



Connected and autonomous vehicles

Advancing technology to enable connected and autonomous vehicles

Connected and autonomous vehicles will bring advanced communications, self-driving and significantly improved mobility for people and transported goods.

Vehicle intelligence and networking are part of an emerging solution to our global transportation challenges, and are advancing quickly to deliver highly automated and even partially autonomous vehicles, which already operate on some of our roads today.

Delivering simplicity and managing complexity

As the transportation marketplace percolates with new ideas and ways of delivering intelligent multi-modal mobility, it remains to be seen who will own future vehicles, who will develop them and which types of services and infrastructures will become commonplace.

Behind the scenes is an innovative arena – a matrix of evolving technologies and services that include sensors, software, chips and boards, integration and vehicle builds, data management, connectivity and security. The vehicle value chain is expected to be driven by software feature sets, low system costs and high-performance hardware.

Ricardo shares a vision to continue to advance technology, replicate successful models and establish standards, practices and legislation that drive successful autonomous vehicle growth. As a leader in providing strategy and engineering services in the connected and autonomous vehicle market, we are currently focused on leading algorithm development, sensor fusion and hardware integration technologies through our client program successes.



Ricardo global footprint

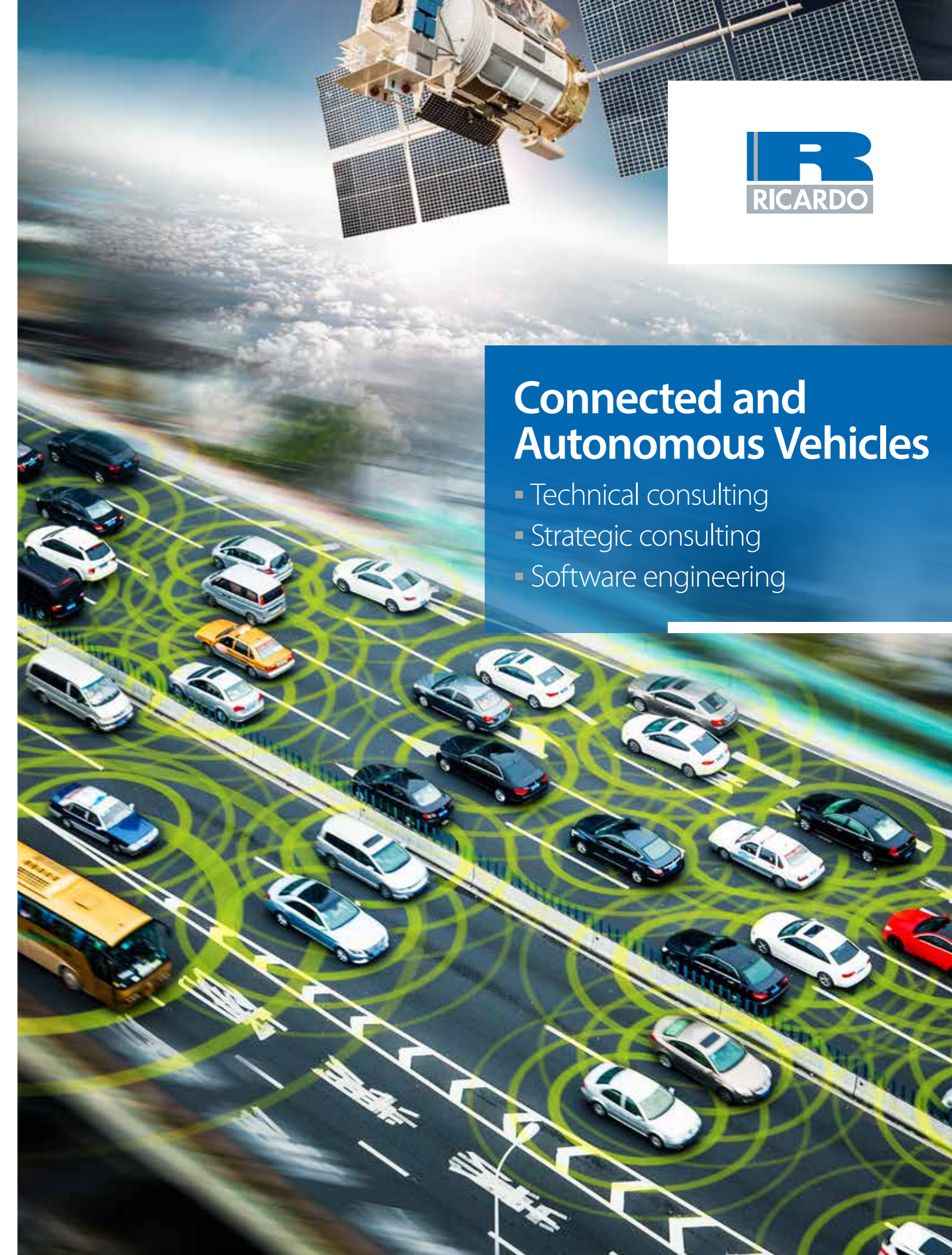


Connected and autonomous vehicles

Autonomous and connected vehicles will provide significant social, industrial, economic and environmental benefits in the future. Large investments in research and development are being made globally to ensure we bring these solutions to market as soon as possible.

Contact us

For more information on Ricardo's connected and autonomous vehicle (CAV) solutions, email cav@ricardo.com



Connected and Autonomous Vehicles

- Technical consulting
- Strategic consulting
- Software engineering

Environmental impact, regulation, standardization

Helping regulators anticipate how connected vehicle features will impact overall fleet emissions and other national metrics (e.g. vehicle miles travelled – VMT) such that new standards can ensure safety, security and overall CO₂ reductions.

Strategic consulting

Understanding technical developments, cost and affordability. Strategies for vehicle and control architectures.

Autonomous vehicle engineering

Agent Drive modeling delivers software verification and evaluation of system performance, evolving to include driver-vehicle interaction.

Platooning

Leveraging DSRC or LTE communication with software design and development.

Vehicle connectivity (V2X)

Development and implementation of V2X systems, including independent and partnered R&D, and network security.

Level-3, -4 and -5 autonomous transit

Software design and development providing lateral, longitudinal and platooning algorithms.

Public transport system planning

Agent Drive modeling allows strategic planning for cost-effective, clean, efficient and future-proof urban transport networks.

Ricardo Agent Drive

Leveraging agent-based modeling (ABM) methodology, real-world analysis of complex system behaviours reduces costs, risks and time-to-market for both up-front multi-agent system development and analysis.

Connected data services

Developing applications to enable internet of things (IoT).

System integration

Actuation system development and integration for autonomous vehicle control (brake, steer, accelerate by wire).

Connected and autonomous vehicles

Ricardo provides integrated strategy and technology driven connected and autonomous vehicle solutions from within a multi-discipline global and dynamic organization.