

Americans who have tried autonomous cars are much more likely to have positive feelings about them. Autonomous ridehailing can help bridge the gap and expose more people.

An Ipsos Point of View

Authors: Graham Gordon, John Kiser

GAME CHANGERS

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Key Findings:

- Progress in fully autonomous driving is stalling amid slow progress and shifting investments, but advanced safety tech or ADAS features are still valuable in the eyes of the consumer.
- Overall consideration of full autonomous driving is increasing, but buyers still view the technology as situational.
- Experiences with semi-autonomous driving is up and helps demonstrate its benefits... but it does not eliminate concerns.
- Autonomous ride-hailing has provided a new way forward, promoting incremental progress in key city-centers. Top providers have over 1 million miles of experience without drivers, a significant milestone with potential to continually expand.
- With any new innovation, collaboration and transparency is critical. Industry and governmental leaders must be prudent and honest in the spirt of progress. Sharing information across stakeholders can help avoid overreaction and negative public sentiment.

For some people, fully autonomous driving is the logical, utopian solution to transportation. For others, it's merely a pipe dream. Neither crowd has been validated yet, but developments in advanced driver-assistance system (ADAS) features working together to create a semi-autonomous experience (or even autonomous ride-hailing) may provide the right opportunities for consumers to experience an automated driving experience.

The tech advancements of the last few years have been significant — and with the acceleration of artificial intelligence, there is a real opportunity for exponential growth in autonomous driving in the coming years. One clear barrier is that many people aren't familiar with autonomous driving experiences — but those who have experienced it are much more likely to understand its potential to be safer and more comfortable.

How can automakers and other stakeholders help expose more people to the technology? While the pace of innovation in personal vehicles isn't meeting consumer expectations, autonomous ride-hailing services are emerging as a way to bridge the gap and develop the technology through other means.

Autonomous driving is omnipresent in the news, for better or worse

With such high stakes, autonomous technology sentiments can often be tied to how the media presents the technology, good or bad. Unfortunately, what is covered by the media tends to be negative or when accidents happen — and not how many accidents may be avoided as a result.

These media reports have rippling effects on the industry and beyond, affecting public perception of the technology, altering market investments across different ventures, and even affecting the existence of companies that were previously heralded as industry darlings. So, with an uphill battle ahead, where does the automotive industry currently lie, where is it going, and how can it effectively push forward?

Safety tech is still the future of the industry

According to our 2023 Navigator study on driving technology, there is an upside in the current state of autonomy. For one, consumers are becoming more comfortable with the technology in their cars. Three in five (60%) would consider a *connected vehicle* that can communicate with other devices/systems (up 11% from last year), and 58% *trust advanced driver assist systems* (ADAS), a 7% increase from 2022.

US Car Buyer Vehicle Technology Sentiment, Top 2 Box %

Would consider a **connected vehicle** (can communicate with other devices/systems)

Up 11% YoY 60%

Trust **Advanced Driver Assist Systems** (ADAS)



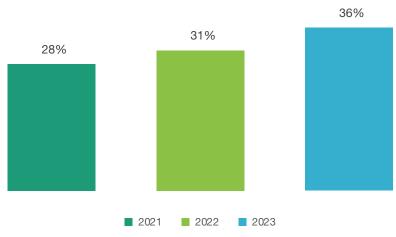
On top of that, out of the 17 future-focused technology features analyzed in our study this year, consumers ranked various safety-related features such as accident avoidance, emergency service, and adaptive/automatic cruise control as the features they were both most aware of and most interested in purchasing in their vehicle. While semi-autonomous mode and full-autonomous mode were both low in interest comparatively, it's still a cautiously optimistic sign that safety enhancements are the most welcome innovations in the auto industry. Once ADAS features become more widely used and trusted, this in turn could help prime more car buyers to consider and test out further enhancements in the space, namely semi-autonomous and full-autonomous driving. And in turn, if semi and full autonomy can fully realize their own stated safety benefits, they too may find themselves a home in the vehicles of the future.



Leveraging semi-autonomous driving can help boost public perception of full autonomy

Consideration regarding full autonomous driving continues to climb, although there is still work to do. Our study shows a steady upward trajectory in full autonomous mode consideration, with an 8-point increase since 2021 and 5-point increase year-over-year.

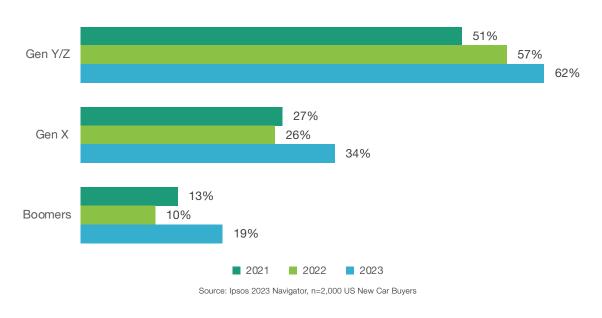
US Full Autonomous Mode Consideration, Top 2 Box %



Source: Ipsos 2023 Navigator, n=2,000 US New Car Buyers

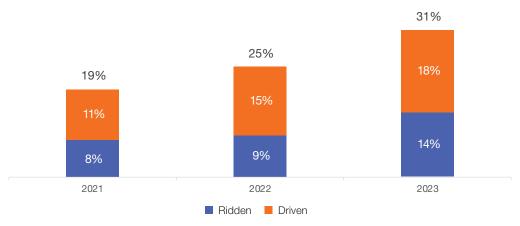
Boomers and Gen X rebounded after a year of stagnation, but the better news for autonomy stems from Gen Y/Z, where consideration continues to climb (62% vs. 51% in 2021) and is much higher than the older generations. This attraction from the younger consumer base is what will drive future progress and promote a positive outlook on the tech as it evolves. The youth will drive the adoption of this technology as it matures over the next decade.

US Full Autonomous Mode Consideration by Generation, Top 2 Box %



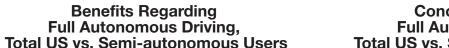
Much of this increase in consideration could be attributed to the fact that more consumers are trying out semi-autonomous driving. This year, 31% of U.S. car buyers noted they have experienced semi-autonomous driving, either as a driver or passenger (up from 25% in 2022). Getting more people acclimated to the technology will promote familiarity and minimize any learning curves with these systems.

Semi-Autonomous Features Experience, Driven & Ridden

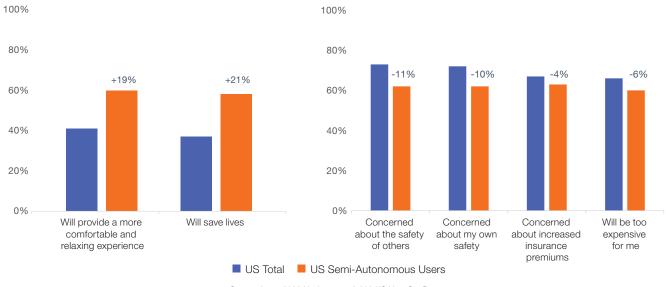


Source: Ipsos 2023 Navigator, n=2,000 US New Car Buyers

And while the benefits of full autonomy are better understood among users of semi-autonomous vehicles, including its ability to saves lives and provide a more comfortable/relaxing experience (+~20% vs. those that have no experience), the concerns surrounding the technology regarding safety and increased costs remain more prominent, even if you have experience with semi-autonomous tech.



Concerns Regarding Full Autonomous Driving, Total US vs. Semi-autonomous Users



Source: Ipsos 2023 Navigator, n=2,000 US New Car Buyers

Now according to our survey responses analyzed by IpsosFacto, our proprietary generative AI tool, semi-autonomous tech is still situational. And diving deeper into consumer sentiment illuminated the areas that these systems must still improve to push the envelope and get people more comfortable using these features.

Utilizing IpsosFacto AI to Analyze Autonomous Usage

How Consumers Experienced Semi-Autonomous Driving According To IpsosFacto

387 Responses

Key Insights

Usage Situations: Typically used during highway and long-distance trips.

Common Features: Frequently used features were adaptive cruise control and lane-keeping assist.

Sentiment: Overall sentiment was mixed, with some enjoying the features while others expressed unease or distrust.

Deep Dive: Unease and distrust

Surrendering Control: Users were uncomfortable with vehicles autonomously managing controls.

System Trust: There were concerns related to system malfunction and incompetent handling of complex scenarios.

Contradictory Requirement: It was unclear why the user needed to remain attentive, going against the convenience-promoting purpose of semi-autonomous driving.

Anxiety with New Tech: There was general apprehension towards adopting new, advanced vehicle tech.

Top Encompassing Verbatims

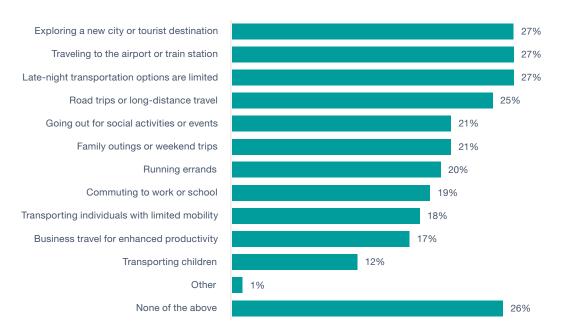
- 66 My current vehicle has this feature. I use it when on the highway in noncongested traffic. However, it is a bit clunky and I don't feel completely comfortable relying on it in all situations. 99
- 66 There is a bit of unease knowing the vehicle is driving itself at high speeds. But, I do appreciate the convenience in certain scenarios and I believe once the technology evolves it will be a game-changer. 99



Autonomous ride-hailing erupts on the scene

While traditional OEMs have been implementing autonomous driving technology and crowdsourcing data from drivers in various situations, companies such as Waymo, Cruise, Aurora, Zoox, and others are providing the industry with an alternative approach towards progress. Each company has its own distinct strategy towards improvement, whether testing in singular downtowns, emphasizing night driving, developing purpose-built vehicles that re-define the shape and components of the vehicle. But all are managing their problem-solving through small-scale progress that starts in city centers (where the usage and return on investment is most apparent) and expanding outwards incrementally. And these environments allow autonomous ride-hailing the chance to flourish; situationally, autonomous ride-hailing is rooted in convenience for out-of-towners and socialites navigating a city without the need for a vehicle of their own.

Top Use-cases for Autonomous Ride-Hailing



Source: Ipsos 2023 Navigator, n=2,000 US New Car Buyers

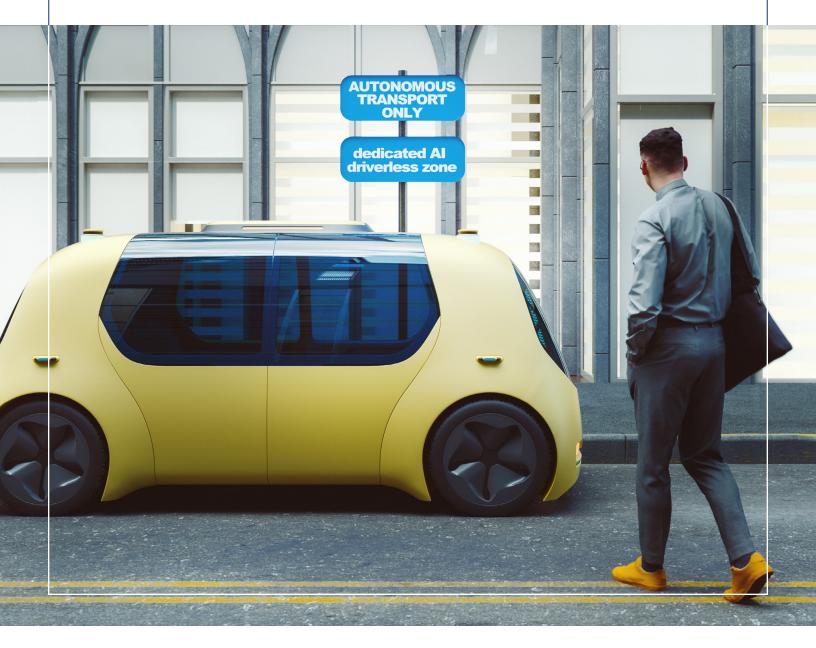
The results thus far have been promising; Both Waymo and Cruise have reached over 1 million "true" driverless miles (with no one sitting in the driver's seat) and reported fewer injuries and collisions vs. a benchmark of human driving. Now, these vehicles know the city better than the drivers themselves and have a chance to further improve and carve out a niche that leverages the technology's strengths.



Shaping the future through patience and collaboration

Again, technology will always make headlines, and the emergence of autonomous ride-hailing is not without its detractors. Working within city centers means changing road conditions such as sporting events, parades, construction, and millions of eyes scrutinizing how these vehicles handle these obstructions. It also means that city governments must decide how long of a leash these companies deserve, and whether they will have a beneficial impact on transportation within the city. To advance this technology to the pace of public sentiment and mitigate bad press, proactivity and thoughtfulness in its implementation is the best way forward.

These advancements can be world-changing if done correctly, which involves collaboration from local governments (i.e., allowing vehicles to operate in areas suited for the technology) and federal institutions (i.e., sharing data with NHTSA to better track and prove autonomy's safety benefits). And for the companies themselves, treading carefully and knowing your audience can help further increase public sentiment, leading to an expansion beyond urban borders and into suburban areas, personal vehicles, and commercial vehicles. This future sounds aspirational if not impossible right now. But small, deliberate steps in the right direction could soon lead to larger strides towards a fully autonomous future.



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John Kiser

U.S., Auto & Mobility Ipsos john.kiser@ipsos.com

Graham Gordon

U.S., Auto & Mobility lpsos graham.gordon@ipsos.com

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