

Pros and Cons of Self Driving Cars

Headline



**Self driving cars
used to be a dream.
But today, they're
bogged down in
controversy, as
cities across the
country judge their
safety features.**

Introduction



Pros of Self Driving Cars

1. Increased Safety

- Accidents caused by human error or distraction account for 94% of all accidents (Guynn, 2015), and as stated by Colburn Law and Google spokesman Johnny Luu, "human error is a significant contributor to traffic accidents."
- However, with the help of algorithms and sensors, autonomous cars can operate, greatly reducing this risk.

Pros of Self Driving Cars

2. Environment Friendly

- Valiente Mott stated that "the consistent speeds self-driving cars will be traveling at will reduce constant braking and accelerating" , which will "all contribute to reducing emissions and becoming more environmentally sustainable".

- In addition, The Department of Energy claims that autonomous vehicles can cut transportation energy use by up to 90%. The cars can potentially significantly impact the environment because they account for more than a quarter of greenhouse gas emissions. These cars have automated systems that select the fastest and most fuel-efficient routes.

Cons of Self Driving Cars

1. Security Risks

- The more autonomous the vehicle, the more susceptible it can be to hacking.
- According to HackerNoon, “Besides unintentional threats like sudden malfunctions in the AI systems, there are intentional attacks that aim to specifically harm the safety-critical functions of the AI systems.”

Cons of Self Driving Cars

2. Repair Costs

- Greg Bannon, the director of AAA states that, “Repairing cars that come with advanced driver-assistance technology or other intensively computerized features can be up to three times as expensive as similar maintenance on vehicles without such tech.”
- Due to lack of demand, there is a significant lack of mechanics equipped with the proper tools to fix these vehicles.

Repair Costs

ADA Costs According to AAA

- Front radar sensors used with automatic emergency braking and adaptive cruise control systems: \$900 to \$1,300
- Rear radar sensors used with blind spot monitoring and rear cross traffic alert systems: \$850 to \$2,050
- Front camera sensors used with automatic emergency braking, adaptive cruise control, lane departure warning and lane keeping systems (does not include the cost of a replacement windshield): \$850 to \$1,900
- Front, side mirror or rear camera sensors used with around-view systems: \$500 to \$1,100
- Front or rear ultrasonic sensors used with parking assist systems: \$500 to \$1,300

Conclusion

While these vehicles show potential for increased safety for drivers and the environment, it's still too early to set aside the challenges currently faced within the industry. However, the aforementioned benefits suggest that autonomous cars have a place in the possibly near future.