

# CONNECTED AND AUTONOMOUS VEHICLES: WINNING THE GLOBAL RACE TO MARKET

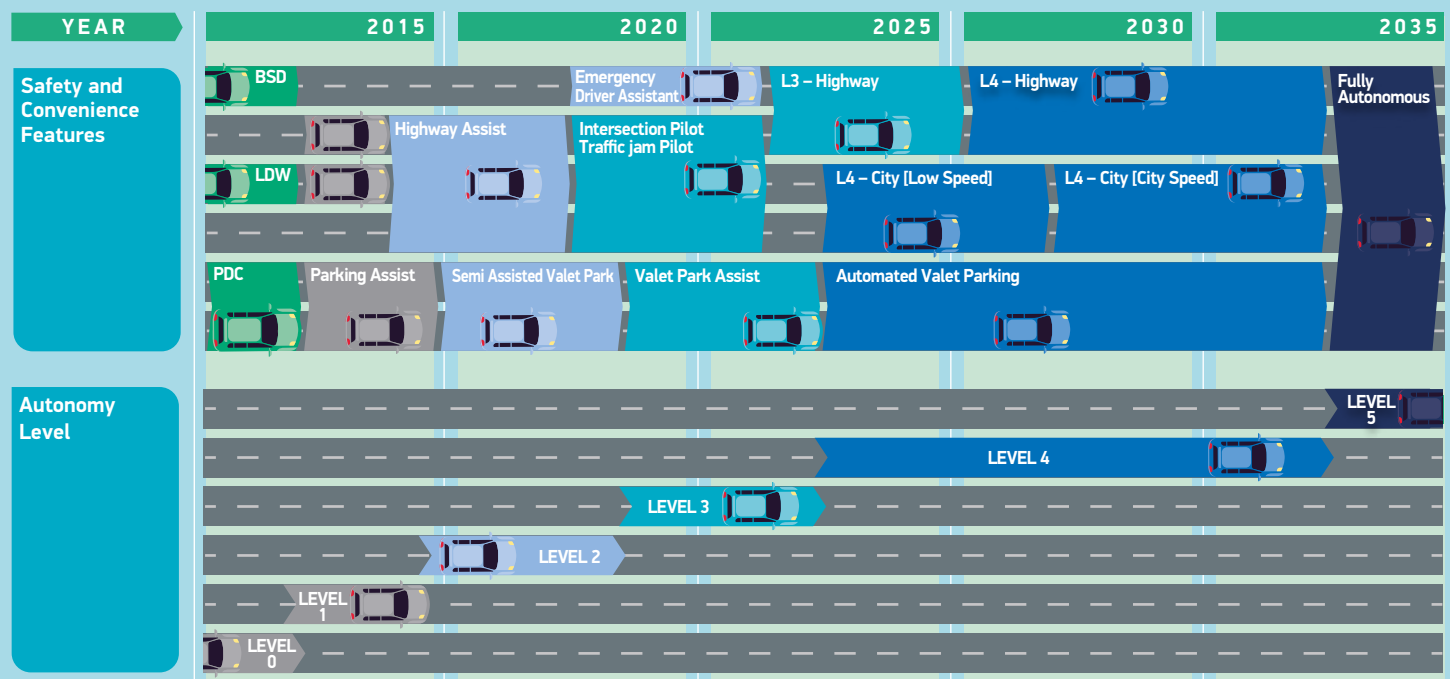


**MIKE HAWES**, SMMT CHIEF EXECUTIVE

“A transport revolution stands before us – the rapid shift to connected and autonomous vehicles (CAVs) will change lives and change society. The automotive industry is doing its part, leading the charge; investing significantly into new technologies, collaborating with governments and policy makers and creating partnerships to bring these innovations to market quicker than ever before. Global nations, meanwhile, are competing for both the development and deployment of CAVs in the real world. The UK is in a prime position to be a global leader in future mobility – but only if the conditions are right and we leave the EU in an orderly fashion.”

## CAV TECHNOLOGY ROADMAP

The emergence of CAVs will bring unprecedented change to the automotive industry worldwide. More than 18 million new automated vehicles are expected to be added to the global motor parc by 2030, significantly changing the way people commute.



## THE £62 BILLION PRIZE

Win the global race to widespread CAV adoption and the economic and social benefits are dramatic. Over the coming decade, today's driver assistance technology and the next generation of autonomous systems are set to save 3,900 lives and create 420,000 new jobs across automotive and adjacent sectors – with an overall annual £62 billion economic benefit to the UK by 2030.

**+£62 Billion**  
Economic Growth

**55%**  
New Automotive Jobs  
to be High Skilled

**+420,000**  
New Jobs

**+20,000**  
New Jobs in Automotive

**+3,900**  
Lives Saved  
(2019-2030)

**+47,000**  
Serious Accidents prevented  
(2019-2030)

It is estimated that **1 in every 5** miles travelled by consumers in the UK could be automated by 2030

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## CONNECTED AND AUTONOMOUS VEHICLES REPORT 2019

### GLOBAL OVERVIEW OF CAV DEVELOPMENT

#### UNITED KINGDOM

**Test Beds:** Four major CAV test beds and 3 additional test sites for highways, rural and parking.

**Self-Driving Road Testing Approval:** ✓

**Potential Automated Road Miles:** 1 in 5 miles

#### NETHERLANDS

**Test Beds:** None

**Self-Driving Road Testing Approval:** ✓

**Potential Automated Road Miles:** 1 in 10 miles

#### FRANCE

**Test Beds:** Multiple OEM test beds

**Self-Driving Road Testing Approval:** ✓

AD testing is permitted on the autoroutes.

**Potential Automated Road Miles:** 1 in 12 miles

#### GERMANY

**Test Beds:** Multiple OEM test beds

**Self-Driving Road Testing Approval:** ✓

AD testing is permitted on the autobahns.

**Potential Automated Road Miles:** 1 in 10 miles

#### USA

**Test Beds:** 10 government authorised test beds

**Self-Driving Road Testing Approval:** ✓

**Potential Automated Road Miles:** 1 in 8 miles

#### SOUTH KOREA

**Test Beds:** 1 dedicated test bed for AD testing.

**Self-Driving Road Testing Approval:** ✗

**Potential Automated Road Miles:** 1 in 20 miles

#### CHINA

**Test Beds:** 3 city based restricted AD test trials with testing permitted on specific public roads.

**Self-Driving Road Testing Approval:** ✗

**Potential Automated Road Miles:** 1 in 12 miles

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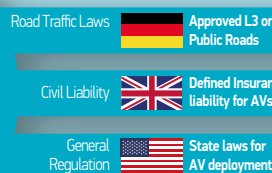
To capitalise, innovation in Britain must continue: favourable regulations, investment into infrastructure and ensuring public acceptance of new technologies.

Central to the report is a new and bespoke CAV Deployment Index, which benchmarks the UK and other major countries in terms of their progress toward CAV rollout and shows the UK among the front runners.

Report prepared on SMMT's behalf by

FROST & SULLIVAN

Enabling Regulations



Overall



Leader

Enabling Infrastructure

4G Speed (Mbps)

50

Share of AV Miles

1 in 5 miles

4G Coverage

97%

Overall



Leaders

Market Attractiveness

Advanced Driving-assistance systems

63%

Connected Car

85%

Demand Responsive Transport

24,629

Overall



Leader