The Future Is Here – Driverless Cars

An estimated
40,000
people died in car crashes in 2017.

According to think tank Eno Center for Transportation, **driver error** is believed to be the main reason behind over **90%** of all crashes. They cite distraction, alcohol, failure to remain in one lane and failing to yield the right of way as the main causes.

In addition to **reducing the rate of motor vehicle** accidents, autonomous vehicles could also reduce **the rate of congestion and traffic** substantially. According to a paper by Thierer and Hagerman, congestion caused drivers to spend an extra 5.5 billion hours on the road, resulting in $121 billion in costs associated with the 2.9 billion gallons of fuel they needed.

INFRARED CAMERA

Extend a driver's vision at night without impacting other drivers. Infrared beams are detected by a camera, which displays an illuminated image on the dashboard.

GPS

Accurate to 1.9 meters, GPS covers the overall location of the vehicle, with smaller on-deck cameras recognizing smaller details such as red lights, stop signs and road construction.

LANE GUIDANCE

Cameras mounted behind rear-view mirrors recognize lane markings, detecting the contrast between road surface and lane lines.

RADAR

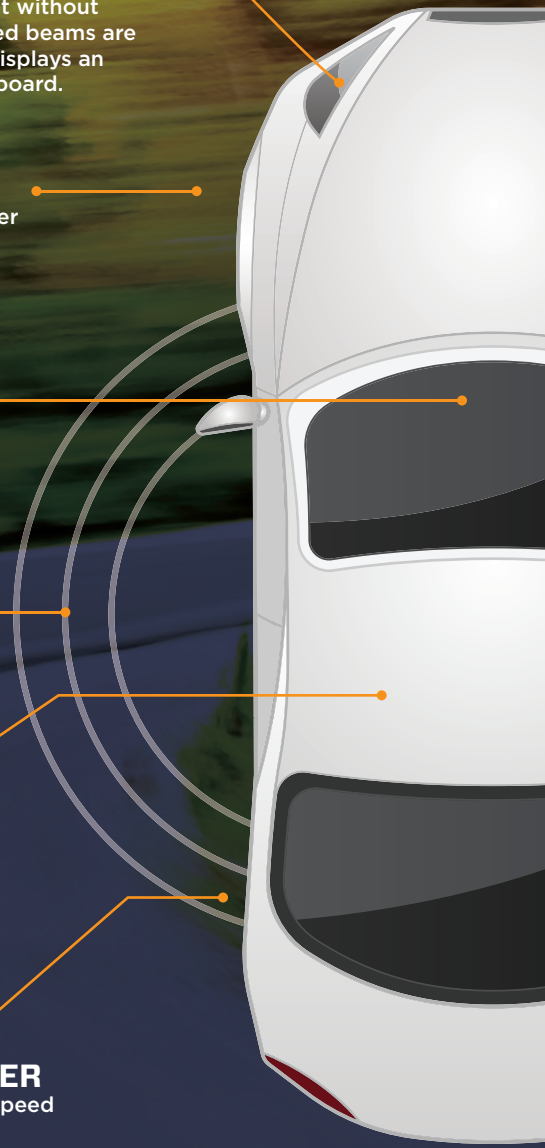
Alerts are triggered by accident prevention systems when something is detected in a car's blind spot.

LIDAR

Rooftop ranging systems containing 64 lasers provide a 360-degree picture of the car's surroundings, accurate to within 2 centimeters.

WHEEL ENCODER

Sensors measure the speed of the car as it travels.



ENVISTA FORENSICS