Annual Report 2021-22

Solving problems for a sustainable future

Austroads

Austroads' insitu trials of road seals in real environments, under real traffic loadings, add to our understanding of pavement performance and validate laboratory testing.

Contents

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About this report

Role of the report

Our annual report provides a detailed review of our progress to deliver the *Austroads Strategic Plan 2020-24*. It also details our financial performance and audited financial statements.

Target audience

The primary audience for the report is our member organisations:

- Transport for New South Wales
- Department of Transport Victoria
- Queensland Department of Transport and Main Roads
- Main Roads Western Australia
- Department for Infrastructure and Transport South Australia
- Department of State Growth Tasmania
- Department of Infrastructure, Planning and Logistics Northern Territory
- Transport Canberra and City Services Directorate, Australian Capital Territory
- Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts
- Australian Local Government Association
- Waka Kotahi NZ Transport Agency.

The content will be of interest to Australasian transport practitioners, as a record of transport trends and government agency responses.
The report is also a public record of the value returned from the public investment made into the organisation.

Acknowledgement of country

Austroads 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.

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

Mission: We help transport agencies to solve problems.

Vision: A safe and reliable Australasian road transport network that is equipped with infrastructure that is sustainable and future proof.

About Austroads

Summary

- We are the member association of Australasian transport agencies.
- We help road managers to collectively solve problems.
- Our high quality technical guidance and services help our members to deliver efficient, reliable and safe mobility to their customers.
- We work in an environment of organisational, technological and environmental change.
- Sustainability is core. We help members to understand the implications of the introduction of low and zero emission vehicles, the performance of re-used materials and ways to extend the performance of existing infrastructure.

Who we are

Austroads is the collective of the Australian and New Zealand transport agencies, representing all levels of government. We are a not-for-profit, non-partisan organisation. We are funded and owned by Australian and New Zealand government transport agencies but our work impacts a wide range of agencies including planning, service, infrastructure, health and safety, public health and policing.

What we do

We provide high quality, practical and impartial advice, information, tools and services to help our members to deliver efficient, reliable and safe mobility to their customers.

Our strategy

The Austroads Strategic Plan 2020-24, released on 1 July 2020, builds on our strengths of delivering high quality technical guidance and collectively identifying and solving Australasian transport problems.

Our services

We provide national services that help transport agencies to operate seamlessly across state borders and bring national efficiencies to their operations, including:

- national guidance and specifications
- research project coordination and governance
- knowledge sharing among communities of practice
- driver licensing and vehicle registration data exchange
- certification, registration and approval of transport technologies
- transport data and data analytics
- assessment and approval for use of roadside barriers and systems, and innovative temporary traffic management devices and solutions
- approval of temporary traffic management trainers and prequalification/ accreditation of temporary traffic management service providers
- classification of Australian road and bridge construction contractors.

Our values

- **Agility** | Our processes enable quick responses to challenges and issues and place our customers' needs at the centre of our business.
- **Collaboration** | Our processes, structures and systems encourage active participation by task force and working group members. We actively engage with education and industry stakeholders and research leaders.
- **Harmonisation** | We seek opportunities to support uniformity of practice that benefit transport customers, transport providers, industry and the economy.
- **Objectivity** | Our processes ensure the integrity of research evidence and recommendations are maintained in project outputs.

- **Quality** | Our project development, delivery systems and processes are continually reviewed. Our projects incorporate quality criteria and controls.
- **Knowledge sharing** | We actively seek to communicate our findings broadly and freely. We focus on delivering practical applications of our research, ensuring the knowledge we create can be accessed and applied.

Our operating environment

- Austroads works in an environment of organisational, technological and environmental change. Our processes, structures and policies must enable us to respond to those changes effectively. It is important that our content is actively used to both update existing products (such as guides and digital tools) and deliver new products to ensure new knowledge is translated into practical applications.
- Road agencies have transformed into transport agencies and customers are increasingly central to their service planning and delivery. Austroads plays a central role coordinating national projects that help agencies understand the mobility of people and goods in the road network and their integration into the broader transport system.
- Technology and data are transforming transport journeys, planning and infrastructure delivery. Our work supports our members to identify and prepare for technologies that could significantly impact their businesses and customers. We also support members to build the data management capabilities of their staff and provide systems that harmonise data collection and analysis.
- Sustainability continues to shape road transport decision-making. We help members to understand the implications of the introduction of low and zero emission vehicles, the performance of re-used materials and ways to extend the performance of existing infrastructure.
- Congestion significantly impacts on quality of life and the economy. Our focus is to build capability to better integrate public transport in the road network and deliver multimodality for end-to-end customer journeys.
- Improving safety on our roads is critically important. Death and serious injury should not be considered inevitable consequences of road travel. We will continue to focus on incorporating the Safe System into practice, maximising safety benefits across the network, delivering National Road Safety Strategy priorities; and seek innovative solutions to work our way towards Vision Zero.

We work in an environment of organisational, technological and environmental change.

Our profile

Our history

From its inception, Austroads has had a strong role in developing and applying national standards to improve transport outcomes.

1933
Annual Conference of State Road Authorities (COSRA) established

Following a proposal put forward by the New South Wales Minister for Transport at a meeting of state ministers held in June 1933, it was agreed that road executives from all states should meet annually to exchange experiences and views on road administration and practice.

> "It would be a good thing for us to meet as road men interested in the development of our states and transport facilities, and there are many problems which it is thought could be better dealt with jointly."
> H.H Newell, NSW Commissioner for Main Roads,
> invitation to join the Annual Conference of State Road Authorities (COSRA), 1933.

1934
First Conference, states agreed to pursue common road signage

The first meeting of the Conference of State Road Authorities (COSRA) took place in 1934, in Melbourne. Unanimous agreement was reached to join the Permanent International Association of Road Congresses (PIARC), and to pursue uniform route markings, mile posting and road warning signs. Standard nationwide road designs were also discussed.

1946
Following a six year suspension during WW2, COSRA re-established as biannual meeting

The Commonwealth requested attendance at the COSRA meeting in 1935. The annual conferences continued until 1939, when they were suspended for the duration of World War II.

Following the war, COSRA met twice yearly and established a liaison with the Australian Transport Advisory Council (now the Infrastructure and Transport Ministers' Meeting).

1959
COSRA renamed National Association of Australian State Road Authorities (NAASRA)

In October 1959 COSRA changed its name to the National Association of Australian State Road Authorities (NAASRA) to reflect its growth into an organisation, not just a conference. NAASRA's principal objective was to deliver a uniform approach to the development and improvement of the national road system. NAASRA was supported by a number of committees and working groups drawn from the member organisations. These committees, now known as task forces, continue to provide direction and governance to our work.

1960
NAASRA establishes ARRB

In 1960 NAASRA established the Australian Road Research Board (ARRB) to encourage research into road construction and management.

1989
NAASRA renamed Austroads

NAASRA was renamed Austroads in 1989. The name change reflected the moves by many of the member organisations to integrate traffic, safety, registration and licensing with design and construction activities.

1993
Austroads initiates development of NEVDIS

In 1993, Austroads commenced development of the National Exchange of Vehicle and Driver Information System (NEVDIS) to exchange vehicle and driver licence information across state borders. Austroads also signed its first agreement with the new National Road Transport Commission (now the National Transport Commission). The agreement reflected Austroads role of coordinating implementation of agreed national practice with member agencies.

1999
Austroads initiates development of TCA

In 1999, Austroads commenced work on a national telematics initiative. This evolved to become Transport Certification Australia (TCA), which commenced operation in 2007. In 2018, the Transport and Infrastructure Council determined that TCA should be reincorporated into Austroads. Austroads formally assumed ownership of TCA on 1 January 2019.

2015
NEVDIS administration located in Austroads national office

2019
Austroads assumes ownership TCA

Congestion and integration of different modes in the road corridor continues to be a common challenge for member agencies.

Traffic congestion on the corner of Queen and Adelaide Streets, Brisbane, 1939.
Source: State Library of Queensland.

Changes in 2021–22

The Austroads Executive Group was established to lead strategic development and common corporate and financial services for Austroads and TCA. The Austroads Board took responsibility for the governance of TCA. The NEVDIS administration team was brought under the leadership of the Chief Data and Technology Officer, Joe Attanasio.

Austroads and TCA have started to explore opportunities to provide data services and products that draw on the resources and expertise available in both organisations. Staff have been working on projects that cross the boundaries of the two organisations, including the new Austroads Innovative Temporary Traffic Management Device and Solution Assessment Scheme (AITDSA), which was launched in July 2022.

Austroads has embraced a new implementation role that has seen the delivery of complex projects to embed change into transport practice.

A dedicated Temporary Traffic Management Task Force of senior representatives from all Austroads member agencies was established to facilitate decision-making in the project to harmonise temporary traffic management practice.

The Environment and Sustainability Program was established in June 2021. Sustainability was identified by the Austroads Board as a key focus area in the Austroads 2020–24 Strategic Plan. The program will play an important role for our member organisations as it works to ensure that environment and sustainability outcomes are at the heart of transport decision-making. Vibeke Matthews was appointed Program Manager and an Environment and Sustainability Task Force established.

Austroads launched a new enterprise-wide accounting system on 1 July 2022.

Our programs

Work program

Austroads programs commonly provide national guidance and specifications, research project coordination and governance, and knowledge sharing among communities of practice.

Transport Infrastructure

Aim: Improve the management and performance of transport infrastructure.

Direction provided by: Austroads Technical Advisory Group (ATAG). Asset Management Task Force, Bridges Task Force, Pavements Task Force, Tunnels Task Force, Project Delivery Task Force

Services: Classification of Australian road and bridge construction contractors

Transport Network Operations

Aim: Improve mobility for all users within the transport system.

Direction provided by: Network Task Force, Freight Task Force, Temporary Traffic Management Task Force

Services: Approval of temporary traffic management trainers and prequalification/ accreditation of temporary traffic management service providers, assessment and approval for use of innovative temporary traffic management devices and solutions

Road Safety and Design

Aim: Eliminate road trauma by 2050.

Direction provided by: Road Safety Task Force, Road Design Task Force, Registration and Licensing Task Force

Services: Driver licensing and vehicle registration data exchange, assessment and approval for use of roadside barriers and systems.

Future Vehicles and Technology

Aim: Identify and prepare for future mobility technologies that could have a significant impact on transport agency businesses and their customers.

Direction provided by: Future Vehicles and Technology Task Force

Environment and Sustainability

Aim: Place environment and sustainability outcomes at the heart of transport decision-making.

Direction provided by: Environment and Sustainability Task Force.

Data services

Transport Certification Australia (TCA)

Purpose: provides assurance services relating to transport technologies and data to enable improved public purpose outcomes from road transport.

Services: Certification, registration and approval of transport technologies, and transport data and data analytics.

National Exchange of Vehicle and Driver Information System (NEVDIS)

Purpose: exchanges information about vehicles and driver licences across state borders.

Services: Data exchange, document verification, vehicle information, vehicle identification number (VIN) registry, world manufacturer identifier (WMI) issuance, accreditation of agents to issue and register VINs, transport data and data analytics.

From the Chair

Transport is essential to our well-being. It connects us the people and places we love, opportunities for education and employment, essential food and health services, and to the delights of exploration and discovery. It also underpins the economic prosperity of our nations, states and territories, and local communities.

Managers of Australia and New Zealand's road networks are facing a range of serious challenges including meeting the needs of a growing population, reducing waste, de-carbonising road transport, ensuring safe and equitable mobility, establishing fairer ways of charging for access, and adapting to new technologies.

For nearly 90 years Austroads has brought road managers together to collectively tackle hard issues. The Board has challenged the Austroads executive team to not just continue with their core role of research and guidance but to actively support member agencies to implement change. This is no small ask and I commend the leadership of Geoff Allan and the Executive Group which has delivered a suite of significant implementation projects including:

- developing a new system of training and accreditation of temporary traffic management workers to improve the safety of all road users
- rolling out the early stages of the road asset data standard to improve the quality and consistency of infrastructure information
- establishing options to improve the way heavy vehicle drivers are trained and licensed to ensure they are job-ready and skilled to safely operate the vehicles under their control
- driving projects designed to address barriers to the consistent application of the national Assessing Fitness to Drive standards.

In May the Austroads Board agreed to lead the strategic matters relating to Transport Certification Australia (TCA). Having TCA and Austroads matters considered together will ensure consistency across the enterprise. The change is designed to improve the efficiency and effectiveness of the organisation and will have no impact on day-to-day operations. I thank Garry Swain, outgoing Chair of the TCA Board and long term member of the Austroads Board for his leadership.

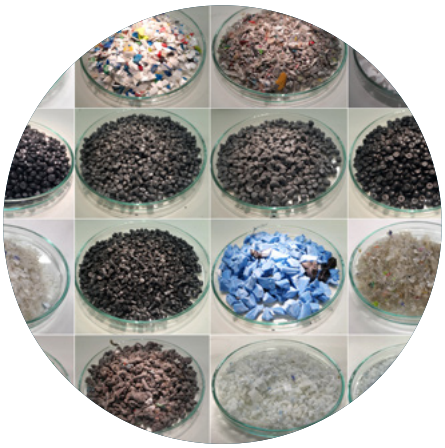
It has been a pleasure to again serve as Austroads Chair this year. The Austroads Board meetings are important to the governance and direction of the organisation but also provide an opportunity to directly share experiences and challenges with other senior transport executives. I would like to particularly acknowledge the long and valued service of Adrian Beresford-Wylie who resigned in July 2021 following his retirement from the Australian Local Government Association, Tony Braxton-Smith who resigned in April 2022 after stepping down from the South Australian Department for Infrastructure and Transport, and James Corrigan, Deputy Director-General City Services for the ACT Government, who also resigned from the Board in April. I also acknowledge the ongoing support of Deputy Chair, Louise McCormick, Infrastructure Commissioner for the Northern Territory, and the other directors for their open knowledge sharing and enthusiasm for the future.

Neil Scales OBE
Austroads Chair

Summary

- Serving members' needs remains central to Austroads purpose.
- In addition to research, guidance and data services, Austroads is to play an increasing role helping members to implement change.
- Austroads Board assumes leadership of TCA strategy to ensure enterprise wide consistency.

Solving problems 2021-22



Reducing plastic waste

Around 84% of plastic goes to landfill and 130,000 tonnes makes its way into the marine environment each year. Government, industry and the community want to reduce waste plastics. While waste plastic can be incorporated into our roads, we need to take care not to introduce different problems when it is processed and used. We commissioned world-leading research, led by RMIT University, to develop a way to test emissions and the release of microplastics from plastic-modified asphalt. The tests will allow road agencies to divert plastics from the waste stream into infrastructure with confidence.

Reducing glass waste

In January 2021, COAG prohibited exporting unprocessed glass. In response Austroads commissioned a project to enable the use of recycled crushed glass in the transport sector, helping to reduce the amount of glass going to landfill. The project developed a technical specification detailing the supply of recycled crushed glass sand and a guideline for crushing, processing and cleaning recycled crushed glass for transport infrastructure.

Reducing tyre waste

Australia and New Zealand are challenged with the disposal of 510,000 tonnes of end-of-life tyres annually. The use of crumb rubber binders in road construction allows tyres which have reached their end-of-life to be used for productive outcomes (rather than sent to landfill, or sent overseas and often burned). We have commissioned experimental work that will make it easier for member agencies to use crumb rubber in their binders and expand its use in asphalt.

Encouraging the safe use of waste materials in road infrastructure

Edition 2.0 of *Guide to Pavement Technology Part 4E: Recycled Materials* presents the latest information about pavement products manufactured from recycling various waste materials. This includes products derived from the recovery of construction and demolition waste (C&D waste) from the building industry; reclaimed asphalt pavement (RAP) from pavement maintenance and rehabilitation activities; recycled rubber from end-of-life tyres (crumb rubber); industrial slag from manufacturing processes; fly ash from power generation; recycled plastics; and recycled glass.

Encouraging the use of assessing fitness to drive standards

Driving a motor vehicle is a complex task. Driving capacity can be influenced by a range of medical conditions, disabilities and treatments. Health professionals play a crucial role in assessing their patients' fitness to drive but they are time poor. In response, Austroads developed a new website to support easy access to the revised Assessing Fitness to Drive standards launched in June 2022. The updated website uses intuitive navigation and improved search functionality. The Austroads Board endorsed an Implementation Strategy to encourage the consistent application of standards across Australia. An Implementation Advisory Group will inform the work and support collaboration across stakeholder groups.

Improving safety for road workers

Across Australia there are 18 fatal crashes, 245 serious injury crashes and 530 minor injury crashes at roadside worksites annually. We are coordinating a complex project to improve the safety of road workers. This includes ongoing updates to the Guide to Temporary Traffic Management, and implementing new training packages and approval processes for trainers, operators and innovative devices.

Developing a well-trained and capable heavy driver work force

Heavy vehicles are over-represented in serious casualty crashes, particularly those involving a fatality. In 2017, transport ministers asked Austroads to undertake an extensive review to improve the National Heavy Vehicle Driver Competency Framework. We have prepared a suite of proposed changes to the way heavy drivers are trained and licensed based on research and feedback from heavy vehicle operators, the driver training industry, and licensing authorities. A Consultation Regulation Impact Statement, which will inform the final solution proposed to Ministers, was released in August 2022.

Standardising signage and pavement symbols for low and zero emission vehicles

The uptake of low and zero emission vehicles has accelerated in recent years. Unlike New Zealand, Australia does not have standardised low and zero emission vehicle symbols or signs. In response, Austroads commissioned a project to develop symbols for electric and hydrogen fuelled vehicles and associated charging or refuelling infrastructure. The symbols will be used on road signs and road marking.

From the Chief Executive

Summary

- Austroads new Executive Group delivering enterprise-wide solutions to better manage risk and improve operations.
- Recruitment is challenging but finding operational efficiencies has allowed for expansion of member services.
- We are focused on improving current services and growing our offerings to deliver more value to our members and the community.

As the association of roads and transport agencies in Australia and New Zealand, Austroads has had a successful year in helping our members deliver better outcomes for the community.

There are three things helping drive Austroads success:

- the professionalism and passion of our staff, who continually strive to do their best to get better outcomes for the community
- the leadership that has been provided by the Austroads Board and my colleagues on the Austroads Executive Group
- the partnerships we have with staff in all of our member agencies and other organisations, with many of these individuals being recognised with Austroads awards and acknowledged in task forces.

I am proud of the people who work for Austroads and the work they do. They are a great group of people to work with and they are a group of people doing great things.

We share the challenge with many others of recruiting skilled professional staff in these times of high employment. While the entire organisation has been focused on operating efficiencies, I do recognise that staff are working hard to ensure projects and services continue to be delivered in a timely way. New processes will help relieve some of that pressure, including capturing more financial data and automating reporting processes enabling a greater focus on analysis, budgeting, and forecasting.

Establishing the Austroads Executive Group this year has allowed us to focus on delivering enterprise-wide solutions to better manage risk and improve operations. That includes keeping the passion, commitment to professionalism and ambition flowing through our organisation and out to the community.

Over the year, Austroads has continued to focus on our core roles:

- producing and disseminating research and guidance to help road agencies achieve better and consistent practice through our work program
- providing a unified consistent exchange of driver and vehicle information to allow a smooth process for those moving interstate and enabling a range of government services through NEVDIS
- delivering one efficient national consistent exchange of telematics data from vehicles to government agencies through TCA and the National Telematics Framework.

We are working towards six key strategic ambitions, to:

1. keep doing what we're doing and get better
2. grow what we do so we deliver more value to our members and the community
3. have common industry standard operational support, mainly in information and information technology
4. grow our combined data service
5. have common high standard corporate services across the organisation
6. set us up to enable our members to shape the future.

I am looking froward to the year ahead as we continue to grow the capabilities of the organisation, improve our current delivery and expand the services we provide to members and the broader community.

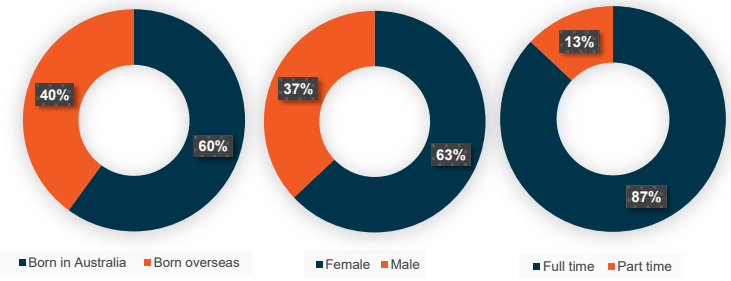
Dr Geoff Allan
Austroads Chief Executive

Our people

We employ about 70 people. Austroads national office and the National Exchange of Vehicle and Driver Information Service are head-quartered in Sydney. Transport Certification Australia is based in Melbourne. We rely on the participation of transport agency staff to direct our work via our Board and subject specific task forces. We engage the expertise of consultants and researchers to deliver our projects. We promote a culture of professionalism, innovation and integrity, with a commitment to accountability, quality and excellence. We pay attention to maintaining a safe and welcoming work environment, where all staff have equal access to opportunities. We encourage our staff to participate in external and internal training to make sure their skills and knowledge are continuously improved.

Diversity

Austroads takes inclusion and diversity seriously. We embrace difference and diversity of identity, experience and thought, and actively strive for inclusive behaviours across our company and our work.



Leadership

Dr Geoff Allan
Chief Executive

Experienced chief executive, managing director and senior leader. Record of transformational leadership. Ph.D. in public sector management.

Paul Davies
General Manager Programs

Skilled executive leader. Extensive transport and environment policy experience. Engineering qualified.

Joe Attansio
Chief Data and Technology Officer

Extensive ITC experience and leadership. Executive Master of Business of Administration.

Eileen Conlon
Financial Controller

Results driven CPA, with extensive experience in financial analysis, forecasting.

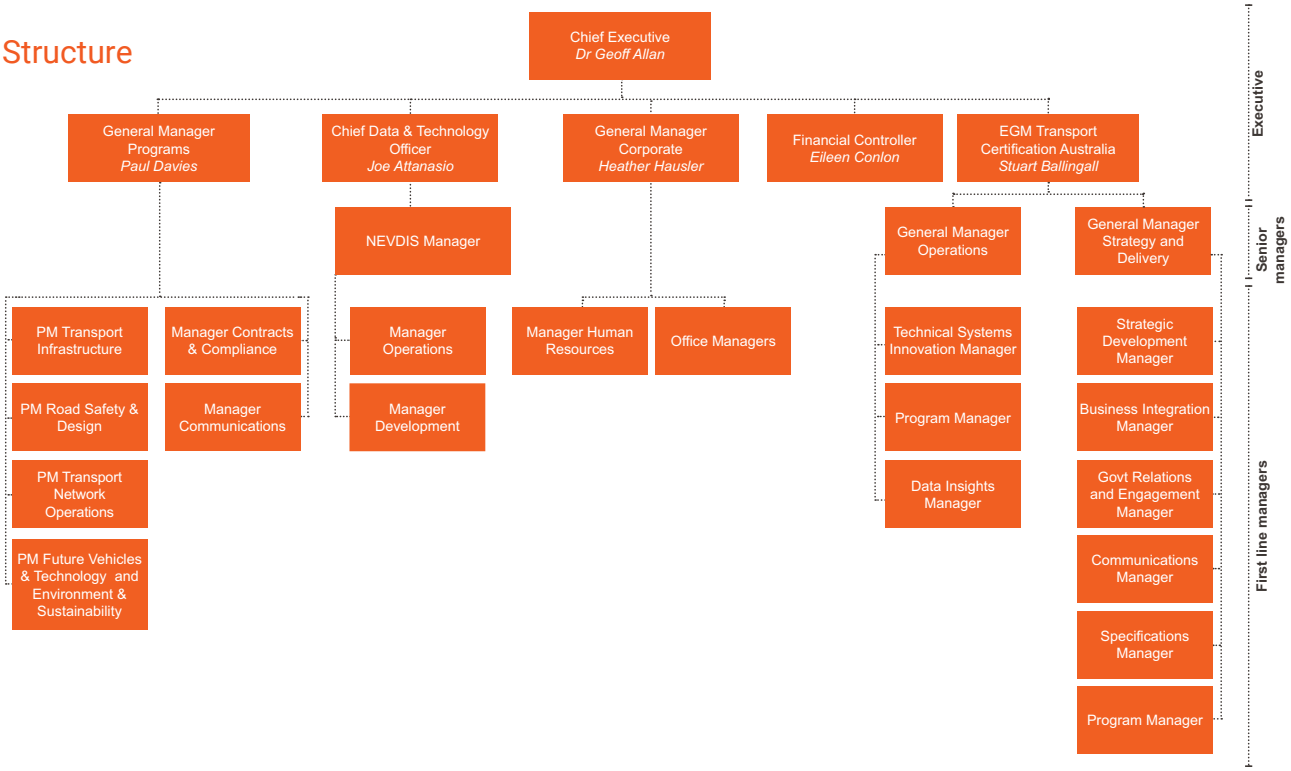
Heather Hausler
General Manager Corporate

Senior manager of projects, people and corporate services. Master of Public Policy and Management.

Stuart Ballingall
Executive General Manager TCA

Experienced director with a focus on transport innovation. Master of Business Administration.

Structure



Recognising exceptional contributions

Summary

We heavily rely on the support of staff from member organisations and related associations.

15 of these exceptional people were recognised for their contribution to Austroads.

We couldn't do it without them.

Our awards recognise the contribution of individuals to the work of Austroads, usually in addition to their regular work for member organisations. The success of Austroads is heavily dependent on the efforts and commitment of these individuals and the awards are a way of publicly acknowledging their contribution.

Austroads Outstanding Service Award recognises an individual who has made an outstanding contribution to Austroads and its activities over a sustained period.

- **David Bobbermen**, Austroads/Qld Department of Transport and Main Roads
  For his leadership as the Road Safety and Design Program Manager for more than five years. Prior to taking up the role, he worked in Queensland Department of Transport and Main Roads. David's work led to significant improvements on the Bruce Highway and a reduction in serious crashes.
- **Robert Vos**, Australian Flexible Pavement Association
  For his outstanding drive, work ethic, ability to steer industry to a better future and contribution to Austroads for over 20 years.
- **Bob Allen**, Sydney Harbour Tunnel
  For his outstanding contribution to Austroads and tunnel technology throughout Australasia over many years.
- **Kym Foster**, Australian Local Government Association
  For his application of the work of Austroads in the development of ALGA Local Government Road Policy and the promotion of the resources of Austroads to councils across Australia.
- **Peter Ellis**,Transport for NSW
  For his leadership and exceptional contributions to the Road Design Task Force over a long period of time.
- **Cheryl Richey**,Transport for NSW
  For her leadership and exceptional contributions to the Registration and Licensing Task Force over a long period of time.
- **Jon Douglas**, Qld Department of Transport and Main Roads
  For his contribution to Austroads as a former Safety Program Manager, his leadership and expertise in the Traffic Management area over a long period of time and his contribution to PIARC.

Peter Ellis (l) and Cheryl Richey (r) awarded Austroads Outstanding Service Achievement Awards for exceptional contributions to Austroads Road Design Task Force and Registration and Licensing Task Forces.

Austroads Special Commendation is for recognition of occasions where there has been a contribution by an individual that warrants special recognition.

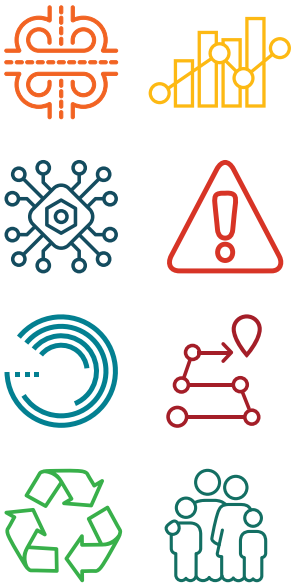
- **Geoff Hughes**, National Theft Reduction Council
  For his contribution to the Registration & Licensing Task Force over many years and for his long-term commitment to vehicle theft reform through involvement in initiatives such as the National Written Off Vehicle Register (WOVR) for both light and heavy vehicles.
- **Stuart Dack**, AustStab
  For his outstanding contribution to Austroads and pavement technology throughout Australasia over many years.

Austroads Achievement Award is made to a person who has contributed to Austroads through the successful delivery of one or more projects or other appropriate activity

- **Graham Hobbs**, Qld Department of Transport and Main Roads
  In recognition of his ongoing contribution to the Project Delivery Task Force in terms of participation and commitment to the objectives of Austroads and through his exceptional work on and management of an important project for the Transport Infrastructure Program: Optimising Project Delivery Performance (APD6174).
- **Andrew Wong**, Qld Department of Transport and Main Roads
  In recognition of his management of an important project for the Transport Infrastructure Program: Design and Construction Guidelines for the Delivery of Large Cantilever and Gantry Structures (ABT6196).
- **Shashi Lakshminarasimhaiah**, Waka Kotahi (NZTA)
  In recognition of his management of network project NTM6189 on passing/overtaking lanes throughout FY2019–20 and FY2020–21.
- **Jason Venz**, Qld Department of Transport and Main Roads
  For his exceptional work in coordinating Austroads' efforts in the definition and development of the national ITS architecture between 2011 and 2020.
- **Alex Hendricks**, Main Roads WA
  For his leadership of the newly formed Transport Management Centre Technical Reference Group under the Network Task Force.
- **Geoffrey McDonald**, Qld Department of Transport and Main Roads
  For his contribution and expertise to the FVaT Program and its predecessor the CAV Program over many years.

Stuart Dack (l) awarded Austroads Achievement award by John Esnouf (r) for his outstanding contribution to Austroads and pavement technology.

Strategic plan



The Austroads 2020–2024 Strategic Plan refocused the work of the organisation to help solve problems for transport agencies in Australia and New Zealand.

The plan outlines eight strategic focus areas that direct the work of Austroads:

- Infrastructure | Delivering affordable infrastructure that meets community needs
- Technology | Optimising the benefits of new technologies
- Data | Managing and harnessing the decision-making power of data
- Sustainability | Reusing materials, reducing emissions and mitigating the impacts of climate change
- Investment | Optimising transport investment
- Safety | Improving safety for road users and workers
- Journeys | Improving the reliability and efficiency of end-to-end journeys
- Customers | Understanding and meeting customer needs.

The plan builds on our strengths of delivering high quality technical guidance and collectively identifying and solving Australasian transport problems.

Performance highlights

In addition to financial performance, the following measures are used to assess progress against the delivery of actions identified in each of the programs:

- projects completed on time and on budget
- adoption of Austroads guides by road agencies
- use of our products
- recognition by government, national policy bodies and road industry as a source of competent, professional research and the reliable source of advice, standards and guidance.

Overveiw

302m
Vehicle and driver data transactions ↑ 8% on 20/21

64
active research projects on target
↑ 14% on 20/21

2
active research projects delayed
↓ 66% on 20/21

102
publications produced
↑ 42% on 20/21

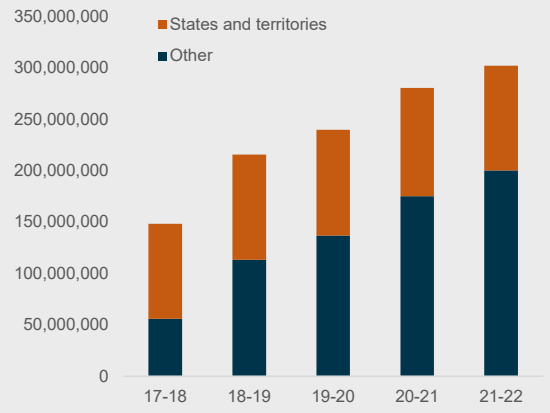
390,000
publications downloaded
→ consistent with 20/21

27,000
webinar participants
↓ 19% on 20/21

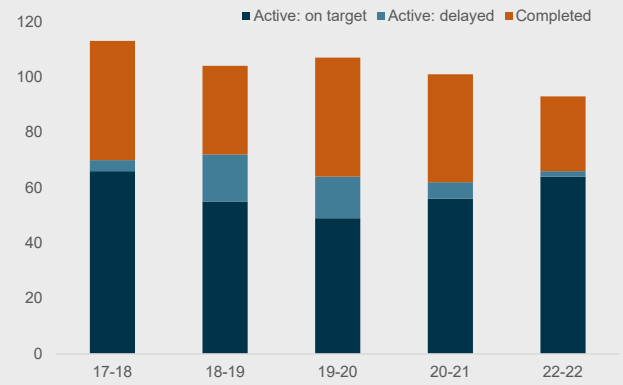
420
external references to Austroads publications
↑ 30% on 20/21

9/10
guides fully adopted by members → consistent with 20/21

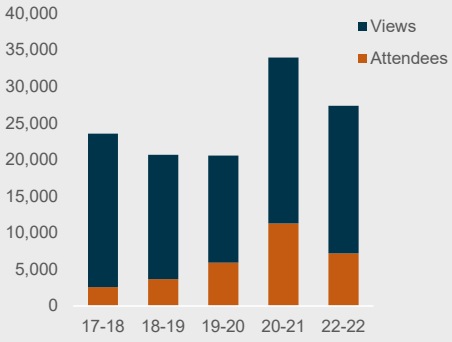
NEVDIS transactions



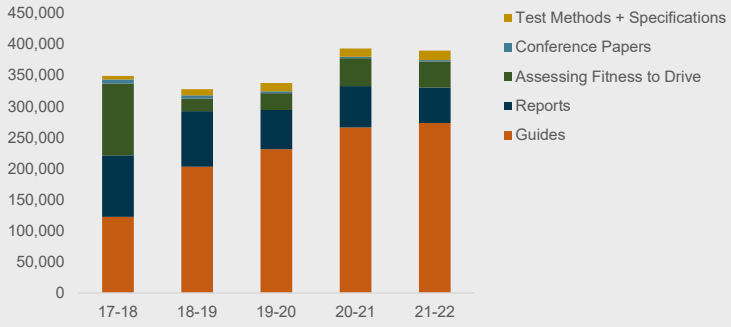
Research project delivery



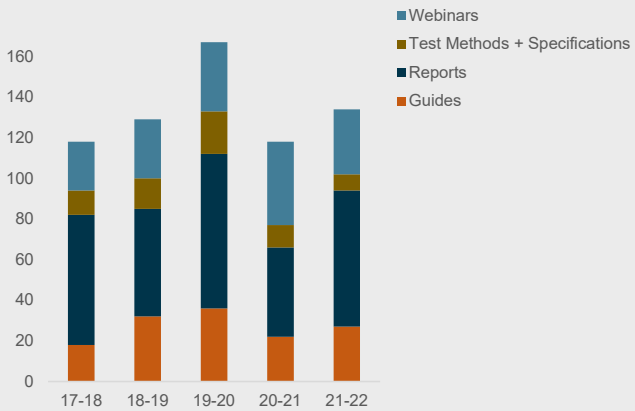
Webinar attendance and views



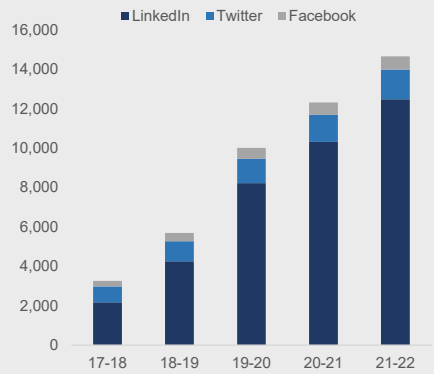
Publication downloads



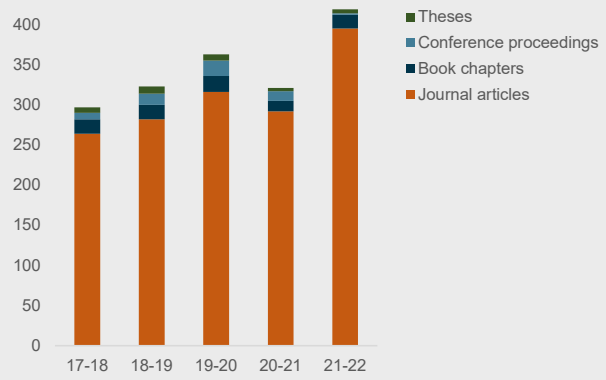
Publications and webinars produced



Social media followers



References to Austroads content



Guides adopted

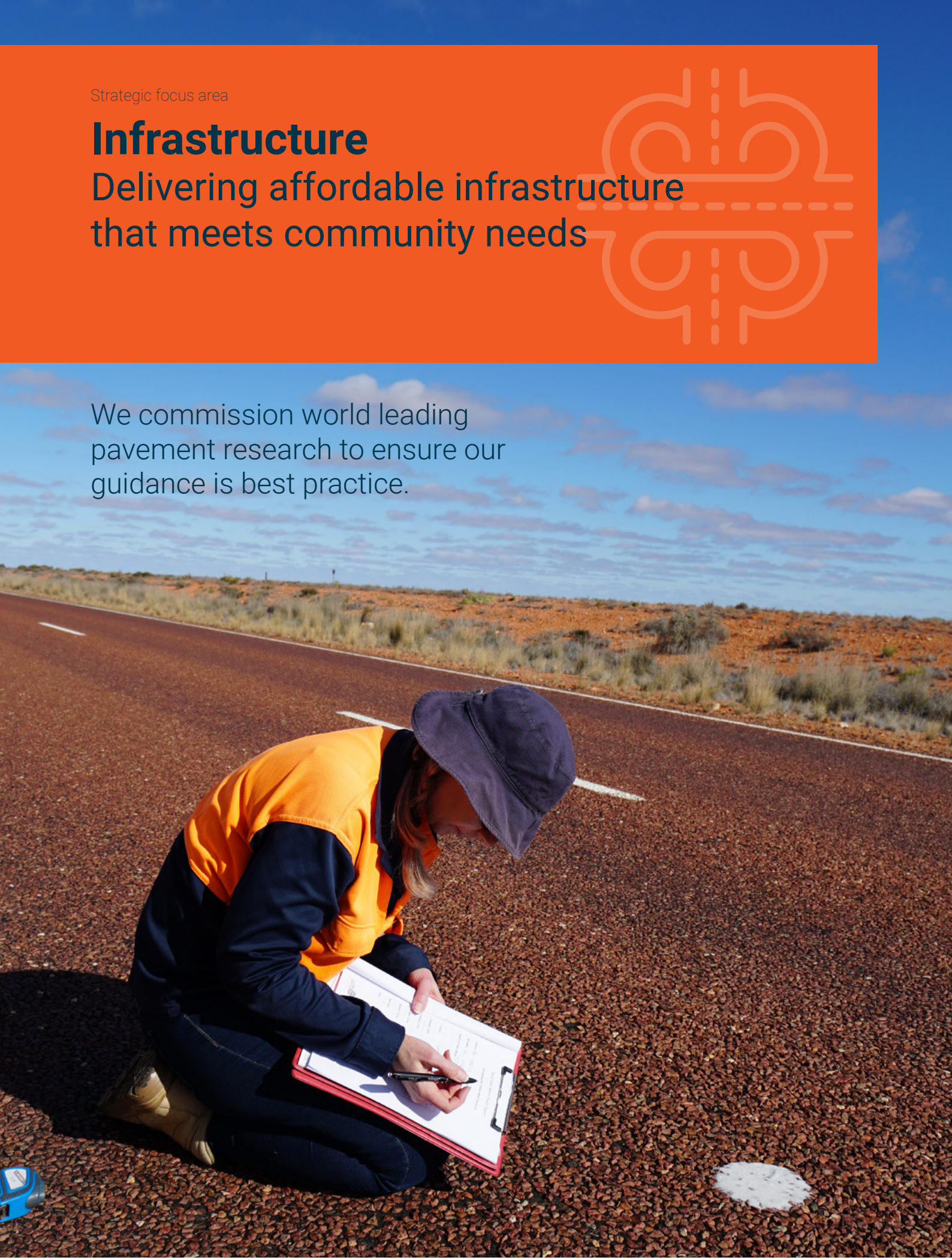
Guide	Status
Guide to Asset Management	100% adopted
Guide to Bridge Technology	100% adopted
Guide to Pavement Technology	100% adopted
Guide to Project Delivery	100% adopted
Guide to Road Design	100% adopted
Guide to Road Safety	100% adopted
Guide to Road Tunnels	100% adopted
Guide to Smart Motorways	100% adopted
Guide to Traffic Management	100% adopted
Guide to Temporary Traffic Management	Complete, being refined
Guide to Digital Engineering	In development

Strategic focus area

Infrastructure

Delivering affordable infrastructure that meets community needs

We commission world leading pavement research to ensure our guidance is best practice.



Consistent approach will help road managers assess the impact of performance based standards (PBS) vehicles on pavements and improve access

Austroads commissioned an investigation into methods of assessing pavement impacts from PBS vehicles. The project developed a seven-step pavement assessment review process that can be used by road managers and local government assessors. The review process includes a checklist to prompt road managers to consider common concerns associated with determining access on local government roads. This approach will speed up the approval process by allowing most applications to be assessed based on the information contained in the application.

New laboratory research improves prediction accuracy for performance of foamed bitumen stabilisation (FBS) materials

Foamed bitumen stabilisation (FBS) involves insitu or plant mix stabilisation of pavement materials with bitumen as the primary binder. Stabilising existing pavements with foamed bitumen and a secondary binder can improve their performance and offer a sustainable alternative for pavement construction or structural rehabilitation treatments.

Austroads research aimed to improve the procedure for the design of FBS materials, which would allow the re-use of existing material insitu, save finite aggregate resources, and reduce cost and environmental impacts when compared with pavement reconstruction.

The research results provide a better understanding of the fatigue characteristics of different mixes and contribute to more accurate predictions of performance and longevity.

Fatigue testing under full-scale accelerated loading reveals new framework needed for designing FBS layers

Austroads conducted a pavement testing experiment that assessed the fatigue cracking characteristics of insitu FBS materials under simulated heavy vehicle traffic.

The findings, presented in a technical report, suggest a new framework is needed for the structural design of FBS layers to account for the specific fatigue behaviour of FBS materials. The report proposes a new definition for FBS design modules, and development of improved in-service fatigue relationships for structural thickness design of FBS layers.

New test method ensures polymer modified binders in asphalt will resist rutting

Road transport agencies purchase around $1 billion worth of bituminous binders annually to build and maintain road networks in Australia and New Zealand.

Binders with the right properties are essential to ensure asphalt has adequate resistance to rutting. Significant research has been conducted to ensure that national specifications and test methods identify materials that will perform consistently. The existing test method uses equipment that is no longer available.

Austroads initiated a research project to develop a new test method to evaluate the rutting performance of polymer modified binders before they are used in road construction. The new method uses a device that is widely used around the world and is readily available.

Extensive collection of resources (including tips, specifications and test methods) ensures ready access to best practice information

Austroads and the Australian Flexible Pavement Association jointly publish Pavement Work Tips which provide easy-to-digest information related to pavement construction. More than 50 are available, each addressing a single, important topic. A new Work Tip was added to the collection this year providing advice on the production and paving of EME2 (a high modulus asphalt used in structural layers for new construction and rehabilitation), and three existing Work Tips were updated to reflect current best practice (asphalt joints, bituminous surfacing characteristics and air voids in dense graded asphalt).

The Austroads Technical Specifications for the construction of roads and bridges identify requirements for the supply of materials, treatments and infrastructure. Four new specifications were published this year:

- ATS 3120 – for the supply of aggregates used for sprayed bituminous surfacing work
- ATS 3050 – for the manufacture and supply of recycled crushed glass as a granular material, as a partial aggregate replacement in asphalt, and as a partial fine aggregate replacement in concrete
- ATS 3450 – for the manufacture and placement of microsurfacing for use on road pavements
- ATS 3460 – for the design and application of sprayed bituminous surfacing or resurfacing.

Austroads Test Methods detail the way measurements and tests should be undertaken. They are part of an international collection of standards that ensure consistency and reproducibility in the way road engineering data is collected and recorded. During the year Austroads published:

- ATM 453 – for obtaining a measure of the evenness of a pavement surface as determined by the deviation from a 3-metre straightedge
- ATM 239 – for verifying that a 4-point bending (4PB) configuration is compliant
- ATM 232 – for preparation of asphalt specimens and measuring the change in indirect tensile strength resulting from the effects of moisture and freeze/thaw conditioning
- ATM 238 – for determining the permeability of a water-saturated asphalt specimen in the laboratory using the ponding method.

Future projects

Projects under way will:

- update road deterioration models
- improve the cost effectiveness of asphalt-surfaced gravel roads
- validate the Superpave™ method of asphalt mix design for Australasia
- establish a method for considering remaining life in the design of pavement rehabilitation treatments
- improve the design of asphalt overlays
- develop a national code of practice to manage utilities in roads
- update bridge inspection and bridge barrier design guidance
- optimise project delivery performance
- harmonise the test methods used in performance specifications
- identify best practice approaches to ensure road tunnel wall panels and finishes achieve performance, access, maintenance and durability requirements.

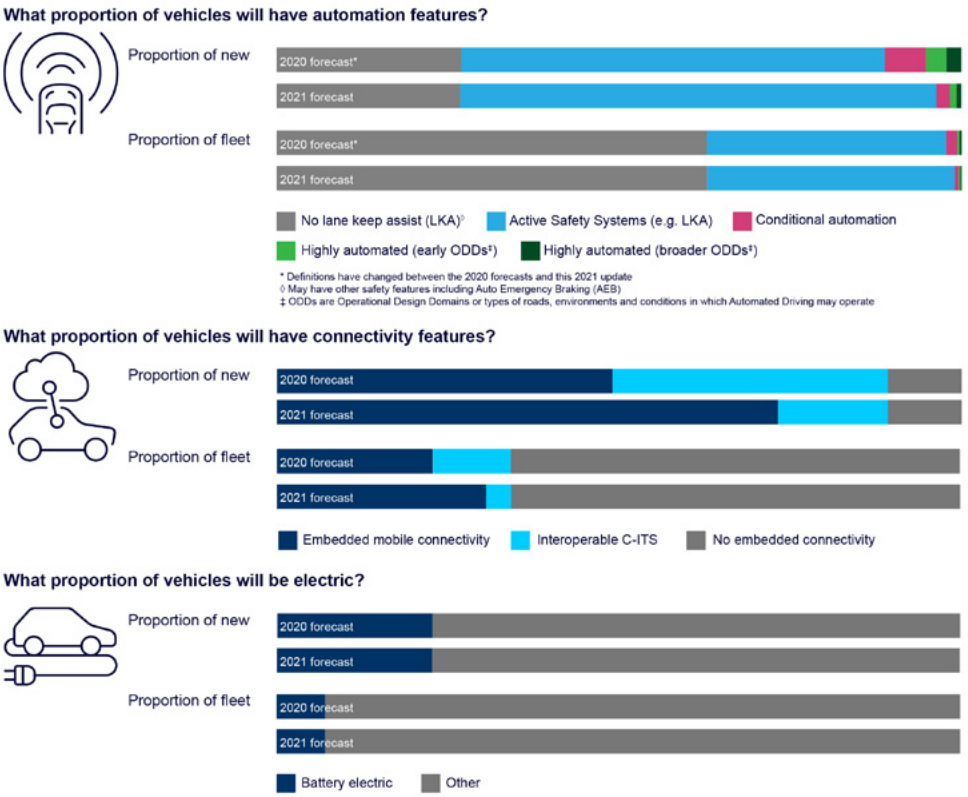
Strategic focus area

Technology

Optimising the benefits of new technologies

We're helping road managers prepare for new technologies such as digital engineering, artificial intelligence and vehicles with low and zero emissions, automation and cloud connectivity.

An update to the Austroads Future Vehicles 2030 forecasts indicates a more rapid adoption of safety technology but a slowing of the introduction of highly automated driving.



Update to Future Vehicles 2030 forecasts helps transport agencies to prioritise research, policy development and planning

The Future Vehicles 2030 forecasts predict the proportion of new light vehicles sold and in the fleet that feature advanced safety technology, automation, connectivity and electric power sources. The forecasts are used by transport agencies and Austroads Future Vehicles and Technology Program to inform priorities in research, policy development and planning.

The latest update to Future Vehicles 2030 indicates a more rapid adoption of safety technology but a slowing of the introduction of highly automated driving. There was no change to the electric vehicle or embedded mobile data connectivity forecasts.

Austroads continues to monitor changes in this field and develop various uptake scenarios to inform forecasts across eight technologies/uses.

Advising road agencies about investing in infrastructure to support connected and automated vehicles

Physical road infrastructure such as pavement markings and traffic signals are expected to play an important role in supporting the uptake of automated vehicles (AVs). Austroads has developed advice for road agencies about which infrastructure types should be prioritised for investment, as well as the timing and scale for that investment.

The advice was developed against a backdrop of uncertainty such as not knowing when high-level AVs will be widely available or the level of reliance of future AVs on physical infrastructure. The economic feasibility of options was assessed to ensure consistency with value-for-money principles.

The greatest return can be achieved by investments that will support current lower capability AVs, offer some advantages for human drivers and be strategically relevant to future higher level AVs.

Guidelines help agencies manage and deliver data to cloud-connected road users

Vehicles with advanced capabilities rely on traffic information and data from other road users. Road agencies currently share data from operational and asset management systems but lack guidance on how best to manage data to assist cloud-connected road users.

Austroads has compiled a report that examines various international methods and practices for managing and delivering data to help users with route planning, warnings and advice. The report contains guidance on how transport agencies can use and exchange data generated by in-vehicle devices to increase safety and efficiency of traffic flows.

Investigation explores ways that artificial intelligence (AI) and machine learning (ML) can assist decision-making for pavement asset managers

Managing pavement assets is an expensive, continual process and heavily reliant on practitioner expertise. This project aims to explore new use-cases for AI and/or ML in providing decision-support to pavement asset managers. Rather than seeking to automate a process, we aim to develop software tools that will help human experts make decisions, either by reducing the labour involved and/or by providing additional insights.

In this research we hope to help member authorities through using AI/ML to:

- capture and retain corporate knowledge
- reduce reliance on individual experts
- improve decision quality and consistency
- accelerate progress towards transparent, evidence-based processes
- understand and prepare for increasing quantities of data and consequential data management demands
- understand the implications of poor-quality data on AI/ML adoption.

New guide will outline strategies for implementing digital engineering

Digital Engineering is the 'use of a shared digital representation of a built asset to facilitate design, construction and operation processes to form a reliable basis for decisions' (ISO19650:1). The application of digital engineering is changing the way projects are procured, designed, delivered, handed over and operated.

Austroads is developing a new Guide to Digital Engineering in response to government and industry needs. The consistent application of digital engineering will help transport agencies to deliver, maintain and operate their assets more effectively. The guide will provide them with user-friendly, up-to-date and comprehensive information spanning all aspects of digital adoption.

The project will be completed in 2023.

Future projects

Projects under way will:

- develop a nationally consistent standard for digital driver licences that can be recognised across jurisdictional boundaries and overseas
- develop software to design treatments for existing pavements and update the popular online pavement design tool AustPADS
- identify the potential role of 5G technology in vehicle and infrastructure connectivity
- provide consistent evaluation and reporting of automated vehicle trials
- publish best practice guidelines for ITS testing, asset management and maintenance
- publish best practice guidelines for smart motorway operations.

Our projects to improve transport data help keep road users safe, and underpin a fairer system for making decisions about road spending.

Strategic focus area

Data

Managing and harnessing the decision-making power of data

Multi-stage project to standardise and share data will provide valuable insights for planning and managing road assets

Data can be a great asset but data held in a system has no value. It becomes valuable when used to provide insights to support decisions and potentially gain competitive or operating advantage. Austroads is undertaking a multi-stage project to standardise and automate ways of recording and sharing road asset information, which will enable collaboration and best practice across jurisdictions.

To date, the project has delivered the Data Standard for Road Management and Investment in Australia and New Zealand which caters for different levels of road asset complexity and asset management planning. The data standard will help road asset owners, managers, road network funding agencies and service providers in the planning, delivery, operation, maintenance, disposal and reporting of asset management functions across the road asset portfolio. It contains nearly 1,000 data fields so a smaller suite of priority datasets has been identified to aid implementation.

Austroads is also collaborating with BuildingSmart International to support the development of the Industry Foundation Classes (IFC) Road Schema and ensure it aligns with the Austroads road asset data standard. IFC is the global standard for data exchange in the built asset industry.

A knowledge-sharing framework has been completed to identify gaps in capability, technology, processes and data, and the tools available for knowledge sharing. Austroads is now building a knowledge-sharing platform where road managers can report activities, collaborate, and share insights. A reporting portal will supplement the knowledge-sharing platform and help to accelerate adoption of the priority datasets across both local and state government. Use of the platform and the portal will standardise data collection and reporting, reduce the need for manual data manipulation and cleaning, and streamline processes.

While testing implementation of the data standard, the project team identified a range of data quality issues that would limit the effectiveness of the harmonisation programs if not addressed. Further, harmonisation efforts have so far only reached a small proportion of road managers across the country. To ensure long-term value from the investment, Austroads is considering a Road Asset Data Quality and Harmonisation Program to address data quality and consistency issues.

Guidance for road agencies aims to improve consistency in real-time data provided to road users

Road agencies currently provide information about road conditions through traveller websites and apps, or feeds through web-based application programming interfaces (APIs).

Austroads has published guidance to improve capability and consistency of road agency practices in defining, collecting, using and storing operational and real-time data, and ensuring it aligns with international standards for connected and automated vehicles.

The guidance covers six high-priority data sets: roadworks, incidents, variable speed limit signs and lane control signals, static speed limits, traffic signals, and heavy vehicle access restrictions.

Model helps road transport agencies to evaluate and develop their capability to support connected vehicles

As connected vehicles become more reliant on agency-owned data for trip planning, warning and advice, road agencies must ensure they can provide data that meets operator and vehicle needs.

Austroads has developed a business capability model to help road transport agencies identify and enhance the capabilities of their systems, policies, processes and staff to support connected vehicles.

The model covers five organisational capability areas and associated capability maturity target states from business and technology perspectives: managing data foundations, governing data, planning and designing data, as well as enabling, maintaining and using data. Each of the five areas comprises multiple components such as data security and privacy, ethics, data integration and storage, business intelligence and data science.

The model and target states can be used by road agencies to assess their current capabilities in supporting connected vehicles, and to guide development of data management practices to improve the range and quality of data provided to connected vehicles.

Investigations inform development of investment and cost recovery process for future heavy vehicle infrastructure

Improving the quality of nationally consistent information about the nature and condition of Australia's roads is a critical component of building a more efficient, fairer system for making decisions about road spending.

The Heavy Vehicle Road Reform is a joint undertaking of Commonwealth, state, territory and local governments. It aims to establish an economic market for the provision and use of heavy vehicle infrastructure services, one with clear links between the needs of users, the charges they pay and the services they receive.

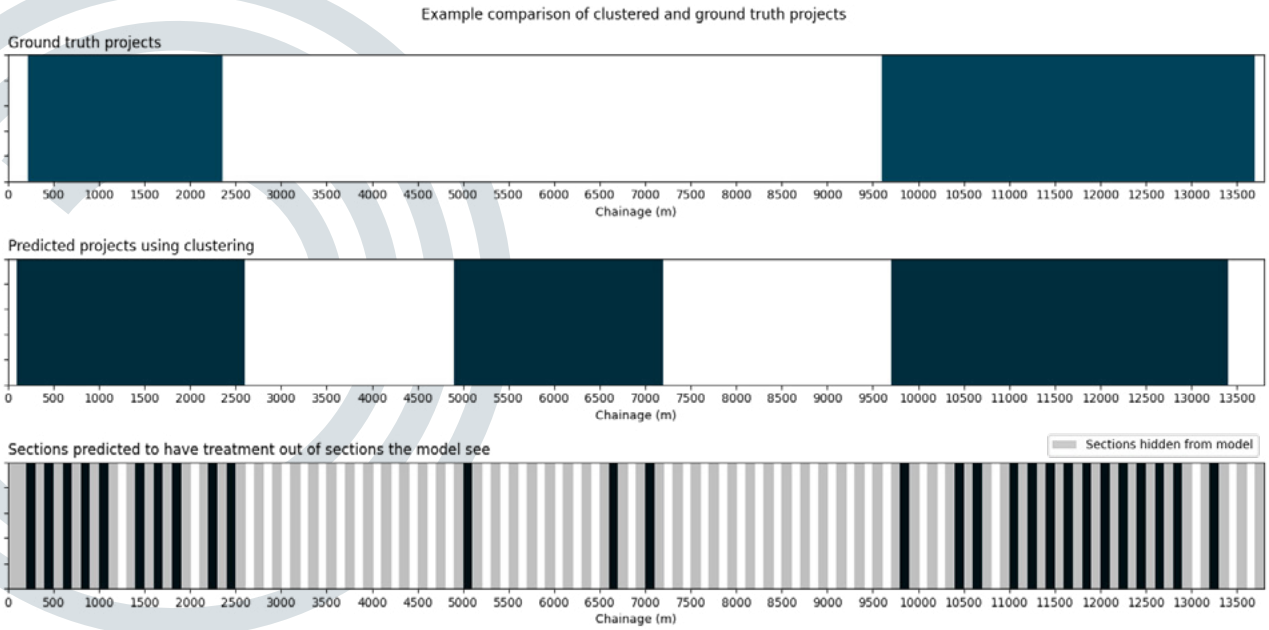
To support the reform Austroads focused on establishing an openly available baseline of information required to transition to the provision of heavy vehicle infrastructure as an economic service over the longer term. The project investigates data availability, quality and structure and outlines development of a National Road Asset Register and a Heavy Vehicle Infrastructure Rating.

Future projects

Projects under way will:

- start the journey towards a national, harmonised connected-vehicle and road-agency data exchange
- deliver the road asset data standard in machine-readable formats and continue implementation activities to improve the usefulness of priority datasets, refine potential data-sharing systems and provide improved information for effective decision-making.

Data is informing our understanding of whether machine learning (ML) models can learn to reproduce expert pavement decisions. The bottom row shows the model's recommendations for specific treatment of individual road sections at different time periods. A clustering algorithm is applied to these recommendations to generate candidate projects of variable length (middle row). The candidate projects are then validated against projects from actual or planned works programs (top row). In this instance, the model has broadly predicted two projects but incorrectly added a third, in which only a few sections may merit treatment.



Strategic focus area

Safety

Improving safety for road users and workers

Our national temporary traffic management project aims to ensure people working on our roads make it home at the end of their shift.

Consultation Regulation Impact Statement outlines policy options for improving heavy vehicle driver competency and safety

In 2017, transport ministers asked Austroads to undertake an extensive review to improve the National Heavy Vehicle Driver Competency Framework. The review involved regular consultation with heavy vehicle operators, the driver training industry, and licensing authorities and led to development of a Consultation Regulation Impact Statement (RIS) by Frontier Economics.

The Consultation RIS outlines policy options and identifies the likely costs and benefits of each of these options. It proposes four key areas for change:

- managing individual driver risk
- strengthening skill and knowledge
- embedding behind-the-wheel experience
- introducing experience-based progression options.

The Consultation RIS will be released for feedback in August 2022 and will be followed by a new project to generate resources for heavy vehicle hazard perception testing in Australia. This will complete the suite of training resources required to implement the revised Heavy Vehicle Driver Competency Framework.

National scheme for temporary traffic management at road worksites will improve safety of both road workers and road users

Across Australia there are 18 fatal crashes, 245 serious injury crashes and 530 minor injury crashes at roadside worksites annually.

In 2019, Austroads sought to improve safety for road workers by publishing the Austroads Guide to Temporary Traffic Management (AGTTM) with Standards Australia publishing the supporting AS 1742.3.

Austroads is now working with states, territories, local governments, the training industry and the temporary traffic management industry to implement nationally consistent schemes to improve road worker safety.

The Austroads National Harmonisation of Temporary Traffic Management (TTM) Practice project aims to maintain best practice TTM and deliver a harmonised operational environment for participating agencies consisting of:

- training package material
- approval process for registered training organisations (RTOs)
- prequalification for TTM organisations using trained personnel
- an approval process for new devices used at TTM sites.

Major achievements in 2021–22 include:

- establishing a task force from all Austroads member agencies to facilitate decision-making
- approving eight TTM national training packages
- delivering the Registered Training Organisation Operational Framework for TTM training
- launching the Austroads Innovative Temporary Traffic Management Device and Solution Assessment (AITDSA) Scheme.

New edition of Guide to Road Design Part 6 expanded to include sections on safety barrier systems and road safety devices

Edition 4.0 of the *Guide to Road Design Part 6: Roadside Design, Safety and Barriers* introduces new sections on the fundamentals of safety barrier systems and design advice for other road safety devices.

The Austroads Guide to Road Design seeks to assimilate the contemporary road design practice of member organisations and provide designers with guidance on designing safe roads. Part 6 focuses on hazard identification and risk mitigation processes in the roadside with new sections on road safety barrier systems and roadside safety devices in the updated edition.

New website streamlines access to updated assessing fitness to drive standards

The revised Assessing Fitness to Drive standards were launched in June 2022. The updated website uses intuitive navigation and improved search functionality to streamline the assessment process for busy health professionals. The site also supports knowledge sharing around key fitness-to-drive issues, including older drivers, chronic medical conditions, driving for people with disabilities and the requirements for heavy vehicle and commercial vehicle drivers. In the first six weeks following launch the new resource was downloaded more than 3,000 times and 160,000 online pages were viewed.

An Implementation Strategy was endorsed by the Austroads Board in February 2022 aimed at consistent application of standards across Australia. Health professionals will be an early focus of these efforts – to build their confidence in addressing fitness to drive and conducting conversations about conditions likely to affect driving. An Implementation Advisory Group will inform the body of work and support collaboration across stakeholder groups.

Updated road safety guide aims to create a system where crashes do not result in death or serious injury

Austroads has updated the Guide to Road Safety which has been restructured to reflect the Safe System.

The Safe System takes a holistic view of road transport, recognising that people will make mistakes but aiming to create a system where mistakes and crashes do not result in death or serious injury. Preventing death and serious injury requires road managers and safety practitioners to address risks in all parts of the transport system: roads and roadsides, travel speeds, vehicles and road users.

The guide covers seven topics:

- Part 1 introduces Safe System and the structure of the guide.
- Part 2 is designed to help practitioners minimise the risk of road crashes.
- Part 3 provides an overview of speed limits and their application.
- Part 4 considers the human factors and behavioural considerations.
- Part 5 considers the vehicle factors and features that impact safety outcomes.
- Part 6 provides guidance on road safety audits.
- Part 7 covers the process of road safety strategy development, management, evaluation and risk assessment.

Framework helps jurisdictions assess speed information and identify opportunities to improve safety outcomes

Speed management is a key factor in ensuring safe and efficient travel. It is also the most effective way of reducing fatalities and serious injuries. Austroads has published a framework to enable practitioners involved in the collection, storage or management of speed information to benchmark their current practices and evaluate opportunities for improvement.

Using a common framework for assessing information relating to speed limits and travelled speeds will help jurisdictions to improve safety outcomes by informing analysis and decision-making processes.

The Australasian Road Safety Conference ('Towards Zero – A Fresh Approach') focused on saving lives and eliminating serious injury

The annual Australasian Road Safety Conference has been co-hosted by the Australasian College of Road Safety (ACRS) and Austroads for six years.

In 2021 the conference program covered the five major topic areas aligned to the United Nations' five Pillars of Road Safety: Road Safety Management; Road Infrastructure (Safer Roads); Safer Vehicles; Road User Behaviour; and Post-Crash Care, Data and Crash Analysis.

Due to COVID-19 the conference was conducted as a virtual conference with over 130 sessions and around 600 delegates from all facets of road and transport safety, including research, teaching, practice and policy from Australia, New Zealand and worldwide.

Guidance recommends rationalisation of signage for over-height and dangerous goods vehicles on tunnel approaches

Diverting vehicles away from tunnels not designed to cater for them is crucial to avoid damage to infrastructure, significant traffic congestion and risk to other road users.

A recently completed project has recommended changes to the Austroads *Guide to Road Tunnels Part 2: Planning, Design and Commissioning* to rationalise road signs on the approaches to tunnels intended to divert over-height and dangerous goods vehicles approaching tunnel entrances.

The project report includes recommended signage designs and guidelines for the placement of signage on the roadway preceding a tunnel and along diversion routes.

Research evaluates various treatments to reduce crash risk in tunnels, including efficacy of perceptual countermeasures (PCM)

While road tunnels are relatively safe, they are the site of a significant number of crashes and the number of tunnels is expected to increase in coming years.

Although substantial research has been conducted into the efficacy of perceptual countermeasure (PCM) treatments in reducing speed and improving lane keeping behaviours, there has been limited evaluation of PCM for enhancing safety in tunnels.

An Austroads-funded study conducted in a virtual reality driving simulator has evaluated a selection of treatments to reduce crash risk in tunnels by improving driver speed behaviour, alertness and lane discipline.

AusRAP leadership transitions to Austroads

The Australian Road Assessment Program (AusRAP) helps road managers to measure the safety of their roads. AusRAP is part of the International Road Assessment Program (iRAP). In 2021, the leadership of AusRAP transitioned to Austroads. As the lead for the program, Austroads will partner with the Australian Automobile Association, Australian Road Research Board, Roads Australia, the Australasian College of Road Safety, the Australian Local Government Association, the Commonwealth Government and state, territory and local governments to build on the existing work and continue helping road managers measure and improve safety on Australian roads. Austroads is currently developing a new AusRAP governance model with the aim to expand the uptake of the program.

Future projects

Projects under way will:

- chart a path to eliminate death and serious injury on our roads
- improve the measurement of non-fatal hospitalised road injuries in Australia
- provide road transport authorities and the driving community with a single, consolidated reference outlining a harmonised view of nationally agreed driver-licensing policies, practices and future directions
- review the Learner Approved Motorcycle Scheme to ensure it provides optimal safety outcomes for novice motorcycle riders, and examine safety risks with electric motorcycles
- pilot innovative perception countermeasure treatments with the aim of reducing the number of motorcyclist casualties on high-risk sections of road through mountainous terrain
- update the Guide to Road Design including: the design exceptions and extended design domain in Part 1; the narrow medians, wide centre lines and central barriers in Part 3; and the data used to design drainage in Part 5
- update the Guide to Road Safety including managing regional road safety priorities and a major update of Part 2: Safe Roads
- implement a risk assessment process for assessing access to tunnels for vehicles carrying dangerous goods.

Strategic focus area

Sustainability

Reusing materials, reducing emissions and mitigating the impacts of climate change

We're providing robust guidance on safely using more waste materials (particularly glass, plastics and tyres) in road infrastructure.

Pioneering project evaluates environmental impacts of roads constructed with recycled plastic waste

Austroads has published world-leading testing frameworks that measure the potential environmental impacts of road materials designed with recycled plastic waste. The pioneering project, initiated by Austroads and led by RMIT University, was established in response to a growing interest in the use of waste materials in road infrastructure.

The frameworks provide innovative performance and environmental assessment procedures to test incorporating recycled plastic into bitumen as a polymer modifier, and the addition of high melting-point recycled plastics into asphalt as an aggregate replacement.

The report provides a laboratory testing framework to assess bitumen and asphalt emissions and a methodology to assess the release of microplastics (MPs) from plastic-modified asphalt.

The project also investigated the possibility of recycling plastic-modified reclaimed asphalt pavements (P-RAP) at the end of their service life to ensure that the P-RAP material can be used in a similar manner as conventional reclaimed asphalt pavement (RAP) material without drastically modifying the asphalt plant processes or reducing the performance of the new asphalt mix with P-RAP. The final project report, due in late 2022, will detail performance test results of asphalt mixes produced with RAP and P-RAP.

Interim guidelines assist local governments to incorporate recycled waste plastic in local roads

There is increasing interest in repurposing recycled waste plastic for use in road surfacing applications. In the 2018–19 financial year, a total of 3.5 million tonnes of plastics were consumed in Australia but only 11.5% of these were recycled (locally and exported). With the COAG ban on plastic exports, alternative methods to deal with waste plastics must be implemented for a sustainable future.

Austroads has released interim guidelines on the use of recycled waste plastic in surfacing applications, particularly for use by local government in the surfacing of local roads that do not experience heavy traffic volumes or a high proportion of heavy vehicles. The guidelines focus on how plastics could be incorporated into asphalt or sealing work and include flow charts, forms and examples for assessing products and technology.

Updated framework helps determine suitability of recycled materials for construction and maintenance of road pavements and surfaces

Edition 2.0 of *Guide to Pavement Technology Part 4E: Recycled Materials* presents the latest information on the use of waste material in roads and provides a high-level approach to determine the suitability of recycled materials for construction and maintenance of road pavements and surfacings.

The updated guide covers advances in material re-use since the previous version was published 13 years ago and presents a new holistic assessment framework. A key principle of this framework is that the use of recycled materials in road construction should not worsen overall environmental, health and safety, engineering performance or road user outcomes relative to the performance of conventional materials.

Technical specification and guideline support government initiatives to encourage the use of recycled crushed glass in road assets

Austroads has published documentation to support government initiatives to encourage road agencies, state, territory and local governments to use recycled aggregate from waste glass in transport infrastructure and road assets.

The technical specification sets out the minimum requirements for the manufacture and supply of recycled crushed glass for use in bedding, backfilling material, concrete, road drainage, embankment fill, and landscaping applications. It is based on national and international best practices, and harmonises the requirements for the use of recycled crushed glass across Australia and New Zealand.

The guideline provides potential recyclers with the information they need to gain a better understanding of how recycled crushed glass should be processed to make it fit-for-purpose for infrastructure applications. It includes performance requirements and processing volumes to allow processors to make informed choices about equipment for processing recycled crushed glass. Examples of methods currently used by industry are also presented.

Research informs specification for using crumb rubber as a binder in asphalt pavements

Crumb rubber is predominantly obtained from vehicle tyres. Every year Australia and New Zealand produce more than 510,000 tonnes of end of life tyres. Austroads has published the results of research which proposes a specification for using a binder containing crumb rubber in the construction of asphalt pavements.

The use of crumb rubber binders in road construction allows tyres that have reached their end of life to be used for productive outcomes, rather than sent to landfill or sent overseas where they are often burned.

Proposed symbols for road signs will identify charging or refuelling infrastructure for low and zero emission vehicles

The uptake of low and zero emission vehicles (LZEV) has accelerated globally in recent years, with Australian and New Zealand road transport agencies responding to the global trend by developing, facilitating, and rolling out plans and strategies to support their adoption. As the number of charging and refuelling facilities and dedicated parking areas increases so does the need for clear and consistent signage.

Austroads has published a report proposing a set of symbols for LZEV and associated charging or refuelling infrastructure to be used on road signs and for road marking in Australia and New Zealand. The proposal forms a basis for future testing and standardisation of the symbols and their adoption in the Australian Road Rules and signage manuals.

Five categories of symbols are considered in the report to illustrate:

- an electric-powered vehicle
- an electric-powered vehicle being charged
- a charging station for electric-powered vehicles
- a hydrogen fuel-cell powered vehicle and associated refuelling infrastructure
- access to lanes and roadways designated for electric-powered vehicles and hydrogen fuel-cell powered vehicles.

Future projects

Projects under way will:

- update the sustainability content in the Guide to Road Tunnels
- investigate ways to increase asphalt recycling using binder rejuvenators to address performance issues with mixes containing reclaimed asphalt pavement
- publish guidelines to support the installation of low and zero emission vehicle charging and refuelling infrastructure within the road reserve
- develop a tool to measure the carbon and recycled content of infrastructure
- investigate opportunities for transport agencies to reduce emissions
- update temperature projections used to calculate the Weighted Mean Annual Pavement Temperature used in pavement design
- examine ways to prioritise active transport
- publish climate change risk-assessment guidelines.

Directors' and financial reports

The Board has challenged the Austroads executive team to not just continue with their core role of research and guidance but to actively support member agencies to implement change.

Contents

Directors' report

The directors of Austroads Ltd ("the Company") present this report on the Company for the financial year ended 30 June 2022.

Directors

The names of each person who has been a director during the year and to the date of this report are:

- Neil Scales OBE
- Louise McCormick
- Peter Woronzow
- Brett Gliddon
- Gary Swain
- John Hardwick
- Maree Bridger
- William Tieppo (appointed 1 July 2021)
- Matt Pinnegar (appointed 20 July 2021)
- Dr Ana Glavinic (appointed 6 April 2022)
- Alison Playford (appointed 12 April 2022)
- Adrian Beresford-Wylie (resigned 19 July 2021)
- Tony Braxton-Smith (resigned 5 April 2022)
- James Corrigan (resigned 11 April 2022)

Directors have been in office since the start of the financial year and are still directors to the date of this report unless otherwise stated.

Principal activities

The principal activities of the Company during the financial year were to coordinate road transport related research and projects, to produce publications related to road transport, and provide a driver registration and vehicle licensing data exchange.

The Company's short-term objectives are to:

- conduct strategic research that assists road agencies to address current and emerging issues;
- develop and maintain guidance and information resources that deliver nationally consistent road network design, operation and maintenance
- facilitate knowledge sharing by widely disseminating research outputs via digital publications, presentations and promotions
- implement services and schemes for Australia and New Zealand on behalf of member agencies
- maintain and develop NEVDIS on behalf of road agencies as an essential national vehicle and driver licence information exchange
- foster relationships with international road organisations through agreements, activities and support.

With member agencies, the Company's long-term objectives are to:

- deliver an Australasian road transport network that is safe and reliable for all users, equipped with infrastructure that is sustainable and future proof
- underpin national policy development on road and road transport issues with technical research and advice
- improve the practice and capability of road transport agencies
- continually improve the consistency of road networks and road transport agency operations.

Strategies

The Company uses a program management approach to the delivery of the strategic plan. Each program focuses on an operational area of the road system but in doing so they address the Company's strategic priorities by undertaking a range of projects that contribute to improving transport outcomes in Australia and New Zealand. Austroads utilises the expertise of its member organisations to develop and deliver its research programs. This encourages a collaborative approach and facilitates learning, development, knowledge sharing and a high level of consistency across jurisdictions. An Operational Plan, which is monitored and reviewed by the Board, includes outputs for each program and an indicative four-year work plan with projects to produce these outputs.

Key performance measures

The following measures have been developed to assess performance and progress against the delivery of actions identified in each of the Company programs:

Projects completed on time and on budget

This is a quantitative measure. Austroads had 93 projects underway or commence in 2021-22 financial year, including 27 projects that were completed. At the end of the financial year, there were 66 active projects. Most projects were progressing in line with the estimated schedule, two are considered late running, with one three to six months late and one nine to 12 months late. Projects were completed within the total project budget.

Adoption of Austroads Guides by road agencies

Austroads member agencies have adopted nine Austroads Guides. The Guide to Temporary Traffic Management is undergoing refinement to ready it for adoption. Drafting of the new Guide to Digital Engineering commenced in November 2021. The table below summarises the status of adoption.

Guide	Status
Guide to Asset Management	Adopted
Guide to Bridge Technology	Adopted
Guide to Pavement Technology	Adopted
Guide to Project Delivery	Adopted
Guide to Road Design	Adopted
Guide to Road Safety	Adopted
Guide to Road Tunnels	Adopted
Guide to Smart Motorways	Adopted
Guide to Traffic Management	Adopted
Guide to Temporary Traffic Management	Complete, undergoing refinement
Guide to Digital Engineering	In development

Take up of project outputs by road agencies and other stakeholders

This is a quantitative performance measure and is demonstrated using a small number of cases.

Case 1: The use of Austroads Guides has increased substantially over the last five years. Last year more than 273,000 Guides were accessed either as PDF downloads or wholly digital editions. This is a 2% increase on last year and an 123% increase in comparison to 2017-18.

Case 2: *Guide to Road Design Part 3: Geometric Design* is one of Austroads' most downloaded publications. During the year the Guide was downloaded 24,000 times and the online version accessed 6,000 times.

Case 3: In September, Austroads published a minor update to the Guide to Temporary Traffic Management. While the Guide it still to be fully adopted by all member agencies, the new editions were downloaded more than 13,000 times.

Case 4: In June Austroads published a new edition of Assessing Fitness to Drive. The publication is used by health practitioners and driver licensing agencies to assess and manage the impact of medical conditions on a driver's capability to safely operate a vehicle. The new online edition featured improved navigation and search functionality. This resulted in a significant shift of users moving from the PDF version to the online version. In the week following launch, the PDF was downloaded more than 1,000 times and more than 5,000 visits were made to the online version.

Recognition by national policy bodies and road industry as a source of competent, professional research and guidance on road transport

This is a qualitative performance measure and is demonstrated using a small number of cases.

Case 1: Austroads staff represent our members on industry and education association boards and committees including the ITS Australia Board, Australasian Road Safety Conference, Centre for Pavement Engineering Education, Australasian BIM Advisory Board, Building Smart International, SPARC Hub, Australian Transport Assessment and Planning Steering Committee, Cycling and Walking ANZ, Roads Australia's Road Workers Safety Working Group, National LZEV Working Group, and APCC-Austroads Environmentally Sustainable Procurement Roundtable. Austroads also agreed to lead AusRAP, the Australian implementation of the International Road Assessment Program.

Case 2: Austroads' publications are regularly referenced in journal articles, book chapters, conference papers and academic theses. Last year Austroads publications were referenced in more than 400 journal articles, book chapters and theses, a 30% increase in comparison to the previous year.

Case 3: The Royal Australian College of General Practitioners (RACGP) nominated the 2022 edition of Assessing Fitness to Drive as an accepted clinical resource (ACR). This is a significant achievement. Recognition as an ACR is provided when a resource is considered to make a useful contribution to general practice but where a degree of clinical interpretation and caution should be applied when using it to guide practice.

Board member satisfaction with progress delivering the strategic priorities

The Austroads Board expressed its support for the work of our organisation. We will continue to work with the Board to develop an appropriate metric for this performance measure.

Information on Directors

Neil Scales OBE | OBE, ONC (Eng), HNC (EEng), BSc (Eng), C.Eng (UK), MSc (ContEng&CompSys), DMS, MBA, FIEAust CPEng, EngExec, NER APEC Engineer Int PE (Aus), Hon FLJMU, FIMechE, FIET, FICE, FCIT, FILT, FRSA, FIRTE, FSOE, RPEQ, MAICD, VFF

As Director-General, Neil leads the Department of Transport and Main Roads (TMR), with an annual budget of $10.5 billion, including capital expenditure of $4.5 billion and managed assets worth in excess of $92 billion. He was appointed Director-General of TMR in March 2013 after having joined the Queensland Public Service in March 2012 as Chief Executive Officer of TransLink. Prior to arriving in Australia, Neil was Chief Executive and Director-General of Merseytravel and held executive roles with transport and engineering companies including the World Bank and European Commission. Neil is the Commissioner of the National Transport Commission, Chair of Austroads, and Deputy Chair of the Australian Roads Research Board. Since 2014, Neil has been the Government Champion for the Woorabinda Indigenous community and is a strong advocate for domestic and family violence (DFV) prevention. From 2015–2017, Neil was the Queensland Public Sector's CEO Champion against DFV and in 2017, won the Australia's CEO Challenge Race.

Louise McCormick | B. Eng – Civil Engineering, Dip. Project Management

Louise McCormick is an Executive Engineer, Chartered Fellow and Senior Civil/Structural Engineer with over 20 years' experience in the public and private sectors. Louise was appointed Commissioner for Infrastructure NT in April 2022. In 2022 she was awarded the John Shaw Medal by Roads Australia. The Medal honours an industry champion who has made a lasting contribution to Australia's roads. Louise has managed some of the largest transport infrastructure projects in the Territory. She has played an active role in Engineers Australia, and her work has been recognised through industry awards for projects and individual awards including Young Professional Engineer of the Year for the NT in 2007; Winner of the 2010 NT Telstra Business Women's Award for Innovation; National Finalist for the 2010 Telstra Business Women's Award for Innovation.

Peter Woronzow | BA (Economics), Grad Dip Public Sector Management, CPA

In November 2021, Peter Woronzow was appointed to the position of Director General – Department of Transport, which also sees him hold the concurrent roles of Chief Executive Officer of the Public Transport Authority and Commissioner of Main Roads. Peter had been undertaking the role since March 2020. Peter is responsible for setting the strategic direction of transport for the State, shaping the development of all major integrated transport plans and leading the implementation of some of WA's most transformational capital projects. Prior to his appointment as Director General, Peter held the role of Managing Director Main Roads. Peter is a member of CPA Australia, Chairman of the Australian Road Research Board, Director on the Board of Austroads Ltd, and is an ex officio Board Member of Infrastructure WA.

Brett Gliddon | BE(Hons), CMEngNZ

As a member of the Waka Kotahi NZ Transport Agency Executive Leadership Team, Brett Gliddon is responsible for the Transport Services business group, overseeing the policy, planning, design, delivery and maintenance of transport system operations and improvements. With a focus on developing an integrated multimodal transport system, Transport Services works alongside local and central government partners to ensure optimal investment that delivers the best long term transport outcomes. Brett has more than 20 years' experience working in and leading transport system improvements, having started his career in engineering and project management, and being involved in infrastructure such as the Northern Busway and stations, Te Ara I Whiti Lightpath walking and cycling link, Waterview Tunnel and Tauranga Eastern Link. As a result, he is committed to developing better outcomes for New Zealand through strong, collaborative relationships with Mana Whenua, local government partners and the supply chain.

Gary Swain

Gary Swain has progressed through a number of public and private sector organisations over the past 25 years, working primarily in the infrastructure sectors of transport, electricity, natural gas and water and sewerage. Gary currently holds the positions of Deputy Secretary, Transport and Infrastructure Services Group, Department of State Growth, Transport Commissioner for Tasmania, Minister's Delegate for the West Coast Wilderness Railway, Director Austroads and is a member of the Road Safety Advisory Council for Tasmania. As Deputy Secretary, Transport and Infrastructure Services, Gary has responsibility for three operating divisions (State Roads, Road User Services and Infrastructure Tasmania), the New Bridgewater Bridge Project and Tasmania's Stadium and major sporting capital delivery program.

John Hardwick

John is the Executive Director of the Asset Management Branch at Transport for NSW and is responsible for leading and enabling transport service outcomes for customers and communities through the effective whole of life asset management. John was previously the Executive Director, Sydney Division for former Roads and Maritime Services, where he lead the division's first Strategic Asset Management Plan and the implementation of full battery electric vehicles into Sydney division's passenger fleet. John has a background of over 30 years in asset management within the electricity and transport industries, is a passionate leader of organisational improvement in asset and operational risk management and has implemented world class asset management strategies and systems to manage risk and provide value for customers and communities. John is a graduate of the Australian Institute of Company Directors and serves as a board member for numerous global and Australian asset management organisations and co-authored the books Living Asset Management and Living Asset Management Maturity. In 2018 John was awarded the MESA medal by the Asset Management Council. The MESA Medal is awarded to an individual who has personally contributed at the highest level to the advancement of the science and/or practice of asset management.

Maree Bridger | B.Ec, Executive MBA, CPA

Maree Bridger is currently the acting Chief Operating Officer at the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the Department). Maree has worked in the Australian Public Service (APS) for 14 years across a range of policy, program, corporate and service delivery areas in the Department, Services Australia, the Department of Immigration and Border Protection and the Australian Customs Service. Maree's current responsibilities include leading a wide variety of corporate functions including: human resources, property, finance, IT, legal, governance, assurance and communications. Prior to Maree' time in the APS she had seventeen years in the private sector and held roles at the Shell Company of Australia, Osborne Computers Corporation and Austar United Communications. Prior to her transition in to the public sector, Maree worked as a consultant for eight years, with a specific focus on organisational change, strategic planning, maximising competitive advantage and building organisational capability. Maree has a Bachelor of Economics from ANU, an Executive MBA from the Australian Graduate School of Management at UNSW and is a Certified Practicing Accountant.

William Tieppo | B.Eng - Civil Engineering (appointed 1 July 2021)

William is the Deputy Secretary Network Integration at the Department of Transport Victoria. William is a career professional with 20 years' experience in the public and private sector, with the majority of this time spent project managing the planning and delivery of major road infrastructure projects in Victoria. Will was formerly General Manager City Services for the City of Greater Geelong. He was also VicRoads' Regional Director South Western Region for three years where he was responsible for the management and operation of the state's arterial road network in South Western Victoria.

Matt Pinnegar | LLB, BComms (appointed 20 July 2021)

Matt Pinnegar was appointed Chief Executive of the Australian Local Government Association (ALGA) in July 2021. Prior to this he was the Chief Executive of the Local Government Association of South Australia (LGASA), including positions as a Trustee of the Local Government Finance Authority (LGFA) and Director of LGASA Mutual Pty Ltd and LGA Procurement (SA). Matt has over seven years of South Australian state government experience including as a Chief of Staff, Ministerial Adviser and Senior Adviser in numerous portfolios including transport, energy and infrastructure, state/local government relations, industry and trade, regional development and fisheries. Matt is also a graduate of the Australian Institute of Superannuation Trustees.

Ana Glavinic | PhD (appointed 6 April 2022)

Dr Ana Glavinic is the Director, Technical Services and Planning within the Department Infrastructure and Transport (DIT), encompassing Engineering and Environment and Sustainability disciplines. She is directly responsible for the provision of standards, technical requirements and master specifications resulting in whole of life functional and sustainable outcomes across DIT. Ana's advancement through DIT is marked by leadership roles in Infrastructure Delivery Services for Major Projects, Technical Manager role in Asset Management and now a Director role in Transport Planning and Program Development, enabling her to identify synergies across divisions and develop a strategic view of DIT's operations. Ana's future focus is on integrating Technical disciplines for the benefit of informed Planning processes, successful Business Case justification and timely and within budget Delivery of Infrastructure projects. Ana is a strong evidence based decision maker with professional achievements demonstrated by a Doctor of Philosophy (Ph.D.) focused in Marine Biology Phylogeny and Systematics from Flinders University, an Honours degree from Adelaide University and a Bachelor of Science degree from Flinders University.

Alison Playford (appointed 12 April 2022)

Alison has been the Director-General, Transport Canberra and City Services (TCCS) since May 2019. The TCCS Directorate is responsible for the delivery, management and maintenance of the ACT's road related infrastructure, has responsibility for road safety and transport regulation and manages Canberra's public transport system.

Alison was the Director-General of the ACT Justice and Community Safety Directorate between 2014 and 2019. Alison has over 30 years' experience in both the Commonwealth and ACT Government public sectors. She has held a range of positions in the Department of Finance, the Department of Prime Minister and Cabinet and the Attorney General's Department. These included the areas of native title, indigenous litigation, family law, administrative law, federal courts and tribunals.

Adrian Beresford-Wylie | BA(Hons) LLB (resigned 19 July 2021)

Adrian Beresford-Wylie was appointed Executive Director of the Australian Local Government Association (ALGA) in 2006. He was previously a senior public servant in the Australian Public Service and headed the area dealing with local government and natural disasters in the Federal Department of Transport and Regional Services. Other roles include head of the road safety area of the Australian Transport Safety Bureau in 2000-2002 and advisor on maritime and land transport issues to the Hon. John Anderson MP, Deputy Prime Minister and Minister for Transport and Regional Services. He began his public service career in 1984 as a Foreign Affairs Officer with the Department of Foreign Affairs. He has also worked in corporate sales in Telstra and for a large law firm in Sydney.

Tony Braxton-Smith | MBA (resigned 5 April 2022)

Tony Braxton-Smith was the Chief Executive of the Department of Planning, Transport and Infrastructure in South Australia from October 2018 until May 2022. He was also the South Australian Rail Commissioner and Commissioner for Highways. Formerly the Deputy Secretary Customer Services at Transport for New South Wales for seven years, Tony's prior career spans 20 years in senior executive roles in the private sector with Great Southern Rail and Serco; Dreamworld and the P&O Group. Tony resigned from the Board in May 2022 and was replaced by Ana Glavinic.

James Corrigan (resigned 11 April 2022)

Jim Corrigan has qualifications in urban and regional planning and environmental design and has over 25 years public sector experience in a range of positions within the ACT and NSW Governments. Jim is currently the Deputy Director-General City Services for the ACT Government which has responsibility for managing the public areas of Canberra and provision of core services including Waste Management, civil infrastructure such as roads and stormwater system, urban parks and associated capital works delivery. Jim resigned from the Board in April and was replaced by Alison Playford.

Company secretary

The following person held the position of entity Secretary at the end of the financial year:

Dr Geoff Allan

Dr Allan holds a PhD in public sector management. He commenced with Austroads Ltd on 21 October 2019 as Chief Operating Officer and was appointed Company Secretary on 2 April 2020. He was appointed as the Chief Executive in June 2020 and is also a member of the Executive Committee. Geoff was appointed Managing Director of Transport Certification Australia in May 2022.

Meetings of directors

During the financial year, four meetings of directors were held. Attendances by each director were as follows:

Director	Eligible meetings	Attended meetings
Neil Scales	4	4
Peter Woronzow	4	-
Louise McCormick	4	4
Brett Gliddon	4	4
Tony Braxton-Smith	3	3
James Corrigan	3	3
Gary Swain	4	4
John Hardwick	4	4
Maree Bridger	4	3
William Tieppo	4	2
Matt Pinnegar	4	3
Ana Glavinic	1	1
Alison Playford	1	1

Alternate directors attended meetings as follows:

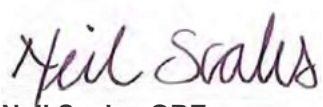
Alternate Director	Alternate for	Attended meetings
Des Snook	Peter Woronzow	3
Doug Morgan	Peter Woronzow	1
Andrew Wall	William Tieppo	2
Liz de Chastel	Matt Pinnegar	1

The Company is limited by guarantee and is incorporated under the Corporations Act 2001 . If the Company is wound up, the constitution states that each member is required to contribute a maximum of $10 each towards meeting any outstanding obligations of the Company. At 30 June 2022, the total amount that members of the Company are liable to contribute if the Company is wound up is $110 (2021: $110).

Auditor's independence declaration

The lead auditor's independence declaration for the year ended 30 June 2022 has been received and can be found on page 41 of the financial report.

Signed in accordance with a resolution of the Board of Directors.



Neil Scales OBE

Chair

Dated this 18th day of October 2022.

PITCHER PARTNERS

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Auditor's Independence Declaration
To the Directors of Austroads Ltd
ABN 16 245 787 323

In relation to the independent audit of Austroads Ltd for the year ended 30 June 2022, I declare that to the best of my knowledge and belief, there have been:

(i) no contraventions of the auditor independence requirements of the *Corporations Act 2001*; and
(ii) No contraventions of APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)*.

S M WHIDDETT
Partner

PITCHER PARTNERS
Sydney

18 October 2022

Statement of profit or loss and other comprehensive income for the year ended 30 June 2022

	Notes	2022 $	2021 $
Revenue	2	32,365,340	29,154,674
Expenses			
Corporate Expenses	3(a)	6,447,048	6,256,368
Work Program	3(b)	8,228,495	11,234,904
Specific Projects	3(c)	501,652	1,145,363
Publications	3(d)	11,851	13,532
Other NEVDIS Related Expenses	3(e)	5,803,816	5,641,261
Depreciation and Amortisation Expenses		2,015,685	1,954,547
Total expenses		23,008,547	26,245,975
Surplus for the year		**9,356,793**	**2,908,699**
Other comprehensive income		-	-
Total comprehensive income for the year		**9,356,793**	**2,908,699**
Total comprehensive income attributable to members of the entity		**9,356,793**	**2,908,699**

Statement of financial position as at 30 June 2022

	Notes	2022 $	2021 $
ASSETS			
Current assets			
Cash and Cash Equivalents	4	31,636,442	8,989,553
Financial Assets at Amortised Cost - Term Deposits		11,396,514	25,378,605
Trade and Other Receivables	5	5,420,928	3,182,538
Other Assets	6	297,003	909,500
Total current assets		48,750,887	38,460,196
Non-current assets			
Plant and Equipment	7	892,304	489,331
Intangible Assets	8	2,719,566	4,268,471
Lease Assets	10	2,488,934	-
Other Assets	6	-	54,860
Total non-current assets		6,100,804	4,812,662
Total assets		**54,851,691**	**43,272,858**
LIABILITIES			
Current liabilities			
Trade and Other Payables	9	2,274,195	2,650,432
Lease Liabilities - Current	10	315,376	-
Provision for Employee Benefits	11	448,942	429,005
Total current liabilities		3,038,513	3,079,437
Non-current liabilities			
Lease Liabilities - Non-Current	10	2,262,404	-
Provision for Employee Benefits	11	196,514	195,954
Total non-current liabilities		2,458,918	195,954
Total liabilities		**5,497,431**	**3,275,391**
Net assets		**49,354,260**	**39,997,467**
Equity			
Accumulated Surplus		5,494,657	3,991,608
NEVDIS Reserve	1(m)	43,859,603	36,005,859
Total Equity		**49,354,260**	**39,997,467**

The accompanying notes form part of these financial statements.

Statement of changes in equity for the year ended 30 June 2022

	NEVDIS Reserve $	Accumulated Surplus $	Total Equity $
Balance at 1 July 2020	30,519,655	6,569,113	37,088,768
Comprehensive income			
Surplus for the year	-	2,908,699	2,908,699
Transfer to Reserve	5,486,204	(5,486,204)	-
	5,486,204	(2,577,505)	2,908,699
Balance at 30 June 2021	36,005,859	3,991,608	39,997,467
Comprehensive income	-	9,356,793	9,356,793
Surplus for the year	7,853,744	(7,853,744)	-
Transfer to Reserve	7,853,744	1,503,049	9,356,793
Balance at 30 June 2022	**43,859,603**	**5,494,657**	**49,354,260**

Statement of cash flows for the year 30 June 2022

	Notes	2022 $	2021 $
Cash Flows from Operating Activities			
Member Contributions		32,183,114	14,216,653
Receipts from Customers and Other Sources		(2,207,366)	14,039,220
Payments to Suppliers and Employees		(20,600,318)	(25,438,938)
Interest Received		151,202	231,472
Interest Paid		(80,927)	(8,662)
Net Cash Inflow from Operating Activities	13	**9,445,705**	**3,039,745**
Cash Flow from Investing Activities			
Movement in Term Deposits		13,982,091	(1,878,605)
Purchase of Plant and Equipment		(533,411)	(222,382)
Purchase of Intangible Assets		-	(20,656)
Net cash from/(used in) Investing Activities		**13,448,680**	**(2,121,643)**
Cash Flow from Financing Activities			
Repayment of Lease Liabilities		(247,496)	(317,425)
Net cash used in Investing Activities		(247,496)	(317,425)
Net increase in cash held		22,646,889	600,677
Cash at the beginning of the financial year		8,989,553	8,388,876
Cash at the end of the financial year	4	**31,636,442**	**8,989,553**

The accompanying notes form part of these financial statements.

Notes to the financial statement for the year ended 30 June 2022

The financial statements are for Austroads Ltd. ("the Company") as an individual entity. The Company is a public entity limited by guarantee, incorporated and domiciled in Australia.

NOTE 1 — Summary of significant accounting policies

Basis of preparation

The directors have prepared the financial statements on the basis that the Company is a non-reporting entity because there are no users who are dependent on general purpose financial statements. These financial statements are therefore special purpose financial statements that have been prepared in order to meet the requirements of the Corporations Act 2001. Consolidation financial statements, including the results and operations of Austroads subsidiary, Transport Certification Australia, have not been prepared as the directors have determined that the group is not a reporting entity.

These financial statements have been prepared in accordance with the recognition and measurement requirements specified by the Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB') and the disclosure requirements of AASB 101 'Presentation of Financial Statements ', AASB 107 'Statement of Cash Flows ', AASB 108 'Accounting Policies, Changes in Accounting Estimates and Errors ', AASB 1048 'Interpretation of Standards ', AASB 1053 'Application of Tiers of Australian Accounting Standards ' and AASB 1054 'Australian Additional Disclosures ', as appropriate for not-for-profit entities. The principal accounting policies adopted in the preparation of the financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

The financial statements, except for the cash flow information, have been prepared on an accruals basis and are based on historical costs unless otherwise stated in the notes.

The financial statements were authorised for issue on 12 October 2022 by the directors of the Company.

New accounting standards and interpretations adopted

There are no new or amended Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB") that are mandatory to the Company for the current reporting period.

Any new or amended Accounting Standards or Interpretations that are not mandatory have not been early adopted.

Accounting policies

(a) Revenue

The company recognises revenue as follows:

Revenue from contracts with customers

Revenue is recognised at an amount that reflects the consideration to which the company is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the company: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.
Variable consideration within the transaction price, if any, reflects concessions provided to the customer such as discounts, rebates and refunds, any potential bonuses receivable from the customer and any other contingent events. Such estimates are determined using either the 'expected value' or 'most likely amount' method. The measurement of variable consideration is subject to a constraining principle whereby revenue will only be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.
The measurement constraint continues until the uncertainty associated with the variable consideration is subsequently resolved. Amounts received that are subject to the constraining principle are recognised as a refund liability.

Fees and charges

Fees and charges are recognised over the period to which the provision of services relate.

Contribution revenue

Contribution revenue is recognised at a point in time when received or when the right to receive payment is established.

Grant revenue

Grant funding that contain specific conditions on the use of those funds are recognised as and when the Company satisfies its performance obligations. A contract liability is recognised for unspent grant funds for which a refund obligation exists in relation to the funding period. General grants that do not impose specific performance obligations on the Company are recognised as income when the Company obtains control of those funds, which is usually on receipt.

Interest income

Interest income is recognised on an accruals basis using the effective interest.

Other revenue

Other revenue are recognised as income upon receipt of those income.

(b) Currency

The financial statements of the Company are presented in Australian dollars, the Company's functional and presentation currency.

(c) Income tax

The Company has been exempted from income tax under section 50-5 of the Income Tax Assessment Act 1997.

(d) Right-of-use assets

A right-of-use asset is recognised at the commencement date of a lease. The right-of-use asset is measured at cost, which comprises the initial amount of the lease liability, adjusted for, as applicable, any

lease payments made at or before the commencement date net of any lease incentives received, any initial direct costs incurred, and, except where included in the cost of inventories, an estimate of costs expected to be incurred for dismantling and removing the underlying asset, and restoring the site or asset.

Right-of-use assets are depreciated on a straight-line basis over the unexpired period of the lease or the estimated useful life of the asset, whichever is the shorter. Where the company expects to obtain ownership of the leased asset at the end of the lease term, the depreciation is over its estimated useful life. Right-of use assets are subject to impairment or adjusted for any remeasurement of lease liabilities.

(e) Plant and equipment

Plant and equipment are measured on the cost basis less depreciation and impairment losses.

The carrying amount of plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from these assets. The recoverable amount is assessed on the basis of the expected net cash flows that will be received from the assets employment and subsequent disposal.

Depreciation

The depreciable amount of all fixed assets is depreciated on a straight line basis over the asset's useful life to the entity commencing from the time the asset is held ready for use.

The depreciation rates used for each class of depreciable assets are:

Class of Fixed Asset	Depreciation Rate
Furniture and office equipment	10-33.33%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains or losses are included in the statement of profit or loss and other comprehensive income.

(f) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, and other short term highly liquid investments with original maturities of three months or less.

(g) Trade receivables

All trade debtors are recognised at the amounts receivable as they are due for settlement no more than 120 days from the date of recognition, and no more than 30 days for other debtors.

There is no provision for expected credit loss allowance, as all receivables are fully recoverable.

(h) Goods and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

(i) Provision for employee entitlements

Provisions for long service leave and annual leave are made for all employees from the date of their commencement and are calculated at current pay rates. Additionally, provision is made for On Costs of 13% on long service leave and annual leave.

Provisions for long service leave for service under six years is treated as a non current liability.

(j) Trade and other payables

These amounts represent liabilities for goods and services provided to the Company prior to the end of financial year which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

(k) Lease liabilities

A lease liability is recognised at the commencement date of a lease. The lease liability is initially recognised at the present value of the lease payments to be made over the term of the lease, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the company's incremental borrowing rate. Lease payments comprise of fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, amounts expected to be paid under residual value guarantees, exercise price of a purchase option when the exercise of the option is reasonably certain to occur, and any anticipated termination penalties. The variable lease payments that do not depend on an index or a rate are expensed in the period in which they are incurred.

Lease liabilities are measured at amortised cost using the effective interest method. The carrying amounts are remeasured if there is a change in the following: future lease payments arising from a change in an index or a rate used; residual guarantee; lease term; certainty of a purchase option and termination penalties. When a lease liability is remeasured, an adjustment is made to the corresponding right-of use asset, or to profit or loss if the carrying amount of the right-of-use asset is fully written down.

(l) Intangible assets

Intangible assets acquired separately are recorded at cost less accumulated amortisation and impairment. Amortisation is charged on a straight-line basis over their estimated useful lives. The estimated useful life and amortisation method is reviewed at the end of each annual reporting period, with any changes in these accounting estimates being accounted for on a prospective basis.

Software

Significant costs associated with software are deferred and amortised on a straight-line basis over the period of their expected benefit, being their finite life of five years.

(m) NEVDIS Reserve

A separate NEVDIS reserve is being shown to highlight profit and loss from NEVDIS activities and historical

NEVDIS reserves brought forward. This reserve is separate to the other activities of Austroads.

(n) Comparative figures

Comparative figures have been adjusted to conform to changes in presentation for the current financial year, where required by Accounting Standards.

(o) Financial instruments

Initial recognition and measurement

Financial assets and financial liabilities are recognised when the company becomes a party to the contractual provisions of the instrument. For financial assets, this is equivalent to the date that the company commits itself to either the purchase or sale of the asset. Financial instruments are initially measured at fair value adjusted for transaction costs, except where the instrument is classified as fair value through profit or loss, in which case transaction costs are immediately recognised as expenses in profit or loss.

Classification of financial assets and financial liabilities

Financial assets recognised by the company are subsequently measured in entirety at either amortised cost or fair value, subject to their classification in accordance with the relevant criteria in AASB 9.

Financial liabilities recognised by the company are subsequently measured at amortised cost.

(p) Critical accounting estimates and judgements

The directors evaluate estimates and judgements incorporated into the financial statements based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained externally and within the Company.

Provision for expected credit loss

Except as disclosed in the financial statements, the directors have assessed each debtor and believe that the full amount of debtors is recoverable.

Estimation of useful lives of assets

The company determines the estimated useful lives and related depreciation and amortisation charges for its property, plant and equipment and finite life intangible assets. The useful lives could change significantly as a result of technical innovations or some other event. The depreciation and amortisation charge will increase where the useful lives are less than previously estimated lives, or technically obsolete or non-strategic assets that have been abandoned or sold will be written off or written down.

Impairment of non-financial assets other than goodwill and other indefinite life intangible assets

The company assesses impairment of non-financial assets other than goodwill and other indefinite life intangible assets at each reporting date by evaluating conditions specific to the company and to the particular asset that may lead to impairment. If an impairment trigger exists, the recoverable amount of the asset is determined. This involves fair value less costs of disposal or value-in-use calculations, which incorporate a number of key estimates and assumptions.

NOTE 2 — Revenue

	2022 $	2021 $
Revenues from contracts with customers		
Fees and Charges		
NEVDIS		
PPSR Enhancements Recovery	2,499,999	2,500,000
Safety Recalls	589,165	431,500
Data Extracts	257,462	312,972
Document Verification Services	7,788,805	6,774,126
VSA income	65,450	30,100
WMI income	74,200	36,400
Plate to VIN Services	3,110,256	2,195,406
NHVR-Data fee Income	1,026,635	1,014,196
RAV Project	358,200	64,448
	15,770,172	13,359,148
Revenues from contracts with customers		
Contributions		
Membership Contributions	2,532,011	2,494,652
Work Program Contribution	11,898,101	11,722,001
	14,430,112	14,216,653
Special Programs and Projects		
Australian Transport and Assessment Planning (ATAP)	132,830	–
Tyre Stewardship Australia	–	200,000
Use of Road Grade Recycled Plastics	1,850,000	1,040,000
WTP Financing Variation Road Reliability Measurement	–	43,796
	1,982,830	1,283,796
Publications		
Gross Sales Revenue	7,013	6,169
Royalties	6,511	7,426
	13,524	13,595
Interest Received		
Short Term Investments	143,123	225,095
Rental Bond Deposit	8,079	6,377
	151,202	231,472
Other Income		
Government Subsidy - Cashflow Boost	-	50,010
Other income (AUSTROADS)	17,500	-
	17,500	50,010
Total Revenue	**32,365,340**	**29,154,674**

NOTE 3 — Expenses

	2022 $	2021 $
(a) Corporate		
Salaries and Related Charges	3,400,574	3,476,973
Program Management	2,277,596	2,009,935
Corporate Projects	77,963	223,188
Administration Expenses	122,146	92,617
Finance Cost	80,927	8,662
Other Expenses	487,842	444,993
	6,447,048	**6,256,368**
(b) Work Program		
Corporate Projects - Board Priorities	87,775	101,050
Safety	1,978,713	1,870,256
Assets	4,237,071	6,923,582
Network	1,477,184	1,720,698
Future Vehicles and Technology	349,895	619,318
Environment and Sustainability	97,857	-
	8,228,495	**11,234,904**
(c) Specific Projects		
International Participation	11,786	4,758
NGTSM/ATAP Jurisdictions/ Commonwealth funding carried over	183,928	457,472
ATAP Road User Cost Models and Parameter Values	-	44,149
ATAP Environmental Cost Parameter Values	-	76,000
CPEE Support	-	19,500
Test Methods and Pavement Technology Worktips	25,000	-
Value of Travel Time Willingness to Pay	280,938	543,484
	501,652	**1,145,363**
(d) Publications		
Cost of Sales	**11,851**	**13,532**
(e) NEVDIS Expenses		
Subscription and Operating Costs	4,052,209	3,656,642
NHVR Maintenance	536,563	493,893
NEVDIS RAV Project	-	38,712
NEVDIS Other Projects	661,954	888,690
Other Rental Related Expenses	20,397	71,705
Other Expenses	532,693	491,619
	5,803,816	**5,641,261**
Total Expenditure	**20,992,862**	**24,291,428**

NOTE 4 — Cash and cash equivalents

	2022 $	2021 $
Cash at bank and on hand	11,136,442	3,489,553
Short-term deposits and deposits at call	20,500,000	5,500,000
	31,636,442	**8,989,553**
Cash at the end of the financial year is reconciled to the statement of cash flow as follows:		
Cash and cash equivalents	**31,636,442**	**8,989,553**

NOTE 5 — Trade and other receivables

Trade debtors	5,367,450	392,476
Sundry and other debtors (NEVDIS)	41,005	2,759,488
Sundry and other debtors	12,473	30,574
	5,420,928	**3,182,538**

NOTE 6 — Other assets

CURRENT		
Prepayments	297,003	782,865
Rental Deposit Bond	-	126,635
	297,003	909,500
NON-CURRENT		
Rental Deposit Bond	-	54,860

NOTE 7 — Plant and equipment

NON-CURRENT		
Furniture and Office Equipment		
At Cost	1,559,445	1,026,033
Accumulated depreciation	(667,141)	(536,702)
	892,304	489,331
Total Plant and Equipment	**892,304**	**489,331**

NOTE 8 — Intangible assets

NON-CURRENT		
Software		
At Cost	8,287,463	8,287,463
Accumulated Amortisation	(5,567,897)	(4,018,992)
	2,719,566	4,268,471
Total Intangible Assets	**2,719,566**	**4,268,471**

NOTE 9 — Trade and other payables

Trade and Other Payables	527,338	2,022,008
Other Payables	1,085,121	65,437
Accrued Expenses	661,736	562,987
	2,274,195	**2,650,432**

	2022 $	2021 $

NOTE 10 — Leases

During the year, a new lease was signed for the Austroads National Office which commenced 01 July 2021 and expires on 30 June 2028.

(a) Amounts recognised in the Statement of financial position:

Right of Use Assets		
Opening balance as at 1 July	-	304,017
Additions at cost	3,082,416	-
Depreciation charge for the year	(593,482)	(304,017)
Carrying amount at end of year	**2,488,934**	**-**
Lease Liabilities		
Current	315,376	-
Non-current	2,262,404	-
	2,577,780	**-**

(b) Amounts recognised in Statement of profit or loss and other comprehensive income

Lease under AASB 16 – interest on lease liabilities	80,927	8,662
Depreciation expenses on right-of-use assets	336,342	304,017

(c) Amounts recognised of cash flows

The total cash outflow for leases was $328,423 (2021: $326,087).

(d) Extension options

The Company has not elected to take up the option to extend the lease at the expiry of the rental period. The Company does not have an option to purchase the leased premises at the expiry of the rental period.

NOTE 11 — Provision for employee benefit

CURRENT		
Provisions for Employee Benefits	**448,942**	**429,005**
NON-CURRENT		
Provisions for Employee Benefits	**196,514**	**195,954**

NOTE 12 — Members' guarantee

The Memorandum of Association of the Company provides that the liability of members is limited and that every member of the Company undertakes to contribute to the assets of the Company, in the event of it being wound up while he is a member, or within one year after he ceases to be a member and of the costs, charges and expenses of winding up and of the adjustment of rights of the members among themselves, such amount as may be required, not exceeding ten dollars ($10) per member.

	2022 $	2021 $

NOTE 13 — Cash flow information

Reconciliation of profit from ordinary activities to net cash generated from operating activities		
Surplus for the year	9,356,793	2,908,699
Adjustment for non-cash-flow items:		
Depreciation and amortisation	2,015,685	1,954,547
Gain on disposal of plant and equipment	-	(16,799)
Change in operating assets and liabilities:		
(Increase) in trade and other receivables	(2,238,390)	(667,329)
Decrease/(Increase) in other assets	667,357	(735,783)
(Decrease) in trade and other payables	(376,237)	(540,323)
Increase in provision for employee benefits	20,497	136,733
Net Cash Generated from Operating Activities	**9,445,705**	**3,039,745**

NOTE 14 — Remuneration of directors

No remuneration was paid or payable to directors in respect to or during the financial year (2021: $Nil).

NOTE 15 — Remuneration of auditors

During the year, the auditor of the company earned the following remuneration:

Audit of the financial statements	30,000	28,700
Other services	4,300	3,700
	34,300	**32,400**

NOTE 16 — Commitments

Capital expenditure commitments contracted for not later than one year		
Contracted amount	-	881,825
Invoiced to date	-	(418,683)
	-	**463,142**

There are no other capital expenditure commitments contracted for as at 30 June 2022.

NOTE 17 — Contingent liabilities or assets

At 30 June 2022, the Company has no contingent liabilities or assets (2021: Nil).

NOTE 18 —Matters subsequent to the end of the financial year

No matters or circumstances have arisen since 30 June 2022 that significantly affected, or may significantly affect the company's operations, the results of those operations or the company's state of affairs in future financial years.

NOTE 19 —Company details

The registered office and principal place of business of the Company is: Level 9, 570 George Street SYDNEY NSW 2000, Australia

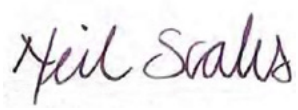
Director's declaration for the year ended 30 June 2022

The directors of Austroads Ltd. ("the Company") have determined that the Company is not a reporting entity, and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

The directors declare that the financial reports and notes set out on pages 44 to 48, are in accordance with the *Corporations Act 2001*, and:

1. The financial statements are in accordance with the *Corporations Act 2001* and:
   a) comply with applicable Accounting Standards; and
   b) give a true and fair view of the Company's financial position as at 30 June 2022 and of its performance for the financial year ended on that date in accordance with the accounting policies described in Note 1 of the financial statements.
2. In the directors' opinion, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the directors.



Neil Scales OBE

Chair

Dated this 18th day of October 2022.

Independent auditor's report

PITCHER PARTNERS

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Sydney NSW 2000

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Independent Auditor's Report
To the Members of Austroads Ltd
ABN 16 245 787 323

Report on the Audit of the Financial Report

Opinion

We have audited the special purpose financial report of Austroads Ltd "the Company", which comprises the statement of financial position as at 30 June 2022, statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying financial report of Austroads Ltd is in accordance with the *Corporations Act 2001*, including:

(a) giving a true and fair view of the Company's financial position as at 30 June 2022 and of its performance for the year then ended; and
(b) complying with Australian Accounting Standards to the extent described in Note 1, and the *Corporations Regulations 2001*.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in *the Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Company in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* "the Code" that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.
We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter – Basis of Accounting

We draw attention to Note 1 to the financial report, which describes the basis of accounting. The financial report has been prepared for the purpose of fulfilling the directors' financial reporting responsibilities under the *Corporations Act 2001*. As a result, the financial report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

Independent Auditor's Report
To the Members of Austroads Ltd
ABN 16 245 787 323

PITCHER PARTNERS

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Company's annual report and the directors report for the year ended 30 June 2022 but does not include the financial report and the auditor's report thereon. Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view and have determined that the basis of preparation described in Note 1 to the financial report is appropriate to meet the requirements of the *Corporations Act 2001* and is appropriate to meet the needs of the members. The directors' responsibility also includes such internal control as the directors determine is necessary to enable the preparation of a financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

Independent Auditor's Report
To the Members of Austroads Ltd
ABN 16 245 787 323

PITCHER PARTNERS

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

S M WHIDDETT
Partner

PITCHER PARTNERS
Sydney

18 October 2022

Annexures

Our volunteer expert task force members provide advice and technical guidance, attend meetings and manage projects, as well as representing member agencies' position when negotiating projects and identifying opportunities. We appreciate their generosity and commitment.

Thank you.

Task Force membership 2021-2022

We are grateful for the ongoing support, dedication and professionalism of our task force members. We rely on their knowledge and expertise and are thankful for their exceptional service to Austroads that they provide in addition to their day-to-day work.

Transport Infrastructure Program

Austroads Technical Advisory Group (ATAG)

David Anderson	
David Barton	Department of Transport, Vic
David Bobbermen	
Dr Christian Christodoulou	Transport for NSW
Noel Dwyer	Department of Transport and Main Roads, Qld
Owen Earl	Transport Canberra and City Services Directorate, ACT
Richard Edwards	
Shelley Fraser	Transport Canberra and City Services Directorate, ACT
Paul Gelston	Department for Infrastructure and Transport, SA
Michele George	Department of Transport and Main Roads, Qld
Frank Giana	Department of State Growth, Tas
Andrew Iannos	Department for Infrastructure and Transport, SA
Douglas Morgan	Main Roads, WA
Dr Sulo Shanmuganathan	Waka Kotahi NZ Transport Agency
Mark Smith	Transport for NSW
Richard Underhill	Department of Infrastructure, Planning and Logistics, NT
Dennis Walsh	Department of Transport and Main Roads, Qld

Assets Task Force

Sharfuddin, Ahmed	Transport Canberra and City Services Directorate, ACT
Michelle Baran	Department of Transport and Main Roads, Qld
Andrew Cooper	Transport for NSW
George Diamand	Transport Canberra and City Services Directorate, ACT
Andrew Golding	Department of Transport and Main Roads, Qld
Qindong Li	Main Roads, WA
John MacDonald	Waka Kotahi NZ Transport Agency
Fiona McLeod	Department of State Growth, Tas
Tarique Memon	Department of Infrastructure, Planning and Logistics, NT
Dr Michael Moffatt	Australian Road Research Board
Ammar Mohammed	Main Roads, WA
Tony Porcaro	Department for Infrastructure and Transport, SA
Gareth Prosser	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Vineta Risteki	Department of Transport, Vic
Ramon Staheli	National Transport Commission
Steve Verity	Australian Local Government Association/IPWEA

Bridges Task Force

Jay Brewster-O'Brien	Department of Infrastructure, Planning and Logistics, NT
Adam Lim	Main Roads, WA
Phil Molloy	Department for Infrastructure and Transport, SA
Andy Ng	Department of Transport, Vic
Cam Middleton	UK Bridge Owners Forum
Dr Torill Pape	Department of Transport and Main Roads, Qld
Nigel Powers	Australian Road Research Board
Parvez Shah	Transport for NSW
Vincent Tang	Department for Infrastructure and Transport, SA
Trevor Williams	IPWEA
Andrew Wong	Department of Transport and Main Roads, Qld
Barry Wright	Waka Kotahi NZ Transport Agency
Diana Zagora	Transport for NSW

Pavements Task Force

Dr Didier Bodin	Australian Road Research Board
Stuart Dack	AustStab
Anna D'Angelo	Australian Flexible Pavement Association
Stacy Goldsworthy	Civil Contractors NZ
Sam Henwood	Transport for NSW
Phil Herrington	WSP
Paul Keech	Australian Local Government Association
Adam Leslie	Waka Kotahi NZ Transport Agency
Les Marchant	Main Roads, WA
Kym Neaylon	Centre for Pavement Engineering Education
Andrew Papacostas	Department of Transport, Vic
Mike Pickering	Department of Transport and Main Roads, Qld
Bryan Pidwerbesky	Civil Contractors NZ
Micah Sluczanowski	Department for Infrastructure and Transport, SA
Philip Stacey	Department of Infrastructure, Planning and Logistics, NT
Dr Robert Urquhart	Australian Road Research Board
Hugo van Loon	Department for Infrastructure and Transport, SA
Barry Walker	Department of State Growth, Tas

Project Delivery Task Force

Lauren Allen	Transport for NSW
Leo Coci	Main Roads, WA
Graham Hobbs	Department of Transport and Main Roads, Qld
Michael Kahler	IPWEA
Colin MacKay	Waka Kotahi NZ Transport Agency
Adrian Paine	Department of State Growth, Tas
Belinda Stopic	Main Roads, WA

Richard Underhill	Department of Infrastructure, Planning and Logistics, NT
Andrew Williams	Major Road Projects, Vic
Dr Richard Yeo	Australian Road Research Board

Tunnels Task Force

Bob Allen	Australasian Tunnel Operators Group
Nigel Casey	Transport for NSW
Andrew Eckersley	Australasian Tunnel Operators Group
John Hawes	Australasian Fire and Emergency Service Authorities Council
Nigel Lloyd	Waka Kotahi NZ Transport Agency
George Mavroyeni	PIARC
Terry McGavin	Waka Kotahi NZ Transport Agency
Tony Peglas	Australian Tunnelling Society
Dimi Polymenakos	Department of Transport, Vic
Tony Mazzeo	Australasian Tunnel Operators Group
Mohamed Nooru-Mohamed	Department of Transport and Main Roads, Qld
John Venables	Main Roads, WA
Yanyan Xiao	Department for Infrastructure and Transport, SA
Dr Richard Yeo	Australian Road Research Board

Road Safety & Design Program

Road Safety Task Force

Chris Brennan	Department of Transport, Vic
Amanda Capper	National Heavy Vehicle Regulator
Bernard Carlon	Transport for NSW
Sarah Clark	Department for Infrastructure and Transport, SA
Brett Clifford	Department of Infrastructure, Planning and Logistics, NT
Nigel Coates	Australian Local Government Association
Bettina Cruise	Department of Transport, Vic
Wim De Beckker	Transport Canberra and City Services Directorate, ACT
Mark Ellis	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Craig Hoey	Department of State Growth, Tas
Ann-Maree Knox	Department of Transport and Main Roads, Qld.
Peter Kolesnik	Department of Transport and Main Roads, Qld.
Ben Marcus	Queensland Police Service
Fabian Marsh	Waka Kotahi NZ Transport Agency
Mandi Mees	National Transport Commission
Sarah Mewett	Road Safety Commission, WA
David Moyses	Main Roads, WA
Carol Nightingale	Department for Infrastructure and Transport, SA
Gabby O'Neill	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Louise Purcell	Department of Transport, Vic
Joanna Robinson	Department of Transport and Main Roads, Qld
Sanjiv Sathiah	Australian Local Government Association
Frances Stanford	Transport Canberra and City Services Directorate, ACT
Donna Stewart	Queensland Police Service
Glenn Weir	Victoria Police
Jeremy Wolter	National Transport Commission

Road Design Task Force

Peter Ellis	Transport for NSW
Richard Fanning	Department of Transport, Vic
Steven Hare	Transport Canberra and City Services Directorate, ACT
Sam Hatzivalsamis	Department of Infrastructure, Planning and Logistics, NT
Jade Hogan	Transport for NSW
Michael Hogan	Australian Local Government Association - The Hills Shire Council
James Hughes	Waka Kotahi NZ Transport Agency
Anthonie Lambert	Transport Canberra and City Services Directorate, ACT
Bernard Worthington	Waka Kotahi NZ Transport Agency

Registration & Licensing Task Force

Charmaine Berry	Waka Kotahi NZ Transport Agency
Amanda Capper	National Heavy Vehicle Regulator
Melissa Cummins	Department of Transport and Main Roads, Qld
Bettina Cruise	Department of Transport, Vic
Chris Davers	Department of Transport, WA
Nicole Denton	Department of Transport, Vic
Theresa Dorman	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Paul Duignan	Transport for NSW
Geoff Enguell	Department of Transport, Vic
Ruth Graham	Transport for NSW
Geoff Hughes	National Motor Vehicle Theft Reduction Council
Daniel Kaden	Department of Transport and Main Roads, Qld
Claire Manalo	Department of Infrastructure, Planning and Logistics, NT
Kirsten McKillop	Transport for NSW
Mandi Mees	National Transport Commission
Rod Paule	Transport Canberra and City Services Directorate, ACT
Cheryl Richey	Transport for NSW
Scott Swain	Department for Infrastructure and Transport, SA
Greg Turner	Department of Infrastructure, Planning and Logistics, NT
Jeremy Wolter	National Transport Commission
Andrew Wright	Department of State Growth, Tas

Future Vehicles & Technology Program

Future Vehicles & Technology Task Force

Mark Beasley	Department of Transport, WA
Chris Coghlan	Department of Transport, Vic
Ramy Gokal	Department of State Growth, Tas
Benjamin Hubbard	Transport Canberra and City Services Directorate, ACT
Chandan Kalase	Department of Infrastructure, Planning and Logistics, NT
Dan Keely	National Transport Commission
Sascha Kelly	Department for Infrastructure and Transport, SA
Meifang Lai	Department of Transport, WA
Matthew Lohmeyer	Department for Infrastructure and Transport, SA
Mike Makin	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Geoffrey McDonald	Department of Transport and Main Roads, Qld
Lee McKenzie	Waka Kotahi NZ Transport Agency
Raj Roychoudhry	Transport for NSW

Environment & Sustainability Program

Environment & Sustainability Task Force

Max Bushell	Australian Local Government Association (WALGA)
Katrina Cristofani	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Sally Durham	Transport for NSW
Owen Earl	Transport Canberra and City Services Directorate, ACT
Rob Hannaby	Waka Kotahi NZ Transport Agency
Sarah Leslie	Department of Transport, Vic
Denise McIntyre	Department of State Growth, Tas
Natalie Millar	Department of Infrastructure, Planning and Logistics, NT
Martine Scheltema	Main Roads, WA
Jennifer Slocombe	Department for Infrastructure and Transport, SA
Ramses Zietek	Department of Transport and Main Roads, Qld

Transport Network Operations Program

Network Task Force

Aftab Abro	Department of Infrastructure, Planning and Logistics, NT
Tim Bickerstaff	Department of State Growth, Tas
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Andrew Wall	Department of Transport, Vic

Freight Task Force

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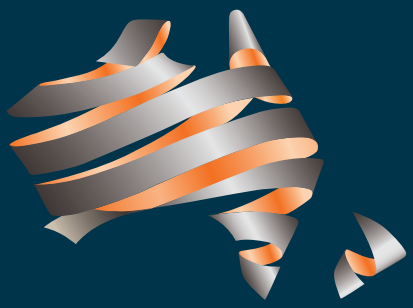
Craig Walker	Transport for NSW
Dennis Walsh	Department of Transport and Main Roads, Qld
Daniel Verdouw	Department of State Growth, Tas

Publications and webinars 2021-2022

Code	Title
Research reports	
AP-R654-21	Future Vehicles Forecasts Update 2031: Addendum to Future Vehicles 2030
AP-R655-21	Inclusion of Recent Road Safety Research in the Guide to Road Design Phase 2
AP-R656A-21	Data to Support the Heavy Vehicle Road Reform Part A: Project Summary
AP-R656B-21	Data to Support the Heavy Vehicle Road Reform Part B: Heavy Vehicle Infrastructure Rating
AP-R656C-21	Data to Support the Heavy Vehicle Road Reform Part C: National Road Asset Register
AP-R656D-21	Data to Support the Heavy Vehicle Road Reform Part D: Infrastructure Base Map and Data Alignment
AP-R656E-21	Data to Support the Heavy Vehicle Road Reform Part E: Traffic Data Analysis
AP-R656F-21	Data to Support the Heavy Vehicle Road Reform Part F: Alignment of Expenditure Reporting Data
AP-R656G-21	Data to Support the Heavy Vehicle Road Reform Part G: Stocktake of Pavement Deterioration Modelling
AP-R656H-21	Data to Support the Heavy Vehicle Road Reform Part H: Investigation of Maintenance Data Records
AP-R657-21	Best Practice Guidance to Meet the Changing Needs of Transport Network Operations: Strategic Review of Austroads Guide to Traffic Management
AP-R658-21	Investigation of Pavement Assessment Methodologies for Performance Based Standards Access
AP-R659-21	Updates to Austroads Guide to Temporary Traffic Management Edition 1.1
AP-R660-21	Minor Amendments to the Austroads Guide to Road Design Part 3
AP-R661-21	Minor Amendments to the Austroads Guide to Road Design: Part 4, 4A, 4B and 4C
AP-R662A-21	Road Authority Data for Connected and Automated Vehicles Module 1: Guidance for Roadwork Data Provision to Connected and Automated Vehicles
AP-R662B-21	Road Authority Data for Connected and Automated Vehicles Module 2: Guidance for Incidents Data Provision to Connected and Automated Vehicles
AP-R662C-21	Road Authority Data for Connected and Automated Vehicles Module 3: Guidance for Variable Speed Limit Sign and Lane Control Signal Data Provision to Connected and Automated Vehicles
AP-R662D-21	Road Authority Data for Connected and Automated Vehicles Module 4: Guidance for Static Speed Limit Data Provision to Connected and Automated Vehicles
AP-R662E-21	Road Authority Data for Connected and Automated Vehicles Module 5: Guidance for Traffic Signal Data Provision to Connected and Automated Vehicles
AP-R662F-21	Road Authority Data for Connected and Automated Vehicles Module 6: Guidance for Heavy Vehicle Access Restriction Data Provision to Connected and Automated Vehicles
AP-R662G-21	Road Authority Data for Connected and Automated Vehicles Case Study: Improving Static Speed Limit Data Provision to Connected and Automated Vehicles
AP-R662H-21	Road Authority Data for Connected and Automated Vehicles: Guidance for Agency Data Provision to Connected and Automated Vehicles
AP-R663-21	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements: Towards the Selection of Road-grade Plastics – An Evaluation Framework and Preliminary Experimental Results
AP-R664-22	Agency Business Capability Model to Support Connected Vehicles
AP-R665A-22	Minimum Physical Infrastructure Standard for the Operation of Automated Driving Part A: Infrastructure Investment
AP-R665B-22	Minimum Physical Infrastructure Standard for the Operation of Automated Driving Part B: Scenarios for Potential Availability and Usage of Different Levels and Types of Automated Driving
AP-R665C-22	Minimum Physical Infrastructure Standard for the Operation of Automated Driving Part C: Scenarios for Investment in Physical Road and Roadside Infrastructure
AP-R665D-22	Minimum Physical Infrastructure Standard for the Operation of Automated Driving Part D: Economic Analysis of Investment Options
AP-R666-22	Laboratory Fatigue Characterisation of Foamed Bitumen Stabilised Materials
AP-R667-22	Standardised Signage and Pavement Symbols for Low and Zero Emission Vehicles
AP-R668-22	Use of Perceptual Countermeasure Treatments to Reduce Crash Risks in Tunnels

Code	Title
AP-R669-22	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements: Final Performance and Environmental Assessment Part A
AP-R670-22	Development of Edition 4.0 of the Guide to Road Design Part 6: Roadside Design, Safety and Barriers
AP-R671-22	Best Practice Guidance: Speed Information Management
AP-R672-22	Supporting Cloud Connected Road Users
Technical reports	
AP-T358-21	Development of the Dynamic Shear Rheometer Consistency 6% Test Method for Polymer Modified Binders
AP-T359-21	National Specification for Crumb Rubber Binders in Asphalt and Seals
AP-T360-21	Network Signage for Over Height Vehicles Approaching Road Tunnels
AP-T361-21	Truck Side / Longitudinal Friction Literature Review and Data Analysis
AP-T362-22	Development of a Specification for Recycled Crushed Glass as a Sand Aggregate Replacement
AP-T363-22	Fatigue Performance of Foamed Bitumen Stabilised Pavements Under Full-scale Accelerated Loading
AP-T364-22	Sustainability in Road Tunnels: Updating the Guide to Road Tunnels
AP-T365-22	Technical Basis of Austroads Guide to Pavement Technology Part 4E: Recycled Materials
Test methods and technical specifications	
ATM-232-22	Stripping Potential of Asphalt–Tensile Strength Ratio
ATM-238-22	Laboratory Assessment of Asphalt Permeability
ATM-239-22	Verification Procedure for the Four-point Bending Test
ATM-453-22	Surface Deviation Using a Straightedge
ATS 3050	Supply of Recycled Crushed Glass Sand
ATS 3460	Sprayed Bituminous Surfacing
ATS 3450	Microsurfacing
ATS 3120	Supply of Aggregate for Sprayed Seals
Guides	
AGPD02-22	Guide to Project Delivery Part 2: Planning and Control
AGPD03-22	Guide to Project Delivery Part 3: Contract Management
AGRD01-21	Guide to Road Design Part 1: Objectives of Road Design
AGRD06-22	Guide to Road Design Part 6: Roadside Design, Safety and Barriers
AGRS01-21	Guide to Road Safety Part 1: Introduction & The Safe System
AGRS02-21	Guide to Road Safety Part 2: Safe Roads
AGRS03-21	Guide to Road Safety Part 3: Safe Speed
AGRS04-21	Guide to Road Safety Part 4: Safe People
AGRS05-21	Guide to Road Safety Part 5: Safe Vehicles
AGRS06-22	Guide to Road Safety Part 6: Road Safety Audit
AGRS07-21	Guide to Road Safety Part 7: Road Safety Strategy and Management
AGTTM01-21	Guide to Temporary Traffic Management Part 1: Introduction
AGTTM02-21	Guide to Temporary Traffic Management Part 2: Traffic Management Planning
AGTTM03-21	Guide to Temporary Traffic Management Part 3: Static Worksites
AGTTM04-21	Guide to Temporary Traffic Management Part 4: Mobile Works
AGTTM05-21	Guide to Temporary Traffic Management Part 5: Short Term Low Impact Worksites
AGTTM06-21	Guide to Temporary Traffic Management Part 6: Field Staff – Implementation and Operation
AGTTM07-21	Guide to Temporary Traffic Management Part 7: Traffic Controllers
AGTTM09-21	Guide to Temporary Traffic Management Part 9: Sample Layouts
AGTTM10-21	Guide to Temporary Traffic Management Part 10: Supporting Guidance

Code	Title
Guidelines	
AP-G56-22	Assessing Fitness to Drive
AP-G97-22	Guideline for Crushing, Processing and Cleaning of Recycled Crushed Glass for Transport Infrastructure
AP-G96-21	Interim Guidelines for the Use of Recycled Plastics in Local Government Road Surfacing Applications
Webinars	
WEB-AITDSA-22	Austroads Innovative Temporary Traffic Management Device and Solution Assessment (AITDSA) Scheme
WEB-PROJECTS-22	Austroads Project Pipeline 2022-23
WEB-R669-22	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements Part 3: Performance Outcomes
WEB-AGPD0203-22	Guide to Project Delivery Parts 2 and 3 Update
WEB-R668-22	Perceptual Countermeasure Treatments to Reduce Crash Risks in Tunnels
WEB-R667-22	Proposed Signage for Low and Zero Emission Vehicles and Associated Infrastructure
WEB-R665-22	Benefits and Costs of Providing a Minimum Physical Infrastructure Standard for the Operation of Automated Driving
WEB-R666-22	Maximising the Use of Sustainable Rehabilitation Treatments
WEB-G97-22	Increasing the Use of Recycled Glass in Road Infrastructure
WEB-NFSCS-22	National Freight and Supply Chain Strategy
WEB-NWCPS-22	National Walking and Cycling Participation Survey 2021
WEB-R655-21	Inclusion of Recent Road Safety Research in the Guide to Road Design
WEB-AGRS06-22	Introducing Austroads' New Road Safety Auditing Guidance
WEB-R663B-21	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements Part 2
WEB-R663A-21	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements Part 1
WEB-R662-21	Road Authority Data for Connected and Automated Vehicles
WEB-T360-21	Guide to Road Tunnels Part 2 Update: Rationalising Network Signage for Over-height Vehicles
WEB-AusRAP-21	New Direction for AusRAP – Austroads leadership of Australian Road Assessment Program
WEB-R657-21	Strategic Review of the Guide to Traffic Management
WEB-BN2019-21	New Pathway for the Implementation of Nationally Harmonised Temporary Traffic Management Practice
WEB-CFSC-21	Cycling for Sustainable Cities
WEB-R658-21	Investigation of Pavement Assessment Methodologies for PBS Access
WEB-R359-21	National Specification for Crumb Rubber Binders in Asphalt and Seals
WEB-R656-21	Data to Support the Heavy Vehicle Road Reform
WEB-T358-21	Evaluating the Rutting Performance of Binders
WEB-SCBD-21	Supply Chain Benchmarking Dashboard
WEB-AGRS07-21	Review of the Guide to Road Safety and Structure for Online Access – Part 7
WEB-AGRS01-21	Review of the Guide to Road Safety and Structure for Online Access
WEB-G96-21	Use of Recycled Plastics in Road Surfacing
WEB-T356-21	Technical Basis of Changes to Guide to Pavement Technology
WEB-TRIALS-21	Emerging Vehicle Technology Trials Online Repository
WEB-PROJECTS-21	Austroads Project Pipeline 2021-22



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