

# Autonomous Vehicles

28 January 2018

The news is awash with stories and information about vehicles driving themselves. As much as I love to drive cars and ride motorcycles, a chauffeur certainly can be nice; call a cab and try it out. The Committee warns me, the apparent inevitability of driverless vehicles is a human choice.

*Q: Esteemed Committee, do our alien extraterrestrial cousins have self operating vehicles?*

C: Yes.

*Q: At least in the USA, the percentage of newly eligible minimum age drivers has dropped from >40% to about one quarter, over the last three decades or so. In my day, it was a rite of passage. Is this reduction a part of the driverless car process?*

C: Yes, mankind is becoming digitized, a circumstance we find amusing because it represents an unaware return to the essence of the human soul, which is digital. Mankind is analogue, by design and intent.

*Q: The idea a destination can be chosen and reached, the way food can be ordered then delivered by using a computer application?*

C: The same.

*Q: There seem to be growing pains, in other words, collisions involving autonomous vehicles. I don't find that unusual and believe there should have been more already. A driverless car cannot control another one.*

C: Not yet.

*Q: What's driving the perceived popularity?*

C: Convenience.

*Q: How can driverless cars work today?*

C: The method most inexpensively available today is a guide wire or cable placed into the center of a lane with cross connections at intervals of approximately one meter, for lane changes. The vehicle will power and steer itself along the route these cables follow. The passenger will have to select a recognized destination. Exit from parking places of several types will require driver control until the cable network is reached.

Centralized, redundant computer control will determine speed and following distance, and reduce much use of brakes.

There will be challenges, such as capacity overload. When an operator passenger selects a destination and route which the central computer informs has already reached capacity, the vehicle will be directed to a different route.

This will displease many users, now accustomed to independent decisions.

There will be great concern about liberty, the freedom to make anonymous movements.

*Q: The little I know about current technology, it uses cameras and sensors to read following distance, lane markings and other existing things on the road. Y'all are suggesting this will not continue?*

C: What continues is human choice. The system we suggest above combines what has been used on other planets and existing Earth road infrastructure.

Q: *Are electric cars related?*

C: Yes, however guidance and propulsion can be done in several combinations. There need not be autonomous electric vehicles, although this is likely.

Q: *Self driving trucks seem to be getting some attention.*

C: But not the parking, loading and unloading functions.

Q: *How close together can the guided vehicles travel and at what speeds?*

C: A stopped roadway where vehicles are stationary at the usual distances can be easily managed to move at typical motorway speeds of one to one hundred twenty kilometers per hour, with that same volume of vehicles.

Q: *That would only work if all vehicles are autonomous and controlled by the same network.*

C: Yes; independent vehicle movement is too dangerous and cannot be permitted.

Q: *Going too slow or too fast isn't possible?*

C: No.

Q: *The obstacle seems to be human willingness to have travel routes, times and travel information placed under computer control.*

C: Yes, this technology already exists on Earth. The cost is manageable and can be covered by elimination of several devices already being installed in vehicles now. Human resistance to change is the issue and choices still very much undecided.

Q: *Thank you, Esteemed Committee.*

C: Enjoy driving, one and all.