



# Consumer Acceptance on the Road to Autonomy

Ragina C. Averella

AAA Mid-Atlantic, Maryland

Public & Government Affairs Manager





In Dec. 2017,  
**63%** of U.S. drivers  
would be afraid to  
ride in a fully self-  
driving vehicle,  
down from **78%** in  
early 2017.

# Automated Vehicle Crashes

The New York Times

How a Self-Driving Uber  
Killed a Pedestrian in Arizona

abc NEWS

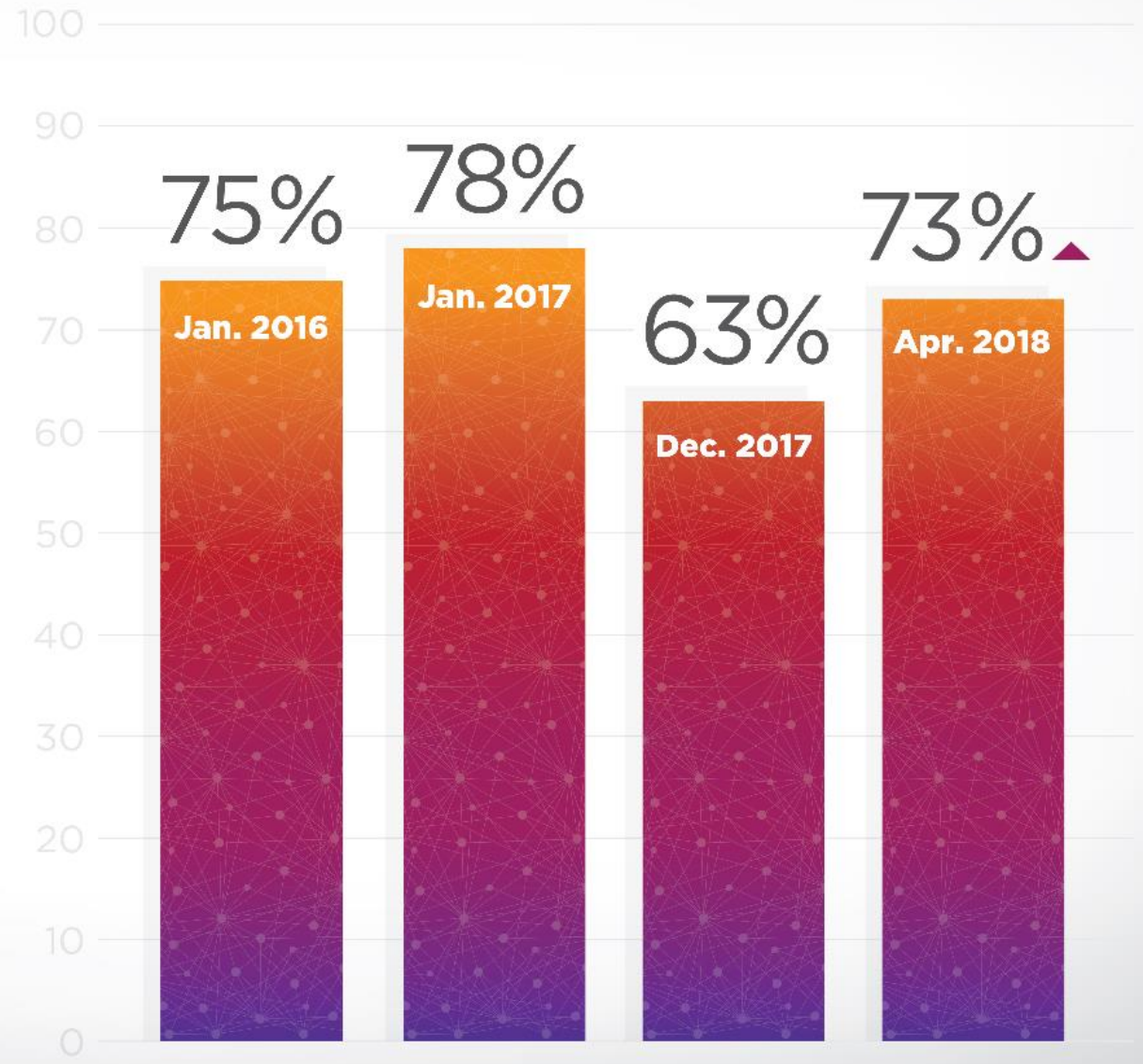
**NTSB investigating Tesla crash, fire that  
killed 2 Florida teens**

NBC  
BAY AREA

Driver Dies Following Fiery Tesla Model X  
Crash on U.S. Hwy. 101 in Mountain View



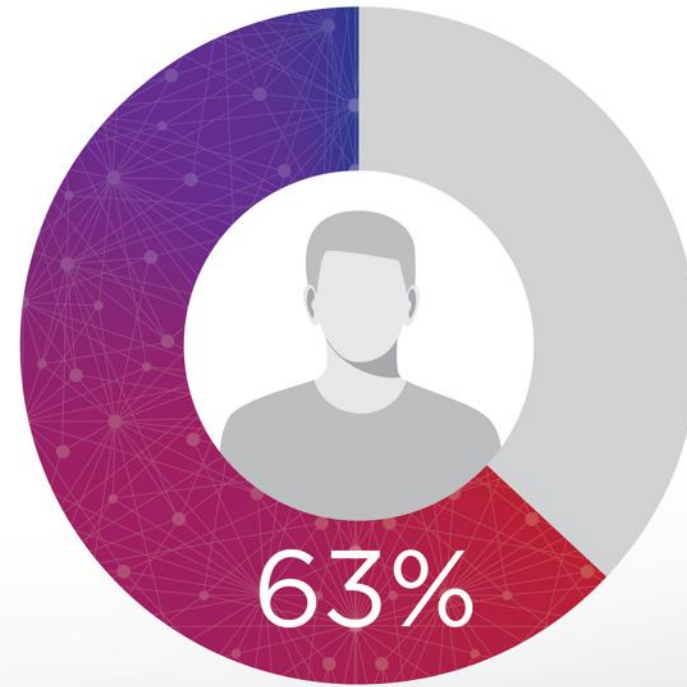
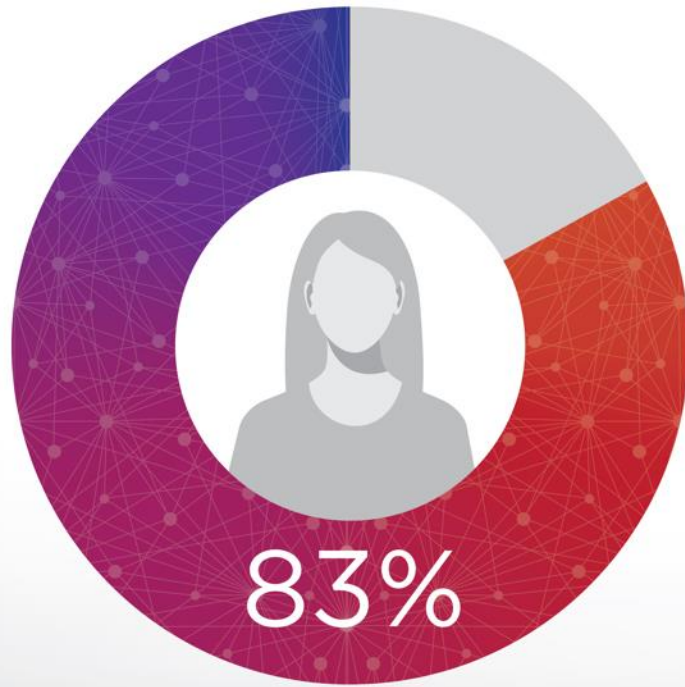
Percentage of U.S. drivers that would be afraid to ride in a fully self-driving vehicle



Difference between 2016 and 2017 not statistically significant.

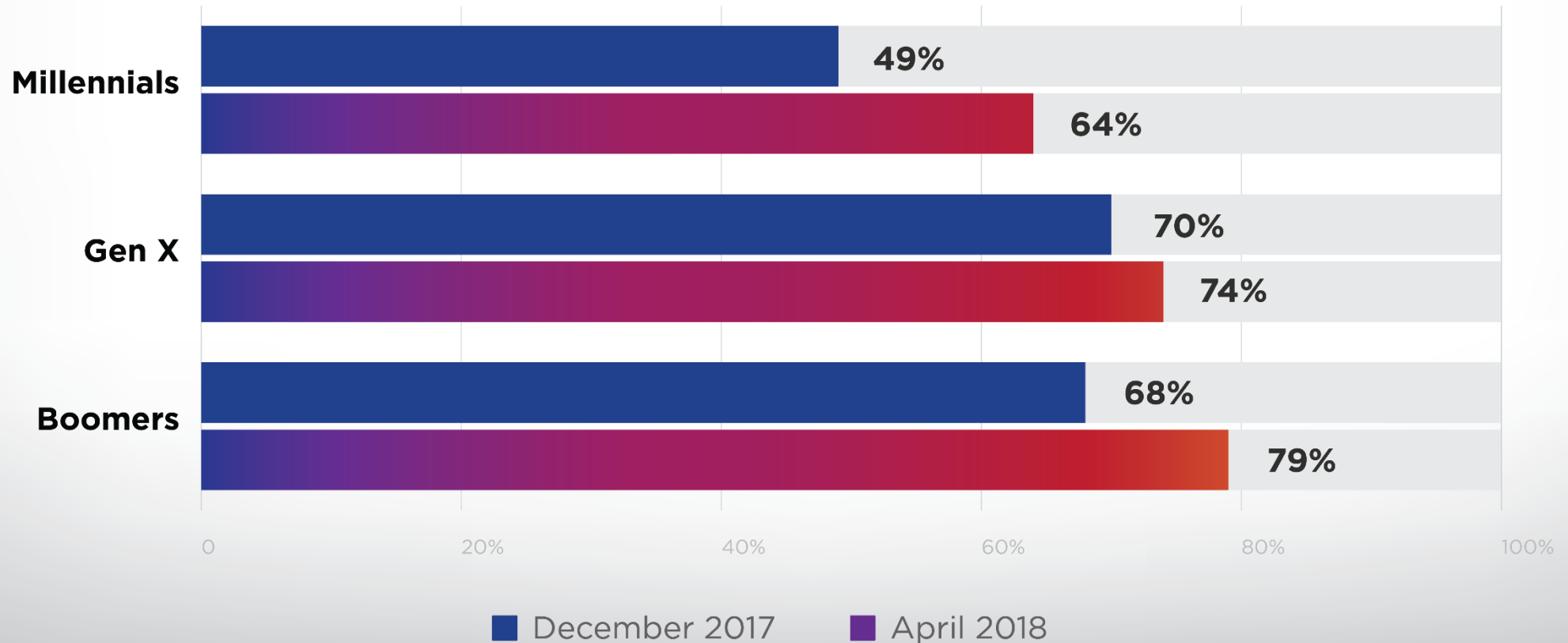
# Gender Differences - Percent Afraid to Ride in Self-Driving Car

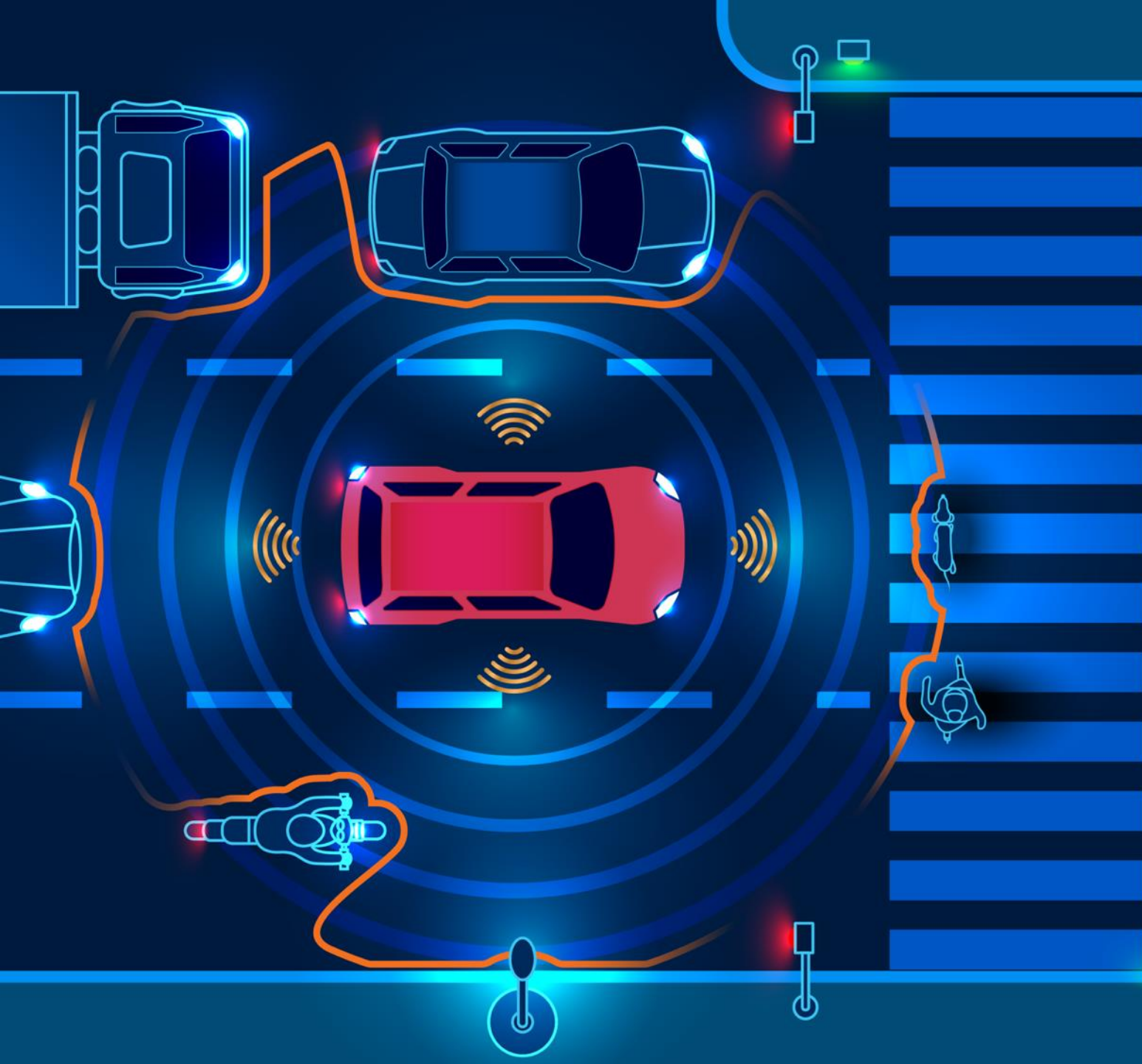
---



# Generational Differences

Share of U.S. drivers afraid to ride in a fully self-driving car by generation





## Sharing the Road

---

The survey showed that **63%** of respondents would feel less safe sharing the road with fully self-driving cars while walking or riding a bike.



Education can play a key role in easing fears.

**FROM OUR CEO**

## DRIVING INTO THE FUTURE

At Mcity, researchers put cutting-edge automotive technology to the test  
BY AMY S. ECKERT

### What Happens to Safety Begins Driving You?

AAA has been at the forefront of the nation's love affair with the automobile for more than a century. From those early days of noisy motorized contraptions competing with horse-drawn carriages to today's sleek computers on wheels, AAA motor clubs have always held to the unwavering belief that every American deserves safe, efficient transportation.

Today, society is on the verge of a seismic shift in safety and mobility as autonomous vehicle technology is deployed across more and different terrain.

While we understand and challenge the technologies and their implications for motorists, the potential safety impacts of driverless vehicles should not be underestimated.

Each year, roughly 35,000 people lose their lives in traffic crashes on our nation's roadways, and millions more

While there are sure to be bumps in the road to technology, and many of the safety, licensing, and liability laws and regulations have yet to be written, auto manufacturers are racing at full speed to get these vehicles on the road. As futuristic as some of these advances may seem, you might be surprised to know that

# Technology Takes the Wheel

2018 BI-MONTHLY SEMINARS ON AUTONOMOUS VEHICLES

## KICKOFF SEMINAR

Wednesday, Feb. 7, 2018 • 3–5 p.m.

Nittschke Auditorium on UT's Main Campus (1600 N. Westwood Ave.), with reception to follow in adjacent Brady Center

Cosponsored by:  
The University of Toledo College of Engineering and AAA Northwest Ohio

UT COLLEGE OF ENGINEERING THE UNIVERSITY OF TOLEDO AAA

**public & government affairs**

### Autonomous Vehicles: Coming to a Highway Near You

Car manufacturers, tier-one automotive suppliers, technology companies, ride-sharing businesses, universities and other researchers are all racing to develop autonomous vehicles and related components. Some experts predict that we will see fully autonomous self-driving vehicles as soon as 2020, and the pace of change is so rapid that automakers are teaming with other companies to speed development even further. They are also purchasing autonomous-vehicle technology startups and investing in ride-sharing companies to preserve their relevance in the industry in the event that vehicle autonomy has a significant effect on consumers' vehicle buying patterns.

While autonomous vehicles hold the promise of bringing a seismic shift in safety and mobility, AAA is working to ensure that federal, state and private industry officials maintain a balance between innovation and public safety.

AAA Public and Government Affairs staff is serving on or, in some cases, seeking to form state autonomous-vehicle task forces to guide safe deployment of this potentially transformative technology. In Maryland and Pennsylvania, for example, AAA Public Affairs staff serve on state task forces evaluating the impacts of driverless technology on safety, insurance, law enforcement, licensing, privacy, cyber security and road testing. We are looking to help form similar task forces in Ohio, Kentucky, Delaware, Virginia and New Jersey this year. AAA views the development of autonomous vehicles from the perspective of the driver and consumer, related impacts on how technology is used as well as planning for the future.

With some market leaders.

FORD—After working on automated car technology for more than a decade, this major automaker expects to have a fully autonomous vehicle in 2021, including high-volume, fully autonomous vehicles for ride-sharing.

GM—GM plans to release its Super Cruise semi-autonomous technology on the Cadillac CT6 sedan this year. In 2016, GM paid \$1 billion for technology startup Cruise Automation to boost its own efforts. It also invested \$500 million in the ride-sharing company Lyft, becoming a preferred supplier of cars for its drivers today—and likely delivering autonomous cars to the company in the future.

TESLA—This electric-car company has said it may offer fully autonomous vehicles as early as 2018, but a recent facility in a

61% of U.S. drivers want at least one of these semi-autonomous features on their next vehicle:

- Adaptive Cruise Control
- Automatic Emergency Braking
- Lane Departure Warning/Lane Keep Assist
- Self-Parking Technology

with some market leaders.

FORD—After working on automated car technology for more than a decade, this major automaker expects to have a fully autonomous vehicle in 2021, including high-volume, fully autonomous vehicles for ride-sharing.

GM—GM plans to release its Super Cruise semi-autonomous technology on the Cadillac CT6 sedan this year. In 2016, GM paid \$1 billion for technology startup Cruise Automation to boost its own efforts. It also invested \$500 million in the ride-sharing company Lyft, becoming a preferred supplier of cars for its drivers today—and likely delivering autonomous cars to the company in the future.

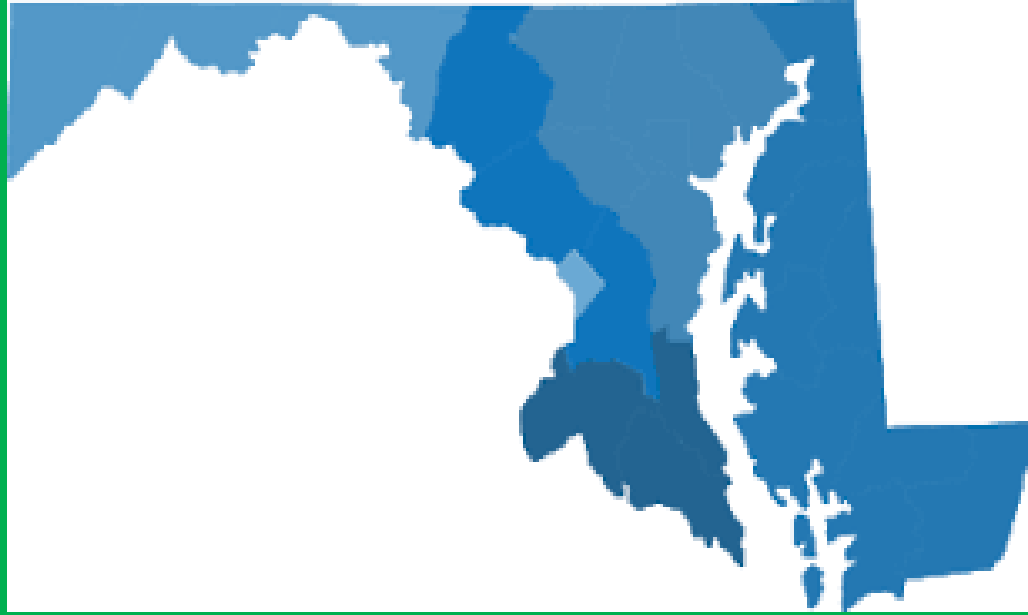
TESLA—This electric-car company has said it may offer fully autonomous vehicles as early as 2018, but a recent facility in a

## THE SHIFT TO AUTONOMY

BIG BETS FROM TECH AND AUTO ACCELERATE THE DEVELOPMENT OF SELF-DRIVING CARS

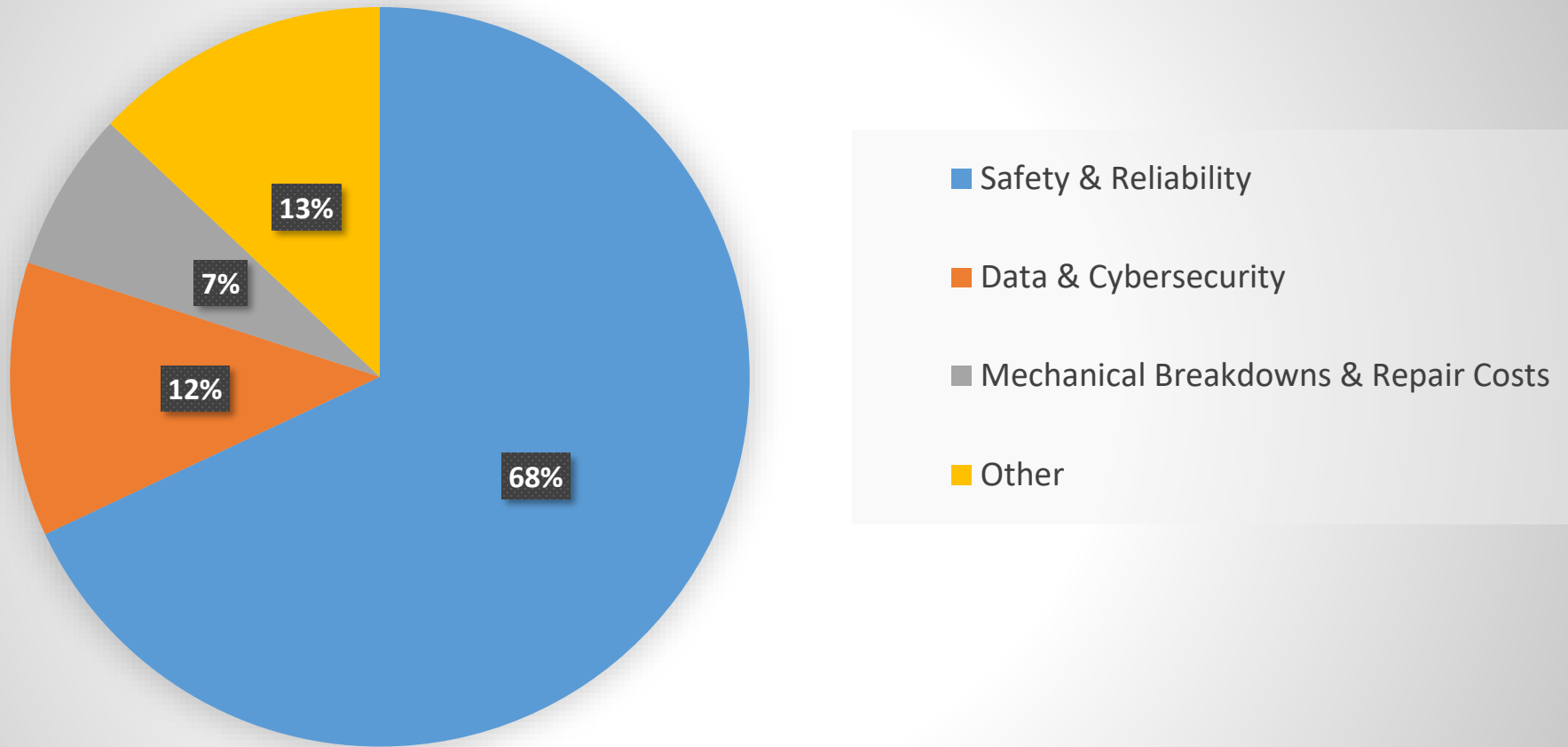






What Do Marylanders Think?

# Top Concerns About Autonomous Vehicle Technology



# Automated Vehicles: AAA Testing

**THE WALL STREET JOURNAL.**  
Home World U.S. Politics Economy **Business** Tech Markets Opinion Arts Life Real Estate

## AAA Warns of Misconceptions Regarding Automated Systems

Auto club says consumers need to be better educated on distinctions between system types



Money u.s. +

Business Markets Tech Media

## Always look when you change lanes

Despite massive improvements in car safety, drivers still need to keep their eyes open.

A new AAA report finds that car safety options that are supposed to work most of the time, but drivers need to be aware of some limitations they have.

"AAA's tests found that these systems are a great asset to drivers," said John Nielsen, AAA's managing director of automotive engineering and repair.

The car owners' group tested blind spot monitoring systems. Blind spot monitoring systems use radar to warn drivers in case they're not visible or go unnoticed in side mirrors. Lane departure cameras to warn drivers when they are drifting out of their lanes.

**FORTUNE**

## AAA Says Not All Automatic Braking Systems Are Designed to Prevent Car Crashes



THE VOICE OF THE AUTOMOTIVE WORLD

## New Cross Traffic Alert Systems Often Fail, Warns AAA

by Paul A. Eisenstein on Dec. 10, 2015

A major new safety technology frequently fails to work as promised, according to a new study by the AAA, leading to parking lot crashes and injuries to pedestrians and bicyclists.

The problem is complicated by the fact that more than three quarters of U.S. drivers "park incorrectly," the road service and safety organization reported. That further enhances the risk of accidents in parking lots, according to the AAA study.



We'll Keep You Alerted!

"Recognizing that American parking habits differ from much of the world, automakers are increasingly adding technology to vehicles that is designed to address rear visibility concerns," said John Nielsen, AAA's managing director of Automotive Engineering and Repair. "However, AAA's testing of these systems reveals significant shortcomings when used in real-world conditions and Americans should rely more on driving skills than technology."

The root of the problem is the way Americans typically park in shopping center and mall lots, 76% pulling forward, rather than backing into spots. That practice leaves pedestrians and bicyclists more vulnerable, while increasing the risk of a driver backing out into traffic.



An illustration shows how a cross-traffic alert system works, by spotting oncoming traffic.

**MOTORTREND**  
CAR REVIEWS NEWS FEATURES VIDEOS AWARDS REAL MPG BUYER'S GUIDE

NEWS 1 PHOTOS

Markets Money Work Small Business Retirement Tech Trends

## Do you trust your car to park itself?



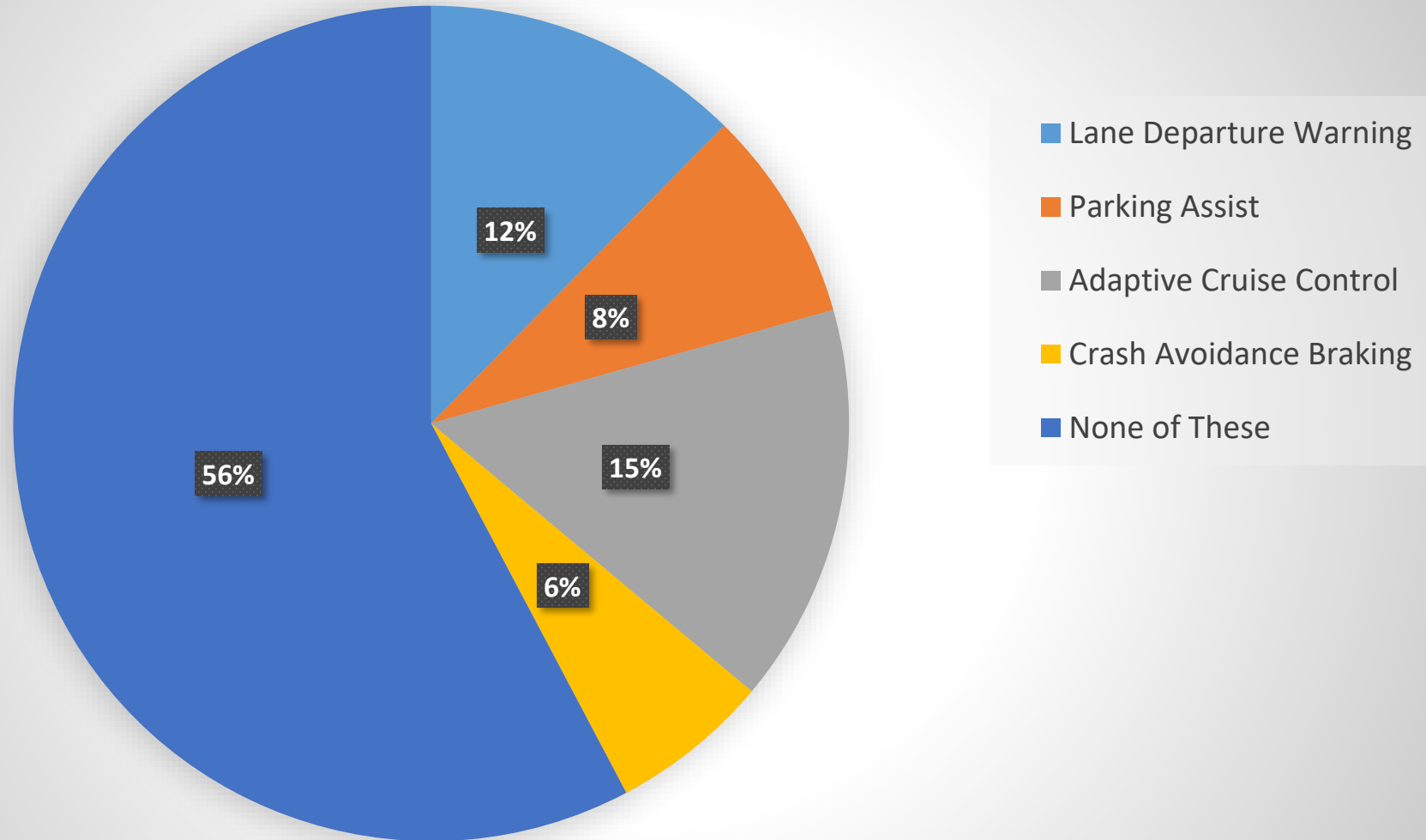
Tweet / Stumble / Email

that parallel parks itself without you touching the steering wheel. AAA shows that 72 percent of those asked would not even though it's now available in several models, mostly

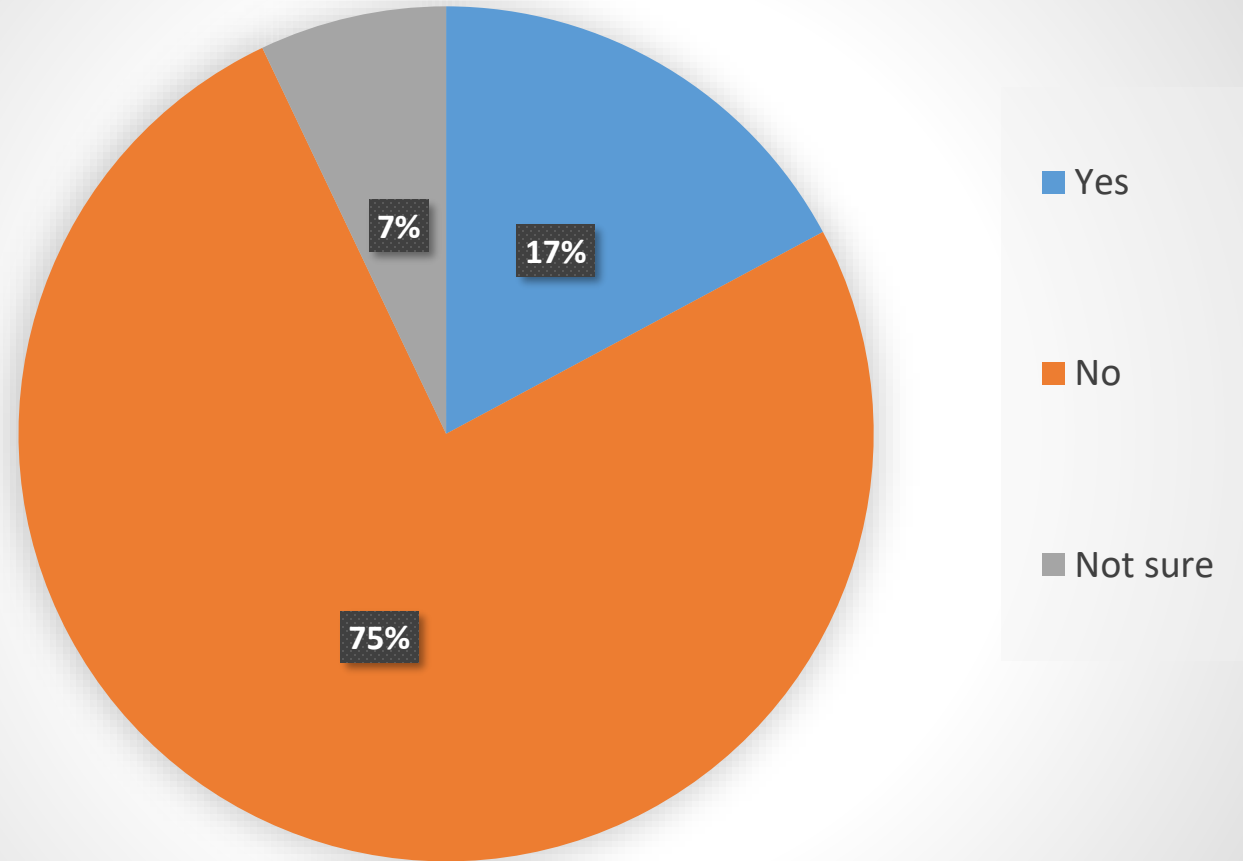
However, parking tests show that such suspicions are likely misplaced. AAA found the self-parking systems parked 10 percent faster than human drivers and



# Most Often Used Features



# Ride In Driverless Vehicle, Bus or Shuttle

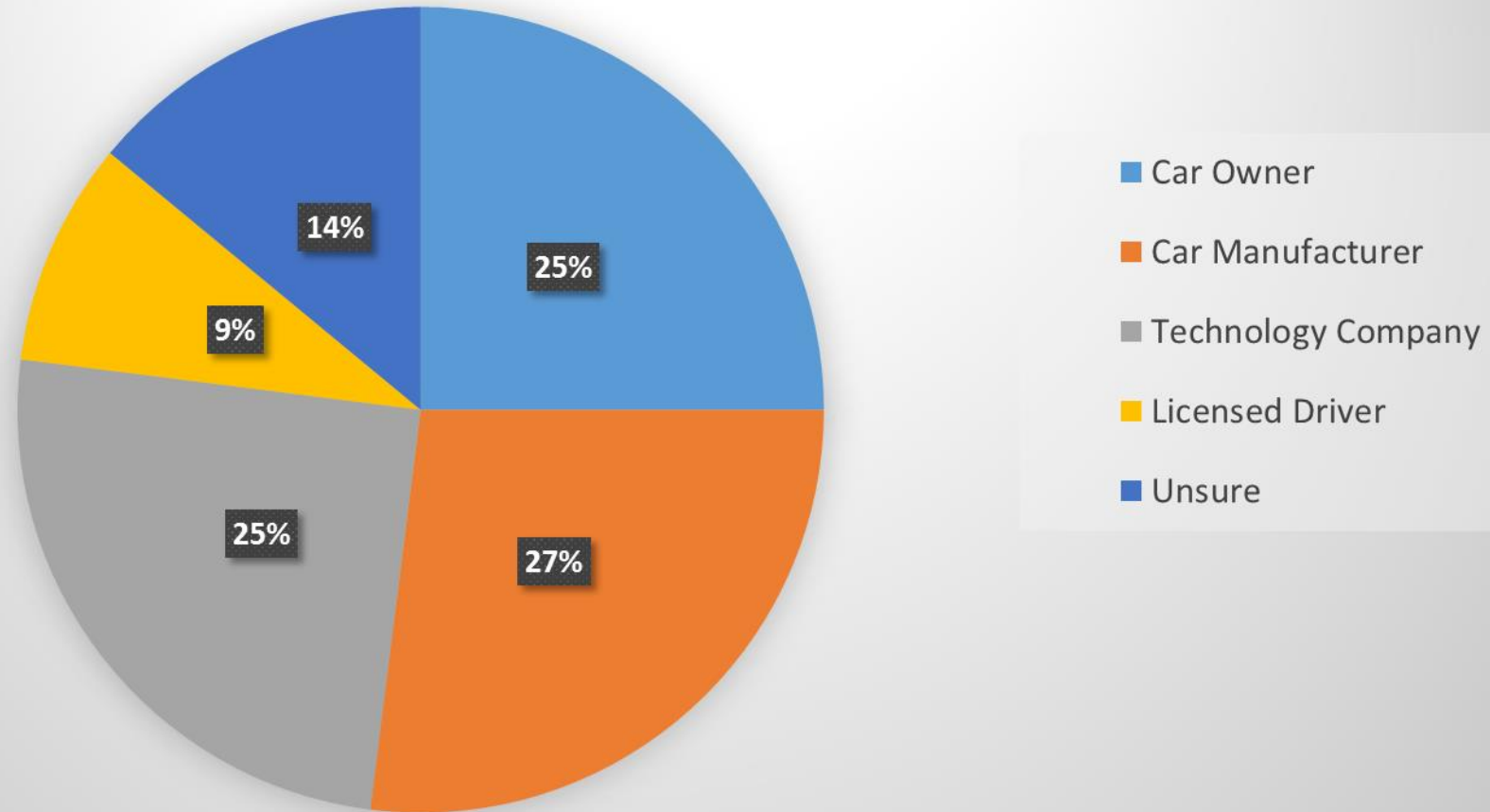


# AAA Helps Dispel Fear of Riding In Driverless Vehicles

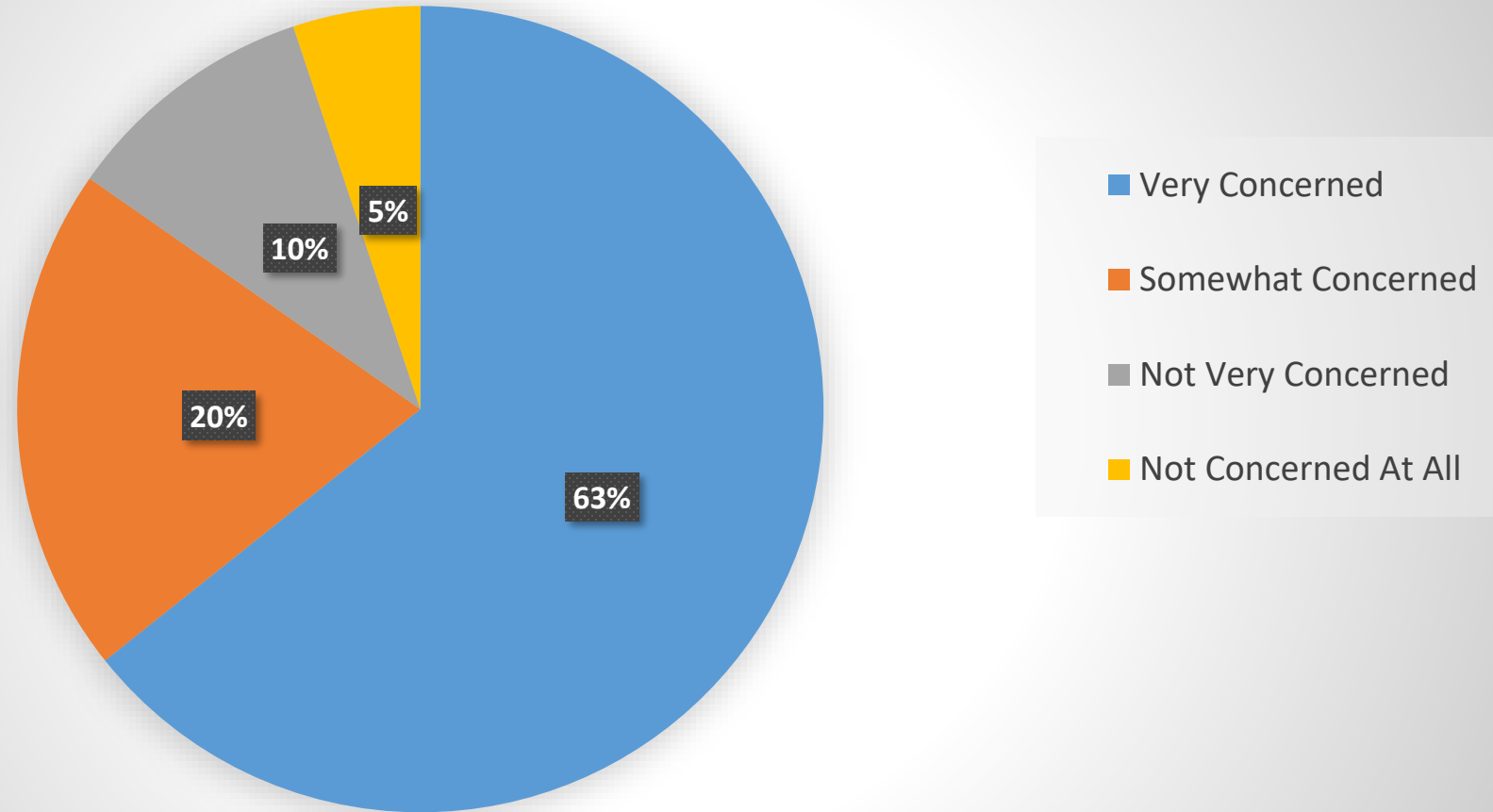




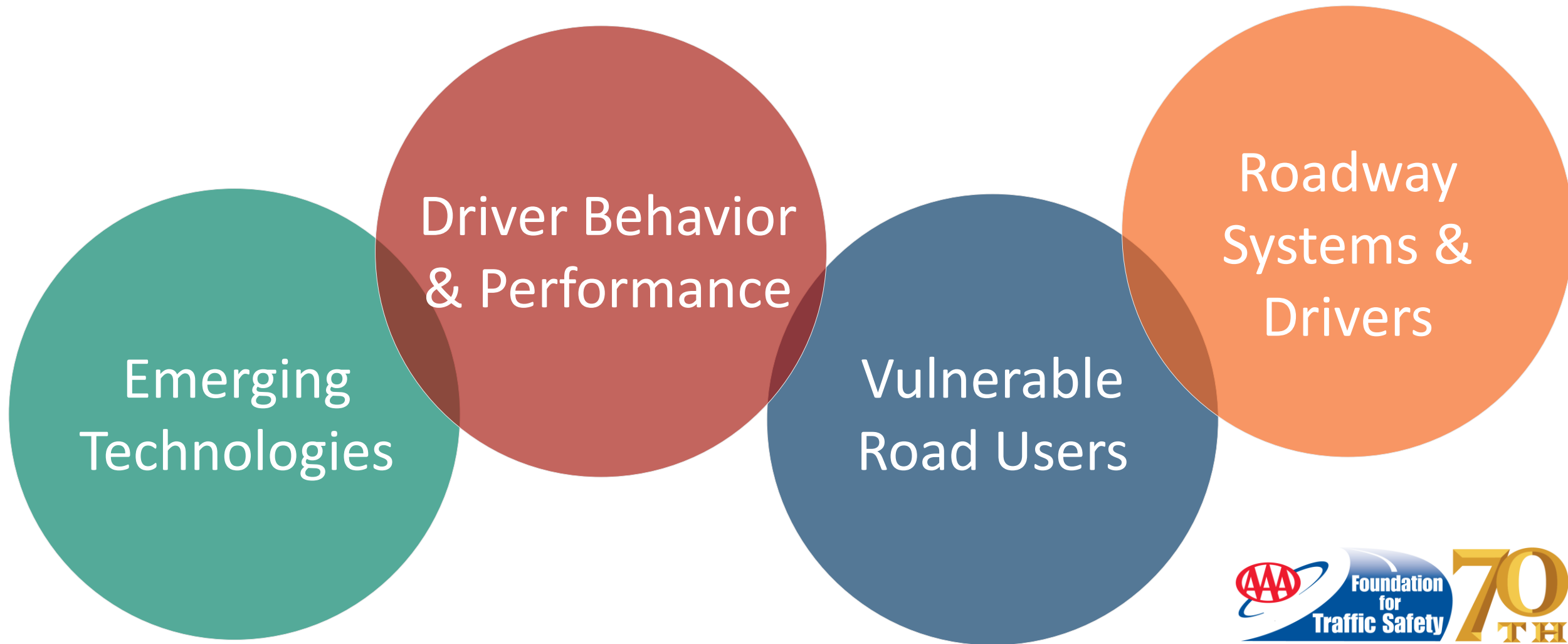
# Liability While Riding In Driverless Vehicle



# Concerns With Data Security



# AAA Foundation for Traffic Safety

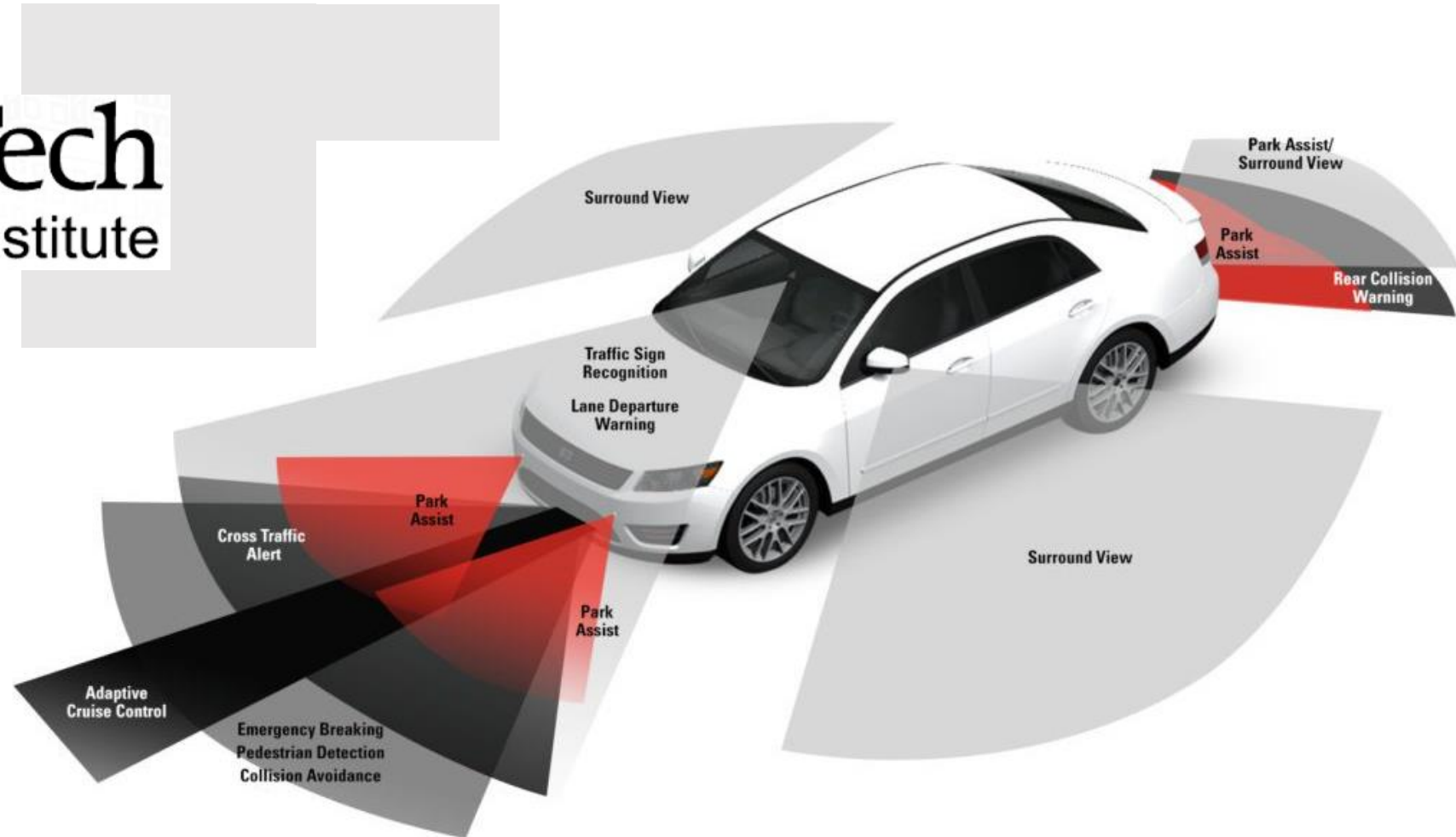




# AAA Foundation Research – Upcoming Research



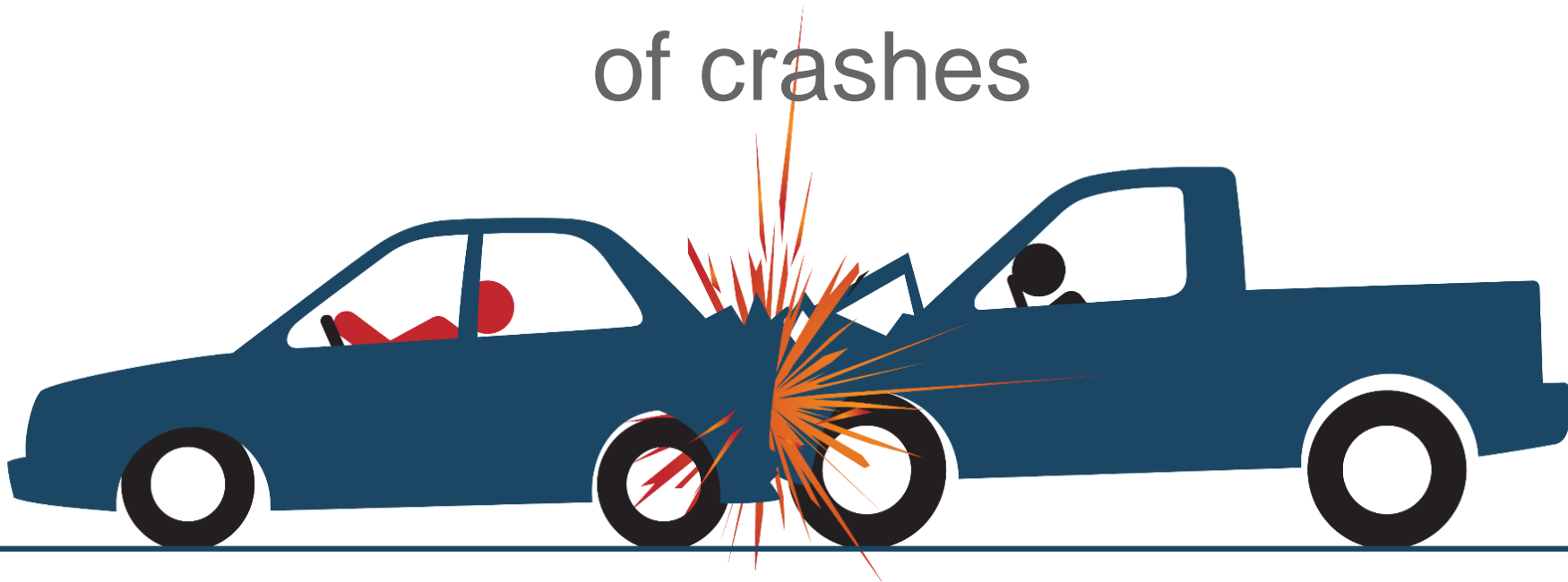
VirginiaTech  
Transportation Institute



# Safety Landscape

---

Human Error Contributes to  
**More than 90%**  
of crashes





# Thank You

Ragina C. Averella

[rcooper-Averella@aaamidatlantic.com](mailto:rcooper-Averella@aaamidatlantic.com)

(410) 616-1900 x61153



@AAAMDNews



AAA Mid-Atlantic News