

Fast Facts

20 autonomous technology stats that might surprise you.

With varying degrees of autonomous capabilities already being used in an array of consumer and industrial applications, it's clear that the shift to autonomous technology is no longer a vision of the future. It's here, and soon, anything less will be history.

To keep you in the know, Trimble Autonomy has researched and compiled some of the latest data and statistics related to the current autonomous market, sustainability opportunities and the drivers behind the call for the technologies themselves.

State of the autonomy market:

42.32 M

The market for AV sensors is poised to grow by 42.32 million units during 2022-2026, accelerating at a CAGR of 20.34% during the forecast period.¹

12 M

By 2025, "technology will create at least 12 million more jobs than it eliminates."²

55-56%

56% of Gen Y and 55% of Gen Z consumers expressed more interest in both partially and fully autonomous vehicles.³

100x faster

5G might be the missing piece of the puzzle to take autonomous vehicles to the next level of efficiency. With a network 100x faster than 4G, it's expected to serve 40% of the world by 2024.⁵

68%
Europe

76%
Asia

93%
North American



93% of North American respondents reported that machine learning is a core component of their business strategy, followed by 76% in the Asia Pacific region and 68% in Europe.⁴



\$40.2 B

The global 5G IoT market size is expected to grow from \$2.6 billion USD in 2021 to \$40.2 billion USD by 2026.⁶

40.1%

The global autonomous vehicle market was valued at \$76.13 billion USD in 2020, and is projected to reach \$2,161.79 billion USD by 2030, registering a CAGR of 40.1% from 2021 to 2030.⁷

26%

Since the pandemic, an additional 26% of consumers are now on board with autonomous delivery technologies.⁸

Sustainability opportunities:

75%



The National Renewable Energy Laboratory estimates removing unnecessary safety features could make autonomous vehicles 75% lighter than conventional vehicles, making them more energy efficient.¹⁰

\$19 B

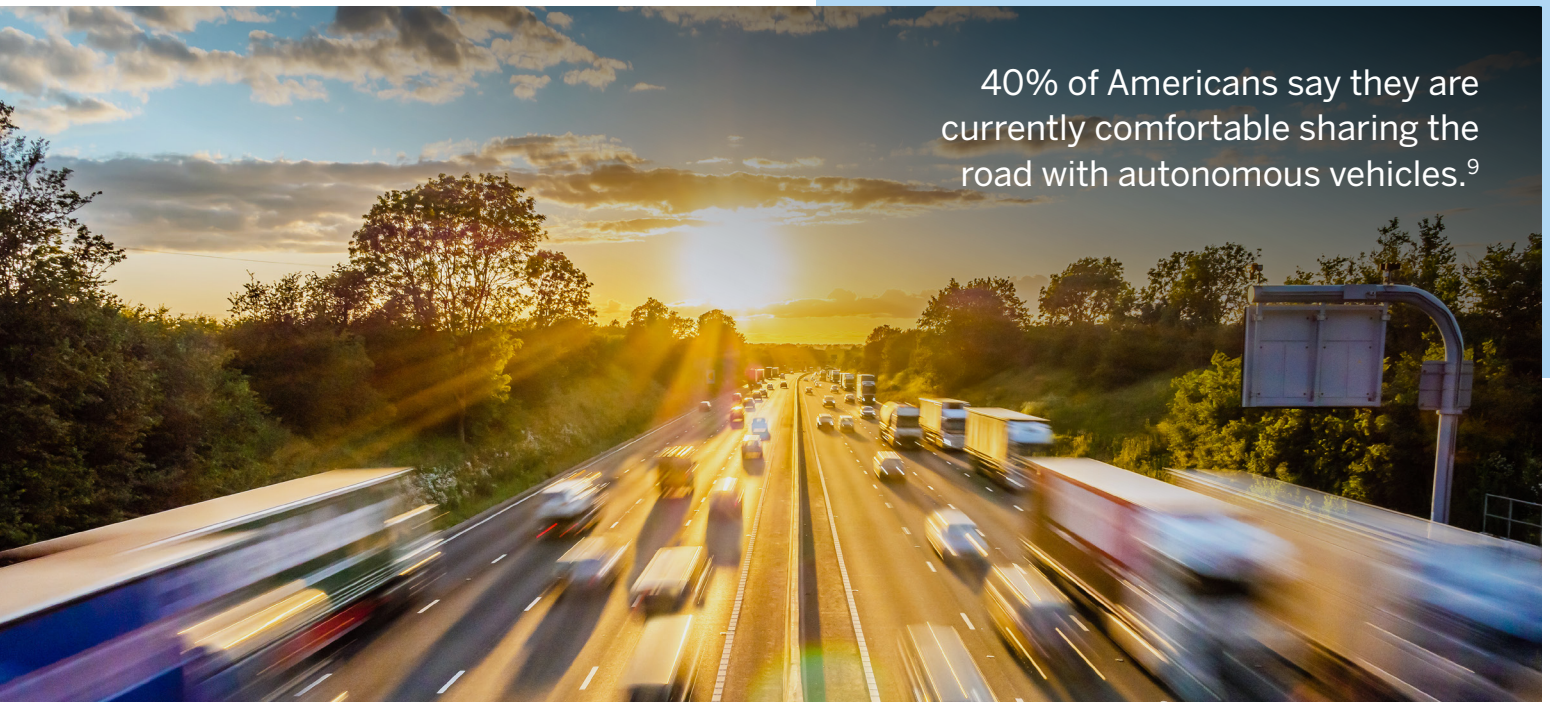


Autonomous vehicles could mitigate transportation obstacles for some 57 million Americans, opening up 2 million job opportunities, and even saving \$19 billion USD annually in healthcare costs from missed appointments.¹¹

23%

Less Fuel

Vehicle performance, such as fast acceleration, will likely become de-emphasized when comfort and productivity become travel priorities, potentially leading to a 5-23% reduction in fuel consumption.¹²



40% of Americans say they are currently comfortable sharing the road with autonomous vehicles.⁹

Primary drivers to adoption:

40%

Autonomous trucks could help reduce transportation network costs by 29% to 40%, according to a study from Ryder and the Georgia Institute of Technology.¹³

48%

Study reveals 48% of business respondents are using machine learning in an effort to increase productivity and speed. And 61% are using it for automation.¹⁴

2040

PwC analysis estimates autonomous, long-haul trucking could save manufacturers nearly 30% in total transportation costs through 2040, assuming aggressive adoption of autonomous trucking.¹⁵

The top trigger for manufacturers to adopt industrial mobility technologies (such as autonomous trucks) is:¹⁶



cost advantage



customer/supply expectations



increased safety

160,000 shortfall

The current truck driver shortage could surpass 160,000 in 2031, according to the ATA.¹⁷

99%

Humans are to blame for 99% of autonomous vehicle accidents, IDTechEx data reveals. For crashed vehicles operating in autonomous mode, 81 out of 83 incidents were caused by a human.¹⁸

90%

According to the U.S. Chamber of Commerce, more than 90% of industry association economists say employers in their sectors are struggling to find qualified workers for open jobs.¹⁹

69%

According to AV statistics, 69% of Americans think that self-driving cars would positively impact helping elderly or disabled people move around.²⁰

With a 40+ year track record in innovation, Trimble Autonomy has what it takes to lead the way to greater efficiencies with a flexible, consultative approach that empowers customers like you to realize your autonomous potential—on your terms. We'll walk with you every step—to take you from where you are to where you want to be—with unparalleled accuracy, precision, positioning and timing.

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