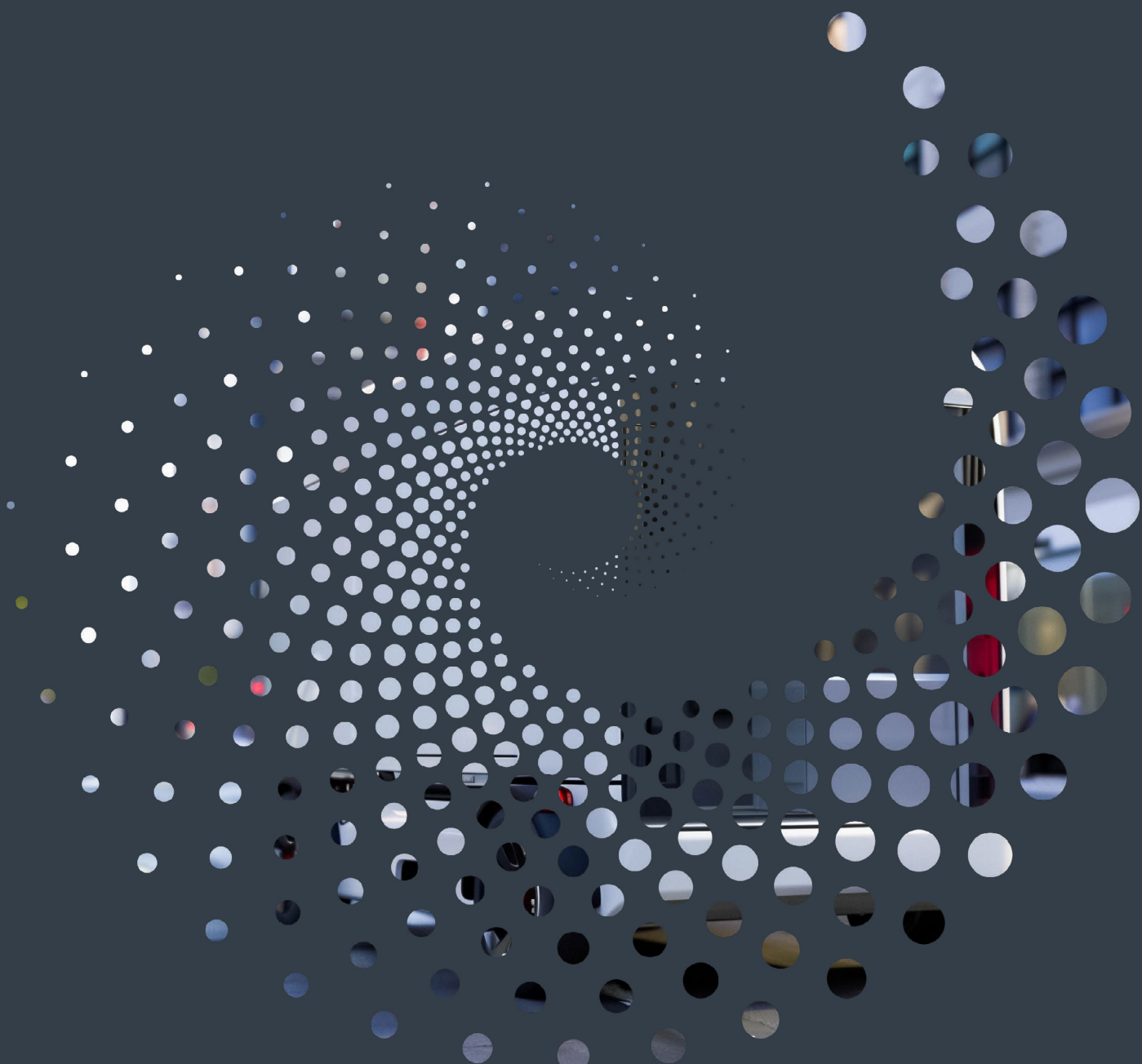


# Future Mobility UK The Automated Vehicles Act 2024

/// Briefing Note



# Introduction

The Automated Vehicles Bill, which was granted Royal Assent in May 2024, creates a comprehensive legal framework for the safe deployment of so called 'Self-Driving' vehicles on public roads across Great Britain. It delivers on the recommendations set out by the Law Commission, following an extensive four-year review of the legal reforms needed to enable the safe and responsible introduction of Automated Vehicles (AVs) on British roads.

The Act enables a clear vehicle approvals process, providing protections for consumers, giving legal clarity for the ever-growing AV industry and ensuring that vehicle users or passengers are not liable when the vehicle is 'driving itself'. Around the world similar frameworks enabling real-world commercial deployment of AVs have been developed, including in many US states and in EU countries, including France and Germany.

Secondary legislation (likely to be in the form of Statutory Instruments) will be developed which will provide the processes to govern the introduction of such vehicles for a variety of use cases. Early use cases are expected to be commercial in nature – within estates and depots, local deliveries, trunk haul freight, public transport and taxis – before the widespread application to private fleets and personal cars.

The introduction of AVs could be as seismic as the transition from the horse and cart to the motor vehicle, but it will not happen overnight nor to the same timescales everywhere. It is expected to be driven by commercial use cases, as businesses look to solve issues such as driver shortages, improve safety and create efficiencies, with potential for wider socio-economic benefits from safety improvements.

As a sponsor of the All Party Parliamentary Group for Self-Driving Vehicles, WSP's Future Mobility team has helped to steer the Bill through both Houses of Parliament, briefing Lords, MPs and key influencers to ensure the text of the Bill encapsulated positive societal outcomes and wide economic benefits. As such, we not only understand the legislation, but also its intent, application and how industry could respond.

## What is a Self-Driving vehicle?

A Self-Driving vehicle, otherwise known as an AV, is a vehicle (which could be for industrial, utility, freight or passenger purposes) uses a combination of sensors, such as cameras and/or lidar, to gather data around it, and sophisticated software to 'drive itself' without the intervention of a human driver.

The use of Self-Driving vehicles is usually limited by certain parameters such as geography, road type, speed or even weather, known as the Operational Design Domain (ODD). The process for approving use of a Self-Driving vehicle must therefore consider the ODD in which it will be used, and be tightly defined, understood and controlled.

The Act classifies two types of Self-Driving vehicles:

- **User-In-Charge (UiC)** - A UiC vehicle can only operate in limited conditions and must always have an alert human driver present to respond to a request to take back control.
- **No-User-in-Charge (NUIc)** - In a NUIc vehicle, any humans are simply passengers (or in the case of freight & logistics, human free) and the system is designed to drive under all circumstances in its ODD.



AI render of an Autonomous electric delivery vehicle

# What does the legislation cover?

The Act, which runs to over 90 pages, sets out the legal framework by which AVs can operate in the UK, including their designation, approval to operate, the roles, responsibilities and actions of operators, insurers and users and, the sanctions which can be imposed for non-compliance.

The legislation is not prescriptive as to how, when and where AVs could be used, allowing for future flexibility, but provides for the introduction of secondary legislation to govern the necessary processes. It also sets out amendments to other legislation such as the Road Traffic Act 1988 and the Road Traffic Offenders Act 1988 to include these new types of vehicles in existing legislation.

These developments will bring about new linkages and working relationships between government, its agencies (such as DVSA), vehicle manufactures / operators and road authorities in ways that haven't been seen before in the roads sector.

**At its core the Act covers the following areas:**

## SAFETY

AVs will be 'expected to achieve an equivalent level of safety to that of a competent and careful human driver', which is underpinned by safety principles. The goal is that road safety in Britain will be better with AVs than it would be otherwise.

## TESTING

The testing of any AV will have to show that it "satisfies the self-driving test" to meet the identified safety principles. The test will consider whether an AV (a) is designed or adapted with the intention that a feature of the vehicle will allow it to travel autonomously, and (b) is capable of doing so safely and legally.

## AUTHORISATION

The Act makes provision for the authorisation of vehicles, either individually or as a 'type'. Vehicles must satisfy defined tests which determine their UiC or NUiC designation and the defined locations in which they can operate. The Act also creates a new legal entity — the Authorised Self-Driving Entity (ASDE) — which is the person within the authorised organisation responsible for the driving behaviour of the AV. The legislation also describes what is known as a 'transition demand' for UiC vehicles where the human driver is required to take over control, with particular reference made to the needs of disabled people in this scenario.

## CONSUMER PROTECTION

The Act prohibits misleading marketing. Only vehicles that meet the defined safety standard can be marketed as 'self-driving'. Vehicle capabilities will need to be clearly explained to users.

## ADMINISTRATION

The Government will maintain a public register of vehicles authorised as Self-Driving, and subsequent legislation will cover how approvals are granted, varied, suspended or withdrawn. The licensing of NUiC operations and journeys is also discussed with reference to oversight by operators and how this fits with existing Traffic Commissioner and Government responsibilities. Information may also be required from authorities in the event of incidents, including strategic highway authorities, Transport for London, combined authorities, local authorities, districts in some cases, The City of London and the Isles of Scilly.

## LIABILITY

Consumers will be protected from prosecution for any infractions while self-driving features are engaged in a UiC vehicle. As discussed above, rules will be put in place around how a vehicle should alert users to regain control of the vehicle through a 'transition demand'. A new authorisation regime for NUiC operators is to be created, to help ensure the safety of the vehicle's operations through expectations on fleet maintenance and security. The legislation also sets out legal definitions and a liability framework for UiC and NUiC features, designed to make it clear to consumers and companies what their responsibilities are.

## STATUTORY INSPECTORS

In a similar way to how UK railways are governed, inspectors will be appointed with the role of identifying, improving understanding of, and reducing the risks of harm arising from any AV incidents

## AUTOMATED PASSENGER SERVICE PERMITS

The authorisation of what are described as automated passenger services with the associated disapplication of taxi (Hackney), private hire vehicle and bus legislation where such services are replicating those services. Provision is included as to how this will work in bus franchised areas. Importantly, engagement with both traffic authorities (with the definition being as per Road Traffic Regulation Act 1984) and emergency services that it considers are likely to be substantially affected if a permit were granted.

## TRAFFIC REGULATION MEASURES

Provision in England and Wales for Traffic Regulation Authorities to provide digital information (such as Traffic Regulation Orders) to the Government to enable the operation of AVs or supporting technology.

# What does this mean in reality?

The Automated Vehicles Act provides the legislative framework to support AV adoption across Great Britain<sup>1</sup>. Whilst we expect that the transition from initial use cases to be widespread, business as usual operation, is likely to take decades. We are aware that a number of AV companies are looking to commercialise their operations as soon as practicably possible so, we may start to see early use cases coming to our roads.

Given the approvals process for automated passenger services, we suggest that transport authorities will need to undertake diligence when assessing potential services and risks therein (both from a safety point of view and wider network impacts).

Similarly, any associated safety impacts of use cases on highway networks (strategic or local) may need further assessment depending upon the individual use case.

Enabling widespread public trust and understanding will be key in the early years of deployment and network operators should, in our opinion, have an influencing role in developing contextual narratives for their areas where AV services may be operating to articulate benefits, roles and responsibilities.

The digitalisation of Traffic Regulation Order information, which may form a key data flow for ingestion by AV services, could also be an area where careful framing would help reduce effort and risk. Similarly, any associated data from AV operations, particularly in the event of incident, would need careful consideration by authorities.

<sup>1</sup> Great Britain – meaning England, Wales and Scotland - with the exception of Clauses 54(2) and 93 which do not extend to Scotland. The Act will also mostly not apply in Northern Ireland



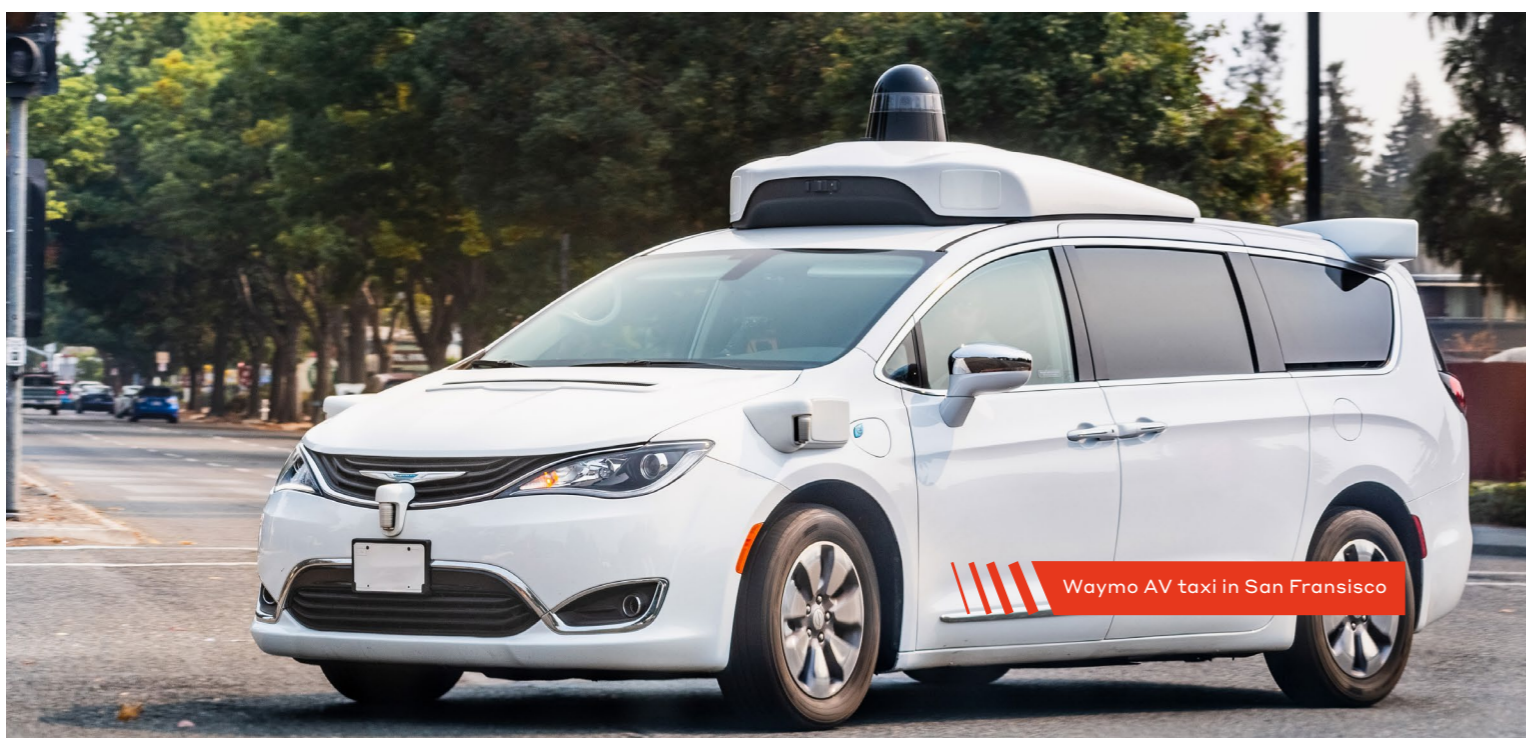
## Where will we see AVs?

We expect these early uses cases and application of AV technologies and services to be:

- In industrial applications, particularly within agriculture, mining, private estates and depots
- The freight and logistics market, including so called first / last mile local deliveries
- 'Public' transport sector including taxis.

The initial focus is likely to be on large urban centres, as these potentially offer bigger markets, supporting a viable commercial case for investment in Self-Driving vehicles to be made more easily, as well as on parts of the Strategic Road Network between distribution hubs and major centres for similar reasons. However, that does not exclude rural use cases where benefits and commercial models could be quite innovative and different.

Autonomous tractor at work



Waymo AV taxi in San Francisco

## How can WSP help?

Over the last decade, our teams have been helping clients plan and prepare for an autonomous future by:

- Considering how the UK AV sector positions itself in the international marketplace for investment.
- Understanding the potential uptake of self-driving technologies across transport.
- Identifying short, medium and long-term commercial use cases and their economic impact.
- Undertaking evidence-based safety analysis to develop operational regimes.
- Considering and assessing the supporting infrastructure needs for certain use cases, including potential impacts on standards.
- Anticipating impacts on existing networks and places.
- Helping design, enable and deliver pilots.
- Developing potential real-world applications and solutions.
- Supporting decision makers and industry through the Self-Driving APPG.

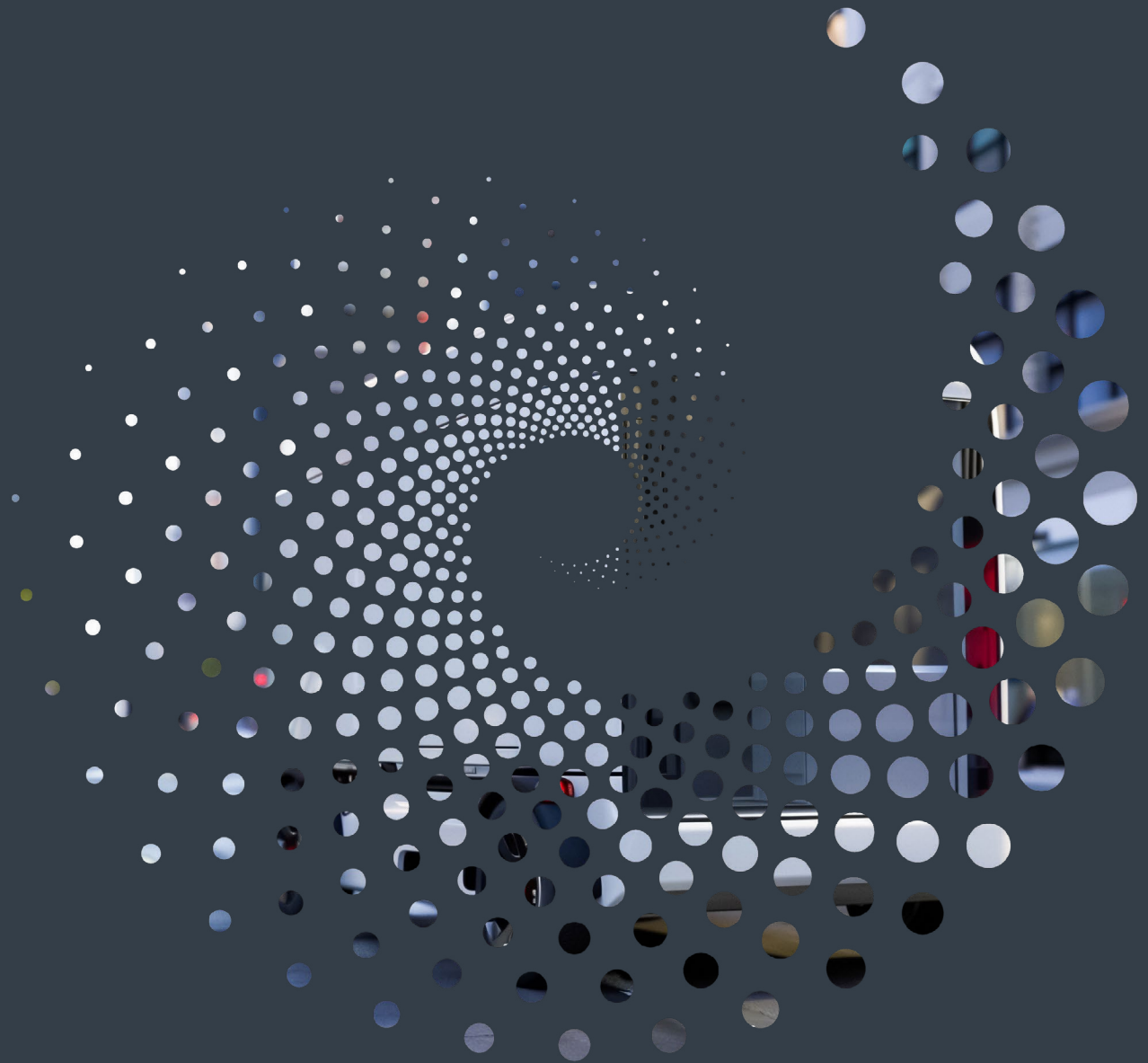
In order to anticipate and capitalise upon the opportunities that Self-Driving vehicles offer, we suggest that an evidential, customer led, commercial and systems thinking approach is required to ensure that AV solutions are considered in the fast-moving mobility, digital & AI and energy agendas.

Our recent document *New Mobility Next* describes this integrated approach in detail and can be downloaded at the link below.

[Read more](#)



AI render of an autonomous passenger vehicle



For more information or a discussion on your journey to a Self-Driving future, please contact:



**Giles Perkins**  
Head of Profession,  
Future Mobility  
+44(0) 7966 210 401  
giles.perkins@wsp.com



**Ian Patey**  
Head of Profession,  
Intelligent Infrastructure  
+44(0) 7887 826 768  
ian.patey@wsp.com