



## Self driving cars

### Why in news?

\n\n

Recent crash involving an Uber driverless car in Arizona has ignited the debate on driverless car.

\n\n

### What does self driving car means?

\n\n

\n

- Self-driving or driverless or robotic cars use artificial intelligence and computing power to navigate from point A to point B, sensing their environment and making decisions in real time to avert mishaps.

\n

- They do this using a range of sensors and cameras on all sides, as well as predetermined digital maps and real time inputs about traffic and obstacles.

\n

- The first experimental self-driving cars started in 1984, but commercial trials are just a few years old.

\n

- The US is the hotbed of this technology, with at least 27 companies including Tesla, Google and Volkswagen seeking permissions for tests in California alone.

\n

\n\n

### Why do we need driverless cars?

\n\n

\n

- In theory, it is great economics.

\n

- The 120 crore cars in the world sit idle for almost 95% of the time, making them perhaps the most inefficient human creation ever.

\n

- Uber thinks that if all cars were autonomous and shared to scale, they could eliminate 90% of these vehicles.

\n

- For residents of cities from Los Angeles to New Delhi, traumatised by traffic jams, this is an attractive idea.

\n

- Fewer cars also mean reduced need for parking spaces and a drastic reduction in pollution.

\n

- Plus, it is possible that self-driving cars would eliminate the human errors that kill thousands on the roads every year.

\n

- From [Google](#) to Uber to Nissan, dozens of companies are working on the concept of self-driving cars with varying degrees of autonomy.

\n

- All have different end goals — from reducing the number of cars on the road to making cars more efficient and safe.

\n

\n\n

## **Are there any laws to regulate these cars?**

\n\n

\n

- None exists in reality.

\n

- Recently, California became one of the first US states to draft a set of broad rules for the “autonomous test vehicles” on its roads.

\n

- Among other requirements, the company running a test vehicle must put a driver behind the wheel as a failsafe.

\n

- The draft also made it mandatory to make it known to everyone on the road that the vehicle is an autonomous one.

\n

\n\n

## **What are the obstacles for this technology?**

\n\n

\n

- Google's self-driving car has been caught in multiple collisions.
- And recent Uber self driving car crash despite the fault was on other car.
- The technology is clearly nascent, and subject to other factors such as errors made by humans in other cars.
- INDIA, with its chaotic driving environment, presents a slew of challenges for this new revolutionary technological concept.

\n

\n\n

\n\n

**Source: The Indian Express**

\n



**IAS PARLIAMENT**  
*Information is Empowering*  
A Shankar IAS Academy Initiative