

## Transportation in 10 years

Do you ever watch a futuristic movie and wonder if that could actually be our world one day? Flying cars, ecofriendly technology, robots that do what we tell them. Well, I believe that we are closer to a world like that than we think. Technology is becoming more advanced than we ever thought possible and the transportation community is being directly affected. Three ways that I believe the transportation will change in the next 10 years is through which vehicle autonomy will increase, urbanization will assist in the ever-growing transportation community, and the advancements made in the digital community.

Autonomy is becoming more of a reality than just a scene on *The Fifth Element*. Robots are being made to make our human lives easier. One project that is already in place is that Amazon has started to use drones to deliver packages. These drones were made to make the deliveries a lot more efficient, increase cost-effectiveness, and save the company a lot of time. They go from being same day deliveries to same hour deliveries. Another example of autonomy that emerged over the last couple of years is self-driving cars. It first started off with cars parallel parking for you and have now turned into fully capable self-driving cars. This modernized car is now being converted into a cargo truck to ship different products without a driver. In fact, this future is becoming a reality. Tesla's electric Semi truck have autopilot features which can greatly facilitate the driving process. Many companies including Walmart, Pepsi, Asko, and Loblaw confirmed ordering Tesla Semi trucks for their commercial needs. If cargo could be shipped without a person behind the wheel, that would propel that company straight to the top of their competitors. When this happen, it will revolutionize the transportation industry.

Lindsey Gieser  
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As medicine and technology becomes more advanced, birth rates will continue to increase, and death rates decrease. This will lead to an overwhelmingly growing population. Cities have responded to the increase in population by urbanizing their communities. They are changing their mobility by expanding their transportation supply. They are doing this by building new highways and transit lines to allow for more supplies to come into those cities. This is why many places like Hawaii and even the little town of Sumner from where I grew up are becoming more commercialized as time goes on. We continue to grow in population and the need for housing and supplies multiplies. Construction cannot keep up with the demands. Roads are constantly being expanded with the growing population and the increase in demands for food and supplies. A greater supply and demand calls for a maximization in urbanization. This need will continue to grow as society continues to exponentiate.

The digital world has become very sophisticated over the last 50 years. Instead of recording everything on paper, we as a society have transferred all of our records to electronic devices. Everything is kept in a folder on our computers, tablets, or phones. By doing this, it has made data more accurate and detail oriented, easy to keep track of it, and has improved the time and cost efficiency. An example of advancing our technology is the creation of electronic log devices for truck drivers. This holds drivers accountable to the maximum fifty hours of service per week with two days off. These devices make roads safer by encouraging drivers to rest. Another way the digital world is becoming advanced is the use of blockchain in the transportation industry. Since blockchains transactions are immutable and transparent, all parties involved in a transaction can be sure that the information about the truck is trustworthy. Another perspective use of blockchain in transportation is capacity monitoring. The cost of transportation depends on the cargo volume. The use of Internet-of-things (IoT) sensors can help determine the

Lindsey Gieser  
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amount of space a particular cargo occupies. This data can be used to calculate the cost of the shipment. Storing this information digitally through the blockchain-based system will allow self-executing payments on a base of the amount of space taken by the freight.

The transportation industry is such a huge industry that whatever they do dramatically affects our world. If making transportation more efficient, less expensive, and safer for the environment is possible, then it should be done. I see a bright future ahead for the transportation industry as inventors and creative scientists come up with new technology and strategies to making it as successful as it can be. Our society is continuously evolving and trying to be as tech savvy as we possibly can. The first cell phone was created in 1973, the first laptop in 1981, the first smartphone in 1992, and the first iPhone in 2007. If all this technology was created and brought to life only in the last 50 years, imagine the infinite ways that our world could change in the transportation industry in the next ten years.