

Fast Facts

25 autonomy stats within the automotive industry that might surprise you.

Between driver control systems such as steering and braking, lane positioning capabilities and sensor technologies, it's clear that autonomous vehicles are no longer a vision of the future. They're here already, and will only advance as time goes on.

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

State of the autonomous automotive market:

20% to 57%

According to McKinsey, by 2030, 20% of passenger cars sold could include ADAS technology. By 2035, the number could jump to 57%.¹

\$197 B

The autonomous car market is slated to reach \$197 billion by 2030, with a CAGR of 25.7%.³

2025

The self-driving car market is expected to be worth one trillion dollars by 2025, according to estimates.⁴

800,000

Annual production levels of robo-cars are expected to reach 800,000 units worldwide by 2030.⁵

\$10K

In a McKinsey survey of more than 25,000 consumers, about 1/4 of respondents said they are very likely to choose an ADAS feature when purchasing their next vehicle. Two-thirds of them would pay a one-time fee of \$10,000 or an equivalent subscription rate for an L4 highway pilot, which provides hands-free driving on highways under certain conditions.⁶



55%



According to autonomous cars data, 55% of small companies anticipate they will have a completely autonomous fleet over the next two decades.²



Sustainability opportunities:

27%



Greenhouse gas (GHG) emissions from transportation account for about 27% of total U.S. GHG emissions, making it the largest contributor of U.S. GHG emissions.⁸

48%



Optimum truck platoon configuration could reduce life cycle costs and environmental impacts by 48% and 36%, respectively, compared with human-driven trucks.⁹

60%



Private vehicles account for some 60% of greenhouse gas emissions. In the US, this amounts to almost 2 billion tons of CO2 equivalent into the atmosphere p/y, accounting for 30% of all emissions.¹⁰

Primary drivers to adoption:

94–96%

Human error accounts for anywhere between 94% to 96% of all auto accidents. Other studies have produced similar results, most reporting the number to be at least 90%.¹¹

25%

Up to 25% of congestion is caused by traffic incidents, according to an automated vehicle study reported by the US Energy Information Administration.¹²

46,020

The National Safety Council's estimate of total motor-vehicle deaths for 2021 is 46,020, up 9% from 42,339 in 2020.¹³



Autonomous vehicles offer significant environmental benefits in fuel usage, and one study claims AVs can lead to as much as 20% improvement in fuel consumption.⁷

47.4%

Trucking and construction occupations accounted for nearly half of all fatal occupational injuries (47.4%) in 2020, representing 1,282 and 976 workplace deaths, respectively.¹⁴

3,522

Distracted driving claimed 3,522 lives in the US in 2021.¹⁵

2019

The most common driver factors in fatal crashes in 2019 were: speeding (16.6%), impairment (fatigue, alcohol, etc.) (15.1%), not yielding right-of-way (8.4%), careless driving (6.6%), and distraction/inattention (6.3%).¹⁶

49%

49% of US citizens want to know how vulnerable they will be to hackers as a result of autonomous advancements.¹⁹

831

Distractions account for 40% of all work-related deaths. Drivers of heavy trucks and tractor-trailers had 831 fatalities.¹⁸

40% less

AVs may cut travel time by up to 40%, recover up to 80 billion hours lost to commuting and congestion, and reduce fuel consumption by up to 40%.¹⁷

73%

According to consumers, vehicle security against hackers is one of the main self-driving vehicle disconnects, with 73% reporting this as a significant concern.²¹

72%

72% of US adults would feel safer riding in a self-driving car if they had the ability to take over control if something goes wrong.²⁰

5G—200 vs 5 ms

Human reaction speed is a bit above 200 milliseconds, leading to accidents every day. 5G's 5 millisecond latency is practically real-time, for enhanced safety and accident avoidance.²²

71%

According to consumers, self-driving vehicles getting confused by unexpected situations is one of the main self-driving vehicle disconnects, with 71% reporting this as a significant concern. ²³

78 M

With projections for some 78 million senior citizens (65 or older) in the US by 2035, ²⁵ autonomous vehicles could provide safer access to medical and personal appointments, shopping and social gatherings essential to healthy and happy living. ²⁴

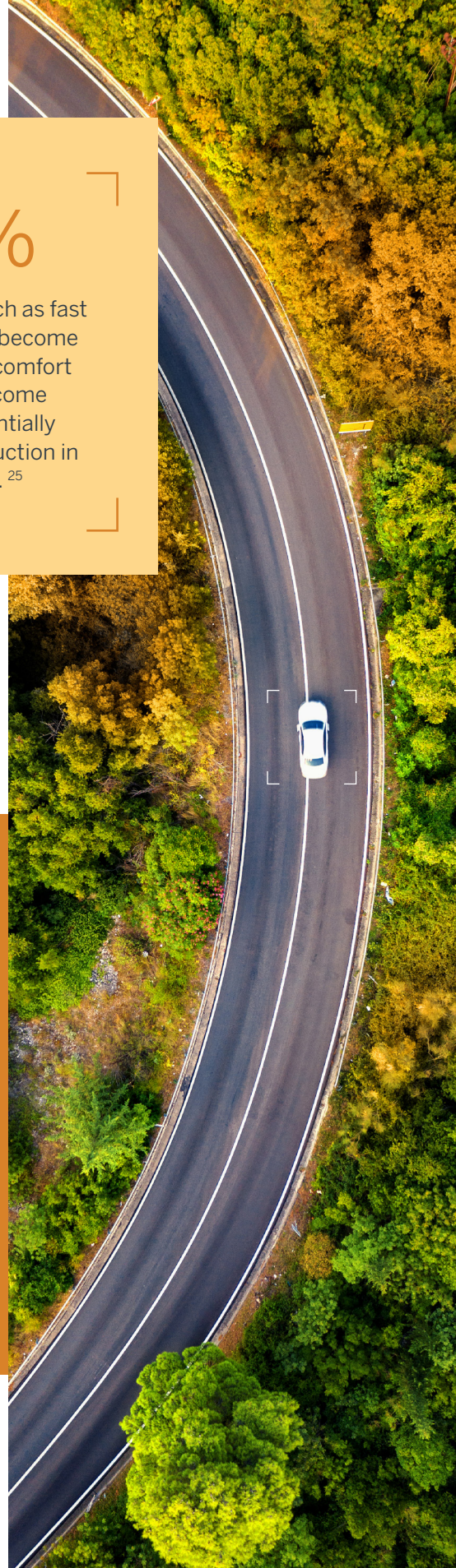
5-23%

Vehicle performance such as fast acceleration is likely to become de-emphasized when comfort and productivity become travel priorities, potentially leading to a 5-23% reduction in fuel consumption. ²⁵

Clearly, autonomous momentum is picking up speed on today's roads and highways. With a 40+ year track record in innovation, Trimble Autonomy has what it takes to lead the way in empowering automotive innovators like you to think bigger and 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.

Learn more at:

<https://autonomy.trimble.com/en/>



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