



Transport Data Ecosystem in Australia

**Review of government, industry and
academia Data Sharing Workshops.**



The Transport Data Ecosystem

Overview

There is substantial interest in data in transport and in discussions with the ITS Australia Board, our members and the broader transport and technology sector, an opportunity was identified in engaging with stakeholders in the data ecosystem nationally and internationally to better understand the current and potential future challenges and opportunities for data in the transport ecosystem.

To facilitate this conversation and ensure the topics are as focused as possible the complex transport data ecosystem has been grouped into three key areas of focus:

- Road Safety
- Asset Management and Maintenance
- Traffic, Planning and Operations

To better understand the opportunities and challenges we invited key stakeholders and subject matter experts together for three two-hour workshops over Zoom in July to hear presentations from government, industry and academics leading the way in transport data and to join facilitated roundtable discussions to collect information and provide a platform for issues to be raised and questions to be considered and discussed.

data, road,
information,
assets, collect,
standards,
organisation,
technology,
conversation,
government,
drives,
autonomous
vehicles, network,
infrastructure,
safety, Australia,
space vehicles

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Overview

These workshops were undertaken to elevate the conversation for the data ecosystem in Australia, to learn from international experience, and to compile these insights and activities, along with potential opportunities and challenges for the short, near and long term.

The importance of these discussions has been highlighted recently through the range of activities in development or underway to consider approaches and platforms for effective and collaborative data sharing in a range of jurisdictions and sectors. The COVID 19 pandemic in particular has focused attention on how vital the safe, efficient and proactive collection and analysis of data is to ensure our communities are safe and secure both now and into the future.

In 2013 the European Union began the process of engaging with industry to develop multi-party data sharing arrangements to improve road safety and identified the following framework...

“Significantly improving road safety across Europe for all road users requires the mass involvement of vehicle manufacturers, traffic information service providers, automotive suppliers and public authorities. Such a level of participation will be necessary to ensure the pace and critical mass of safety data required for comprehensive safety related traffic information services.”

In 2021 the EU and major data asset owners and generators agreed to create a Safety Related Traffic Information Ecosystem: Data for Road Safety - Live Vehicle, Crowd and Infrastructure Data improving road safety across Europe.

data, vehicle,
map, road,
information,
government,
system, safety,
Australia, OEMs,
industry, services,
collect,
challenges,
move, questions,
conversation,
programme,
ecosystem,
environment

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Overview

In Australia there are a range of activities underway to interrogate the potential for and develop data sharing platforms across a number of key focus areas for both government and industry including road safety, asset management, and network management. These are critical projects and essential for our understanding of the future of transport data in Australia. The following are a representative sample of these important activities.

- **Federal Office of Road Safety** - [National Road Safety Data Hub](#)
- **The National Freight Data Hub** - The Department of Infrastructure, Transport, Regional Development and Communications is developing the [National Freight Data Hub](#) in close consultation with industry, governments and other stakeholders.
- **NTC Government access to vehicle generated data** – NTC are developing policy options for [government access and use of vehicle generated data](#) for the purposes of network operations, investment, maintenance, planning and road safety.
- **Austroads** – [Guidance on Multi-Modal Incident Response Management](#) – Tenders open until 6th September requesting advice on architecture and management of increasingly complex network management operations.

Recognising the importance of these and other activities both nationally and internationally there is still utility in collectively working together to better understanding the key challenges and opportunities to sharing transport data in Australia for the benefit of all of us.

data, data sets,
insights, buses,
people, vehicle,
question, share,
transport,
technology,
understand,
space,
ecosystem,
information,
household
survey, survey,
supplier, big,
feedback

Discussion themes

While the focus of each workshop differed, there were consistent themes across all the three workshops:

- Data applications & use cases
- Standards and protocols
- Multi-modal data
- International sharing arrangements
- Preparing our data for the future
- Opportunities and challenges



The Speakers

Road Safety

- Neil Thompson (Office of Road Safety) -
- Miranda Blogg QLD Transport Main Roads
- Stephen Hausler (QUT)
- Ben Wilson (Here), Joel Blatchford (Tom Tom)

Asset Management and Maintenance

- Michael Cybulski (Retina Visions)
- Schalk Van Der Westhuizen (Mobileye)
- Phillip Scanlon (Solace)

Traffic, Planning and Operations

- Simon Young (Cisco)
- Nathalie Sassoon (Keolis Downer)
- Roberto Evangelio (Department of Transport Victoria)
- Natasha Klinghardt (Tom Tom)



Key Findings

Road safety is the key issue for all stakeholders and the most important issue we currently face that shared data could support real-world improvements. In reviewing the EU Road Safety Data use cases there are number that could provide similar benefits anticipated in Europe for Australia as well as additional use cases that are being currently tested in programs such as Queensland's Connected & Automated Vehicle Initiative (CAVI) and Victoria's Australia's Integrated Multimodal Ecosystem (AIMEs). There is general consensus across government and industry that collaboration is crucial to fully enable the benefits transport technologies like connected vehicles and infrastructure can offer to fully exploit these benefits though there are a number of challenges facing government and industry and these collaborations are key to enabling the best and most sustainable outcomes.

Key questions and issues arising from the workshops will form the basis of this ongoing collaboration:

Value:

- What's in it for the customer?
- What are the commercial realities?
- What's the cost/benefit of collecting, maintaining and sharing?

Operational:

- Managing privacy and security concerns sharing data
- Identifying primary use cases offering real benefit
- Managing trust - collecting storing cleaning verifying
- Data standards and harmonisation – national and international

Next steps

More than 150 industry experts were invited to join these three workshops and ITS Australia have undertaken to share this report with them and circulate to the National Transport Data – Community of Practice to review and consider the proposed and any additional next steps.

In the first instance, ITS Australia are developing a research proposal to develop a community survey to assess perceptions on sharing transport data to improve road safety and investigate the value of exchange they're motivated by.

An iMOVE research project is currently in the development stage.

If you have any questions, comments or recommendations on this report, proposed research project or any related matters please contact Policy Manager – Stacey Ryan –

Stacey.ryan@its-australia.com



