

Driverless cars could change lives for disabled people, if we let them

August 14 2014, by Catherine Easton



Driving seat or passenger? Credit: Dino Abatzidis, CC BY-NC-SA

With testing already happening in the US and trials [given the green light](#) in the UK, the autonomous car seems like more of a possibility than ever. Aside from the early adopters who want to be part of the newest technology trend, the autonomous car has enormous potential to help those who, for whatever reason, can't drive themselves.

We've seen over the past few decades that technology can have a transformative effect on the lives of [disabled people](#). But these benefits can only be realised if the technology itself is designed and regulated

with the needs of all users in mind.

The internet, for example, makes new ways of communicating possible, but it needs to be designed in an accessible manner. All kinds of new technologies have sprung up, such as screen readers that transcribe audio content so that websites can be used by disabled people.

And it's not just disabled people who stand to benefit. With an ageing population across the Western world, the potential for [new technology](#) to enhance the lives of those whose capabilities may differ from an accepted norm needs to be embraced at an early stage.

Effective transport can be crucial to achieving of a full life. [Research](#) indicates that disabled people can often feel isolated through lack of access to effective transport services. Targeted schemes and policies can help but they don't provide the same level of independence as when someone is able to choose exactly where they go.

This is exactly where autonomous cars can make a difference. But whether people who can't drive will start using them is linked to the attitude of society as a whole towards the new technology. Only once they are accepted as safe will they become a viable option for the elderly and disabled people.

This, in turn, is connected to the nature of the technology and how certain concepts are defined. The most important will be our definition of the word "driver" – even if we mean to get rid of them entirely – and whether we decide that an [autonomous car](#) needs to have at least one human driver on board in case something goes wrong.

International law describes a driver as "any person" who should "at all times" be "able to control" the vehicle. If a disabled person were, today, to travel in a fully autonomous system, there would still be a need for an

additional passenger "able to control" the vehicle, even if his or her presence were entirely passive.

Potential solutions to this include assigning a level of "personhood" to the systems controlling the car and thereby fulfilling the legal requirement for a "driver" to be a "person".

While this solves one problem, it raises ethical and legal questions about who is actually responsible for the car. There are potential implications for the people who actually develop the systems in the first place, for example.

Another solution might be to develop systems akin to [air traffic control](#). Cars could be monitored from a central location and could be overridden if the need arose. This would solve all kinds of problems but would be difficult to achieve in terms of infrastructure and might pose some extra dilemmas about privacy.

A third solution would be to push for an amendment to international legal framework governing road use in order to redefine the concept of "driver" to include inanimate systems. Amending the provisions of the relevant conventions is not unprecedented and could stand as an important move towards updating the law in light of technological change.

The prospect of autonomous cars is exciting for everyone but for some, it could be life changing. There are all kinds of questions we need to answer before we see these machines on our roads but in answering them, we should consider how to legislate to make this an opportunity for everyone. We need to think through all the potential scenarios so we can produce a robust, future-proof, ethical legal environment that works for a range of people – be they drivers or passengers.

These are not just fun gadgets, they could bring a whole new way of getting around to people who are at the moment excluded to varying degrees. Let's make sure they aren't forgotten on the road to automation.

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