Transport Certification Australia

Telematics Industry Group (TIG) Meeting

18 May 2023

Acknowledgement of Country

We acknowledge 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.

Welcome

- Welcome to the May 2023 Telematics Industry Group
- Please be respectful of others, raise your hand to ask questions or make comments, and keep your microphone muted when not speaking.
- We have a range of speakers and attendees from around Australia and some exciting developments.
- We will be recording the meeting for those who can’t attend.

Agenda

1. Welcome
2. Smart OBM roll-out
3. Latest developments from around the country
4. TCA-led initiatives and priority projects
5. Open forum for discussion
6. Local Government perspectives (ALGA)
7. Other business

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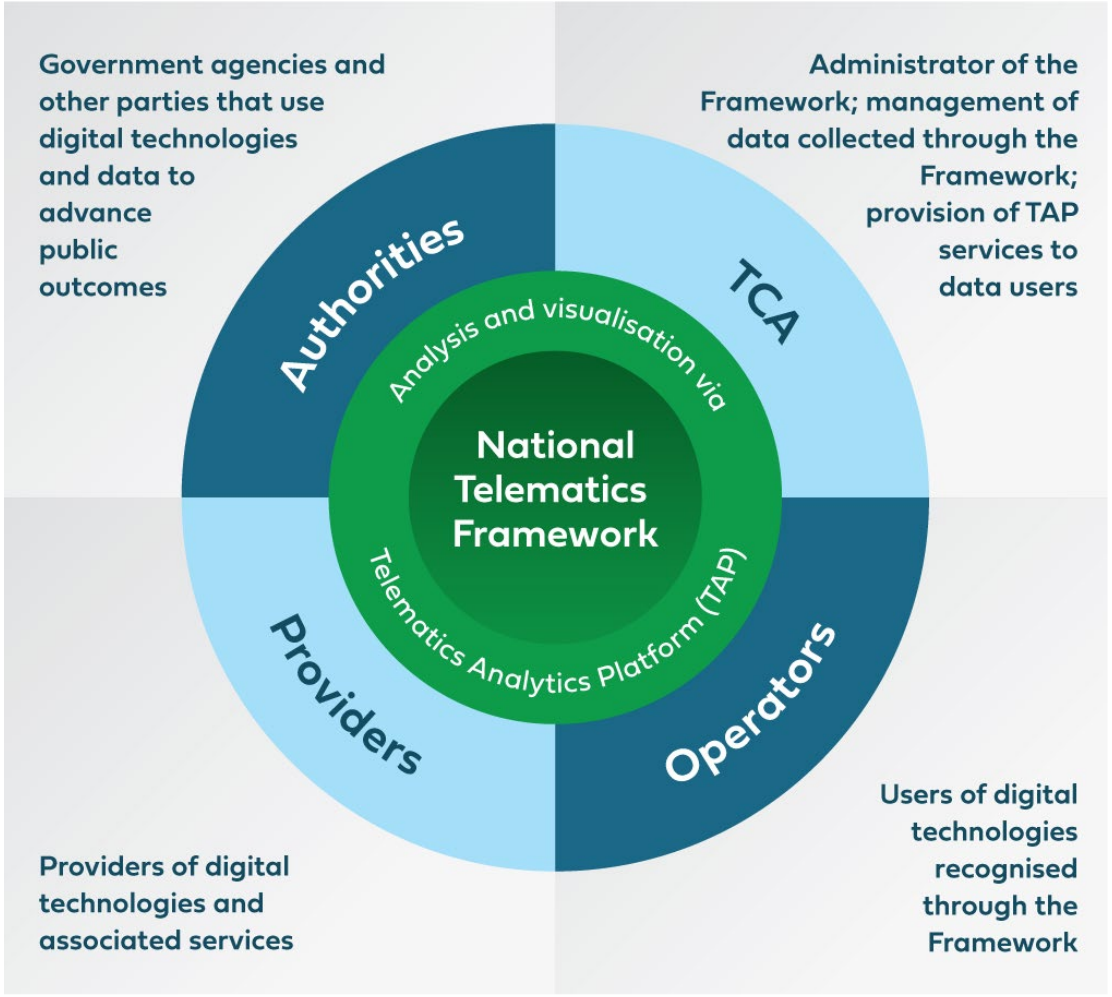
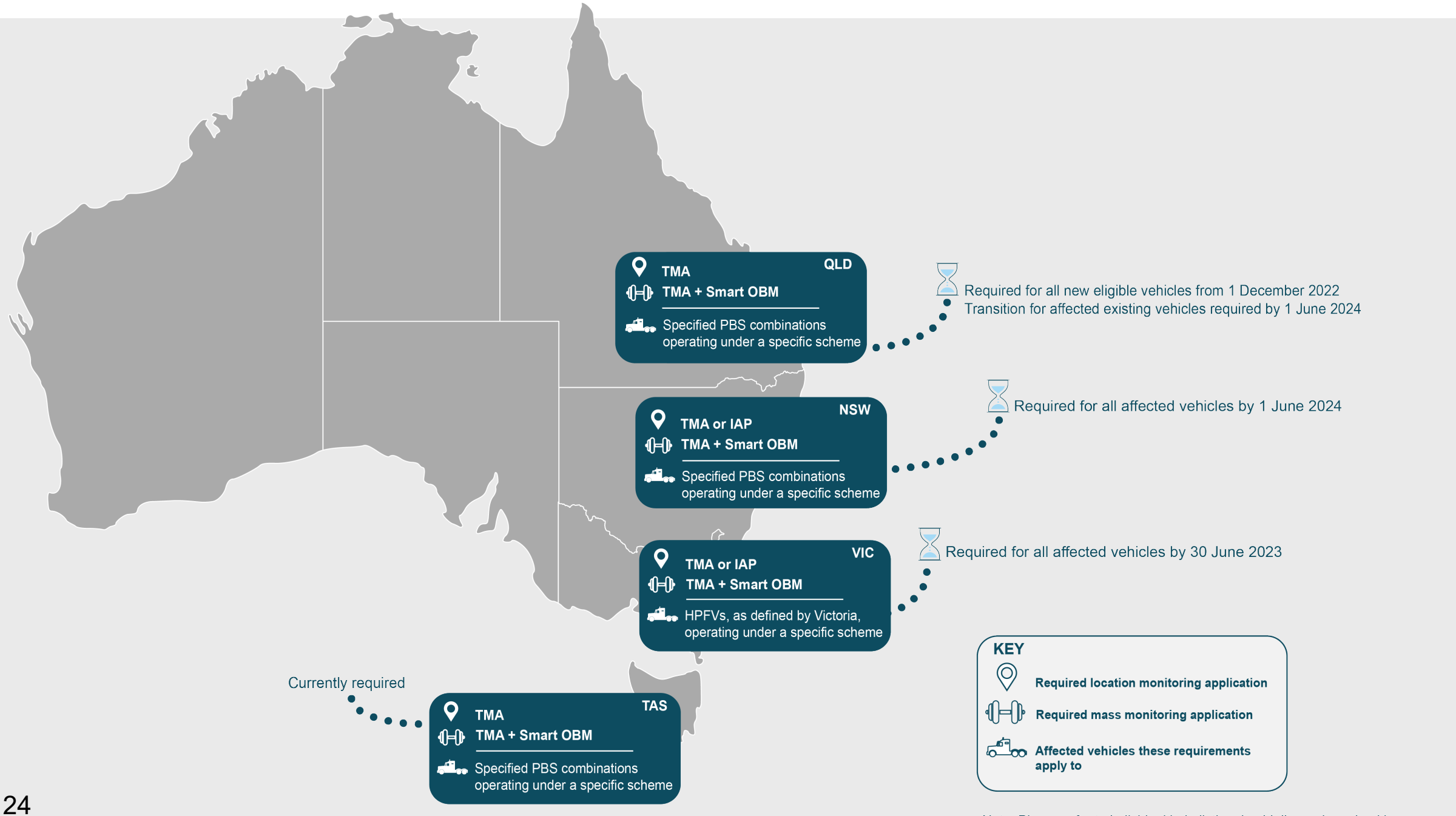
Smart OBM roll-out

Gavin Hill, General Manager
Strategy and Delivery
Transport Certification Australia

The National Telematics Framework





Note: Please refer to individual jurisdictional guidelines when checking requirements for your specific vehicle and scheme enrolment.

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Telematics in Queensland

Mark Mitchell, Director Heavy Vehicle Operations

Department of Transport and Main Roads Queensland

Telematics in Queensland

Telematics Industry Group Meeting – Brisbane Truck Show 2023

Mark Mitchell, Director Heavy Vehicle Operations
Department of Transport and Main Roads

Acknowledgement of Traditional Owners and Elders

I’d like to begin by acknowledging the Traditional Owners of the land where we meet today. I would also like to pay my respects to the Elders both past and present.

I also extend that respect to the Aboriginal and Torres Strait Islander people here today.

'Travelling' by Gilimbaa

What is happening with Telematics in Queensland

- Queensland is currently pivoting from the Intelligence Access Program (IAP) and Interim OBM to the Telematics Monitoring Application (TMA) and Smart On-board Mass (Smart OBM)
- IAP and Interim OBM have been critical tools for Transport and Main Roads (TMR) to manage risk / facilitate road access
- TMRs role is likely to change later this year from managing compliance of the road network to purely a Road Manager function and we need to prepare for this
- The shift to TMA and Smart OBM will align us with other jurisdictions, which is important from a policy perspective.

Broader benefits from application of road use data

- The move by TMR also provides important benefits to the:
  - road transport industry (as users of telematics)
  - telematics/technology industry (suppliers of technology and data services to the transport industry)
- TMR and other road managers will be provided with greater insights, including:
  - Influencing future access
  - Investment decisions
  - Cost savings and operational efficiencies to industry

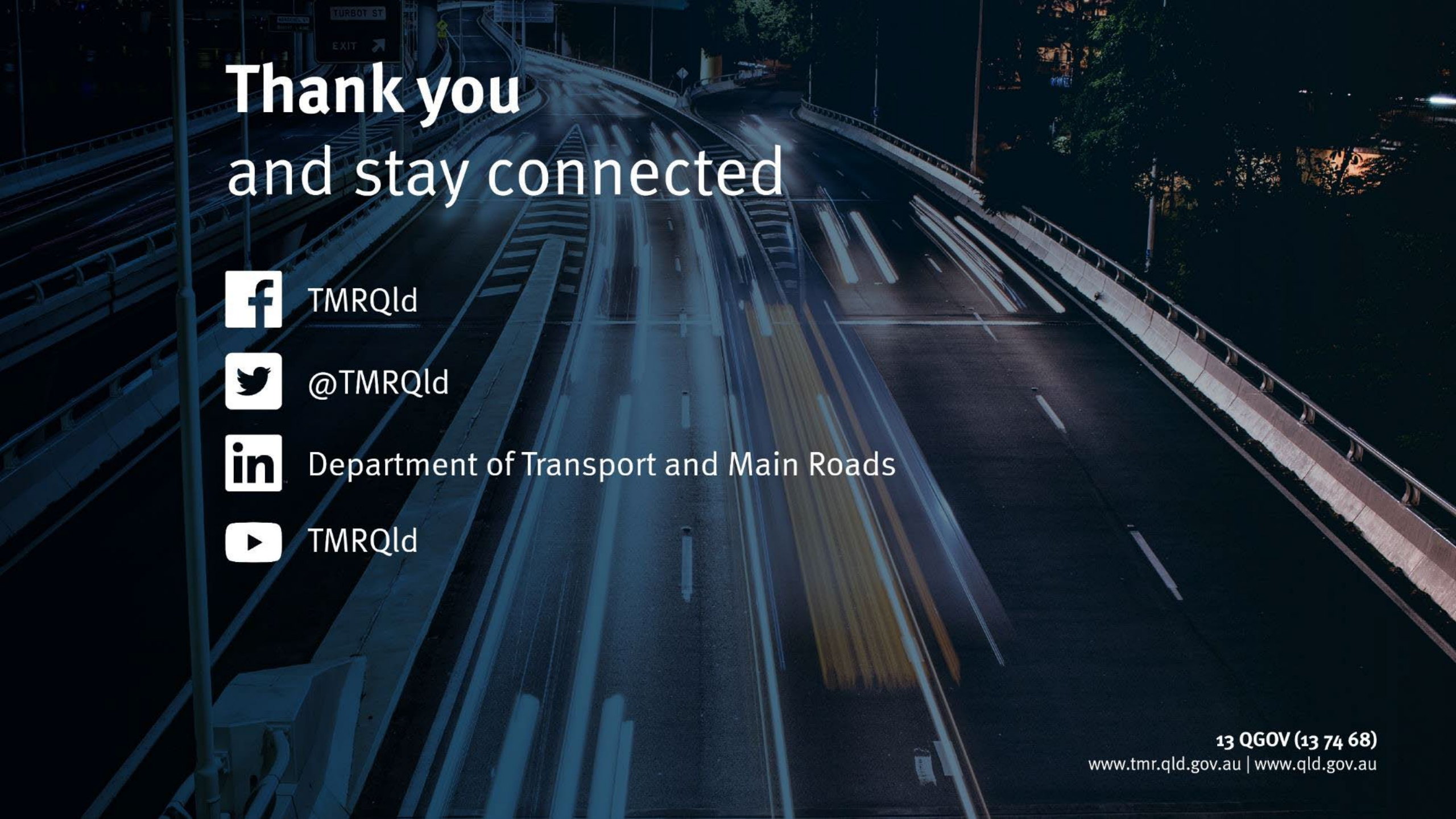
Vehicle categories effected by the pivot so far

- Class 2 vehicles operating at Higher Mass Limits (HML)
- Class 2 Performance-Based Standards (PBS) Level 1 & 2A Truck and Dog Trailers operating at HML masses
- Class 2 PBS A-Doubles
- Class 3 20m Long 3-Axle Truck and 4-Axle Dog combinations
- Some National Heavy Vehicle Regulator (NHVR) issued permits

NOTE: There has been no change to Class 1 Special Purpose Vehicle IAP requirements, at this stage.

What is next for Telematics in Queensland

- 2023 and beyond for telematics and TMR:
  - Continue working with industry and TCA to provide TMA and Smart OBM education and support
  - Continue to be an effective Road Manager through our effective network monitoring through the use of TMA and Smart OBM data.



Thank you
and stay connected

TMRQld

@TMRQld

Department of Transport and Main Roads

TMRQld

13 QGOV (13 74 68)
www.tmr.qld.gov.au | www.qld.gov.au

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Telematics in Victoria

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

A potted history of Smart OBM in Victoria

Victoria's HPFV Network for 73t Quad-Tri and 77.5t Quad-Quad B-Doubles

What is the difference between current B-Doubles and HPFVs?

B-Doubles are up to 26 metres long and have a Gross Combination Mass (GCM) of 68.5 tonne. In Victoria, a High Productivity Freight Vehicle (HPFV) is a heavy vehicle combination that exceeds 26 metres and/or has a GCM in excess of 68.5 tonne.

What roads can be accessed by HPFVs?

The Victorian HPFV network is being developed with a focus on providing access to primary freight routes connecting with Victorian Ports, interstate links and key industries.

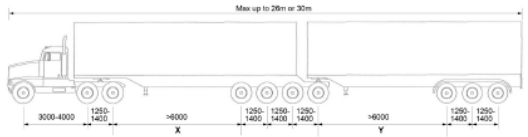
VicRoads is progressively assessing more freight routes to continue to expand the HPFV network. A map and details of Victoria's HPFV network are available on VicRoads website via https://www.vicroads.vic.gov.au/business-and-industry/heavy-vehicle-industry/heavy-vehicle-map-networks-in-victoria

Why is the B-Double HPFV network different to Victoria's current B-Double network?

- Steer Axle – 6.5 tonnes[1]
- Drive Axle or Tandem Axle Group – 17.0 tonnes
- Tri-Axle Group – 22.5 tonnes
- Quad-Axle Group – 27.0 tonnes
- Overall – 77.5 tonnes

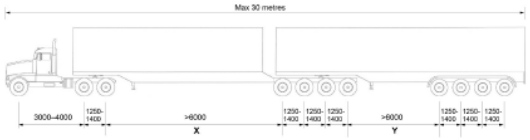
In relation to axle spacings, the combination must meet the following minimum and maximum axle spacings to safely cross all the structures on the network (the figures are in millimetres):[2]

B-Double > 68.5 tonne Configuration (not to scale)
Quad-Tri B-Doubles up to 73 tonne and 26 metres or 30 metres



Note – X plus Y axle spacing for Quad-Tri B-Double must be greater than 13m

B-Double > 68.5 tonne Configuration (not to scale)
Quad-Quad B-Doubles up to 77.5 tonne and 30 metres

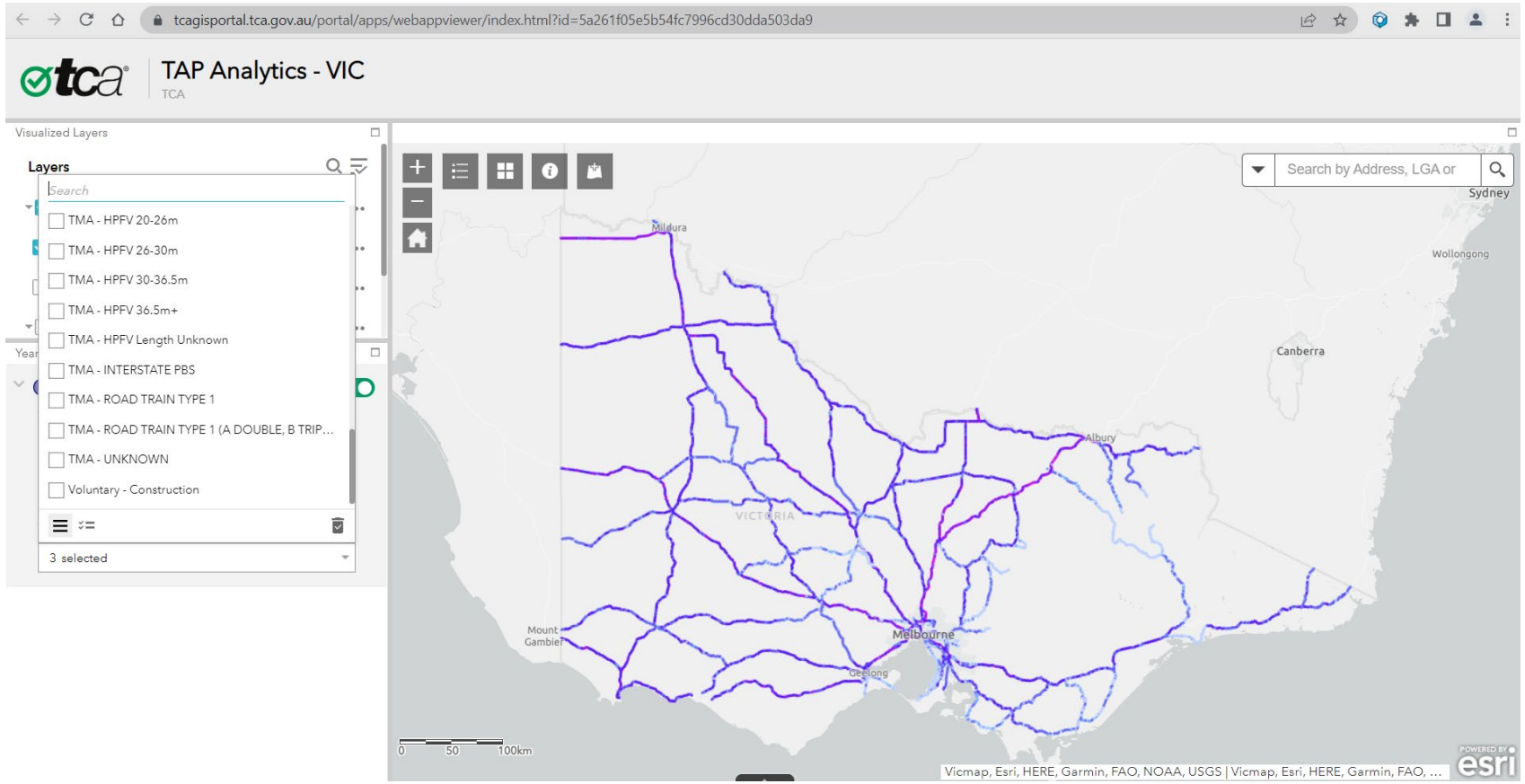


[3] While fitment of an approved OBM system has been specified as an access condition, it is recognised that such systems are not currently available. Accordingly, this requirement is waived until such time as when advice is provided by VicRoads that an OBM system must be fitted to the combination in accordance with the specifications and standards set by Transport Certification Australia.

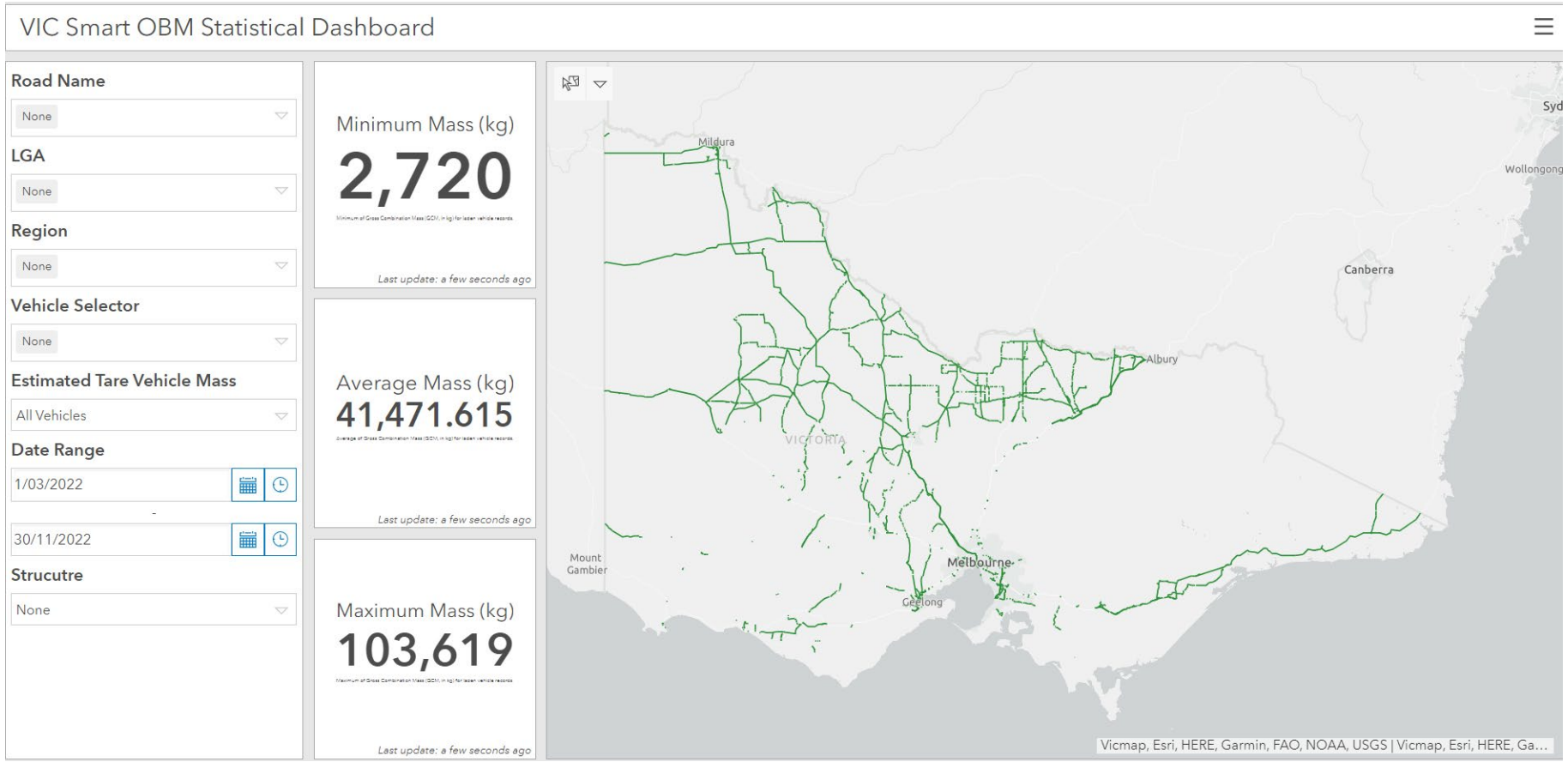
Vehicles that require Smart OBM in Victoria

- A multi-combination vehicle that exceeds 68.5 tonnes
- A single articulated vehicle that exceeds 46.0 tonnes
- A non-standard vehicle (i.e. split axles) that exceeds 43.5 tonnes

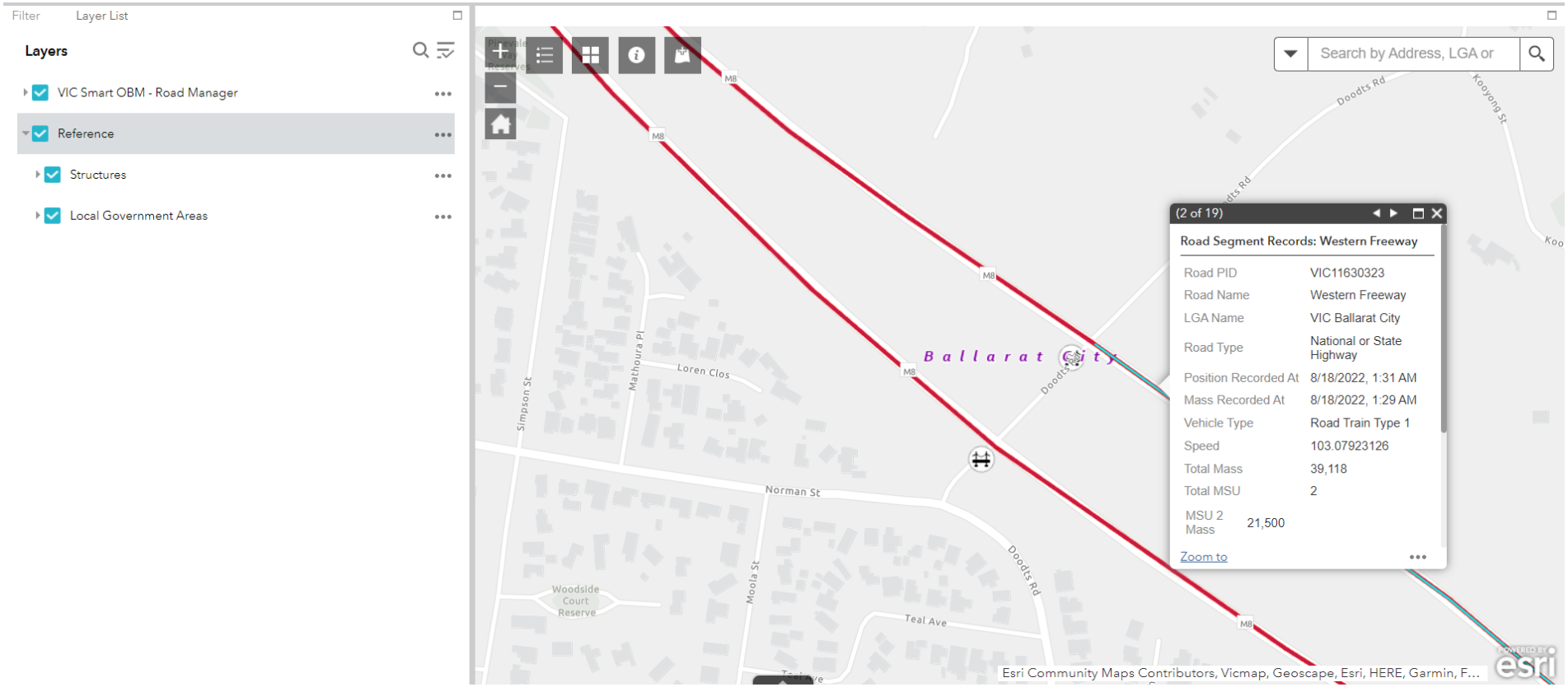
What are the benefits?



What are the Benefits?



What are the Benefits?



What Next?

- Smart OBM will need to be fitted to all eligible vehicles by June 30 2023
- If you have not fitted Smart OBM by then, the mass on your vehicles will be reduced to 68.5 tonnes for a multi-combination or 46.0 tonnes for a single articulated vehicle

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Telematics in New South Wales

Brett Graham, Senior Manager Road Access
Transport for New South Wales

More efficient freight through technology

Brett Graham, Senior Manager Road Access

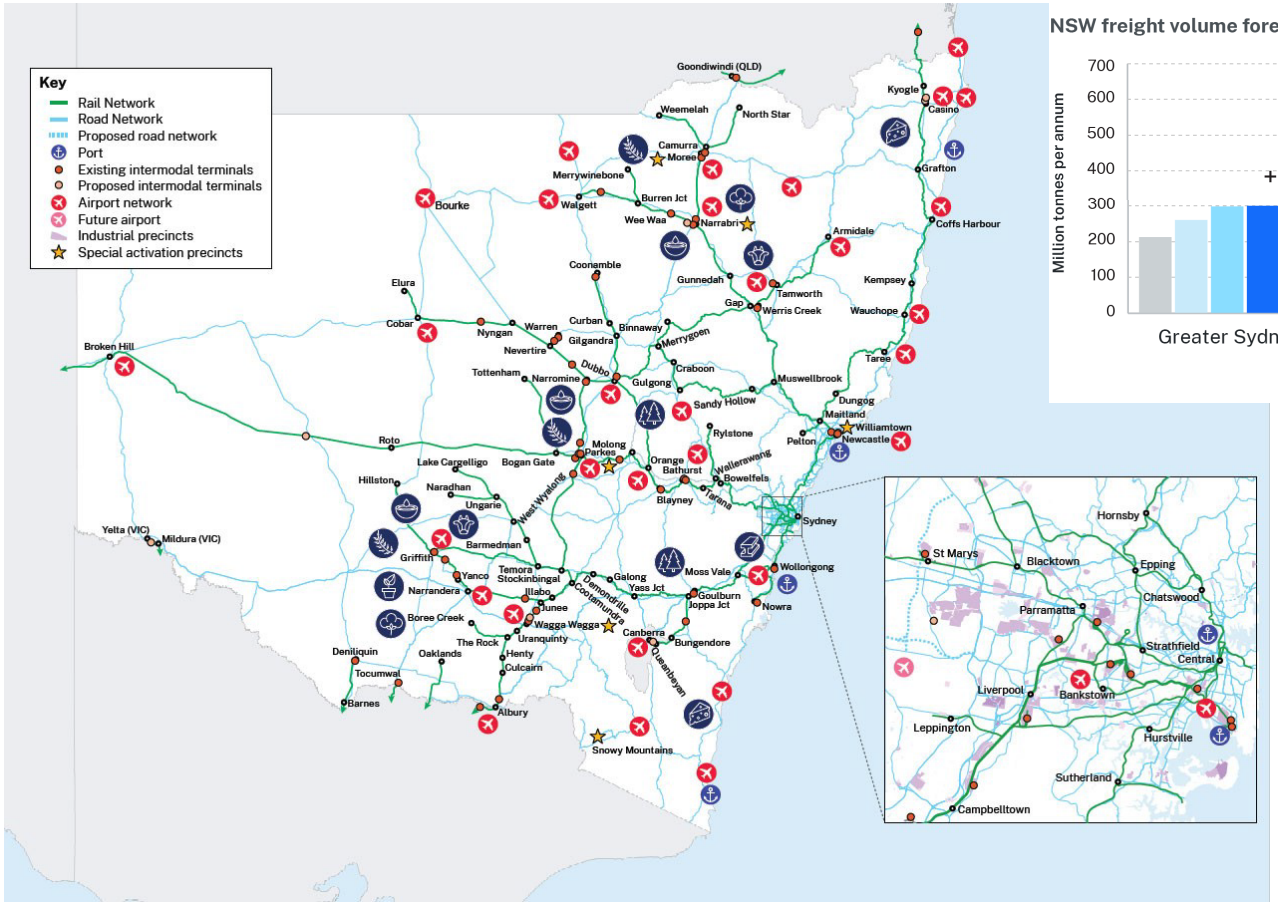
May 2023

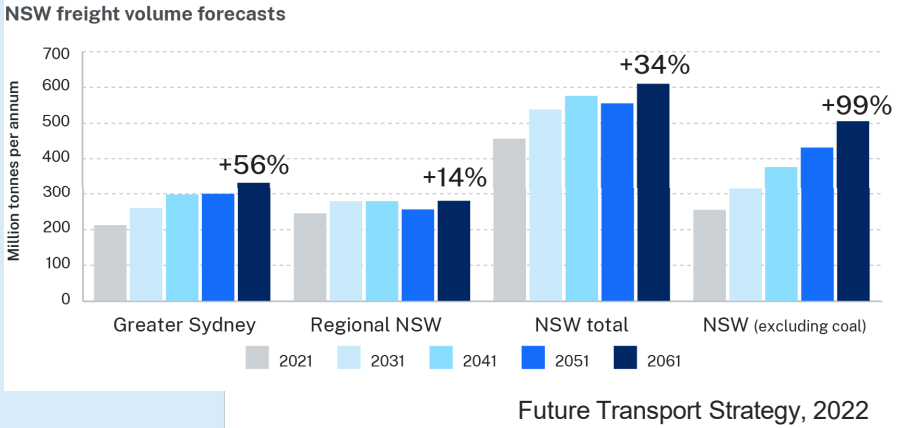
Acknowledgment of Country

Transport pays respect to Elders past and present, and recognise and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

The changing landscape of Australia's supply chains

The growing freight task





Future Transport Strategy, 2022

Freight volumes are estimated to increase by **34%** across NSW between 2021 and 2061, with a **56%** increase in Greater Sydney

Our mission - freight outcomes

Our mission is to give freight a louder voice earlier by raising the profile of freight as a fundamental customer of the transport system to enable the safe, sustainable and productive movement of goods.

Safe

Setting NSW on a path to zero trauma from the movement of freight by 2050

Sustainable

Freight transport that delivers net zero emissions by 2050

Productive

Optimised connected, end to end networks

The role of data in improving efficiency

Telematics Analytics Platform (TAP)

- Telematics is a type of technology which involves a system that captures and sends information electronically, typically with an in-vehicle device.
- It provides local councils with access to de-identified and aggregated road usage information on their network
- The **Telematics Analytics Platform (TAP)** supports local councils with secure access to telematics data.

Making data driven investment and maintenance decisions across the network

Telematics Analytics Portal (TAP)

- Increases visibility of **network usage** by monitored vehicles
- Assists road managers make **smarter access decisions**
- Provides reports on individual roads and bridges
- Inform **network maintenance** and **investment** decisions
- Informs **funding requests.**

Infrastructure Technology: Sheahan Bridge, Hume Hwy

By using technology, access increased from 68.5t to 85t

Non-infrastructure solution using:

- Bridge monitoring devices
- Infrastructure mounted cameras
- In-vehicle telematics (satellite tracking)
- Access conditions including advanced safety equipment on vehicles and lane positioning requirements

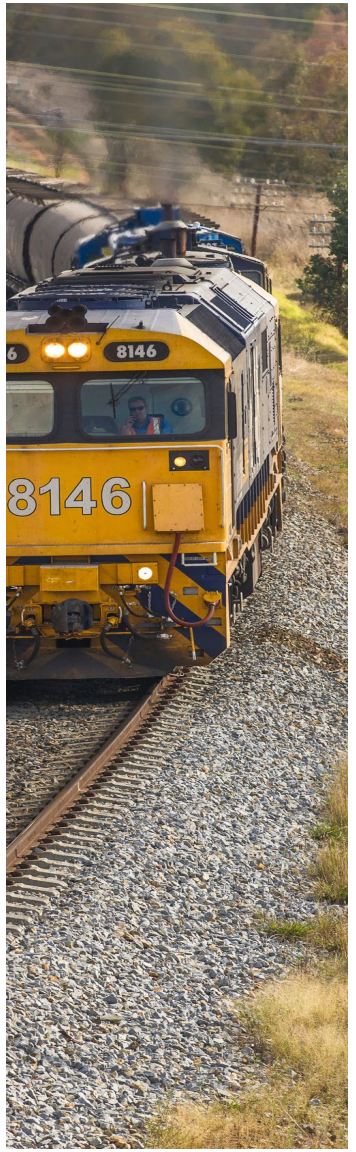
Innovative vehicles - Snowy Hydro 2.0 project

Preparedness for future

Building a resilient freight network for the future

A strong, and efficient network is underpinned by:

- **New technology**
- Real-time **network visibility** through telematics
- **Data-driven decision making** enabling real-time responses to freight operations
- **Targeted** non-infrastructure options, and improved maintenance
- Reduced **administrative burden** on road infrastructure managers and time delays for road operators through new technology
- A clear understanding of the future network: **end-to-end journey** from large- scale exports and imports to last mile deliveries to businesses and homes
- Securing **industrial land** to support efficient freight, including intermodals allowing large, high productive vehicles in, and smaller vehicles out, for last mile deliveries to local houses and businesses.



Questions

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Developments from other states

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TCA-led initiatives and priority projects

- ✓ **Heavy and small electric vehicles**
- ✓ **Voluntary data**
- ✓ **Port performance**
- ✓ **New data types**

Heavy and small electric vehicles

otca®
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Voluntary data studies

Melbourne: A tale of two transport sectors

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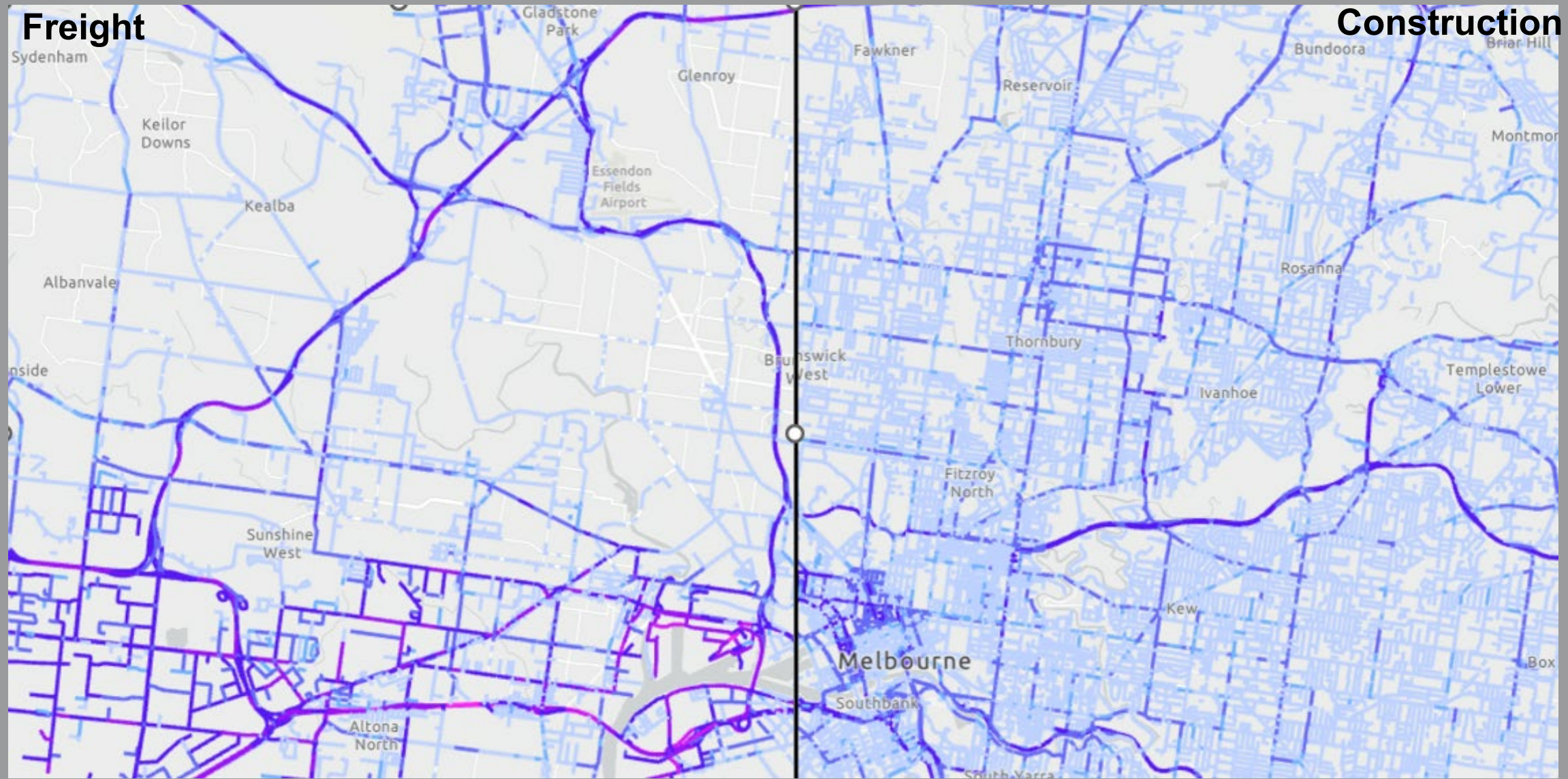
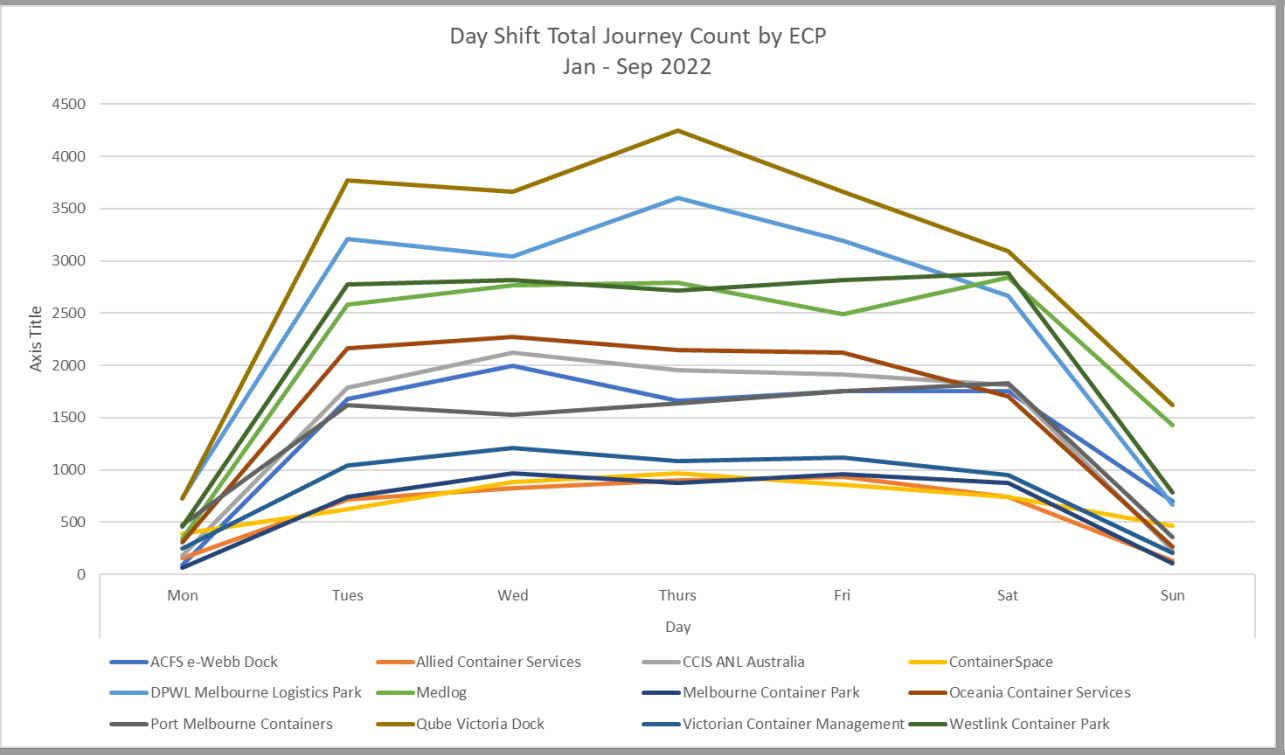
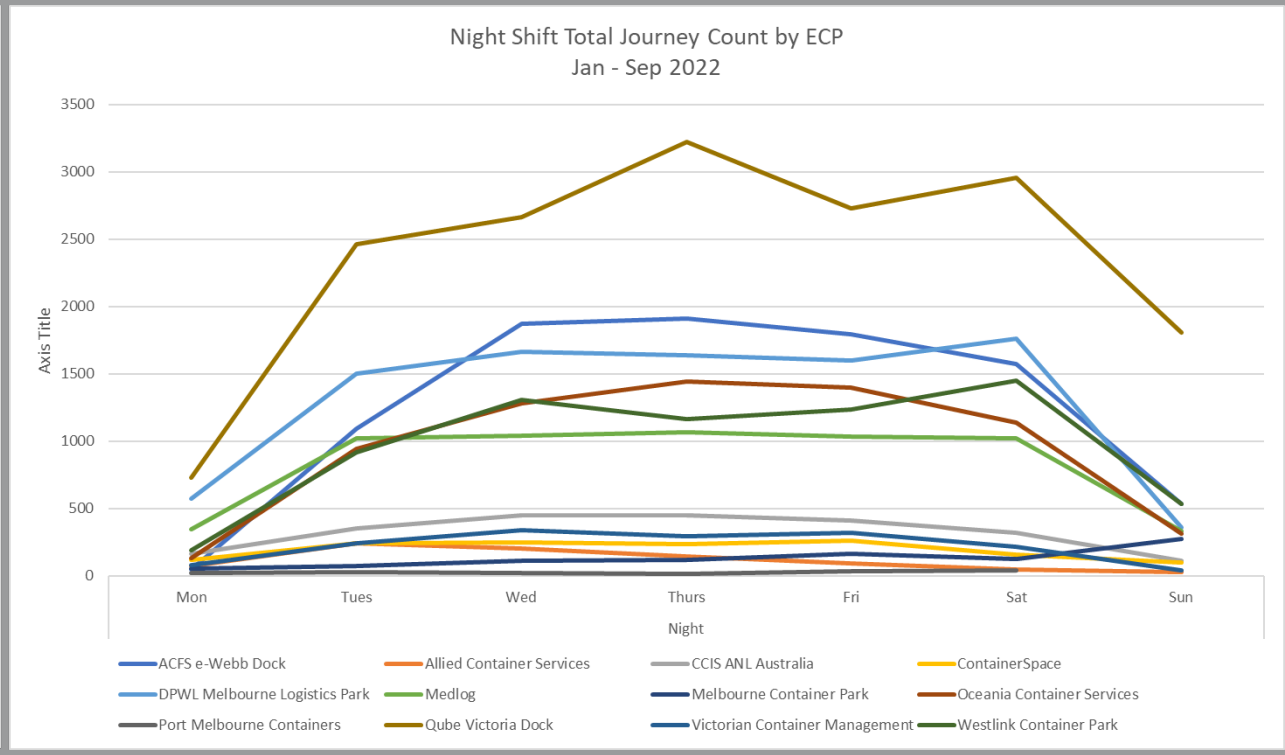
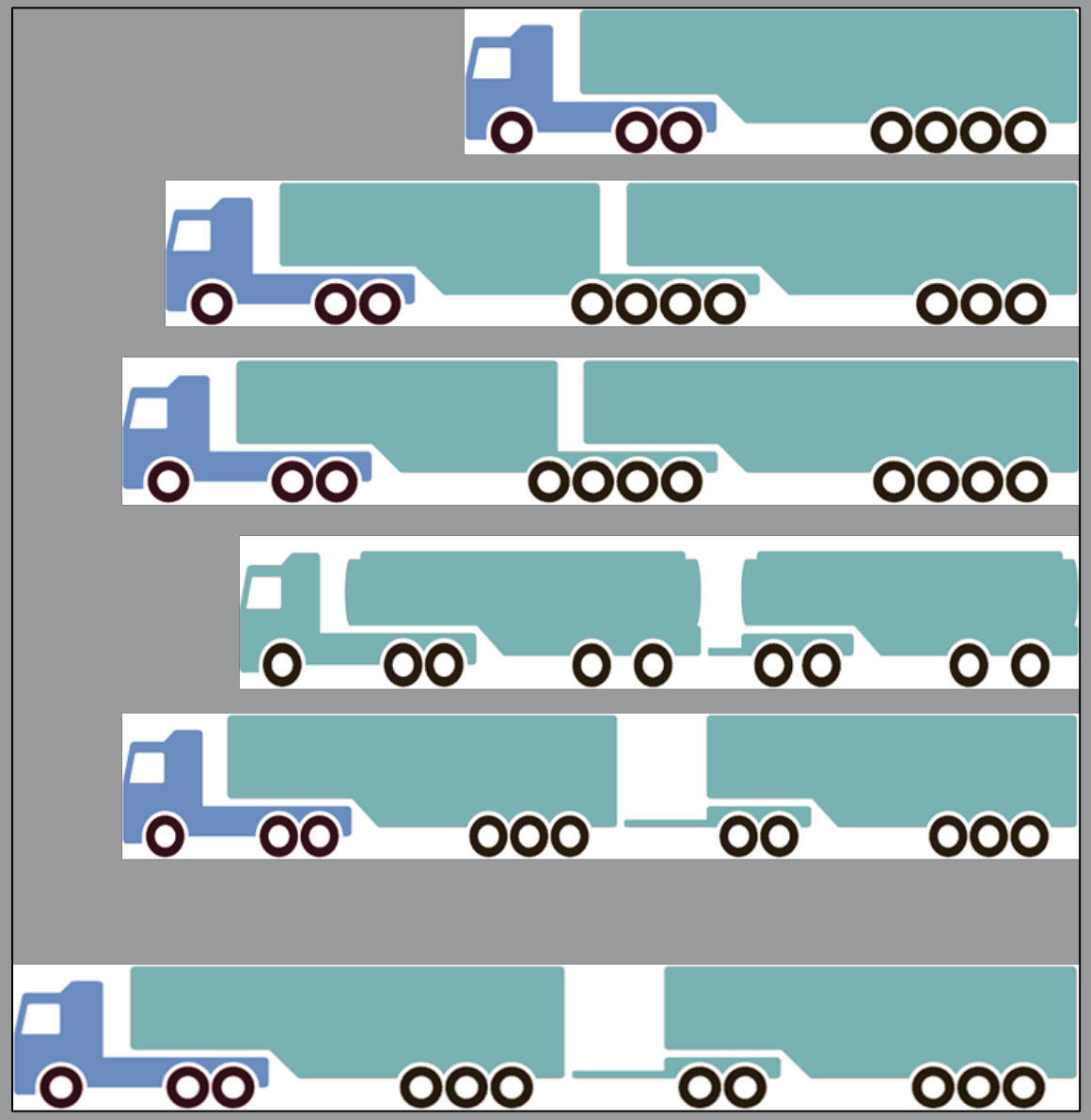


Port performance







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New data types and vehicle configuration

- **How to best determine the specific configuration of a vehicle at any point?**
  - Electronic Braking Systems (EBS) data
  - Battery powered devices
  - Trailer telematics
  - Smart OBM
  - PBS databases
  - Other data sources

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Working with the transport industry

How can we better address the needs of the transport sector?

Anything we should cover in our ‘What’s new in Telematics?’ sessions?

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HEAVY VEHICLE INDUSTRY AUSTRALIA

TCA AND HVIA PRESENT

What's New in Telematics?

Join us as we discuss the latest changes happening around heavy vehicle telematics and mass monitoring requirements for the transport industry.

Location: Brisbane Truck Show
Brisbane Convention & Exhibition Centre
Plaza Seminar Room, at the top of the escalators

Register to view online

THURSDAY 18 MAY
2:30PM - 3:30PM
IN PERSON AND ONLINE

FRIDAY 19 MAY
11:00AM - 12:00PM
IN PERSON ONLY

SATURDAY 20 MAY
11:00AM - 12:00PM
IN PERSON ONLY

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Sanjiv Sathiah

Director Transport & Infrastructure Policy

Telematics and Access

18 May, 2023

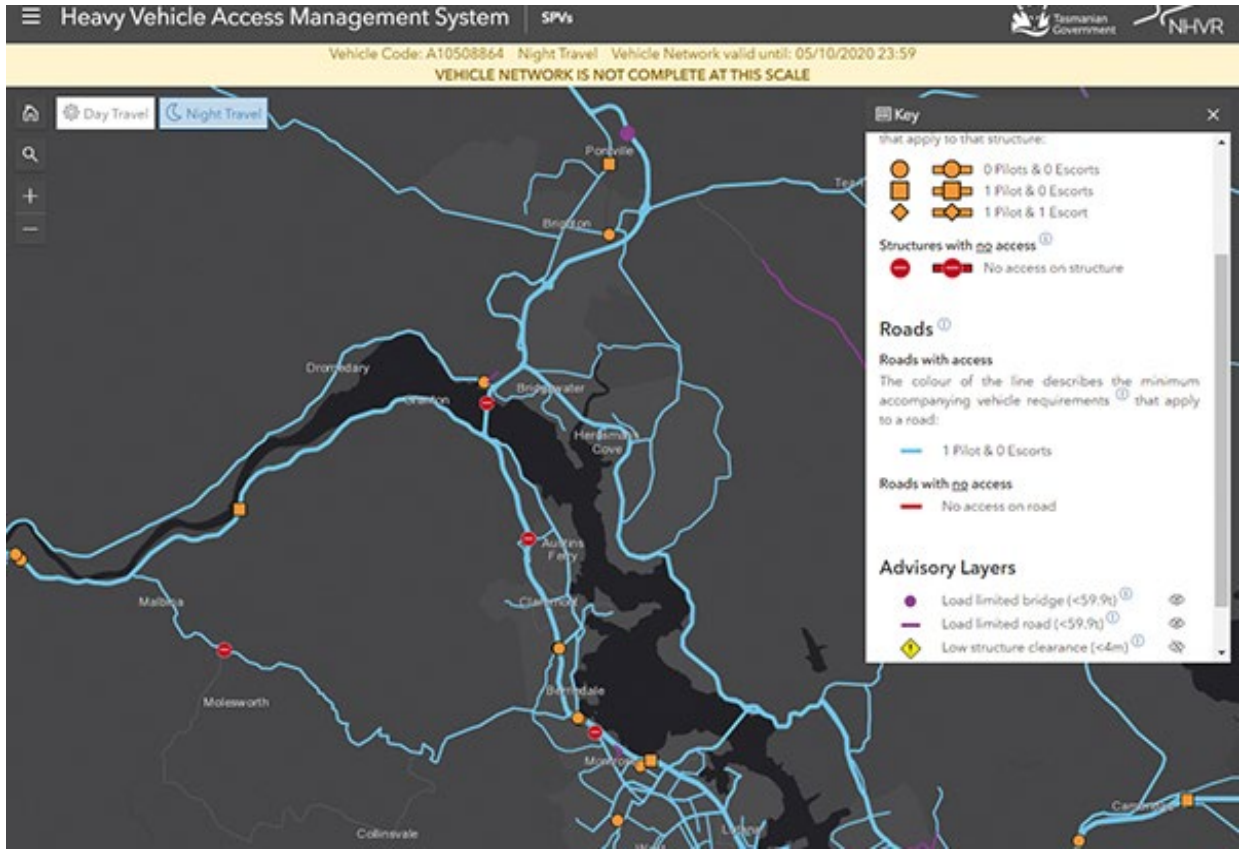
Current State of Access

- NTC Permit Access Data shows 96% of permits are approved and processed within 7 days.

- Access decisions must be according to the principles outlined under the HVNL:
  - Will not pose a risk to infrastructure
  - Will not post a risk to road safety
  - Will not unduly impact residential amenity

Access Needs to Improve

- Automation will deliver instant access to routes.
- HVAMS has shown the way forward.
- Difficult, costly, will take time, but it must be done.



Telematics as a Condition of Access

- Telematics will provide road managers with visibility of network utilisation.
- Facilitate a paradigm shift from scheduled maintenance to predictive maintenance.
- Will provide evidence for government so that we can move from grant-based funding to needs-based funding.

Collaboration is Key

- We want to work closely with industry as was the case in Tasmania.

- We have a lot in common

  - we all want to see better funding for roads

  - we all want to improve access

  - we will all benefit from better access

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THANK YOU!

Sanjiv Sathiah

Telematics and Access

18 May, 2023

icons from flaticon.com

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Questions and Comments from the floor

Transport Certification Australia

Telematics Industry Group Meeting

Thanks for attending

Enjoy the show!