



AUTOMOTIVE ENGINEERING

FACT SHEET



VEHICLE TECHNOLOGY SURVEY

BACKGROUND

Autonomous vehicles, designed to travel from point A to point B with minimal input from a driver/passenger, are currently being tested on American roadways, and cars equipped with technologies that enable certain aspects of autonomous operation (adaptive cruise control, automatic emergency braking, lane deviation correction and self-parking functionality) are becoming increasingly common in dealer showrooms

According to a new survey from AAA, three-quarters of U.S. drivers, particularly women and those ages 55 and older, would be afraid to ride in a self-driving car. Despite this fear, consumer demand for semi-autonomous vehicle technology is fairly strong with six-in-10 American drivers wanting at least one of the following on their next vehicle: automatic emergency braking, adaptive cruise control, self-parking technology or lane keep assist.

With one-in-five of Americans planning to purchase or lease a vehicle this year, AAA urges car shoppers to fully understand today's advanced vehicle technology, particularly the limitations, before purchasing a new car.

KEY FINDINGS

CONSUMER TRUST

- **Only one-in-five (20%) U.S. drivers would trust an autonomous vehicle** to drive itself with them in it.
- **Three-quarters (75%) of U.S. drivers would be afraid to allow an autonomous vehicle** to drive itself with them in it.
- **Women (81%) are more likely than men (67%) to be afraid** to allow an autonomous vehicle to drive itself with them in it.
- **Baby Boomers (82%) are more likely to be afraid** to allow an autonomous vehicle to drive itself with them in it than younger generations (69%)
- **U.S. drivers are most likely to trust lane departure warning/lane keep assist (52%),** followed by adaptive cruise control (47%), automatic emergency braking (44%) and self-parking technology (36%).
- **Men are more likely than women to trust semi-autonomous vehicle technology*,** specifically self-parking (42% vs. 31%), automatic emergency braking (49% vs. 40%) and adaptive cruise control (50% vs. 43%)
- **Drivers that have semi-autonomous technology* in their vehicle are more likely to trust it** than those that do not, specifically lane-departure warnings/lane keep assist (84% vs. 50%), adaptive cruise control (73% vs. 47%) and automatic emergency braking (71% vs. 44%).

To understand consumer attitudes towards autonomous/semi-autonomous vehicles, AAA pursued three lines of inquiry:

- **Are U.S. drivers comfortable with the idea of riding in a self-driving car?**
- **Are U.S. drivers likely to want semi-autonomous technology* on their next vehicle?**
- **Do U.S. drivers trust today's vehicle technology* to work as designed?**

KEY FINDINGS, *continued*

PURCHASE INTENTIONS

Sixty-one percent of U.S. drivers want at least one semi-autonomous vehicle technology* in their next vehicle, including lane departure warning/lane keep assist (41%), adaptive cruise control (40%), automatic emergency braking (39%) and self-parking technology (25%)

- Millennial drivers are most likely to want self-parking technology in their next vehicle (33%), compared to Gen-Xers (20%) or Baby Boomers (22%)
- Millennials are most likely to want adaptive cruise control on their next vehicle (45%) compared to Gen Xers (37%) or Baby Boomers (34%)
- Men are more likely to want automatic emergency braking on their next vehicle (42%) than women (35%)
- Men are more likely to want adaptive cruise control on their next vehicle (44%) than women (36%)

For drivers who want semi-autonomous vehicle technology* on their next vehicle, their primary motivation is *safety* (84%), *convenience* (64%), *reducing stress* (46%) and *wanting the latest technology* (30%).

- Baby Boomers are more likely to cite *safety* as a reason they want semi-autonomous technology* in their next vehicle (89%) than Millennials (78%).
- Millennials are more likely to cite *convenience* as a reason they want semi-autonomous technology* in their next vehicle (75%) than Gen-Xers (60%) or Baby Boomers (59%)
- Millennials are more likely to cite *wanting the latest technology* as a reason they want semi-autonomous technology* in their next vehicle (36%) than Baby Boomers (25%)
- Female drivers are more likely to cite *reducing stress* as a reason they want semi-autonomous technology* in their next vehicle (50%) than male drivers (42%)



Drivers who do not want autonomous technology* in their next vehicle cite *trusting their driving skills more than the technology* (84%), *feeling the technology is too new and unproven* (60%), *not wanting to pay extra for it* (57%) and *feeling they don't know enough about it* (50%)

- Millennials (63%) and Gen-Xers (62%) are more likely to cite *not wanting to pay extra* as a reason for not wanting semi-autonomous technology* on their next vehicle than Baby Boomers (49%)
- Drivers with children are more likely to cite *not wanting to pay extra* as a reason for not wanting semi-autonomous technology* in their next vehicle (65%) than those without children (53%).
- Female drivers are more likely to cite *not knowing enough about it* as a reason for not wanting semi-autonomous technology* in their next vehicle (56%) than male drivers (44%)
- Female drivers are more likely to cite *it would be too complicated to use* as a reason for not wanting semi-autonomous technology* in their next vehicle (23%) than male drivers (12%)

METHODOLOGY

Between January 14 and 24, 2016 two waves of an omnibus telephone survey were conducted in the continental US. A total of 1,832 interviews were completed among drivers who are 18 years of age or older.

A dual-frame approach was used that combined land-line and cell phone interviews to ensure that adults who only or primarily communicate via cell phones are included and properly represented.

Survey responses are weighted by six variables (age, gender, geographic region, race/ethnicity, education, and landline vs. cell phone only) to ensure reliable and accurate representation of the total continental US population, 18 years of age and older.

The study results have an average statistical error rate of +/-2.7% at the 95% confidence level.