Safety in the Age of Connected Mobility

Cathy Rossi, Vice President
Public & Government Affairs
AAA Club Alliance
Automated Vehicles: Overview

When? Where? How?
- 5, 10, 20 years or longer

Why?
- Safety
- Societal
- Congestion

Challenges

Consumer Understanding/Acceptance
Automated Vehicles: Challenges

- Policy
- Insurance
- Privacy
- Cybersecurity
- Consumer Understanding
  - Level 4 & 5 vs. Levels 1-2
Federal Automated Vehicles Policy

Accelerating the Next Revolution
In Roadway Safety

September 2016
Motor Vehicle Fatalities 2000-2015

One death every 15.0 minutes

35,092
Automated Vehicles: Potential Benefits

- Convenience
- Safety
- Congestion
- Mobility
Traffic Safety Culture Index

- Culture of complacency
- Prevailing attitude: “Do as I say, not as I do.”
- Speed & convenience valued over safety
Safety Culture: “Do as I say, not as I do.”

Source: AAA Foundation for Traffic Safety, 2017
Automated Vehicles & the Consumer

What Happens to Safety the Day Your Car Begins Driving You?

A.A. 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, mechanical contraptions competing with horses on today’s streets, the nation’s love affair with the automobile has grown exponentially, resulting in more than 100,000 people killed and an estimated 4 million suffering injuries on our nation’s roads each year.

While we are just beginning to understand the myriad opportunities and challenges of autonomous vehicles and their implications for safety, the potential safety impacts of autonomous vehicles should not be underestimated.

Adaptive Cruise Control

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

From Our CEO

Autonomous Vehicles: Coming to a Highway Near You

Public & Government Affairs

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

AAA Warns of Misconceptions Regarding Autonomous Systems
Auto club says consumers need to be better educated on distinctions between system types.

AAA Says Not All Automatic Braking Systems Are Designed to Prevent Car Crashes
AAA researchers are conducting tests to ensure that all systems are reliable and safe.

Always look when you change
Despite massive improvements in car safety, we need to keep our eyes open.

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.

"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.

However, parking tests show that such suspicions are likely misplaced. AAA found the self-parking systems parked 90 percent faster than human drivers and...
<table>
<thead>
<tr>
<th>EARLIEST NOTIFICATION</th>
<th>SHORTEST NOTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>188 feet from</td>
<td>4 feet from</td>
</tr>
<tr>
<td>approaching vehicle</td>
<td>approaching vehicle</td>
</tr>
</tbody>
</table>
Automated Vehicles: Consumer Opinion

75% of U.S. Drivers report feeling "AFRAID" to ride in a self-driving vehicle.

AAA NewsRoom.AAA.com
**How soon can you imagine routinely riding in a fully autonomous or self-driving vehicle?**

- **Within 10 years**: 57%
- **Longer than 10 years**: 25%
- **Not sure**: 3%
- **Never**: 15%

---

**Do you think you would watch the road the same way you would as if you were in a vehicle where you have complete control of driving?**

- **Still watch the road**: 55%
- **Do not think still watch the road**: 41%
- **Not sure**: 3%
Automated Vehicles: Connecticut Opinion

Do you think local and state governments should inform the public when and where autonomous vehicles will be tested on roads in their area?

- Yes: 81%
- No: 15%
- Not Sure: 4%
States with Enacted Autonomous Vehicle Legislation

- Columbus, OH won “Smart Cities Challenge”
- Uber testing in Pittsburgh
- Google testing in Austin, Phoenix, and Kirkland
- Otto—Subsidiary of Uber delivered 45,000 cans of beer in self-driving truck
- VA Governor: 70 miles of interstates and arterial roads dubbed “Virginia Automated Corridors”

Source: National Conference of State Legislatures
Policy Considerations – Testing

Human Driver?
- Identification
- Human/Remote Take-over
- Safety Certification

Consumer Education

Vehicle Specifications
- Identification
- Human/Remote Take-over
- Safety Certification

Data
- Collection
- Transparency
- Incident Reports
Automated Vehicles: The Road Forward

- Keep safety a priority
- Respect motorists’ rights
- Consumer education & acceptance
- Harmonization & standardization
- Ongoing research
- Continued investment