**Should people start driving self-driving cars?**

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| In today’s ever more inter-connected world, it appears like technology has something to add to absolutely every industry. The same is true of transportation, with self-driving cars fast becoming a hot topic. The concept of self-driving cars has been around for years, but only recently have increasing advances in networking, satellites, and laser equipment made this dream a reality. Several companies have made major investments in the self-driving car market, but | Google, Audi, BMW, and Hyundai are so far doing the most testing. On Google models for example, a complex overhead laser guidance system combines with real time satellite data to expertly guide the car under any condition. These advances mean that we may soon be able to sit back and relax the next time we leave the house, letting our car do all the work. While self-driving cars present many incredible advances for consumers, the safety requirements are particularly complicated and may present significant challenges to these cars being made available to the public. |
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| **Advantages** | **Disadvantages** |
| **Decrease the number of accidents** Virtually it should decrease the number of accidents, simply by taking the human error factor out of the equation. By sensing everything around you, following the speed limits, adjusting the speed at all times, not texting while driving, “paying attention to the road”, and taking over the steering, the car can save a lot of trouble to all of us. According to the National Highway Transportation Safety Administration, in 2012 – 33, 561 people were killed in traffic accidents, almost all of them were due to a human error.  **Decrease the number of traffic jams** We, the people, do not like traffic jams. So, for self-driving vehicles to decrease that on its own is a huge advantage. It would take down one of the biggest stress contributors on earth. The way the self-driving technology could allow you to avoid congestion on the road is by calculating less populated and congested roads around you, and have you to take one of them so that you won’t have to spend your afternoon in a traffic jam. Real-time traffic data will constantly be calculating less busy routes that let you save time. It can also cut back human errors and incompetence that often create traffic jams. Moreover, an autonomous vehicle will have the ability to calculate the time of approaching traffic light, which would allow it to not completely stop, but rather slow down. This, alongside all other features will make traffic run smoother.Just think about this – on average America spends 4.2 billion hours in traffic jams yearly, according to Sebastian Thrun – robotics scientist and Google X founder. In comparison, it took 20 million hours to build the Panama Canal. Don’t you think that’s a lot of wasted time?  **Less cars, less air pollution** The fuel efficiency comes from better calculations – the software in a self-driving car calculates the time you have to reach another car, light or intersection and slows down accordingly, which allows you to avoid the need of stopping and starting from zero again. This is not only fuel efficiency, but it prolongs the life of your brakes and is gentler to the engine, and the car in general. More than anything elso though it affects our climate and the air we breathe. Less driving means less pollution because it lowers the impact a single car has on the environment. And since we mention a single car, we ought to think about the number of cars we own. We need to ask ourselves “How many cars do we need?” Less cars means less pollution. Smart cars also mean less pollution. So, one smart car would be ideal for one person. Less is more!  **Cuts down on time looking for parking** Imagine this – you get to a party and instead of spending 20 min looking for a parking spot, your car drops you off right in front of the door and heads to a parking spot or a garage where it already knows a spot is waiting, eliminating the need to waste gas and time looking for one. According to the consulting firm Ronald Berger, an estimated 30% of congestion in urban areas is caused by people driving around searching for parking, this will not only eliminate your hustle, but also the traffic that it creates. | **Potential Loss of Privacy** Though the companies testing self-driving cars claim all pros and no cons, using a self-driving car means a third party would have the opportunity to track your movements. While many companies will likely avoid this due to consumer backlash, a massive loss of privacy still exists. Because your car would be receiving or communicating with data centers, your location would be potentially accessible to people or organizations who could hack into the network.  **Personal satisfaction of driving** Driving is all about the idea of you being the one in charge of your vehicle, speeding up or slowing down – being the driver. Simply driving is what a car was all about and this self-driving technology will turn us all into passengers. it will be boring for many out there – many sports car enthusiasts, who know why they buy a fast car. Or for those collectors who know why cruzing down by the ocean is  **Cost** One big step to making autonomous cars more mainstream is to separate driverless cars from normally operated cars, likely using dedicated lanes. The author of the report Alex Mereu explained that research shows roundabouts are easier for autonomous cars to navigate than intersections, and that traffic lights and road signs should have transmitters so that vehicles can interact with them better.  However, there will be a cost associated with building new roads and city infrastructure that is friendly to autonomous vehicles, which will likely be doled out to taxpayers, something that is usually met with criticism and hesitation. Retrofitting current city elements to feature sensors and connected transmitters to communicate with vehicles isn’t a cheap venture. |

**Reference list**

1. <https://www.lifehack.org/articles/technology/unbelievable-benefits-and-drawbacks-the-self-driving-car.html>
2. <https://www.corsia.us/self-driving-cars-trucks-pros-cons>
3. <https://www.autoguide.com/auto-news/2017/02/4-major-pros-and-cons-of-autonomous-vehicles.html>