Impacts of Self-Driving Cars

Do We Need Self-driving Cars?

Yes!	No…
Why?	Why not?
Do benefits outweigh the risks?	What are the major issues or concerns?

YES!

1. Increased Safety

Self-driving cars will save thousands and thousands of lives.

According to a Reuters article by David Shepardson "The issue has taken on new urgency as **U.S. traffic deaths have soared since the start of the COVID-19 pandemic, jumping 10.5% last year to 42,915. That marked the highest number killed in a year since 2005.**"

According to Matt McFarland in a CNN Business article, "Driving is the deadliest of the common forms of transportation, and a leading cause of death for many age groups. **More Americans have died in traffic crashes than fighting in all of its wars.**"

According to Merck KGaA, Germany company in the science and technology market sector, **self-driving cars of the future will be outfitted with Neuromorphic chips, that can simultaneously store and process information like the brain. These will help them learn and make decisions more efficiently, helping them to be even better at achieving greater safety.**

YES!

2. **Independence & Accessibility**

Seniors and folks with disabilities, who cannot currently drive, would be afforded more mobility.

YES!

3. Saves Money

Self-driving cars will help avoid the costs of crashes, including medical bills, lost work time and vehicle repair.

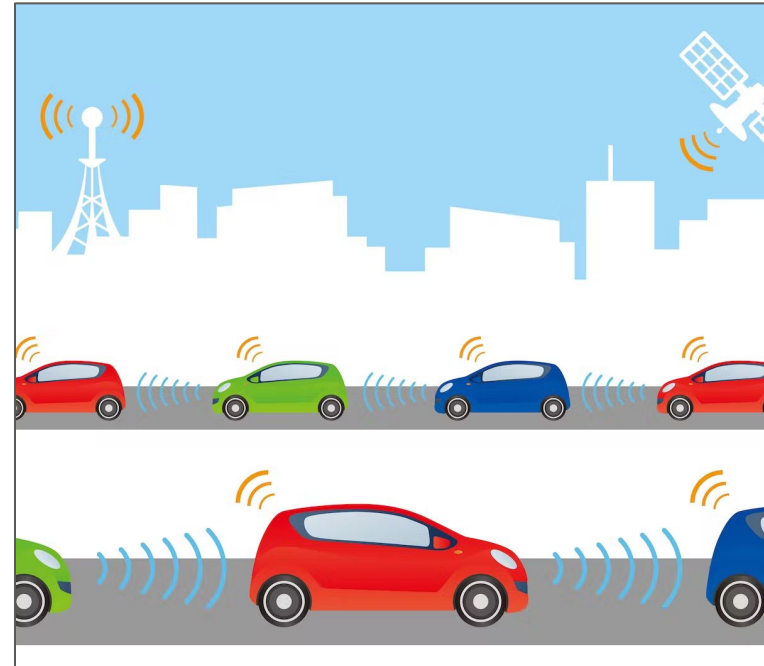# YES!

4. **Recapture Time**

    Drivers become passengers who can engage in other activities while they travel. They could be more productive and work or entertain themselves.

YES!

5. Reduced Congestion

Self-driving cars can communicate with each other **reducing potential for accidents** and r**educing stop and go waves that cause traffic.** According to Kopestinsky, "Most new cars are equipped with software that enables lane tracking, autonomous emergency braking, enhanced vision systems, and vehicle to vehicle communication (V2V)." (2022)
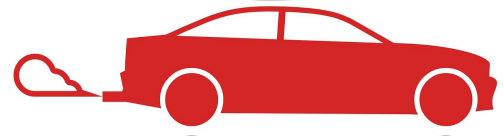
YES!

6. Environmental Gains

Fewer traffic jams save fuel and reduce greenhouse gases from needless idling.

NO!

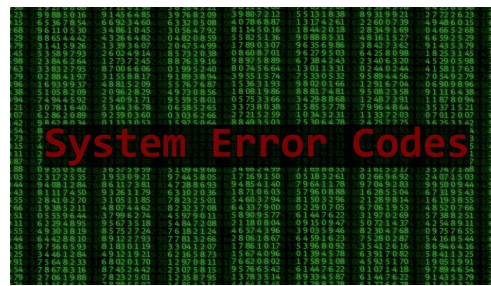1. Self-driving cars may lead to more driving, more traffic congestions, and more pollution

In a separate study conducted in late 2019 and early 2020, we simulated the function of a fully automated vehicle by providing 43 households in Sacramento, California, with a chauffeur service to take over the family driving duties and tracking how they used it. These households increased their vehicle miles traveled by 60% over their pre-chauffeur travel, and dramatically reduced their use of transit, bicycling and walking. More than half of the increase in vehicle travel involved sending chauffeurs on zero-occupancy trips without a household member in the car.
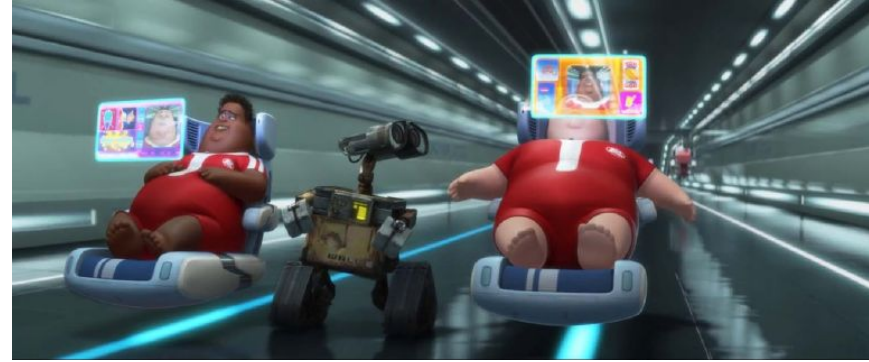
2. Economic impact:

- Unemployment

- Auto industry and auto insurance industry

System Error Codes

3. Safety concerns:

- system malfunction or misinterpretation

- system being hacked

- ethical dilemmas

- privacy issues (locations, PII, etc.)

4. Change us as humans :

- increase in drug and alcohol use and create other health issues

- losing the ability to self-navigate

Resources

- [Self-driving cars face uncertain path to U.S. deployment](#)
- [Self-driving cars were supposed to take over the road. What happened?](#)
- [Benefits of Self-Driving Cars - Coalition for Future Mobility](#)
- [25 Astonishing Self-Driving Car Statistics For 2022](#)
- [SELF-DRIVING CARS: WILL THEY SOON BE A REALITY?](#)
- [The Unintended Consequences of Self-Driving Cars](#)
- [Driverless cars won't be good for the environment if they lead to more auto use](#).
- [Advantages and Disadvantages of Driverless Cars - AxleAddict](#)