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**Title**
Viability of Autonomous Cars

**Background**
Autonomous cars, also known as self-driving cars, are vehicles that are able to operate without the need for human interaction. These vehicles have been a part of science fiction tv shows and movies for decades such as in Knight Rider and I, Robot in which the cars are able to function completely on their own but can also be switched into a manual mode so they can be human operated. More recently, autonomous cars have been showing up in the news for both the achievements and accidents they have been involved in, showing that perhaps they are not entirely ready to replace their human counterparts.

**Issue and Rationale**
In 2014, more than thirty thousand people died in car crashes in the United States alone.(Fatality) These crashes could be the result of a number of different factors including distracted driving and poor road conditions, some of which can easily be controlled for. This is true for distracted driving in which activities such as texting or making a phone call are not necessary when operating a vehicle. However, it is a difficult thing to enforce and people are going to continue doing it despite the resulting accidents. One possible solution, and something that has been gaining popularity in the past few years, is autonomous cars. The potential benefits of autonomous cars could be endless including everything from allowing the driver to sleep during long commutes to eliminating stop-and-go traffic altogether. However, this technology also comes with its own risks and downfalls. Many people worry that a computer will not be as safe in traffic or under poor road conditions as a human or that an autonomous car could be hacked and misdirected. There is also the age-old ethical concern of who the car should protect if there is no way around a collision and how the computer should be programmed to handle such a situation. Based on these concerns, is the technology for autonomous cars currently viable or will it be in the future and do the benefits outweigh the potential failures of the technology?

**Audience and Purpose**
For people who regularly find themselves distracted behind the wheel, the opportunity to drive and accomplish other activities safely at the same time should be very appealing. For the skeptics, a look at the developing technology might help to sway them in one way or the other. This paper will detail the capabilities of current technology which is being developed by companies like Tesla and Google. Google has developed fully autonomous cars that are unavailable to the public while Tesla has implemented semi-autonomous features into their current vehicles. Based on the viability of this technology, the paper will also demonstrate the

advantages and disadvantages of continuing to develop it. Furthermore, there are multiple studies on user feedback of these self-driving cars which will help to discern how the public might respond and how potential ethical issues should be addressed.

**Organization**

Introduction
- Issue:
  - Inherent risks of humans operating vehicles
  - Rising popularity of autonomous cars
- Purpose:
  - Research safety and advantages/disadvantages of moving towards a world of self-driving cars

Body of Paper
- Current technology and companies working with autonomous cars
- Advantages of autonomous cars
- Disadvantages of autonomous cars
- Future plans and testing
- User feedback of technology
- Ethical Concerns

**Representative Sources**

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