
Automated Vehicles

Overview

This is a questionnaire regarding automated vehicles, also known as driverless vehicles.

Introduction

This is a questionnaire about driverless vehicles. There are five widely accepted levels of driverless vehicles which can be found in the further information link below.

Project Synergy is an Innovate UK funded project which has been working to develop level 5 type vehicles with connectivity. In this questionnaire we would like to understand how you feel about self-driving vehicles and how you may expect to benefit from them in the future.

Further information

Project Synergy is trialling self-driving cars in a platoon formation from Stockport railway station directly to the Arrivals terminal at Manchester Airport. They are also trialling, a platoon of three pods to take passengers to and from a car park in the airport to the passenger terminals. COVID -19 has impacted on the speed the project has developed and the type of trials that will be undertaken at the airport and on the roads to the airport. However, it is expected that trials will take place in 2021. Trials of vehicles would be undertaken with strict safety protocols in place and drivers would be able to take over when necessary. No public passengers would be involved.

There are five widely accepted levels of driverless vehicles which are:

Level One - Assists the driver with some parts of driving such as braking pressure during an emergency stop.

Level Two - Can take over some parts of driving. Automatic emergency braking and lane-keep assist both fit this description.

Level Three - Can drive itself, but only in certain environments, such as on motorways, and for very limited periods. The driver must take back control when requested and so must be ready to do that.

Level Four - Drives itself for sustained periods without needing input from the driver. However, it can only do this in certain areas.

Level Five - Lastly, there's complete A-to-B self drive with no input from the driver.

Connectivity - Vehicles can be self-driving or connected, or self-driving and connected. Connected vehicles use a number of communication tools to relay information to the driver, to other vehicles (known as vehicle-to-vehicles communication), to roadside infrastructure (known as vehicle-to-infrastructure communication), and to the cloud. This information could include anything from size, shape, construction material, speed limit zone, traffic, informing a vehicle of its surroundings to aid in steering, speed, and decision making. In theory, connected vehicles allow drivers and self-driving vehicles to have a 360-degree view of the road landscape.

About you

1 Where do you live? (Please provide the first half of your postcode)

Postcode

2 Which gender do you identify with?

Please select only one item

- Male Female Non-binary Prefer not to say

3 What is your age group?

Please select only one item

- Under 25 25 - 34 35 - 44 45 - 54 55 - 64 Over 65
 Prefer not to say

4 What is your ethnic group? (Please select one option only)

Ethnicity

Please select only one item

- Asian/Asian British Indian Pakistani Bangladeshi Chinese
 Kashmiri Any other Asian background Black/Black British
 African Caribbean Any other Black/African/Caribbean background
 White and Black Caribbean White and Black African White and Asian
 Any other mixed/multiple ethnic groups
 English/Welsh/Scottish/Northern Irish/British Irish
 Gypsy or Irish Traveller Eastern European
 Any other White background Arab Any other background
 Prefer not to say

About how you travel

5 Which of the following types of transport did you use most regularly pre-COVID19?

	1	2	3
Bus <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Car Club <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Car Share <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cycle <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Own Car/Van <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taxi/Private Hire Vehicle <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Train/Tram <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walk <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please state)

6 What do you consider when planning a journey? (please select all that apply)

Please select all that apply

- Ability to move luggage Assistance available Cleanliness Cost
 Environmental impact Physical exercise Privacy Safety
 Time it will take

Your knowledge about self-driving vehicles

7 Fully driverless or self-driving vehicles are not yet available for everyday use. How much, if anything, would you say you know about these types of vehicles?

Please select only one item

- Haven't heard about them before now
- Hardly anything but I've heard of them A little A fair amount
- A lot I don't know

8 Although fully driverless or self-driving vehicles are not yet available for everyday use, some cars available today have self-driving features. Which of these, if any, have you heard and have you used any of them yourself?

	Feature I have used myself	Feature I have heard of	Feature I have not heard of
Lane assist where the car detects if the driver unintentionally leaves their lane and adjusts the steering accordingly <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automated parking where the car parks itself without driver involvement <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic emergency braking that detects if impact is imminent and applies brakes automatically <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adaptive cruise control where the car automatically adjusts the speed based on the traffic ahead <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Feature I have used myself	Feature I have heard of	Feature I have not heard of
In-car Wi-Fi connection <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remote control drive or remote control parking where driving is controlled remotely using a mobile device outside the car <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traffic jam assistant for use in slow-moving traffic. The vehicle automatically drives within its lane, keeping safe distance from the vehicle in front. <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Impact of self-driving vehicles

9 To what extent do you think that self-driving cars will have a positive or negative impact on society?

Please select only one item

- Very positive
 Fairly positive
 Neither positive nor negative
 Fairly negative
 Very negative
 Don't know

10 To what extent do you think that self-driving cars will have a positive or negative impact for you and your family?

Please select only one item

- Very positive Fairly positive Neither positive nor negative
 Fairly negative Very negative Don't know

11 What affect do you expect self-driving vehicles to have on the following issues?

	Improve	No change	Make worse
Congestion <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of physical activity people do <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility of older people <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility of people with disabilities <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility of younger people <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passenger safety <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price of travelling <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road safety <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12 How attractive do you find the following ways to use these vehicles?

	Not at all	Not very	Neither	A little	A lot
Liftshare on demand <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Own vehicles <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private hire - individual trip <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private hire - set hire period for example a weekend <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transport (e.g. bus) - unstaffed <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transport (e.g. bus) - staffed <i>Please select only one item</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Place of Local Authority's in regards to self-driving vehicles

13 What actions would you expect to be taken to minimise any negative impacts and maximise positive impacts from self-driving vehicles? (please select all that apply)

Please select all that apply

Licensing of shared vehicles

Provision of infrastructure to support use of self-driving vehicles such as pick up bays

Support of use of self-driving options in public transport

Identification of areas where self-driving vehicles are not allowed

Identify locations for parking self-driving vehicles

Please state any other actions you expect to be taken that aren't listed above: