included in the 2018 Roadmap of State Highway Safety

-  **Alabama:** Upgraded GDL passenger restriction to primary enforcement
-  **Arkansas:** Enacted open container law
-  **Connecticut:** Enacted rear facing through age 2 law
-  **Iowa:** Upgraded all-driver text messaging restriction to primary enforcement
-  **Mississippi:** Enacted primary enforcement rear seat belt law → Upgraded from red to yellow overall rating
-  **Nevada:** Enacted ignition interlock device requirement for all-offenders → Upgraded from red to yellow overall rating
-  **New York:** Enacted rear facing through age 2 law
-  **North Dakota:** Upgraded booster seat law → Upgraded from red to yellow overall rating
-  **Oklahoma:** Enacted ignition interlock device requirement for all-offenders
-  **Oregon:** Enacted rear facing through age 2 law
-  **Rhode Island:** Enacted rear facing through age 2 law
-  **South Carolina:** Enacted rear facing through age 2 law
-  **Texas:** Enacted primary enforcement all-driver text messaging restriction

Note: In this year's report, two states' overall rating changed because of the addition of the rear facing through age 2 law. While these states did not pass this law in 2017, they now qualify because of the overall number of state laws.

California → Upgraded from yellow to green

Pennsylvania → Upgraded from red to yellow

Based on Advocates' safety recommendations, states need to adopt 407 laws:

- 16 states need an optimal primary enforcement seat belt law for front seat passengers;
- 31 states need an optimal primary enforcement seat belt law for rear seat passengers;
- 31 states need an optimal all-rider motorcycle helmet law;
- 41 states and DC need a rear facing through age 2 law;
- 35 states and DC need an optimal booster seat law;
- 192 GDL laws need to be adopted to ensure the safety of novice drivers, no state meets all the criteria recommended in this report;
- 32 critical impaired driving laws are needed in 30 states;
- 7 states need an optimal all-driver text messaging restriction; and,
- 19 states and DC need a GDL cell phone restriction.



State Performance in 2017

Best States

A state without a primary enforcement seat belt law covering passengers in all seating positions (front and rear) or that has repealed an existing all-rider motorcycle helmet law within the previous ten years is not eligible for a green rating, regardless of the number of other highway safety laws it has enacted. States must have 11 to 16 laws including both primary enforcement seat belt laws, or 9 or more laws including both primary enforcement seat belt laws and an all-rider helmet law, to achieve a green rating.

RHODE ISLAND ● 13 laws. Missing all-rider motorcycle helmet law, nighttime restriction and age 18 for unrestricted license for teen drivers.

DELAWARE ● 11 laws. Missing all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, age 18 for unrestricted license for teen drivers, and open container law.

OREGON ● 11 laws. Missing minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers.

WASHINGTON ● 11 laws. Missing rear facing through age 2 law, minimum age 16 for learner's permit, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers.

CALIFORNIA ● 10 laws. Missing minimum age 16 for learner's permit, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, ignition interlocks for all-offenders and GDL cell phone restriction.

DISTRICT OF COLUMBIA ● 10 laws. Missing rear facing through age 2 law, booster seat law, supervised driving requirement, nighttime restriction and age 18 for unrestricted license for teen drivers and GDL cell phone restriction.

LOUISIANA ● 9 laws. Missing rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, and open container law.

Worst States

The red rating indicates that the following states are dangerously behind in the adoption of Advocates' optimal laws. States receive a red rating if they have fewer than 7 laws, without both primary enforcement front and rear seat belt laws.

SOUTH DAKOTA ● Only 2 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, 6-month holding period, supervised driving requirement, passenger restriction and age 18 for unrestricted license for teen drivers, ignition interlocks for all-offenders, child endangerment law, all-driver text messaging restriction and GDL cell phone restriction.

WYOMING ● Only 3 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, 6-month holding period, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, ignition interlocks for all offenders, open container law and GDL cell phone restriction.

ARIZONA ● Only 4 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, all-driver text messaging restriction and GDL cell phone restriction.

MISSOURI ● Only 4 laws. Missing front and rear primary enforcement seat belt laws, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, open container law, all-driver text messaging restriction and GDL cell phone restriction.

MONTANA ● Only 4 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, ignition interlocks for all offenders, all-driver text messaging restriction and GDL cell phone restriction.

FLORIDA ● Only 5 laws. Missing rear primary enforcement seat belt law, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, ignition interlocks for all offenders, all-driver text messaging restriction and GDL cell phone restriction.

NEBRASKA ● Only 5 laws. Missing front and rear primary enforcement seat belt laws, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, all-driver text messaging restriction and GDL cell phone restriction.

VIRGINIA ● Only 5 laws. Missing front and rear primary enforcement seat belt laws, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, open container law and GDL cell phone restriction.

IDAHO ● Only 6 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, passenger restriction and age 18 for unrestricted license for teen drivers, ignition interlocks for all offenders, and GDL cell phone restriction.

IOWA ● Only 6 laws. Missing rear primary enforcement seat belt law, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, and ignition interlocks for all offenders.

NEW HAMPSHIRE ● Only 6 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, 6-month holding period, supervised driving requirement, nighttime restriction and age 18 for unrestricted license for teen drivers.

OHIO ● Only 6 laws. Missing front and rear primary enforcement seat belt laws, all-rider motorcycle helmet law, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, nighttime restriction and age 18 for unrestricted license for teen drivers, ignition interlocks for all offenders and all-driver text messaging restriction.

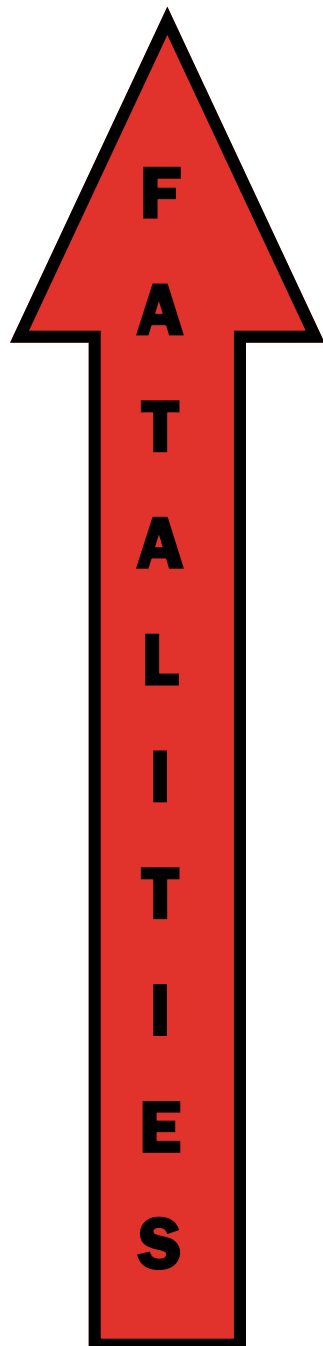
VERMONT ● Only 6 laws. Missing front and rear primary enforcement seat belt laws, rear facing through age 2 law, booster seat law, minimum age 16 for learner's permit, supervised driving requirement, nighttime and passenger restrictions and age 18 for unrestricted license for teen drivers, and child endangerment law.



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Sharp Fatality Increases in 2016

*37,461 People Killed in Motor Vehicle Crashes --
Up 5.6% from the Previous Year*



Pedestrians	Up 9%
Older Driver Involved (Age 65+)	Up 8.8%
Occupants Under 16	Up 6.3%
Large Truck Involved	Up 5.4%
Motorcyclists	Up 5.1%
Unbelted Vehicle Occupants	Up 4.6%
Excessive Speed	Up 4%
Young Driver (15 - 20) Involved	Up 3.2%
Alcohol-Impaired	Up 1.7%
Pedalcyclists	Up 1.3%



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SPEAKER BIOS
Press Conference to Release the
2018 Roadmap of State Highway Safety Laws
Tuesday, January 22, 2018
Reserve Officers Association, Washington, D.C.

Georges Benjamin, MD, FACP, FNAPA, FACEP (E), Hon FRSPH: Georges C. Benjamin, MD, is well-known as a health leader, practitioner, and administrator. Dr. Benjamin has served as the executive director of the American Public Health Association, the nation's oldest and largest organization of public health professionals, since 2002. Prior, he was secretary of health for the state of Maryland. Dr. Benjamin is a graduate of the Illinois Institute of Technology and the University of Illinois College of Medicine. He is board-certified in internal medicine, a master of the American College of Physicians, a fellow of the National Academy of Public Administration and a fellow emeritus of the American College of Emergency Physicians. He serves on several non-profit boards, including Research!America, the University of Maryland Medical System and the Reagan-Udall Foundation. He is a member of the National Academy of Medicine.

Catherine Chase: Cathy Chase is President of Advocates for Highway and Auto Safety. Her career has been in the areas of transportation advocacy and policy, teenage violence prevention and support for at-risk youth, political fundraising and campaigning, and government relations. She has worked and volunteered for numerous nonprofit organizations in the Washington, DC area related to education, at-risk populations and legislative advocacy. Most recently, Ms. Chase was a member of the 2016 class of the Women's Executive Leadership Program and is a board member of Hope for Grieving Families.

Janette Fennell: Janette Fennell is the Founder and President of KidsAndCars.org, a national nonprofit organization working to prevent child injury and death in or around motor vehicles. She began her injury prevention career after being locked in her car trunk with no means of escape. Since then, Fennell has led successful safety campaigns, including the addition of a glow-in-the-dark trunk release in all car trunks as standard equipment and requiring the National Highway Transportation Safety Administration (NHTSA) to collect and report nontraffic data. Ms. Fennell also serves as the Consumer-Co-Chair of Advocates' Board.

Jacqueline Gillan: Jackie Gillan is President Emeritus of Advocates for Highway and Auto Safety, and was a founding board member before joining the staff as Vice President in 1990. Her 35-year professional career has been in the areas of transportation planning and government relations, including senior policy positions for three state transportation agencies (New Jersey, California and Ohio), the U.S. Department of Transportation and the U.S. Senate. Her lobbying and grassroots organizing work have resulted in the successful enactment of numerous federal and state laws advancing motor vehicle, highway and truck safety.

Alan Maness, CPCU: Alan Maness is Vice President of Federal Affairs for State Farm Insurance Companies. Maness has been with State Farm since 1994, having worked in the Bloomington, IN office and then the Washington, DC office as Associate General Counsel. Maness, who also has significant experience working in government, previously was Senior Minority Counsel for the Aviation, Consumer and Surface Transportation Subcommittees of the Senate Commerce Committee and also worked at the U.S. Department of Justice as an attorney and as special assistant U.S. Attorney for Washington, DC. State Farm is a founding member of Advocates for Highway and Auto Safety and Mr. Maness serves as a member of Advocates' Board.

Colleen Sheehey-Church: Colleen Sheehey-Church is the National President of Mothers Against Drunk Driving (MADD). She joined MADD in 2005, a year after her 18-year-old son Dustin drowned after the car he was riding in, driven by a teen with alcohol and drugs in her system, crashed into a river. Before becoming National President in 2015, Ms. Sheehey-Church served on MADD's National Board of Directors beginning in 2010. In addition to speaking to lawmakers across the country about the importance of enacting all-offender ignition interlock laws, Ms. Sheehey-Church continues to raise awareness for MADD's victim services by serving as a volunteer on MADD's 24/7 helpline.

Melissa Wandall: Melissa Wandall is President of the National Coalition of Safer Roads and founder of The Mark Wandall Foundation. Days before their only child was born, Ms. Wandall's husband was killed by a red-light runner. As a devoted advocate committed to reducing the number of injuries and deaths caused by traffic collisions, she was instrumental in passing Florida's Mark Wandall Traffic Safety Act in May 2010, which allowed communities to use red-light cameras at intersections to help combat the preventable problem of red-light running. She is an active Campaign Ambassador for Alert Today Florida, Vision Zero Champion, and was recognized by The National Safety Council as a 2016 Distinguished Service to Safety Award winner. As an Advocacy Consultant, Melissa actively travels the U.S. and internationally participating in speaking engagements, workshops and shares her message by encouraging authentic leadership, inspiration, and resolution.



STATEMENT OF
Georges C. Benjamin, MD, MACP, FNAPA, FACEP (E)
Executive Director
American Public Health Association
On the Release of the
2018 Roadmap of State Highway Safety Laws
Reserve Officers Association, Washington, D.C.
January 22, 2018

Good afternoon. I am Dr. Georges Benjamin, Executive Director of the American Public Health Association (APHA). APHA champions the health of all people and all communities. Our membership comprises 50,000 professionals from all fields of public health. We are dedicated to making the United States the healthiest nation in one generation.

Over the course of my 30-year career, I have held numerous positions exposing me to the devastating consequences of motor vehicle crashes. I have served as an administrator of emergency medicine, a state health secretary, and presently am the leader of the nation's premier public health association. Each of these experiences provided me with a unique vantage point to identify, develop and implement sound solutions to the public health epidemic of motor vehicle crashes. The *2018 Roadmap of State Highway Safety Laws* being released today brings needed attention to ways to curb the unacceptable death and injury toll occurring on our roadways.

As a public health professional it is alarming and a clear call to action that motor vehicle deaths have increased in recent years. This public health epidemic comes with a personal and economic price tag. In 2016, 37,461 people died in motor vehicle crashes. Further, on average nearly 2.4 million people are injured on our roads each year and crashes impose a comprehensive cost to society of \$836 billion annually. Significant and sustained reductions in these numbers can only be achieved through prevention. As with every other public health challenge, we must look to solutions that are shown to be effective in saving lives and preventing injuries. The *Roadmap Report* is a compilation of lifesaving and cost-saving strategies for every state to use right now.

Across the nation, emergency room doctors and nurses, surgeons, EMTs, fire fighters, and police officers are responding to crashes and helping the many victims. They are employing training and skills they have learned and using available lifesaving technologies at hand. Similarly, public health officials and advocates are working to *prevent* these tragedies. By using state laws to require people to buckle up, restrain children in age-appropriate safety seats, wear motorcycle helmets, put away cell phones and don't drink and drive, coupled with vehicle and roadway technologies available today, we can save lives and prevent injuries.

There are several advanced vehicle safety technologies that help to prevent a crash and should be put in all cars as we travel the path to the possibility of truly autonomous vehicles in the next couple of decades. For example, automatic emergency braking (AEB) that stops a vehicle when a crash is imminent, and audible and visual reminders that alert passengers in the rear seat to buckle up are just two examples of technologies currently in use and already proven to advance safety.

We all deserve a safe transportation system. It doesn't matter where you live – in the city, in the suburbs or in a rural community. It doesn't matter how you travel – as a driver, as a passenger, as a pedestrian or as a cyclist. What does matter is that everyone in every state is afforded the same basic protections and arrives safely at their destination. This is not a difficult goal especially when we have the solutions. APHA urges Governors and state lawmakers to swiftly enact every single law included in this *Roadmap Report*. The use of seat belts, child safety seats and motorcycle helmets should all be required as they are the first line of defense when a crash occurs. We must prohibit the reckless behaviors of texting

while driving, drinking and driving, and for teens – talking on a cell phone while driving. We know that all of these laws, if enacted, will prevent crashes and save lives.

A doctor would never needlessly withhold an effective treatment that could save a life or mitigate an injury. Similarly, legislators should not delay the implementation of these proven cures to the public health crisis occurring everyday on our roadways.

Thank you.



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**STATEMENT OF
Cathy Chase, President
Advocates for Highway and Auto Safety
On the Release of the
2018 Roadmap Report of State Highway Safety Laws
January 22, 2018**

Good afternoon, everyone. I am Cathy Chase, President of Advocates for Highway and Auto Safety (Advocates). Thank you for joining us today here in Washington, DC and on the live webcast.

Founded in 1989, Advocates is a unique partnership of consumer, health, and safety groups and property-casualty insurance companies and agents. Our mission is to work together to advance state and federal laws and programs to prevent motor vehicle crashes, save lives, reduce injuries and contain costs.

We are proud to be releasing the 15th edition of our annual *Roadmap of State Highway Safety Laws*. At a time when an average of 100 people are killed and 6,500 more are injured in crashes every day, this “report card” provides tangible and actionable steps that can be taken right now to improve this unacceptable condition of roadway safety. The *Roadmap Report* assesses state progress in adopting 16 essential traffic safety laws. These laws address five issue areas including: occupant protection; child passenger safety; teen driver protections; impaired driving; and, distracted driving. Definitions for the optimal laws can be found starting on page 12 of the Report.

States are given a rating for each section as well as an overall rating based on their total number of laws. States earn a “green” overall rating if they are significantly advanced in adopting the optimal safety laws defined in the report. However, without primary enforcement seat belt laws covering both front and rear seat occupants, no state can achieve a green rating. Only six states and D.C. earned a green rating. “Yellow” indicates the need for improvement because of gaps in a state’s laws. Thirty-one (31) states received a yellow rating. And, 13 states were given a “red” rating because they are dangerously behind in the adoption of optimal safety laws. More details on the overall ratings can be found beginning on page 36 of the Report.

Since the first edition of the *Roadmap Report* was published in 2004, states across the country have passed nearly 250 safety laws, including 13 laws adopted last year. As a result, Mississippi, Nevada, and North Dakota improved their overall ratings from red to yellow. Mississippi enacted a primary enforcement rear seat belt law, Nevada passed an all-offender ignition interlock law, and North Dakota upgraded its booster seat law. Pennsylvania has a rear facing child seat through age two law, upgrading its overall rating to yellow, as does California, improving its grade to green. Nonetheless, there is still much more work to be done. As this year’s report indicates, 407 laws are still needed across all 50 states and D.C. Already this year, 39 states and D.C. have started their 2018 legislative sessions. We urge state elected officials to use the findings of the *Roadmap Report* to introduce, advance and pass legislation this year.

The title of this year’s report, “Safest Route: Proven Safety Laws + Advanced Vehicle Technologies” brings focus to the need to enact state traffic safety laws while also getting proven safety equipment into all cars. On the path to driverless cars, safety technologies are now available that are preventing crashes, deaths and injuries right now. Unfortunately, this safety equipment is only being offered on high end models or included in expensive luxury packages. These lifesaving technologies should be available and affordable for every family and not be tendered as an optional amenity with a big price tag.

Motor vehicle crashes impose a significant economic burden on society. Each person in America pays an annual “crash tax” of \$784. When loss of life, pain and decreased quality of life are factored in, society shoulders an enormous financial burden of \$836 billion a year. This emotional and economic toll must be

addressed. Yet, known legislative solutions continue to languish in state capitols and proven safety technologies are inexcusably exclusive.

Today, you will hear from our dynamic lineup of speakers who represent safety advocates, public health experts and victims of motor vehicle crashes to discuss the urgency of action and political leadership.

Joining me are:

- Janette Fennell, Founder and President of KidsAndCars.org, and Consumer Co-Chair of Advocates;
- Alan Maness, Vice President of Federal Affairs for State Farm Insurance and an Advocates' Board Member;
- Colleen Sheehey-Church, National President of Mothers Against Drunk Driving (MADD);
- Melissa Wandall, President of the National Coalition of Safer Roads and Founder of The Mark Wandall Foundation;
- Dr. Georges Benjamin, Executive Director of the American Public Health Association; and,
- Jackie Gillan, President Emeritus of Advocates.

After the speakers' remarks we will open up for questions from the media. If you are participating via webcast, there are instructions below the video viewer on how to submit a question. Additionally, all of the materials including speaker statements and handouts and a recording of the webcast will be available on our website www.saferoads.org.

Finally, I'd like to express my gratitude to Advocates' staff who have spent hundreds of hours putting this report together. In particular, thank you to Allison Kennedy, who led the *Roadmap* project, as well as Cathy Barzey, Lisa Drew, Tara Gill, Henry Jasny, Shaun Kildare, Peter Kurdock, and Eric Naing. Thanks also to Jamie Douglas of Daylight for creating the *Report* cover. Advocates' staff reviewed more than 800 state laws, government data, and numerous research reports in compiling this comprehensive analysis. We hope it will bring public attention to this urgent problem and motivate immediate legislative action.



STATEMENT OF
Janette E. Fennell, President and Founder
KidsAndCars.org
Consumer Co-Chair, Advocates for Highway and Auto Safety
On the Release of the
2018 Roadmap of State Highway Safety Laws
January 22, 2018

Good Afternoon. I am Janette Fennell, President and Founder of KidsAndCars.org. I also serve as the Consumer Co-Chair of Advocates for Highway and Auto Safety (Advocates).

This year's Roadmap Report highlights how advanced vehicle and roadway technologies can complement strong traffic safety laws and lead to major reductions in crashes, deaths and injuries. Lately, there has been a lot of buzz around future driverless car technologies at the recent Consumer Electronics Show in Las Vegas, last week's auto show in Detroit, and leading into this week's auto show in D.C. However, we don't have to wait, and actually shouldn't wait, for the entire vehicle population to switch over to driverless cars in the next 20 or 30 years to address our nation's highway safety problems which are so pervasive right now. We have technologies available today such as automatic emergency braking and rear seat belt reminders that should be in every car and can contribute to saving lives. We also need to ensure that safety systems like child safety seats, seat belts and motorcycle helmets are required for motorists, no matter how old or how young.

Advancing technologies and requiring their use is an issue that is very personal to me. In 1995, my husband and I were pulling into our garage when two men appeared and held us at gunpoint, forcing us into the trunk of our own car. Our infant son was in the car with us, and we did not know what the assailants had done with him. Thankfully they had removed him in his car seat and left him in our driveway. They then took us to a remote location and left us there. As we were trapped inside the trunk, we desperately searched for a release mechanism to escape. We were eventually able to somehow find a buried cable that allowed us to open the trunk. From that day forward, I fought for a new federal safety standard to require all new passenger cars to be equipped with interior trunk release latches. This very simple and inexpensive technological solution was finally required in 2001 and has been extremely successful in stopping the problem of trunk entrapment. In fact, there has not been one fatality in the trunk of a vehicle that contains this little piece of plastic. This little device is the difference between life and death if you somehow are entrapped in a car trunk. Today we have many other examples of similar fixes that could have dramatic results if implemented. Rearview cameras are also a great example.

My organization KidsAndCars.org is dedicated to protecting children inside the vehicle, as well as outside the vehicle. We have fought, together with many brave families, for rearview cameras, which as of this year are required in all new cars. We also continue to work to advance other lifesaving technologies and laws to combat motor vehicle crashes which are a leading cause of death and injury for children. In 2016, 1,233 children age 14 and younger were killed in motor vehicle crashes, including 311 children age four through seven and 228 children age two and younger. The annual

death toll for children in motor vehicle crashes is simply intolerable and unacceptable, especially when we have so many solutions at hand to save these young lives.

Another example of the pressing need for technology and strong laws to be employed together is rear seat belt use. DOT studies show that rear seat passengers are three times more likely to die in a crash if they are unbelted. The *Roadmap Report* shows that only 19 states have primary enforcement rear seat belt laws. Rear seat belt reminders can complement all passenger state laws and encourage rear seat belt use. However, despite a congressional mandate, the U.S. Department of Transportation is more than two years overdue in issuing the seat belt reminder rule.

In addition to seat belts, the *2018 Roadmap Report* calls for state action requiring the use of child passenger safety seats and motorcycle helmets. While this safety equipment provides critical protection in a crash, its use is still not required in every state. 31 states lack an all rider motorcycle helmet law, and 35 states and D.C. do not have an optimal booster seat law.

Before I conclude, I would like to briefly highlight a couple of updates that have been made in this year's report. More information on these changes can be found on page 11.

- First, the teen cell phone restriction has been moved from the Teen Driving section to the Distracted Driving section. Teen drivers are particularly susceptible to driving while distracted. As a mother of two young men, I am very aware of this problem. Cell phone restrictions play a key role in protecting novice drivers and all road users from the elevated crash risk that comes with using a mobile phone behind the wheel. Drivers under the age of 20 have the highest proportion of distraction-related fatal crashes, but only 31 states that have an optimal teen cell phone restriction.
- Second, states are now rated on whether they have enacted a law requiring that children be placed in a rear-facing seat from birth through age two. Children younger than two are at an elevated risk of injuries because of their body structure, and rear-facing car seats provide the best protection in a crash.

Prevention is the key to achieving meaningful progress in saving lives and reversing the upward trend of motor vehicle deaths. I urge every state elected official to pick up this report and take action to enact proven state traffic safety laws that advance the use of effective safety technologies.

Thank you.



ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

**STATEMENT OF
Jacqueline Gillan, President Emeritus
Advocates for Highway and Auto Safety
On the Release of the
2018 Roadmap Report of State Highway Safety Laws
January 22, 2018**

Good afternoon, I am Jackie Gillan, President Emeritus of Advocates for Highway and Auto Safety (Advocates).

Advocates recognizes that the effort to achieve significant and lasting reductions in our highway death and injury toll is a daunting task, but it is doable and will require applying multiple approaches to the problem. The Roadmap Report we have released today highlights the most successful strategy of requiring the passage of traffic safety laws and the use of available vehicle and roadway technologies. For nearly 30 years Advocates has championed both safety approaches because that is simply what works. By addressing driver behavior and advancing the widespread use of lifesaving technologies, we can make significant gains in preventing crashes and saving lives.

Each year thousands of lives are saved because of strong traffic safety laws requiring the use of seat belts, child safety seats and motorcycle helmets; protecting novice teen drivers with commonsense restrictions; and, prohibiting driving while dangerously impaired or texting.

So too have the safety technologies in our vehicles saved lives. These include airbags, electronic stability control to prevent rollover, and anti-lock brakes. The National Highway Traffic Safety Administration (NHTSA) has estimated that since 1960, more than 600,000 lives have been saved by motor vehicle safety technologies.

The potential for technology to make an even larger contribution to preventing crashes, saving lives and reducing injuries is real. Every day we learn about new companies with new technologies that may eventually replace human drivers with computer drivers. However, there are numerous obstacles to overcome both in solving technical problems as well as ensuring consumer confidence.

Advocates recently released the results of a nationwide CARAVAN public opinion poll. The poll revealed deep public skepticism about autonomous vehicle technology. It showed that the public, among all age groups and in all areas of the country, has many concerns. In fact, two-thirds of the public (64%) expressed concern about sharing the roads with driverless cars.

The reality of our entire vehicle population being replaced with cars operated by computers instead of humans is still decades away. And, until that happens we face the reality that motor vehicle crashes will continue to kill hundreds of thousands of people, cause millions of injuries and cost billions of dollars in societal costs. Our country is approaching 9 years without a single death caused by a commercial aviation crash. Yet, today, we can't go 15 minutes without a single death caused by a motor vehicle crash.

Going forward, the most promising and pragmatic strategy at hand is adopting safety laws and advancing available safety technologies. That is why our Roadmap Report's theme this year shows that the safest and the fastest route to saving lives is combining proven safety laws with proven safety technologies.

Every state needs laws that protect all occupants in a crash and requires the use of technologies to stop dangerous drivers who threaten all of us because they are impaired or ignore speed limits and run red lights. Every motorist needs the protection of available and affordable safety technologies that should be required as standard equipment in all vehicles such as automatic emergency braking and lane departure warnings.

We cannot allow lawmakers and policymakers to hide behind tomorrow's promise of driverless cars by prolonging adoption of laws and technology that could be saving thousands of lives today.

Thank you.



STATEMENT OF
Alan Maness, Vice President of Federal Affairs
State Farm Insurance Companies
Board Member, Advocates for Highway and Auto Safety
On the Release of the
2018 Roadmap of State Highway Safety Laws
Reserve Officers Association, Washington, D.C.
January 22, 2018

Good afternoon. I am Alan Maness, Vice President of Federal Affairs for State Farm Insurance. As the nation's leading property casualty insurance company, State Farm is a proud founding Board Member of Advocates for Highway and Auto Safety (Advocates). For nearly 30 years, Advocates has been a unique and effective alliance of insurance companies and consumer, public health and safety groups. Together we have advanced state and federal laws and policies that have reduced motor vehicle crashes, prevented deaths and injuries, and lessened the associated cost of crashes.

Our motto at State Farm is "Here to Help Life Go Right." Advocates' *Roadmap Report* serves as a guidebook to helping life go right by providing recommendations to protect the safety of every family or individual, on every trip in every state. At this time, action is needed more than ever. Over the past few years, motor vehicle fatalities have been climbing. In 2016, more than 37,000 people were killed in crashes – representing an increase of nearly six percent from 2015. This was the second yearly increase in traffic fatalities and is especially alarming given that this spike follows a recent history of decline in highway deaths. Unfortunately, preliminary figures for fatalities in 2017 indicate little improvement.

The 16 laws identified in the *2018 Roadmap of State Highway Safety Laws* are proven lifesavers. Yet, as the report reveals, there are still 407 missing safety laws in all 50 states and D.C., and not a single state has all of the recommended laws. We urge state lawmakers to seize this opportunity to close safety gaps that put everyone at risk and make passage of these laws a top legislative priority this year.

I would now like to reveal the results of the *2018 Roadmap Report*. The states that have earned the highest overall rating of "green" are: Rhode Island at the top with 13 out of 16 safety laws followed by Delaware, Oregon, Washington, California, Louisiana, and the District of Columbia.

There are 13 states with a "red" overall rating indicating that they have fallen dangerously behind in adoption of Advocates' recommended laws. With only two critical safety laws out of the 16 in the report, South Dakota ranks last. This is a ranking it has unfortunately held since 2010. Wyoming is next with only three laws, followed by Arizona, Missouri, and Montana with four laws each. Rounding out the bottom 13 are Florida, Nebraska, and Virginia with five laws and Idaho, Iowa, New Hampshire, Ohio, and Vermont with six laws. People continue to needlessly die on our roads because of delays in advancing effective safety solutions.

The mounting toll of fatalities, injuries, and costs should be a major wake-up call to lawmakers at all levels of government. The problems we are facing are clear but so are the solutions. State Farm is committed to protecting families. We are committed to making our streets safe and preventing crashes. And, we are committed to supporting the passage of laws that will reduce the death and injury toll on our streets and highways. Thank you.



**Colleen Sheehey-Church
Advocates for Highway and Auto Safety Press Conference
2018 Roadmap of State Highway Safety Laws
January 22, 2018**

Good afternoon, my name is Colleen Sheehey-Church, and I am the National President of Mothers Against Drunk Driving.

I want to thank Advocates for Highway and Auto Safety for allowing me to be here today to represent MADD and the nearly 1 million people MADD has served who have been victimized by the 100 percent preventable, violent crime of drunk driving.

On July 10, 2004, my life was shattered by someone's decision to drive while impaired by alcohol and drugs.

You see, my son Dustin was just 18 years old. He had his whole life ahead of him that summer after graduating from high school.

But that night in July, he was doing what most kids like to do over the summer. He was hanging out with friends and decided to go grab a pizza.

Now, my husband Skip and I had talked to both of our sons about not drinking and driving. And we talked to them about making sure any car they were in was driven by a sober driver. But sadly, Dustin got into the car with his friend who had been drinking and had illicit drugs in her system.

When she lost control of the car, it careened off the road and into a Connecticut river.

The driver and passenger escaped, but not my Dustin.

Early the next morning, Skip and I got that knock on the door that no parent should ever receive.

I knew immediately I had lost one of my boys. I just remember shouting out, "which one?"

This doesn't get any easier, especially around the holidays and birthdays and all the special events that I want Dustin to be here for. The pain of losing someone so senselessly to a preventable crime never goes away.

That's why this Advocates Roadmap is so important. MADD is pleased to work with the Advocates to encourage and advocate before federal and state legislators to stop the tragedies on our roadways. We know that alcohol, followed by speed and not wearing seatbelts are the largest killers, year after year.

12 years ago, MADD launched our Campaign to Eliminate Drunk Driving. This is the blueprint for creating a nation of No More Victims of drunk driving.

The Campaign consists of four major initiatives:

The first is supporting high-visibility law enforcement such as sobriety checkpoints. MADD couldn't be more proud to stand with our law enforcement partners and thank them for keeping our roads safe.

The second is passing laws in every state that require ignition interlocks for every drunk driving offender. MADD now counts 30 states along with Washington D.C. as all-offender ignition interlock states. That means offenders must use an ignition interlock if they want to drive. Fifty to 75 percent of convicted drunk drivers will continue to drive on a suspended license, so license suspension alone is no longer an effective way to stop drunk drivers.

We are still working on those 20 other states — and MADD will not stop working with legislators and partners like Advocates until all 50 states require these lifesaving devices for all drunk drivers.

The third element of MADD's Campaign to Eliminate Drunk Driving is the development of advanced vehicle technology, such as fully autonomous vehicles and the Driver Alcohol Detection System for Safety, or DADSS. As many of you know, DADSS is an emerging technology which, once fully implemented, could passively detect if the driver is past the legal threshold for alcohol impairment. MADD believes this technology will be such a popular safety option that it will become a standard feature, the same way anti-lock brakes and air bags have evolved.

We are in the middle of an extraordinary time in development of vehicle safety technologies — with announcements on an almost daily basis of advancements that can save lives. DADSS is part of this technology revolution.

The fourth initiative of MADD's Campaign is public support. Without the grassroots efforts of our MADD volunteers and our many partners — including Advocates — we would not be able to say that we have reduced drunk driving fatalities by half since 1980. We would not be able to say it's no longer acceptable for anyone to drink and drive. And we would not have the many options for a safe and sober ride home that we have today. It started with the introduction of designated drivers, and today it is becoming ingrained in our culture to use either designated drivers, rideshare such as Uber, traditional taxis or public transportation to get home safely. We know public support will continue to drive our progress in changing beliefs and behavior.

Finally, I want to talk about laws to protect the most vulnerable on our highways — our children.

Driving drunk with a child passenger is not only unconscionable, it's a crime and a form of child abuse. Children don't have a voice or a choice when riding with an adult, and they should never be in danger from drunk driving. Especially by those entrusted to keep them safe.

MADD has been working on Child Endangerment laws since 2004, and I'm proud to say my home state of Connecticut passed a Child Endangerment Law in 2016.

Like Advocates, MADD calls on all 50 states to impose additional sanctions for anyone who drives under the influence of alcohol or drugs with a child in the vehicle. Regular sanctions and treatment are not enough.

The battle to eliminate drunk driving is far from over. We are still losing 10,000 people every year. That's 28 people every day. We have our work cut out for us, and MADD will not stop until we get to zero.

I want to extend my sincere gratitude to Advocates for your comprehensive roadmap highlighting what states can do to protect families from these horrible tragedies on our highways.

It will take all of us working together to ensure that we are protected from drunk drivers and other dangerous behavior that pose a threat every day to our children, our families and our future. Thank you.



STATEMENT OF
Melissa Wandall, President
National Coalition of Safer Roads and
Founder of The Mark Wandall Foundation
On the Release of the
2018 Roadmap of State Highway Safety Laws
Reserve Officers Association, Washington, D.C.
January 22, 2018

Good Afternoon. I am Melissa Wandall, President of the National Coalition of Safer Roads and founder of The Mark Wandall Foundation. For over a decade, I have been an advocate for improving traffic safety by adopting the proven technological solutions of speed and red-light cameras, as well as the other lifesaving laws featured in the *2018 Roadmap of State Highway Safety Laws*.

Making our roads safer is very personal for me. Just days before our only child was born in October of 2003, my husband, Mark, was killed and my brother, Philip, was severely injured by a red-light runner. Overnight, I became a widow, a single parent, a grieving sister, and also a researcher who delved into why the crash occurred and what could be done to prevent it. I then became a committed advocate for the use of automated enforcement systems to prevent other families from having to suffer a similar tragedy. I started in my home state of Florida where I fought for four years for the Mark Wandall Traffic Safety Act. It was passed in 2010 allowing communities to use red-light cameras at intersections to help combat the preventable problem of red-light running. Unfortunately, my work in Florida didn't end with this success. Every year there are attempts to repeal this lifesaving law – just as there are attempts in legislatures throughout the country to rollback, repeal, and weaken other traffic safety laws highlighted in Advocates' *Roadmap Report*.

It makes no sense that the commonsense solutions provided in this report are not embraced by lawmakers and enacted with urgency. The Federal Highway Administration reports that Americans are more likely to be injured in a red-light running related event than any other crash. We have the technology to curb this dangerous and deadly practice. In 2015, the most recent year for which these statistics are available, 771 people were killed and approximately 137,000 were injured in red-light running crashes. Half of those deaths were pedestrians, bicyclists, and people in other vehicles hit by the red-light runners.

Enforcement is essential to reducing red-light running but it is impossible for police to be at every intersection at all times. A study by the Insurance Institute for Highway Safety (IIHS) found that red-light cameras reduce the fatal red-light running crash rate by 21 percent and the rate of all types of fatal crashes at signalized intersections by 14 percent. This is why we need red light cameras installed at dangerous intersections.

Additionally, I am the mother of a teenager who will soon be applying for her driver's license. I am keenly aware that motor vehicle crashes are the number one killer of teens, and young driver-involved crashes are on the rise. Yet, no state has all of the optimal graduated driver licensing, or GDL, provisions recommended in the Roadmap Report.

My home state of Florida is ranked as one of the worst states for traffic safety laws in this report with only five out of the recommended 16 laws. Many of those deficiencies are in the state's teen driving laws. Florida has only two out of the six elements for a comprehensive teen driving law and that needs to

change. The lifesaving benefits of strong and comprehensive novice teen driving laws are supported by years of experience in states and countless studies demonstrating their benefits. It is critical for a novice driver to gradually gain driving experience under safer conditions. Some of these safer conditions include restrictions on the number of teen passengers and nighttime driving and a minimum of 50 hours of supervised driving. For example, the number of teen passengers should be limited to no more than one, but only 18 states and the District of Columbia have this law. I congratulate Alabama for upgrading their law in 2017 and urge the other 32 states to follow suit, including Florida.

I traveled from Florida to come here today to join Advocates for Highway and Auto Safety and the other tremendous safety leaders on this panel to urge policymakers, community leaders, and citizen advocates to take action to save lives. You don't have to wait until tragedy strikes your family when we have the safety solutions at hand. Thank you.



ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

CARAVAN Public Opinion Poll: Driverless Cars

January 12, 2018

Introduction

Advocates for Highway and Auto Safety (Advocates) is an alliance of public health, safety, and consumer organizations, insurers and insurance agents that promotes highway and auto safety through the adoption of safety laws, policies and regulations. Advocates is a unique coalition dedicated to advancing safer vehicles, safer drivers, and safer roads.

Motor vehicle crashes are still a leading cause of death and injury in the United States, yet progress in significantly reducing the annual morbidity and mortality toll has stagnated. On average, approximately 100 people are killed and nearly 6,500 more are injured every day in motor vehicle crashes.¹ Safety technologies are a proven method for preventing crashes, saving lives and lessening injuries. Since its founding in 1989, Advocates has enthusiastically championed lifesaving vehicle technologies as an effective countermeasure for reducing the death and injury toll on our roads, and for good reason. The National Highway Traffic Safety Administration (NHTSA), an agency of the U.S. Department of Transportation (DOT), has estimated that since 1960 more than 600,000 lives have been saved by motor vehicle safety technologies required by the Federal Motor Vehicle Safety Standards (FMVSS).² Advocates is encouraged that autonomous vehicle (AV) technologies also hold tremendous promise to achieve additional safety advances and to decrease the number of motor vehicle crashes, fatalities and injuries.

The advent of AVs, commonly referred to as driverless cars, has captured the public's attention and interest in the future of motor vehicle transportation. Predictions vary about the timing of their arrival into the mainstream marketplace, their initial levels of autonomy versus the need for retaining some driver control, and the impact of their introduction and assimilation into the existing roadway mix of vehicles. In order for this technology to realize its full safety potential, critical protections must be in place to assure the safe development and deployment of driverless cars. New and emerging technologies will experience problems and in fact already have. For example, in 2016 a Tesla Model S operating under its "Autopilot" system drove under the side of a tractor trailer, shearing off the roof and fatally injuring the driver (Image 1).³ The National Transportation Safety Board (NTSB) criticized the operational design of the Tesla Autopilot system finding that it had contributed to the crash by enabling the driver's overreliance on the automation system.

Congress is currently considering landmark legislation that will set federal policy on the development and deployment of driverless cars for years to come. On September 6, 2017, the U.S. House of Representatives passed H.R. 3388, the SELF DRIVE Act (Safely Ensuring Lives Future Deployment and Research In Vehicle Evolution Act). In the U.S. Senate, S. 1885, the AV START Act (American Vision for Safer Transportation through Advancement of Revolutionary Technologies Act), has been reported out of the Committee on Commerce, Science, and Transportation and is awaiting floor action.



Image 1

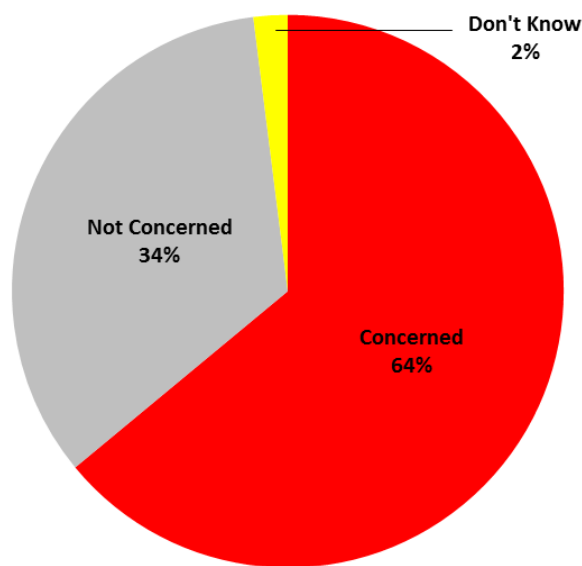
To find out the views of the public on several of the key issues being debated in Congress, Advocates commissioned a CARAVAN Poll of 1,005 adults (18 years and older) in December 2017. **The poll revealed widespread concern across major segments of American society on important issues under consideration in federal legislation which will determine the level of government oversight to ensure auto manufacturer accountability regarding driverless cars.**

¹ Traffic Safety Facts Research Note, 2016 Fatal Motor Vehicle Crashes: Overview, NHTSA, Oct. 2017, DOT HS 812 456.

² Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standard, 1960 to 2012; NHTSA, Jan. 2015, DOT HS 812 069.

³ NTSB, Accident Report NTSB/HAR-17/02 PB2017-102600.

Nearly Two-Thirds Of The Public Express Concern About Sharing Roads With Driverless Cars



Sixty-four percent (64%) of respondents express concern about sharing the road with driverless cars (Figure 1). This level of apprehension was approximately the same across the U.S., regardless of the region of residence (Figure 2) and across political party affiliation.

Advocates recognizes and supports the potential for driverless cars to help reduce needless crashes, deaths and injuries. However, missteps, mistakes, or setbacks involving driverless cars will hamper public acceptance and consumer confidence in this technology and risk progress.

Figure 1

**Percentage of Respondents Concerned About Sharing the Road With Driverless Cars
By Region of Residence**

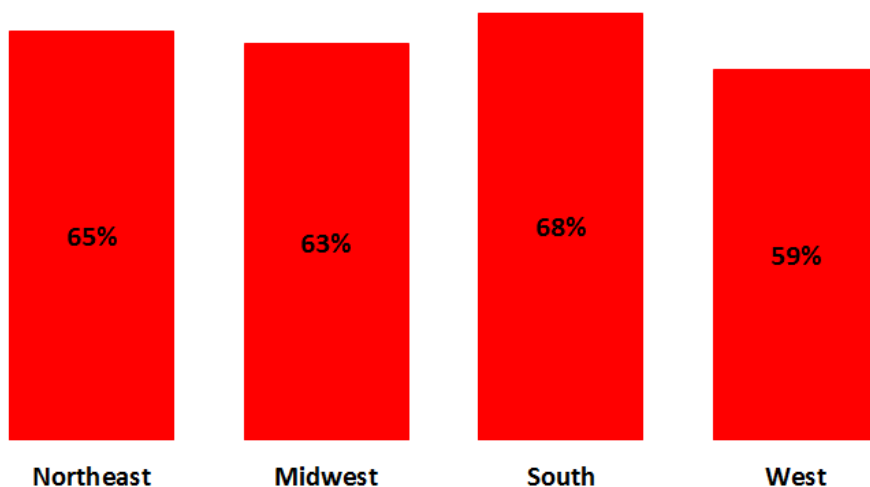


Figure 2

This result from the CARAVAN Poll is similar to the findings of other polls. A separate study conducted by the Pew Research Center revealed deep public skepticism about driverless cars. The majority of those surveyed (56 percent) said they would not ride in a self-driving vehicle. Of those respondents who said they would not ride in a driverless car, 42 percent said they didn't trust the technology or feared giving up control and 30 percent cited safety concerns.⁴

Similarly, a Kelley Blue Book survey, released in September 2016, found that nearly 80 percent of respondents believed that people should always have the option to drive themselves, and nearly one in three said they would never buy a vehicle that would always drive itself.⁵

⁴ Automation in Everyday Life, Pew Research Center, Oct. 4, 2017.

⁵ Future Autonomous Vehicle Driver Study, Kelley Blue Book, Sept. 2016.

63 Percent Of The Public Does Not Support Mass Exemptions From Existing Safety Standards

Three out of every five respondents state they are not comfortable with Congress increasing the number of driverless cars which do not meet existing federal vehicle safety standards and would be available for public sale (Figure 3). This concern was shared equally across political affiliation, region of residence, level of education, and household income (Figure 4).

At present, federal law already allows unlimited exemptions from FMVSS to auto manufacturers for testing purposes only.⁶ For vehicles sold to the public, current law limits exemptions from safety standards in traditional vehicles to no more than 2,500 per year. This is done to limit exposure of the public to vehicles that do not meet the minimum safety requirements. The Senate AV START Act and the House SELF DRIVE Act will allow manufacturers to sell as many as 100,000 vehicles with exemptions to federal safety standards. Moreover, the Senate bill does not limit exemptions from crashworthiness standards which protect occupants when a crash occurs. The House bill provides a temporary restriction on these exemptions.

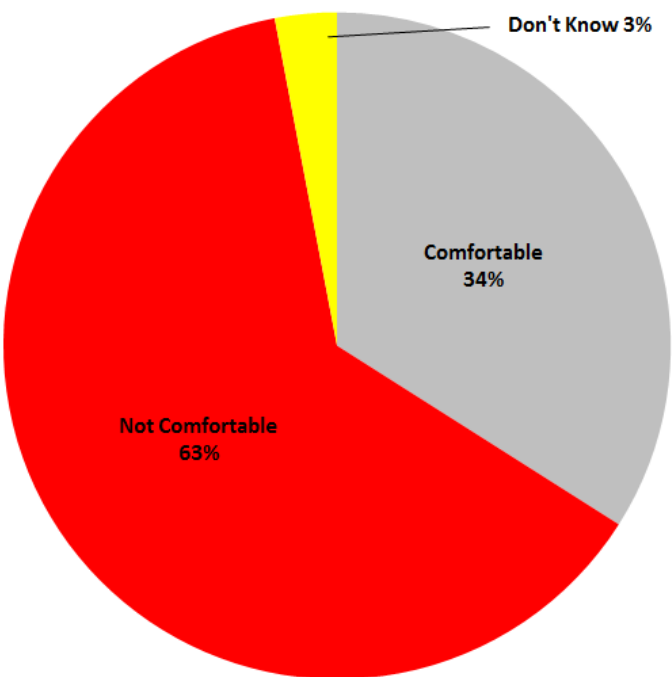


Figure 3

Respondents Not Comfortable With Increased Exemptions
By Household Income Level



Figure 4

⁶ Fixing America’s Surface Transportation Act (FAST Act), Pub. L. 114-94, Sec. 24404.

75 Percent Not Comfortable With Disconnecting Vehicle Equipment



Figure 5

Some manufacturers are seeking to disable vehicle controls, such as the steering wheel, and brake and gas pedals, when the AV is being operated by the computer. Under current law, manufacturers are prohibited from rendering such safety systems inoperable without adequate justification and approval from the U.S. Department of Transportation (DOT). The Senate AV START Act would allow manufacturers to turn off such systems without having to obtain prior government approval. This is a significant reversal from current law and gives auto manufacturers sole discretion to ignore existing safety standards rather than the DOT evaluating the request for an exemption and determining the safety impact. The House SELF DRIVE Act does not include this provision.

Three out of four respondents are not comfortable with allowing manufacturers to disconnect vehicle equipment such as the steering wheel and brake pedal without prior approval from DOT (Figure 5). This view was consistent across all regions of the country (Figure 6), gender, household income level, and political affiliation.

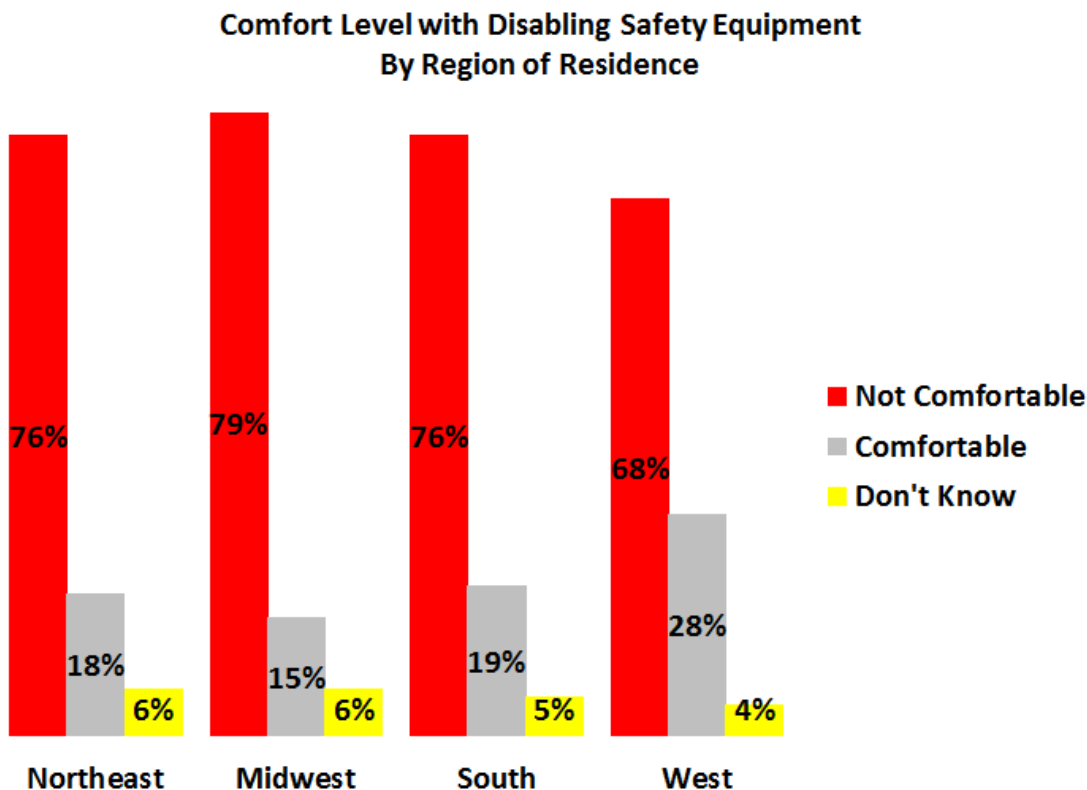


Figure 6

Vast Majority Supports Safety Standards For Driverless Cars

Seventy-three percent (73%) of respondents support DOT developing safety standards for new features related to the operation of driverless cars, whereas only twenty-three percent (23%) of respondents opposed (Figure 7). All three generations queried, Millennials (ages 18-36), Gen-X (ages 37-52), and Baby Boomers (ages 53-71), equally showed significant support for the proposal (Figure 8). Responses were similarly strong across gender, political affiliation, and region of residence.

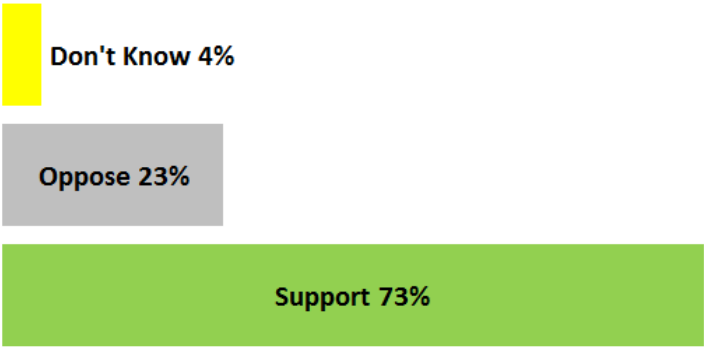


Figure 7

Percent of Support for Safety Standards for Driverless Cars
By Generation

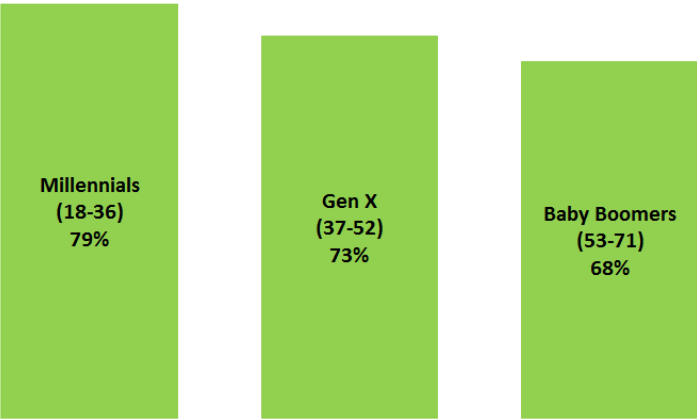


Figure 8

At present, automated driving systems are not specifically subject to any current federal motor vehicle safety standards. Neither the Senate AV START Act nor the House SELF DRIVE Act addresses this shortcoming by directing DOT to issue minimum safety requirements for the operation of these systems. Moreover, DOT, to date, has issued “voluntary guidelines” for industry to only consider following, which lack any compliance requirements or enforcement mechanisms.

Over the last few years, there have been many incidents where automakers have hidden from the public and DOT regulators known safety problems and defects that have resulted in numerous and unnecessary deaths and injuries as well as the recall of an all-time record of millions of vehicles. New and emerging automated vehicle technology will not prevent every crash and will not be without errors. During this critical time it is important that DOT ensures that this technology is reliable and safe and ready to be sold before it is deployed on public roads or the results could be catastrophic.

81 Percent Of Respondents Support Cybersecurity Rules To Protect Driverless Cars From Hacking

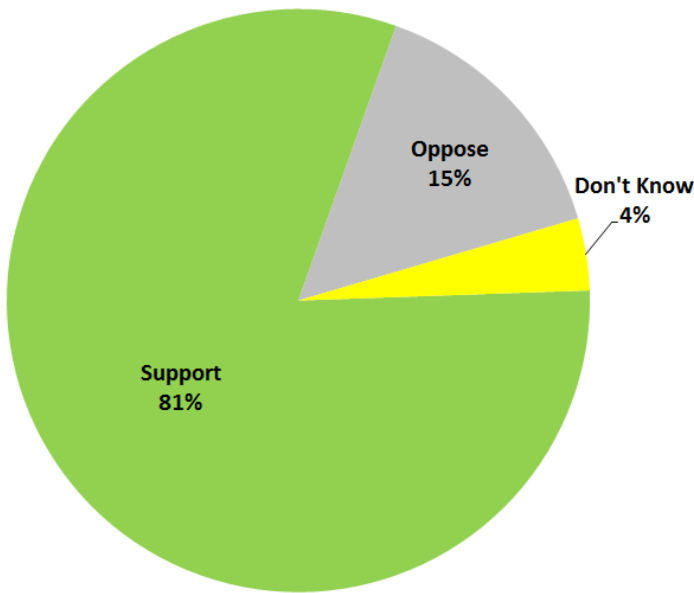


Figure 9

Eight in ten respondents support DOT issuing cybersecurity rules to protect against hacking of cars that are being operated by a computer (Figure 9). This view was consistent across all generations (Figure 10), region of residence, gender, and household income.

Research and testing already have demonstrated the ability of hackers to remotely gain access to vehicle controls and put occupants at dangerous and deadly risk. Both the Senate AV START Act and the House SELF DRIVE Act only require that manufacturers have a cybersecurity “plan”, but not meet minimum uniform cybersecurity standards established by DOT.

Percent of Respondents Supporting Cybersecurity Rules
By Generation

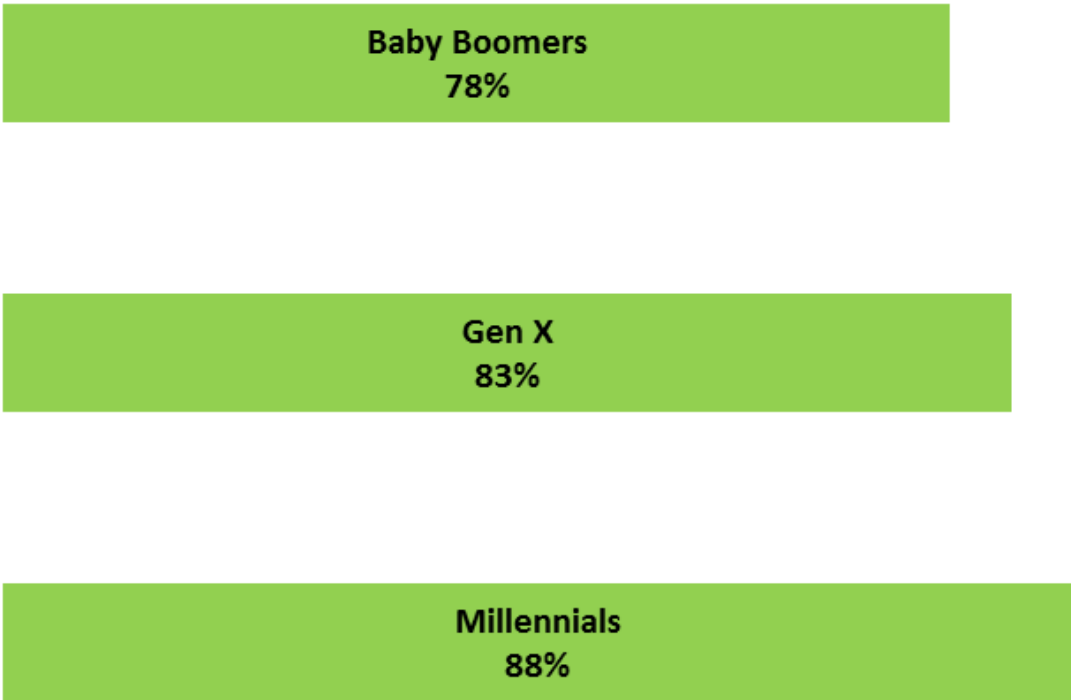


Figure 10

84 Percent Support Rules To Ensure That Human Drivers Are Alert To Be Able To Safely Take Control From An Autonomous Vehicle

More than eight in ten respondents support uniform DOT rules to ensure that the human driver is alert in order to safely take control from the computer (Figure 11). This is especially important for those autonomous vehicles that switch the operation of the vehicle back and forth between the computer and the human driver during the same trip. Strong support was uniform across all groups polled no matter the political affiliation, generation, region of residence, gender, household income and size, and education. Across all age groups surveyed, support ranged from seventy-nine percent (79%) to eighty-seven percent (87%) (Figure 12).



Figure 11

For example, the NTSB’s investigation of the 2016 Tesla crash found that the Autopilot facilitated the driver’s inattention and overreliance on the system, which ultimately contributed to his death. The Autopilot was active for 37 minutes of the 41 minute trip, during which the system detected the driver’s hands on the steering wheel only 7 times for a total of 25 seconds. The NTSB found this failure to address driver distraction widespread across manufacturers with similar automatic driving systems.⁸ Both the Senate AV START Act and the House SELF DRIVE Act fail to address this critical safety problem, even though technology to discern distraction and provide alerts to the human driver is readily available.

The human driver must be kept engaged in the task of driving and alert in order to take control when the computer can no longer operate the vehicle. Research demonstrates that even for a human driver who is alert and performing the dynamic driving task, there is a time lag between noticing a problem and taking action.⁷ This is known as the reaction time. The reaction time will be longer for a human driver who will innately become bored and no longer pay close attention and monitor the vehicle’s operation. In that situation, the human driver must first re-engage in the driving task before taking control of the vehicle and executing the appropriate action.

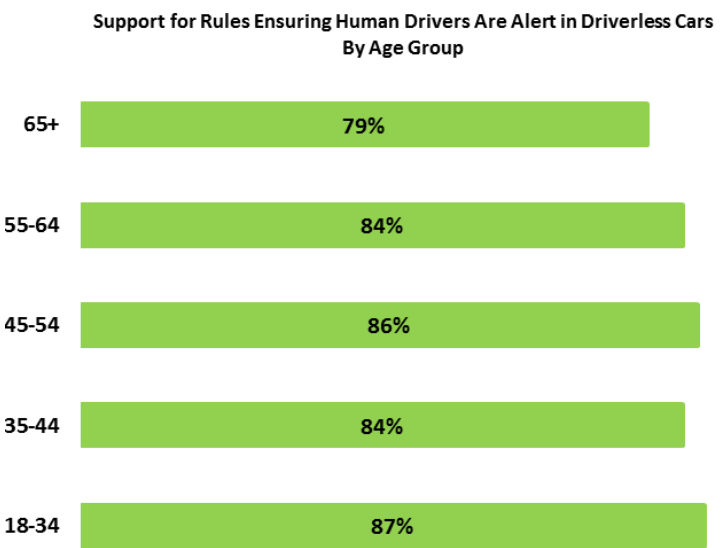


Figure 12

⁷ Human Factors, Koppa, R.J., FHWA, Ch.3, Sec. 3.2.1 Perception-Response Time
⁸ NTSB, Accident Report NTSB/HAR-17/02 PB2017-102600.

Clear Majority Supports DOT Ensuring The Safe Operation Of Car Computers Similar To Protections For Computers Operating Commercial Airplanes

Eighty percent (80%) of respondents support minimum performance requirements for computers that operate driverless cars similar to those for computers that operate commercial airplanes (Figure 13). While Millennials showed the strongest support (90%) for the performance requirements, both Gen X and Baby Boomers expressed high levels of support (76% and 78% respectively, Figure 14). Support was uniform across genders, region of residence, and household income levels and size.

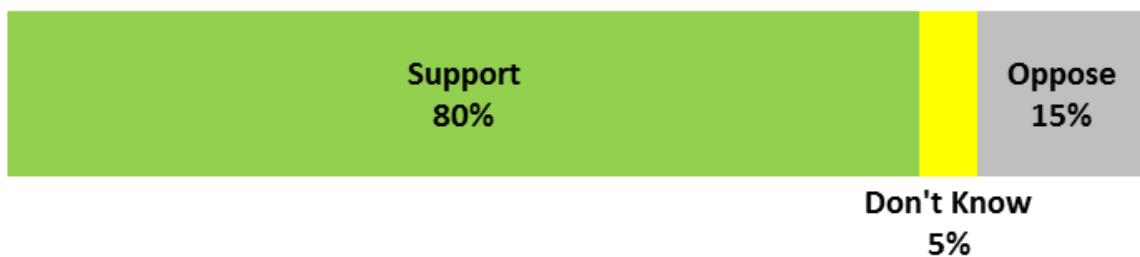


Figure 13

Modern motor vehicles and motor vehicle equipment are powered and run by highly complex electronic systems. Cars will become even more sophisticated with the introduction of autonomous driving systems. The Federal Aviation Administration (FAA) established minimum performance requirements years ago for the autopilot systems which conduct most of the flying in today's aircraft. Interference from non-safety systems in a vehicle can affect the electronics that power critical safety systems if they share the same wiring and circuits. For example, one manufacturer discovered that some of its vehicles lost power to the dashboard lights when steering wheel controls were used to access and play songs on an MP3 player plugged into the vehicle USB port.⁹ Without minimum performance requirements, there will be no assurances that the electronics that power and operate safety and autonomous driving systems function properly and are protected from such interference. Neither the House nor Senate legislation includes an electronics standard provision.

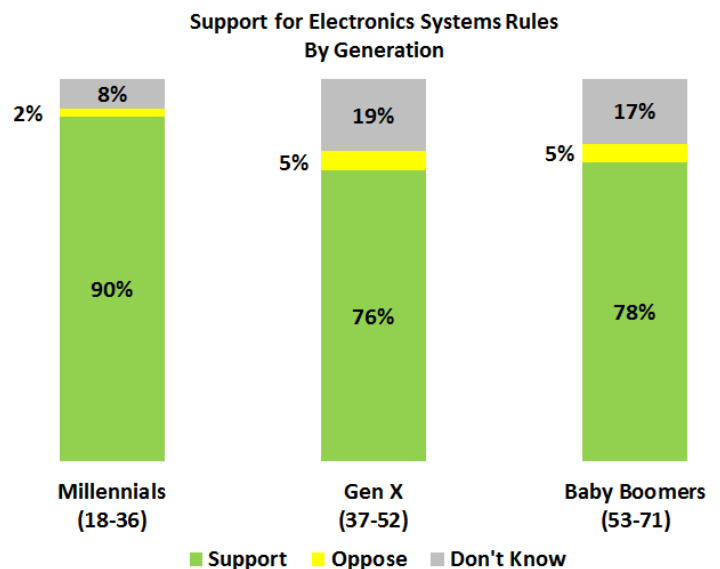


Figure 14

⁹ General Motors, LLC, Receipt of Petition for Decision of Inconsequential Noncompliance, NHTSA, 79 FR 10226, Feb. 24, 2014.

87 Percent Of The Public Want Online Consumer Information On The Safety Features Of Driverless Cars

Nearly nine out of ten respondents agree it would be helpful to have a DOT website for consumers to look up information about the safety features of a new or used driverless car which they may be purchasing (Figure 15). Out of the 87% who found it “helpful,” 76% said it would be “very helpful” (Figure 16). This view is highly consistent across all demographic groups including political affiliation, gender, age, region of residence, household income and size, and education level.

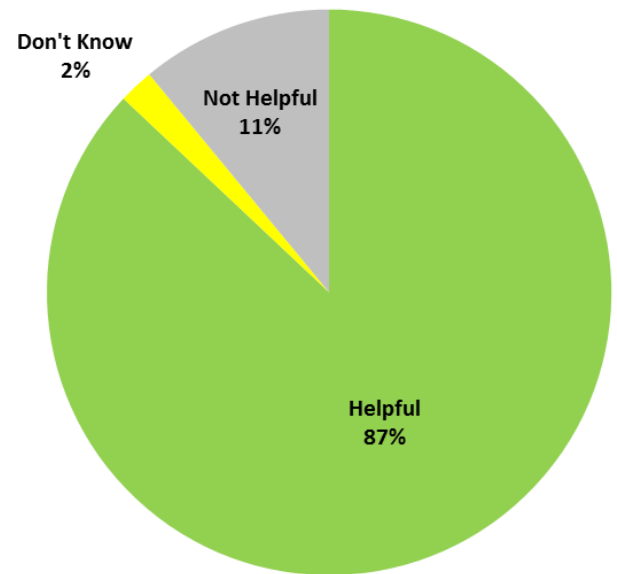


Figure 15

Consumers already have difficulty understanding the safety features on today’s cars,¹⁰ and this confusion will only increase with the introduction of vehicles equipped with autonomous technologies. Requiring DOT to establish a publicly-available online driverless car database with basic safety information will greatly assist consumers in their purchasing choices.

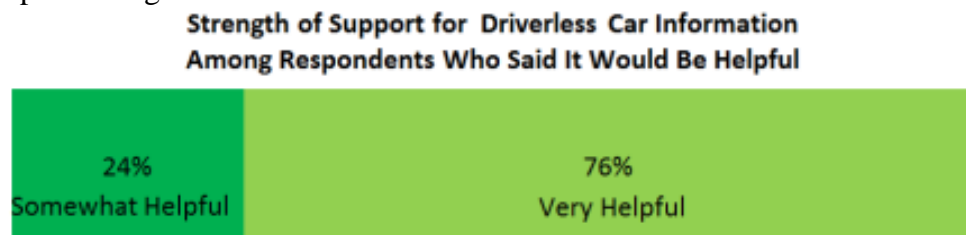


Figure 16

The database should be similar to the safercar.gov website that DOT currently maintains to inform the public about safety recalls applicable to their vehicle. The driverless car database could enable consumers to enter their vehicle identification number (VIN) to obtain critical information about their vehicle such as the level of automation, any exemptions from federal safety standards, and the limitations and capabilities of the vehicle (known as the operational design domain, ODD).

Furthermore, there were 38.5 million used cars sold in 2016.¹¹ The information available from the database will be critical for consumers who purchase driverless vehicles, especially used vehicles that may be missing the owner’s manual or other sources of consumer information. The database will also allow DOT and other research groups to compare the safety performance of different driverless vehicles, and identify poorly performing and unsafe autonomous technology systems.

¹⁰ J.D. Power 2017 Tech Experience Index (TXI) Study, September 2017.

¹¹ Used Vehicle Market Report, February 2017, Edmunds.com.

SHORT SUMMARY OF FINDINGS

This nationwide telephone CARAVAN® survey was conducted by ORC International on December 7-10, 2017, using two probability samples: randomly selected landline telephone numbers and randomly selected mobile (cell) telephone numbers. The combined sample consists of 1,005 adults (18 years old and older) living in the continental United States. Of the 1,005 interviews, 505 were from the landline sample and 500 from the cell phone sample. The margin of error for the sample of 1,005 is +/- 3.09% at the 95% confidence level. Smaller subgroups will have larger error margins.

1. How concerned are you about being on the road with driverless cars? Would you say you are...

Concerned (Net)	64%
Very Concerned	31%
Somewhat Concerned	33%
Not Concerned (Net)	34%
Not Very Concerned	18%
Not Concerned At All	16%
Don't Know	2%

2. Current federal law allows each company to annually sell to the public up to 2,500 vehicles equipped with new technologies that do not meet some existing federal safety standards. How comfortable do you feel with Congress increasing this number for driverless cars to as many as 100,000 vehicles for each company? Would you say...

Comfortable (Net)	34%
Very Comfortable	9%
Somewhat Comfortable	25%
Not Comfortable (Net)	63%
Not Very Comfortable	28%
Not At All Comfortable	35%
Don't Know	3%

3. Current federal law allows companies to disconnect vehicle equipment such as the steering wheel and brake pedal with prior approval from the U.S. Department of Transportation. How comfortable would you feel with Congress changing the law to eliminate the requirement for prior approval by the U.S. Department of Transportation? Would you say...

Comfortable (Net)	20%
Very Comfortable	7%
Somewhat Comfortable	14%
Not Comfortable (Net)	75%
Not Very Comfortable	33%
Not At All Comfortable	42%
Don't Know	5%

4. Right now there are no federal requirements for ensuring the safety of the system that runs driverless cars. Do you support or oppose the U.S. Department of Transportation developing safety standards for new features related to the operation of driverless cars?

Support	73%
Oppose	23%
Don't Know	4%

5. Do you support or oppose the U.S. Department of Transportation issuing cybersecurity rules to protect against hacking of cars that are being operated by computer?

Support	81%
Oppose	15%
Don't Know	4%

6. There will be situations where the human driver will need to take control of the driverless car. For those driverless cars that switch back and forth between the computer and a human driver on the same trip, do you support or oppose uniform U.S. Department of Transportation rules to ensure the human driver is alert in order to safely take control from the computer?

Support	84%
Oppose	12%
Don't Know	4%

7. Driverless cars are operated by complex computer systems. For safety purposes, computers that operate commercial airplanes must meet minimum performance requirements set by the U.S. Department of Transportation. Do you support or oppose the U.S. Department of Transportation having similar requirements for computers that operate driverless cars?

Support	80%
Oppose	15%
Don't Know	5%

8. The U.S. Department of Transportation currently has a website so consumers can look up safety information about their car including vehicle safety ratings and recalls for safety defects. How helpful would it be to have a U.S. Department of Transportation website for consumers to look up information about the safety features of a new or used driverless car that you may be purchasing for you or your family? Would it be...

Helpful (Net)	87%
Very Helpful	66%
Somewhat Helpful	21%
Not Helpful (Net)	11%
Not Very Helpful	5%
Not At All Helpful	6%
Don't Know	2%