

Telematics Industry Group Forum

19 September 2024



TCA acknowledges the Australian Aboriginal and Torres Strait Islander peoples as the first inhabitants of the nation and the traditional custodians of the lands where we live, learn and work. We pay our respects to Elders past, present and emerging for they hold the memories, traditions, culture and hopes of Aboriginal and Torres Strait Islander peoples of Australia.

TCA acknowledges and respects the Treaty of Waitangi and Maori as the original people of New Zealand.

Today's Agenda

10:00 Setting the scene

- **Gavin Hill**, General Manager Strategic Engagement and Performance, Austroads

10:10 State of the industry

- **John Gordon**, Strategic Engagement Manager, Austroads

10:20 Industry-led data-sharing initiatives

- **Gavin Hill**, General Manager Strategic Engagement and Performance, Austroads

10:30 Developments from Victoria

- **Ian Mond**, Manager Land Freight Systems, Freight Victoria, Department of Transport and Planning Victoria

10:50 Intelligent Transport System Compliance Framework

- **Zack Kennie**, A/Director, National Compliance Services, National Heavy Vehicle Regulator

11:10 Austroads project spotlight

- **Amy Naulls**, Program Manager Transport Network Operations, Austroads
Joanne Vanselow, Program Manager Future Vehicles, the Environment and Sustainability, Austroads

11:30 Telematics Analytics Platform

- **David Randall**, TAP Product Manager, Austroads

11:40 Q&A

- Questions and comments from the attendees



Telematics improving road outcomes

- Jurisdictions in Australia and New Zealand are increasingly turning to the use of data and technology for government planning, improved asset management and enhancing supply chain performance.
- Data from telematics devices and Smart On-Board Mass (Smart OBM) systems play a key role in optimising transport options for all.

State of the industry

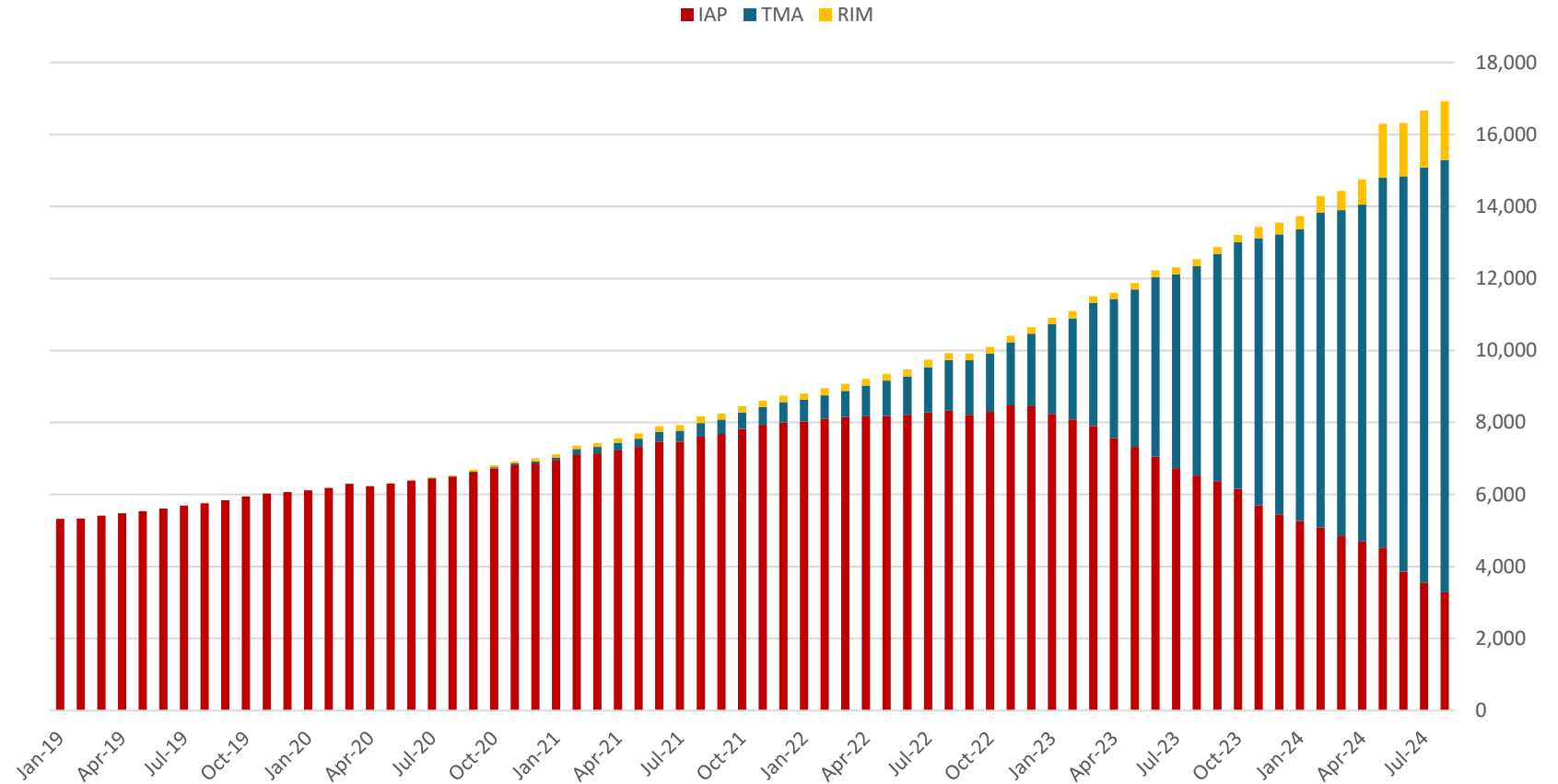
John Gordon
Strategic Engagement Manager
Austroads

The regulatory telematics marketplace is growing

Nearly **17,000 heavy vehicles** enrolled in the various applications of the National Telematics Framework and sharing telematics location data with TCA as of August 2024.

Over **2,000 heavy vehicles** enrolled in TMA sharing mass data with TCA through Smart OBM systems.

Over **300 million data records** processed through the Telematics Analytics Platform (TAP) per month.



Number of vehicles enrolled in IAP, TMA or RIM schemes and sharing position records with TCA as of August 2024.



Active telematics schemes across different jurisdictions:

KEY:



Telematics application

*Please refer to jurisdictional guidelines when checking the requirements for your specific vehicle and scheme enrolment.

The below schemes are available across all Australian jurisdictions:

- RIM Express Scheme
- RIM Industry-Led Data-Sharing Schemes (AUS)



IAP

- IAP SPV Schemes (QLD)



TMA

- TMA Class 3 Truck and Dog Trailer Monitoring Scheme (QLD)
- TMA Higher Mass Limits Scheme (QLD)
- TMA PBS Vehicle Monitoring Scheme (QLD)
- TMA PBS Vehicle Mass Monitoring Scheme (QLD)
- TMA ZEHV Monitoring Scheme (QLD)



IAP

- IAP Higher Mass Limits Scheme (NSW)
- IAP SPV Schemes (NSW)



TMA

- TMA Higher Mass Limits Scheme (NSW)
- TMA SPV Schemes (NSW)
- TMA PBS Vehicle Mass Monitoring Scheme (NSW)
- TMA Class 3 Truck and Dog Trailer Monitoring Scheme (NSW)
- TMA Hill Descent Monitoring – Beacon Hill Scheme (NSW)
- TMA Hill Descent Monitoring – Mount Ousley Scheme (NSW)
- TMA Livestock Loading Scheme (NSW)
- TMA PBS Vehicle Monitoring Schemes (NSW)
- TMA ZEHV Monitoring Schemes (NSW)



RIM

- RIM Class 3 Truck and Dog Trailer Monitoring Scheme (NSW)
- RIM Farm Gate Access Schemes (NSW)
- RIM Oversize Overmass (OSOM) Vehicle Movement Scheme (NSW)
- RIM PBS Vehicle Monitoring Schemes (NSW)
- RIM Port Botany Container Movement Efficiency Scheme (NSW)
- RIM Safety, Productivity, Construction and Environment Transport Scheme (SPECTS) (NSW)
- RIM ZEHV Monitoring Scheme (NSW)



IAP

- IAP HPFV Monitoring Scheme (VIC)



TMA

- TMA HPFV Monitoring Schemes (VIC)
- TMA LZEHV Monitoring Scheme (VIC)
- TMA Road Train Monitoring Scheme (VIC)
- TMA SPV Monitoring Schemes (VIC)
- TMA HPLV Monitoring Schemes (VIC)



RIM

- RIM HPLV Monitoring Schemes (VIC)



TMA

- TMA Special Purpose Vehicle Monitoring Schemes (SA)



RIM

- RIM Express Scheme
- RIM Industry-Led Data-Sharing Schemes (AUS)



TMA

- TMA PBS Vehicle Monitoring Scheme (TAS)
- TMA SPV Monitoring Scheme (TAS)



TCA recognised telematics service providers

etca Certified

Providing services for:
IAP, TMA, RIM

BLACKBOX
CONTROL

NETSTAR
A SUBSIDIARY OF ALTRON

MTData
A Telstra Company

Teletrac
Navman

etca Certified

Providing services for:
TMA, RIM

insee**go**

mX | by POWER&FLEET[®]

netcorp**gps**

V-DAQ

webfleet

WHG.

etca Certified

Providing services for:
TMA, RIM
(for their own fleet)

RonFinemore
TRANSPORT

SIMON
National Carriers

etca Registered

Providing services for:
RIM

ATCO
AUSTRALIAN TRANSPORT COMPLIANCE CENTRE
PTY LTD

DrivaLink
LIVE TRACKING & FLEET MANAGEMENT

FleetLogix

PACIFIC
TELEMATICS

SENSIUM
FLEET TELEMATICS

SolBox

THE FLEET
Office

wisetech
global

Providing services for:
RIM
(for their own fleet)

JIM
PeaSon
TRANSPORT

Hanson
HEIDELBERGCEMENT Group

TCA recognised Smart OBM system suppliers



Providing devices suitable for schemes requiring Smart OBM, in conjunction with certified service providers



Providing Smart OBM devices for their own fleet



Industry-led data-sharing initiatives

Gavin Hill
General Manager Strategic Engagement
and Performance, Austroads

RIM Industry-Led Data-Sharing Schemes (AUS)



Led by industry, for industry



Voluntary participation



For the first time, gives industries access to aggregated, de-identified reports and analysis from vehicles in their own sector.



Authorised users from industry associations can access data analytics and visualisations from vehicles within their own sector

Scheme name	RIM ILDS Scheme – Dangerous Goods (AUS)	RIM ILDS Scheme – Construction (AUS)
Association partner	National Bulk Tanker Association (NBTA)	Cement Concrete & Aggregates Australia (CCAA)
Companies currently enrolled in the scheme	<ul style="list-style-type: none"> Ron Finemore Transport Formula Chemicals 	<ul style="list-style-type: none"> Cement Australia



Want to learn more?

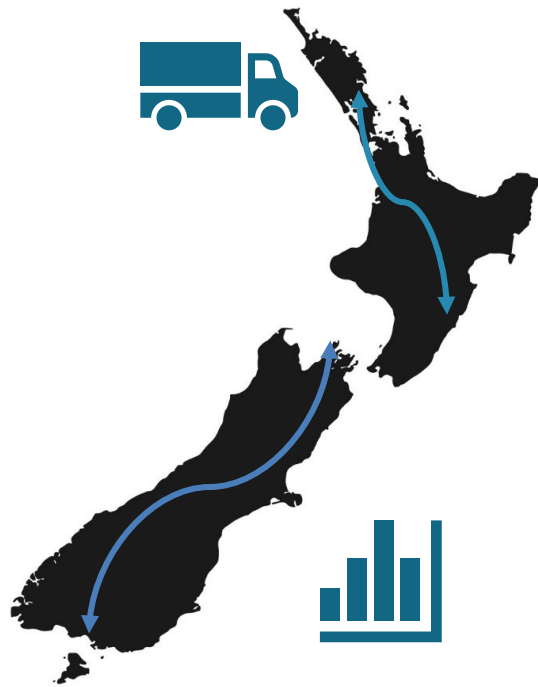
To learn more about the RIM Industry-Led Data-Sharing Schemes (AUS), scan the QR code or visit: austroads.info/ILDS

TCA encourages interested industry associations to explore the use of the RIM Industry-Led Data-Sharing Schemes (AUS) for their members. To get involved, contact TCA by emailing a: tca@tca.gov.au



SCAN ME

The New Zealand industry-led data-sharing initiative



- A proof-of-concept Championed by the [National Road Carriers Association](#) in collaboration with the New Zealand Transport Agency Waka Kotahi and TCA.
- The project is aiming to collect anonymised telematics (vehicle movement) data from participating transport operators and present insights on the New Zealand road network through TAP.
- Long-term goal is to implement a system in New Zealand for managing access to roading networks that allows increased productivity for transport operators and ensures the road controlling authorities can better manage their assets.

Why is the project important?

- With **more than 90%** of the freight task on road, there's little data available on New Zealand's road freight industry.
- Data-driven insights have the potential to unlock significant productivity, efficiency and safety enhancements for the supply chain.
- New Zealand can be positioned, with Australia, as world leaders in the use of telematics data.



Want to get involved?



New Zealand-based transport operators can sign up now.

The aim is to collect data and present insights on the NZ road network through TAP **by December 2024.**

To get involved, contact the National Road Carriers Association by emailing at enquiries@natroad.co.nz or calling **+64 0800 686 777.**

Developments from Victoria

Ian Mond

Manager Land Freight Systems Freight Victoria
Department of Transport and Planning

Intelligent Transport System Compliance Framework

Zack Kennie

A/Director National Compliance Services
National Heavy Vehicle Regulator

- National Heavy Vehicle Regulator assumed monitoring responsibilities for telematics in August 2022 through NSW transition processes.
- This was followed by an expansion through the QLD transition processes.
- The NHVR now has 9 staff across three offices monitoring potential non compliances associated with telematics use and network access.
- To maximise regulatory effectiveness the NHVR has developed an [Intelligent Transport System Compliance Framework](#) (the framework).




- The Framework aims to provide transparency to industry on the National Heavy Vehicle Regulator's (NHVR) approach to obtaining and using data from intelligent access programs
- The Framework is designed to improve NHVR's compliance capability from a process-based approach, which currently only uses IAP data, to a risk-based, data driven approach which incorporates all three types of intelligent access programs
- The Framework aligns with the NHVR corporate goals of
 - **Productivity** – Deliver greater and timely road network access certainty and increased productivity
 - **Regulatory Capability** – Maintain a consistent and streamlined approach to the delivery of services

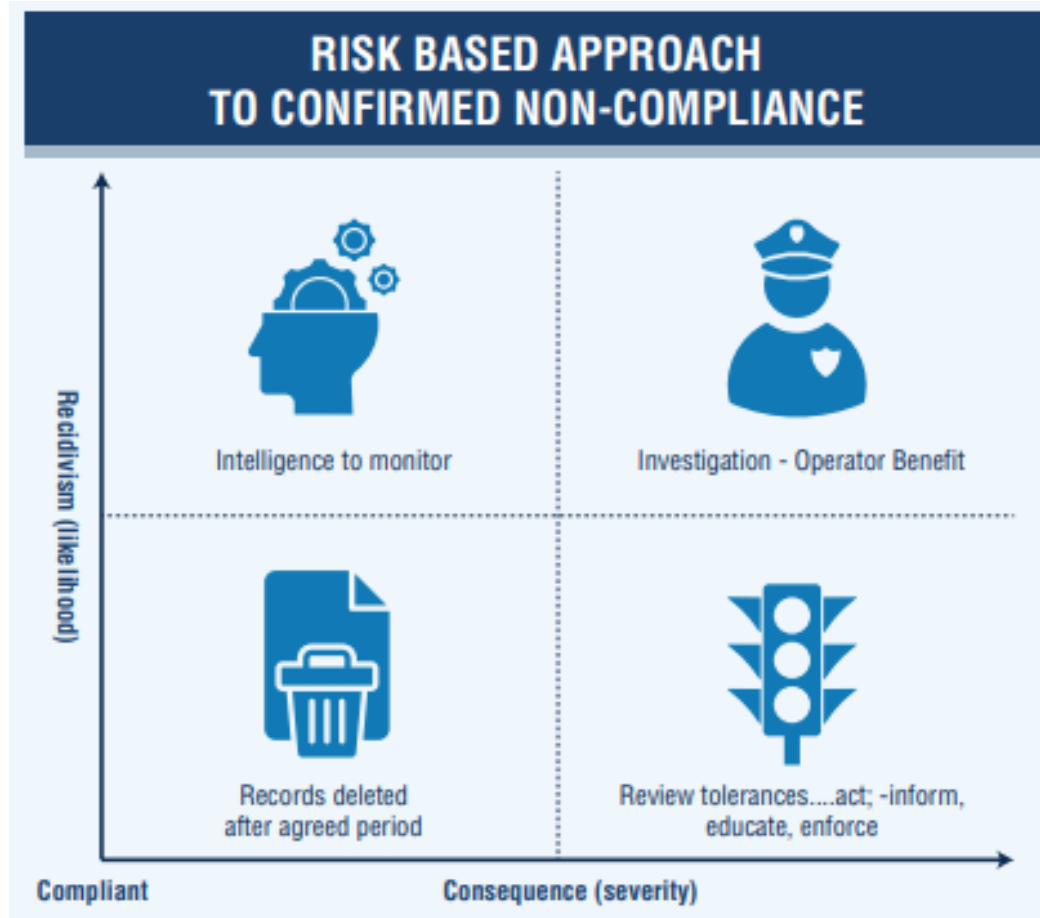


- Compliance objectives:
 1. Encourage and promote safe and productive business practices by motivating industry adoption of intelligent access programs.
 2. Manage the impact of heavy vehicles on the environment, road infrastructure and public amenity by using intelligent access program data to ensure compliance with the requirements of road manager as outlined in the Notice or permit that allows additional access to the road network.
 3. Monitor compliance with the HVNL; informing, educating and enforcing where non-compliance is detected, applying an escalating range of regulatory interventions to change and promote positive behaviour.
 4. Use data to monitor trends that may assist in resource allocation (e.g., SCOs in certain areas based upon trends in non-compliance) and the investigation of potential systemic offending under the HVNL.

Intelligent Transport System Compliance Framework



ADOPTION OF INTELLIGENT ACCESS PROGRAMS	PROTECTION OF THE ROAD NETWORK	PRODUCTIVITY FOR INDUSTRY
 <p>Develop local operational plans to target non-enrolled vehicles travelling on designated routes.</p>	 <p>Identification of vulnerable and critical road assets by the road managers and the applied conditions.</p>	 <p>Analyse and monitor restrictions on Notice and permit conditions in relation to;</p>
<p>Deliver current enrolment data to on-road officers through enforcement and screening lane technology.</p>	<p>Monitoring of intelligent access program vehicles using vulnerable and critical structures</p>	<ul style="list-style-type: none"> • Mass • Location • Speed • Time
<p>Monitor permit and enrolment data to ensure compliance with permit conditions.</p>	<p>Undertake risk analysis of the number and severity of journeys of operators who are non-compliant on vulnerable and critical structures</p>	<p>Apply risk methodology to target greatest risk.</p>
<p>Develop and implement a risk algorithm which can identify in real time, vehicles travelling on restricted routes who are not appropriately enrolled.</p>	<p>Apply NHVR's inform, educate and enforce model.</p>	<p>Apply NHVR's inform, educate and enforce model.</p>
<p>Monitor installed intelligent access program devices to ensure they are functioning correctly.</p>	<p>Monitor behavioral change and report.</p>	<p>Monitor behavioral change and report.</p>



Thank you

For more information:

13 NHVR (13 64 87)

info@nhvr.gov.au

nhvr.gov.au

 nhvrsocial

 nhvrsocial

 NHVR

 National Heavy Vehicle Regulator

Austroads Project Spotlight

Amy Naulls

Program Manager, Transport Network
Operations Program, Austroads

Joanne Vanselow

Program Manager, Environment and
Sustainability, and Vehicles and
Technology Programs, Austroads



Heavy vehicle rest area facilities guidance NEF6436

Goal:

- To review and update the *Austrroads Guidelines for the Provision of Heavy Vehicle Rest Area Facilities*.
- To improve the availability of data on rest area utilisation (from the National Telematics Framework and other sources).



Transport Network Operations
Program

Amy Naulls

Program Manager

Future Freight Vehicles and Buses Implications for Road Managers

NEF6392

- Research the impacts and benefits of increasing steer and drive axle masses, which is anticipated to be a priority for low and zero emission vehicles (LZEVs) and diesel vehicles (both freight vehicles and buses).
- Analyse potential LZEV uptake scenarios, and the consequential implications and opportunities for road managers and others involved in infrastructure decisions.



Transport Network Operations
Program

Amy Naulls

Program Manager

Accessibility guidelines for LZEV charging infrastructure CAV6450

Goal: To support industry and governments in the transition to Low and Zero Emission Vehicles by developing guidelines for charging infrastructure that ensure the EV charging experience is a positive one for all users, including people with disabilities and older people.



Environment and Sustainability, and
Vehicles and Technology Programs
Joanne Vanselow
Program Manager

Guidelines for implementing EV charging in remote and rural areas

CAV6426

Goal: To provide guidance on implementing EV infrastructure in rural and regional areas including addressing key challenges such as limited power and communication coverage, off-grid areas, charging for vehicles with trailers and security concerns.



Environment and Sustainability, and
Vehicles and Technology Programs
Joanne Vanselow
Program Manager



Guidance for Developing Standardised Transport Data Exchange for Australia and New Zealand CAV6376

Goal: To document a development path and guidance for road authorities to grow an agency's Data Provision Capability from 'Day 0.5' to 'Day 1'. Concentrating on cloud provided services harmonised with the European National Access Point platform.



Environment and Sustainability, and
Vehicles and Technology Programs
Joanne Vanselow
Program Manager



Research Climate Resilience Needs and Guidance Approaches ESC6516

Goal: To improve road network resilience by incorporating climate change resilience in asset management processes.



Environment and Sustainability, and
Vehicles and Technology Programs
Joanne Vanselow
Program Manager



Development of carbon measurement and reporting tool ESG6515

Goal: To provide a single Australia-New Zealand tool to enable agencies to meet growing obligations to quantify, consider and report carbon emissions associated with infrastructure construction and maintenance activities.



Environment and Sustainability, and
Vehicles and Technology Programs
Joanne Vanselow
Program Manager



E-Call- possible approaches for Australia and New-Zealand CAV6424

Goal: To better understand the extent to which Automatic Crash Notification (ACN) technologies such as eCall can help support improved safety outcomes on Australian and New Zealand roads, and what interventions are needed to support or enable their implementation in Australia and New Zealand.



**Environment and Sustainability, and
Vehicles and Technology Programs**
Joanne Vanselow
Program Manager

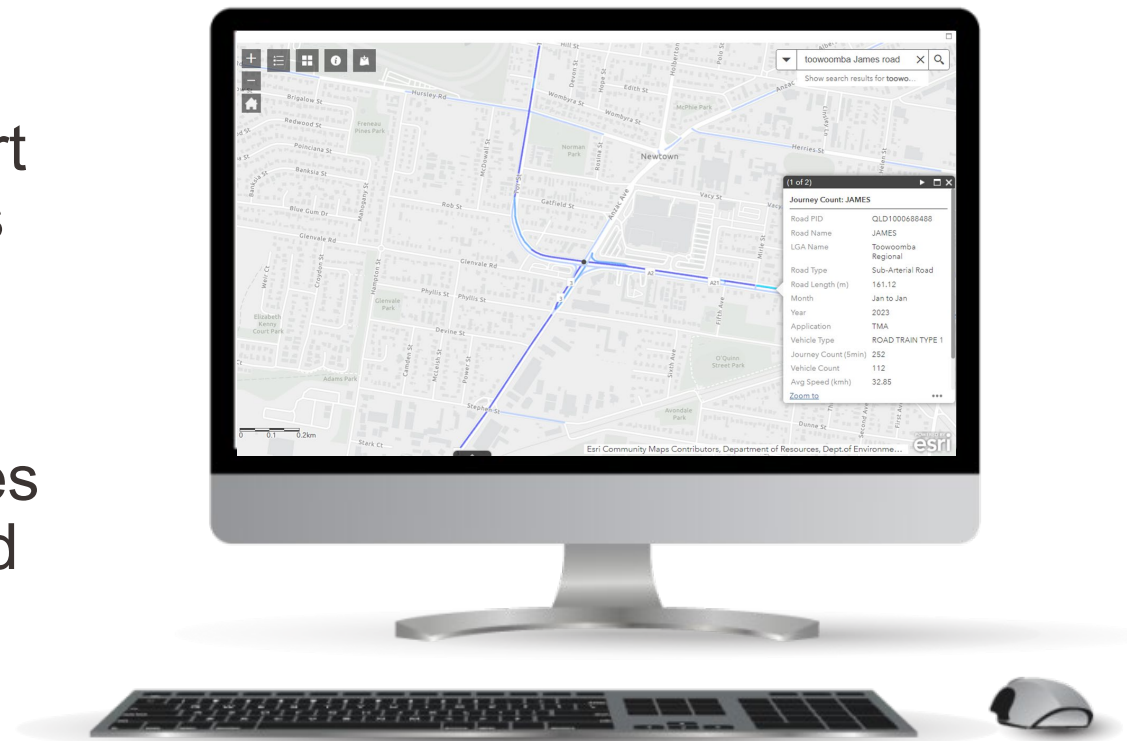
Telematics Analytics Platform

David Randall
TAP Product Manager, Austroads

What is Telematics Analytics Platform (TAP)?

A secure, online portal providing Australian and New Zealand transport agencies with access to data, reports and analytics using telematics data.

TAP supports a range of different uses and users who can unlock TAP's road use analytics functionality through access agreements.



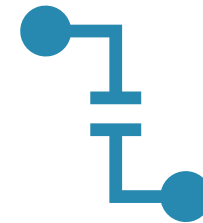
What's new in TAP?



New research product group can generate insights based on Austroads' and TCA's publicly available datasets



Improvements to the Enrolment Reporting Service



Upcoming improvements to the Malfunction Management Portal

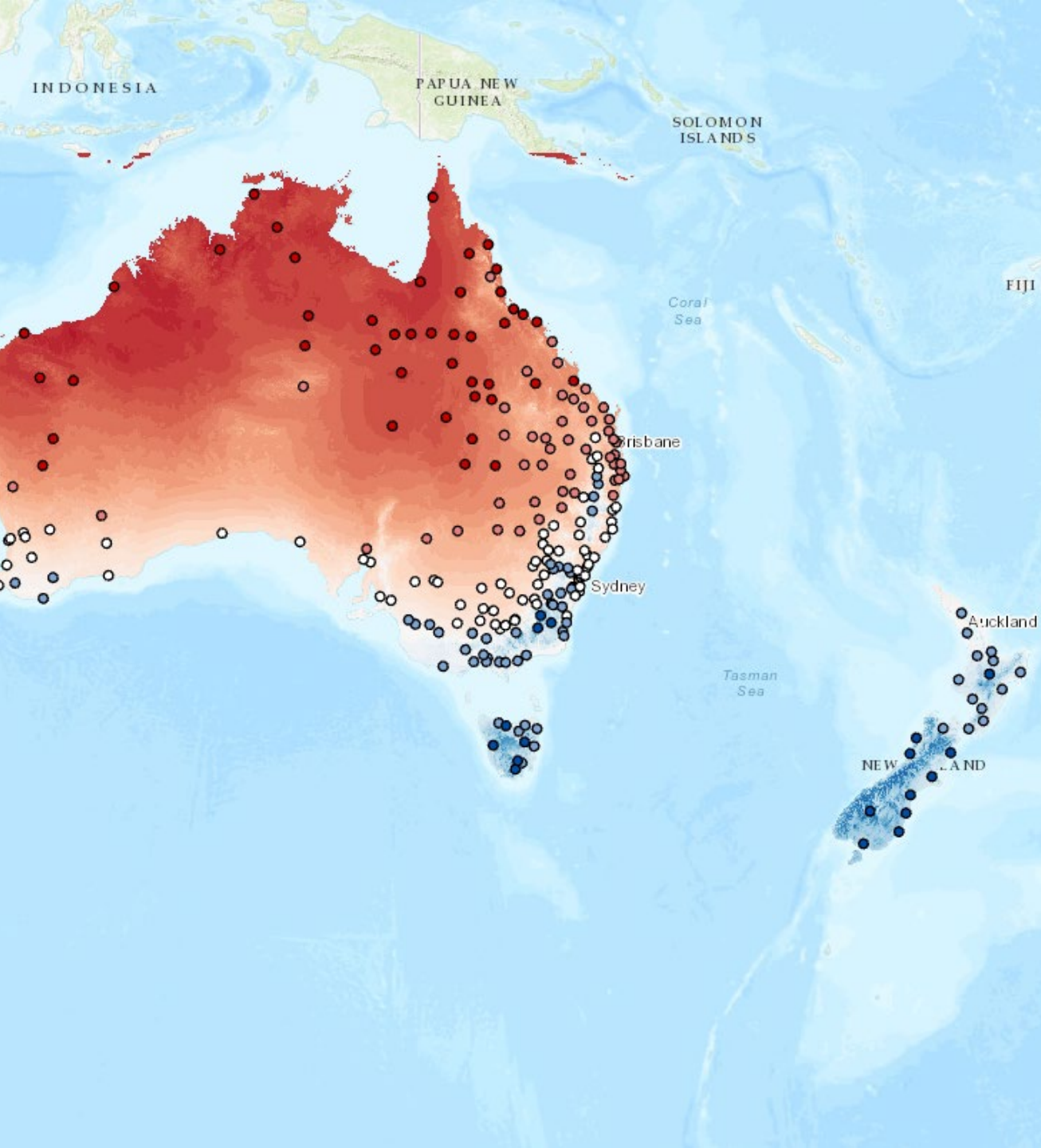


The High-Productivity Freight Routes Dashboard

Purpose

To provide a national overview of road use by vehicles enrolled in the National Telematics Framework.

Insights generated using this dashboard can help road managers, researchers or planners assess the impact of disruptive events on freight productivity or compare productivity on different road segments across Australia.



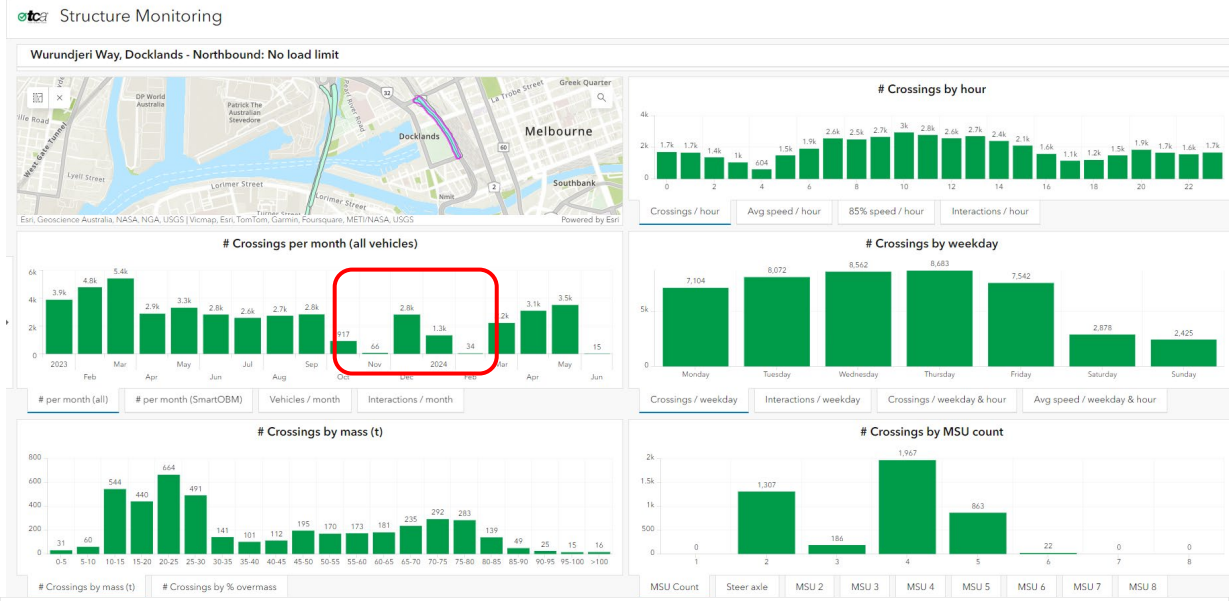
The Weighted Mean Annual Pavement Temperature Dashboard

Purpose

An interactive map showcasing Weighted Mean Annual Pavement Temperature (WMAPT) values for approximately 250 locations across Australia and New Zealand.

It offers a valuable resource for industry professionals engaged in the planning, design, and maintenance of asphalt pavements.

More information on the values of WMAPT for locations throughout Australia and New Zealand is available in the *Austrroads Guide to Pavement Technology Part 2*.



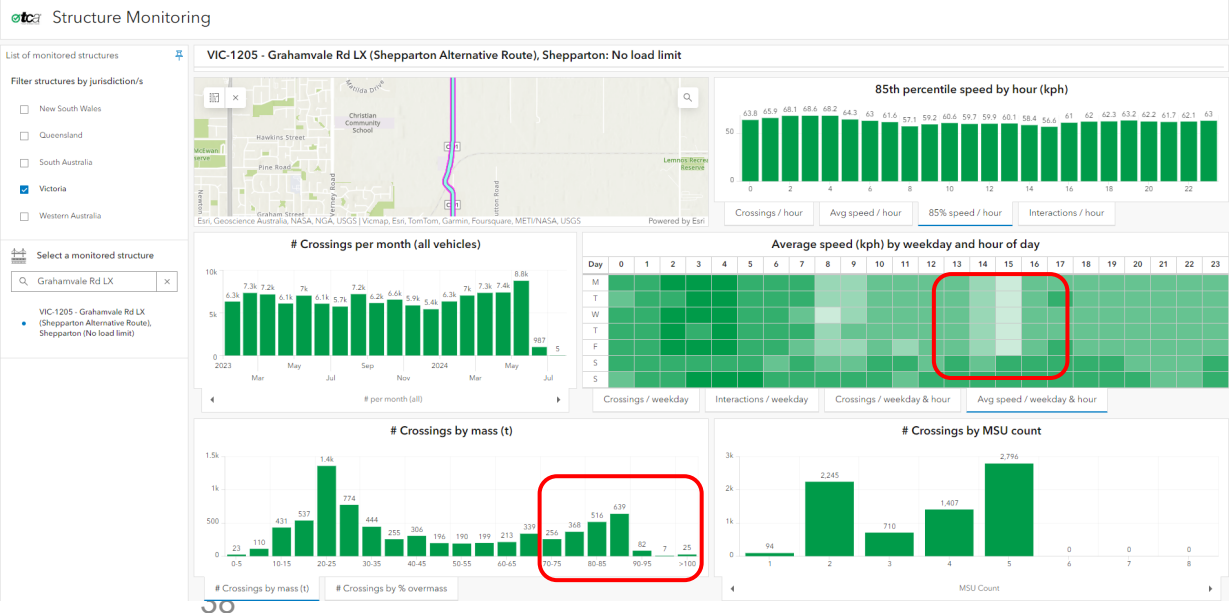
Structure Monitoring Dashboard [To be released]

Purpose

To provide detailed statistical data to road managers based on input from telematics and Smart OBM systems.

Examples of use cases:

- Targeted analysis of instances and impact of mass overloads on structures.
- Understanding patterns of movement of vehicles on different days of week or at different times of day.
- Analysing impact of road closures on freight movement.



TAP future roadmap



Enhancements to the TAP platform will facilitate modern data management



Use of real vehicle telematics to provide evidence basis for safety investment on Australian roads (AusRAP)



Looking at data in and around rest areas to facilitate funding for safe, convenient truck stops

Q&A

Open to questions and comments
from all attendees

Thank you for participating!

We look forward to seeing you in future TIG Forums!

To receive notifications about future events, sign up to this form or visit: austroads.info/TIG

