

Future Mobility Testing and Research Centre (FMTRC)



Future Mobility Testing and Research Centre

The Future Mobility Testing and Research Centre (FMTRC) is Australia's premier testing facility for safer vehicles and sustainable transport technologies.

Since 2019, the FMTRC has provided world-class testing and research facilities for next-generation vehicle and infrastructure technology.

Our mission is to support the development of sustainable, efficient, and safe transport systems by providing comprehensive testing environments for automated and electric vehicles, as well as smart infrastructure.



Domestic and global client base

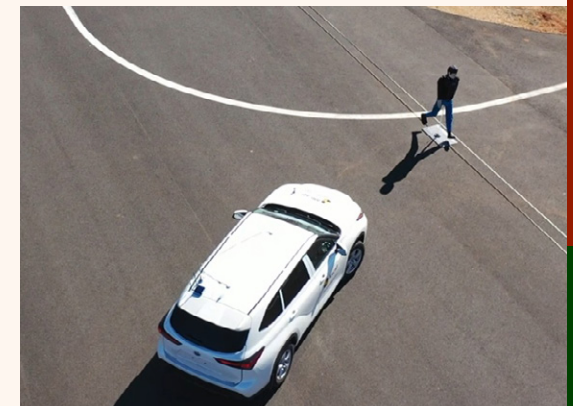
The FMTRC's extensive domestic and global client base reflects our broad expertise and industry trust. We collaborate with vehicle manufacturers, academic institutions, and researchers worldwide. Working with multinational original equipment manufacturers (OEMs), the FMTRC specialises in light and heavy vehicle technology testing and development.

The FMTRC delivers

The FMTRC is one of the few government-run and operated vehicle testing facilities of its kind. Key features include:

- Dedicated on-site test engineering team available to clients
- First-class safety and test equipment
- Leader in Automated and Advanced Driver Assistance Systems (ADAS) testing
- Leader in Australasian New Car Assessment Program (ANCAP) and European New Car Assessment Programme (EuroNCAP) safety assist testing
- Premier ANCAP active safety test laboratory
- On-site Co-operative Intelligent Transport Systems (C-ITS) technology testing
- On-site office and storage space for clients
- National Association of Testing Authorities (NATA) accredited to perform ANCAP safety assist testing as an ISO 17025:2017 laboratory, meeting international standards

We collaborate with industry leaders, manufacturers, researchers, and policymakers to ensure safer vehicle technologies meet performance and safety standards before deployment.



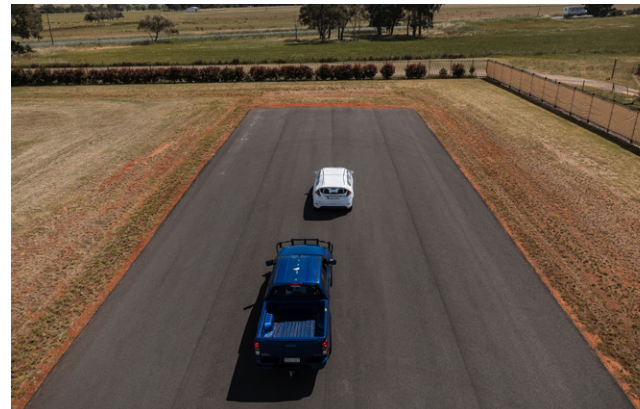
Facilities and capabilities

Facility overview

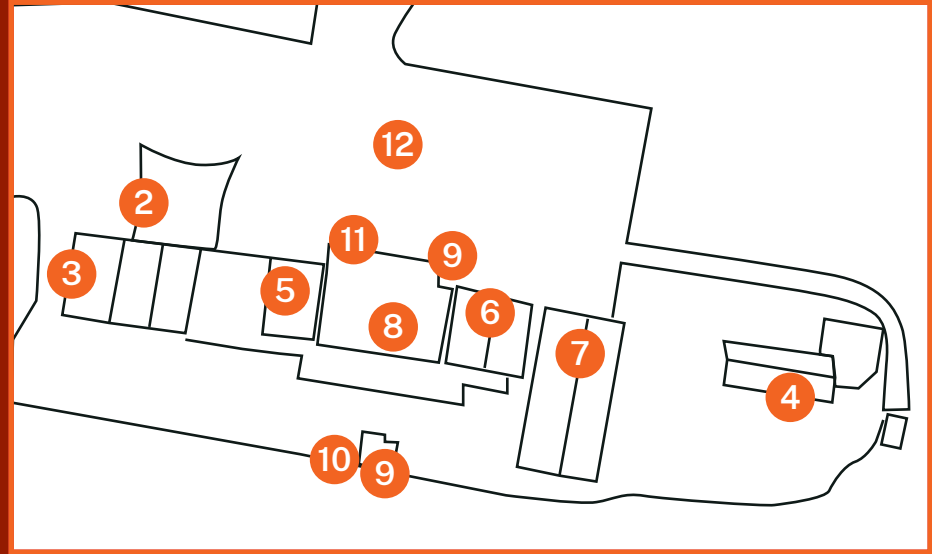
Located 290 km west of Sydney, the FMTRC is based on the historic Hazelton airfield in Cudal, NSW.

We offer state-of-the-art testing facilities, including:

- 2-kilometre test track with a runway, built intersections, and a crossroad
- Connected intersections for C-ITS testing
- Advanced automotive test equipment, including ADAS targets & Vehicle Under Testing (VUT) sets
- Crashlab partnership for safety testing & infrastructure validation
- Workshops converted from aeroplane hangars
- Telstra 5G connectivity across the site
- On-site diesel and EV charging stations
- 24/7 security monitoring



Existing site inclusive two intersections, runway, smart traffic light and C-ITS infrastructure.



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Future growth

The FMTRC is undergoing expansion and upgrades to become a world-class testing facility.

Site expansion

Spanning over 130 hectares, the FMTRC will feature a 4.4-kilometre loop track and a 500-metre access road to a skid pan to enable advanced heavy and light vehicle testing

New testing capabilities

Expanded facilities will support more programs for vehicle manufacturers and key safety authorities such as ANCAP and EuroNCAP.

Investment in regional NSW

The FMTRC expansion will generate new jobs through construction and operational roles.

Artist impression of the new FMTRC site development inclusive of 4.4km loop track and a 500m access road to a 200m diameter skid pan, plus off road service path.

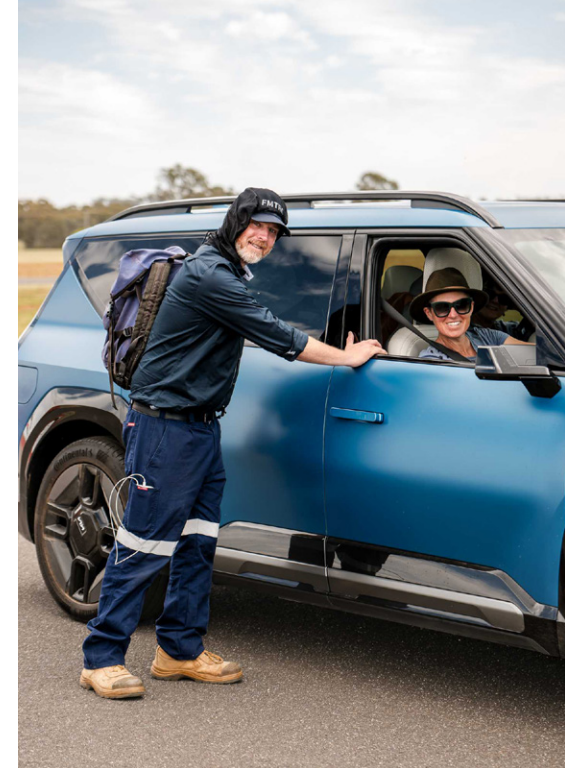


A legacy in innovation

The FMTRC is built on a rich history of transport and aviation innovation. Since 1959, this site has been a hub for transport and aviation services. It is proudly located on the historic grounds of the former Hazelton airfield, established by aviation pioneer Max Hazelton.

In 2000, Hazelton Airlines was listed on the Australian Stock Exchange (ASX), employing 170 staff across Cudal, Sydney, and Dubbo, generating \$69 million annually. In 2002, Hazelton merged with Kendell Airlines to form Rex Group. Remarkably, the original Hazelton runway is still in operation today at the FMTRC.

Our commitment to community development remains as strong as ever. We continue to invest in local staff, resources, and programs that support regional growth and transport innovation in NSW.









Come and talk to us

Client services

At FMTRC, we provide advanced vehicle technology testing and research to help you develop safer, more efficient, and future-ready transport solutions.

Whether you're working with light or heavy vehicles, CAVs, electric EVs, or emerging technologies such as hydrogen and C-ITS, we offer tailored testing solutions to meet your specific needs.

Our services support every stage of development, from early-stage product testing to final certification, ensuring your vehicles meet the highest safety and regulatory standards. With state-of-the-art facilities and cutting-edge technology, we ensure your products are safe, sustainable, and ready for real-world deployment.

Why choose FMTRC?

- Trusted, accurate testing – Coordinated with Crashlab and backed by ANCAP and EuroNCAP expertise
- Specialists in ADAS and infrastructure validation – Helping you meet Australian and global safety standards
- Beyond testing – Full support – Training in automated vehicle sensor technology, heavy vehicle research, and emerging mobility solutions

We go beyond testing. Our services are designed to reduce risk, improve efficiency, and optimise your vehicle's performance.



Come and talk to us

Light and heavy vehicle safety and performance testing

ANCAP Testing

ANCAP is the independent authority on vehicle safety in Australia and New Zealand. ANCAP's five-star safety rating sets the benchmark for vehicle safety and performance.

- The FMTRC is one of two ANCAP testing laboratories in Australia.
- ANCAP test programs assess existing and new vehicles entering the Australian market.
- Expert vehicle advice to improve product safety and performance.
- Development and validation of test protocols to support emerging vehicle technologies and road safety outcomes.

Heavy vehicle testing

- Testing for buses, trucks and other heavy vehicles, including brake and Advanced Driver Assistance Systems (ADAS) testing.
- Growing capabilities in heavy vehicle testing — talk to us about automated or connected testing solutions.

Safety and environment testing

Road Safety testing

- Testing for road safety products such as speed camera calibration, alert speakers, and signage.
- Emerging technology testing for road safety solutions.
- Dedicated site available for road safety campaign filming, including enclosed tracks and equipment.
- Evidence-based testing and investigations to support policy and regulation development.



Automation and emerging technology

Advanced Driver Assistance Systems (ADAS) testing

ADAS testing is required by domestic and global vehicle and equipment manufacturers to enhance vehicle safety. FMTRC conducts tests for:

- Automated Emergency Braking (AEB)
- Lane Keep Assist (LKA)
- Pedestrian detection and avoidance
- Blind spot detection
- Speed assistance functions
- Driver Monitoring Systems (DMS)

All ADAS testing can be conducted to ANCAP and Euro NCAP standards, ensuring results are valid in Australia and Europe.

Automated Driving System (ADS) testing

ADS testing supports the integration of connected and autonomous vehicles into the Australian road network.

- Level 3, 4 and 5 automated driving system testing.
- Detailed test reporting and expert advice throughout the test lifecycle.
- Vehicle data and simulation services to ensure compliance with the NSW Automated Vehicle Trial Framework and international road readiness.

Australian Design Rules (ADR) testing

FMTRC offers facilities to support testing against Australian Design Rules (ADRs) for new and modified vehicles, including:

- ADR-compliant testing, including mandatory ADAS features: 88/00, 90/01, 98/01, 107/00, 108/00

Future Mobility Programs

- Automated vehicle trial testing, research and development.
- Testing for emerging technologies, including electric aircraft and autonomous machinery.
- Developed testing programs for CAVs to ensure safe technology integration on NSW roads.
- Project and program management support
- Pedestrian and micromobility interaction studies
- Development of electric and zero-emission vehicle strategy
- Deployment of EV charging infrastructure across regional and metropolitan areas
- Support for the development of Australian EV charging standards
- Contribution to Hydrogen Hub initiatives to increase hydrogen production and availability in NSW

Industry support and enablement

Technology start-ups

The FMTRC enclosed test track allows our clients to test new technologies in a safe, secure, and flexible environment.

- Vehicle regulatory advice and support
- Vehicle readiness testing including ADR, ANCAP, ADAS and ADS
- New technology testing i.e., drones and aircraft technologies, autonomous machinery

Research and development

- Dedicated facilities for research organisations conducting testing and development projects

Media and community engagement

Automotive and transport technology event support including site, equipment and staff hire. Community days to educate public on emerging vehicle technology, safety and sustainability features such as Emerging Vehicle Event (EVE).

- Promote student development and showcase career opportunities at Science, Technology, Engineering, Mathematics and Construction (STEMC) events

Come and talk to us



Testing equipment

- **Automated robotic platforms:** for ADAS and autonomous driving testing
- **Steering and pedal robots:** allow for complex test scenarios to be run on any vehicle with repeatable and accurate control
- **Precision measurement systems:** when fitted to test vehicles, they provide centimetre accurate data at 100 times a second
- **Testing software:** creates and runs test scenarios and seamlessly synchronise targets and vehicles to a collision point
- **Test target suite:** compliant with ANCAP, EuroNCAP and International Organization for Standardization (ISO) standards. They're inclusive of the Global Vehicle Target (GVT), EuroNCAP Motorcyclist Target (EMT), pedestrian and micromobility.
- **Outfitted workshop equipment:** including vehicle hoist and wheel alignment machine for fitting out and maintaining your vehicle before, during and after testing
- **Electric vehicle charging infrastructure:** available on site

C-ITS testing equipment

- **Entry Intersection:** Permanent testing site with bike and pedestrian crossings, equipped with PoE-enabled Ethernet ports, C-ITS traffic controllers, and roadside units
- **Main/Portable Intersection:** Portable setup with Kelly blocks and pedestrian crossings, featuring 3-light traffic lanterns and PoE-enabled Ethernet ports for C-ITS testing
- **Fibre Optics & PoE:** High-speed communication through fibre optics and PoE at both intersections, supporting reliable C-ITS data transmission
- **C-ITS Traffic Controllers:** Advanced controllers with Wi-Fi, Bluetooth, Ethernet, 5G, and Sydney Coordinated Adaptive Traffic System (SCATS) integration for efficient C-ITS message handling
- **Lab/Workshop (C-ITS Room):** Research & Development (R&D) lab with 5G router, edge computing systems, and power stations for testing, simulation, and data analysis, supporting single-vehicle bench testing
- **Variable Messaging Signage (VMS):** Solar-powered, mobile signs with customizable amber displays (up to 36 frames), easy to move using electronic jockey wheels

Event equipment

The FMTRC offers a range of event support services including event equipment hire. With a growing inventory, the FMTRC now provides a wide selection of quality event essentials to support various functions. Key products include:

- **Chairs and tables:** Durable event chairs and tables suitable for both small gatherings and medium-scale events
- **Marquees:** Small to medium marquees for event stalls and shelter
- **Electronic Variable Message Sign (VMS)** – to promote event and road safety messages
- **Water barriers and crowd control items:** Essential tools to manage crowds and ensure safety at events
- **NSW Government banners and media walls:** for government sponsored projects and programs.

Come and talk to us



The FMTRC offer a range of services and will build customised packages to suit your requirements. Please contact us today for how we can help you with your safety, assurance, and testing needs.

Transport for NSW

Contact and bookings

E: future.mobility@transport.nsw.gov.au

Learn more

FMTRC

<https://www.transport.nsw.gov.au/fmtrc>

