Annual Report 2022-23

Solving problems for a sustainable and resilient road transport future.

Austroads

The Mandurah Bridge, awarded Best Structure over 35 metres in the Austroads Bridge Awards 2022, has improved access for pedestrians and cyclists, and reduced traffic congestion. A lower level shared path serves as a viewing platform for events in the estuary. Its lower elevation minimises the length of ramps required for universal access.

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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 and Planning 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 equipped with sustainable and future proof infrastructure.

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 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.

The plan outlines eight strategic focus areas that direct our work:

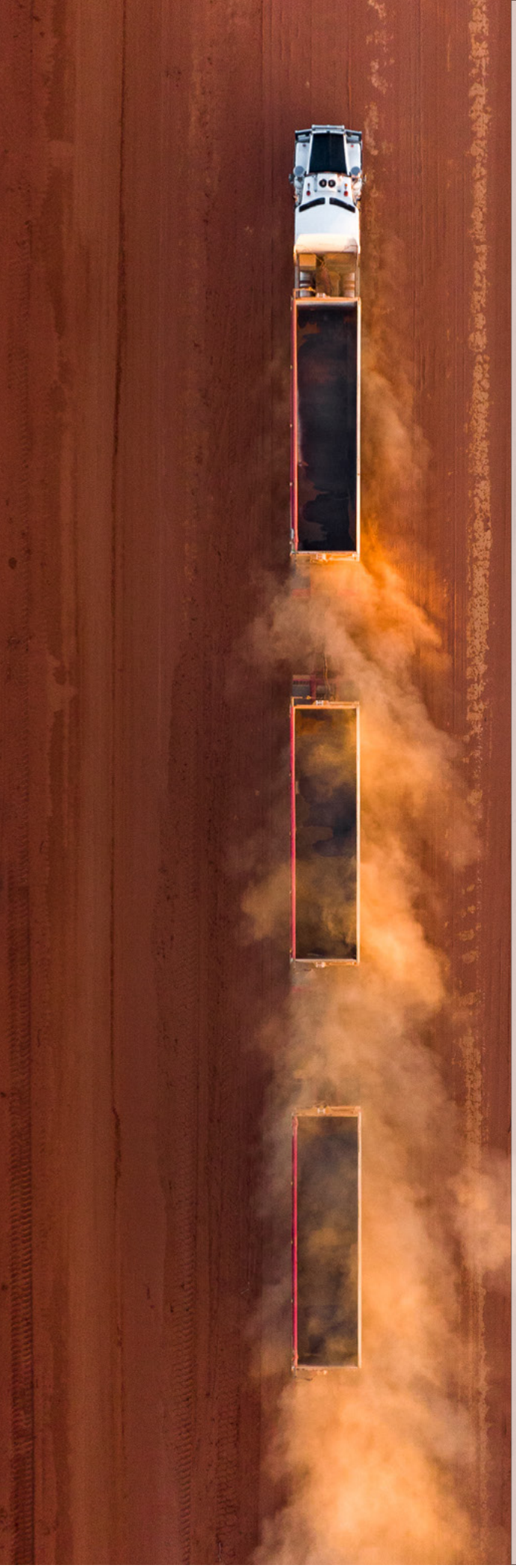
- Infrastructure | Delivering affordable infrastructure that meets community needs
- Technology | Optimising the benefits of new technologies
- Data | Managing and harnessing the decision-making power of data
- Sustainability | Reusing materials, reducing emissions and mitigating the impacts of climate 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 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 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 seeking innovative solutions to work our way towards Vision Zero.

Our profile

1933
Annual Conference of State Road Authorities (COSRA) established

1934
First Conference, states agreed to pursue common road signage

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

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

1960
NAASRA establishes the Australian Road Research Board (ARRB)

1989
NAASRA renamed Austroads

1993
Austroads initiates development of NEVDIS

1999
Austroads initiates development of TCA

2015
NEVDIS administration located in Austroads national office

2019
Austroads assumes ownership of TCA

Our history

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

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.

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.

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' Meetings).

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.

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

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.

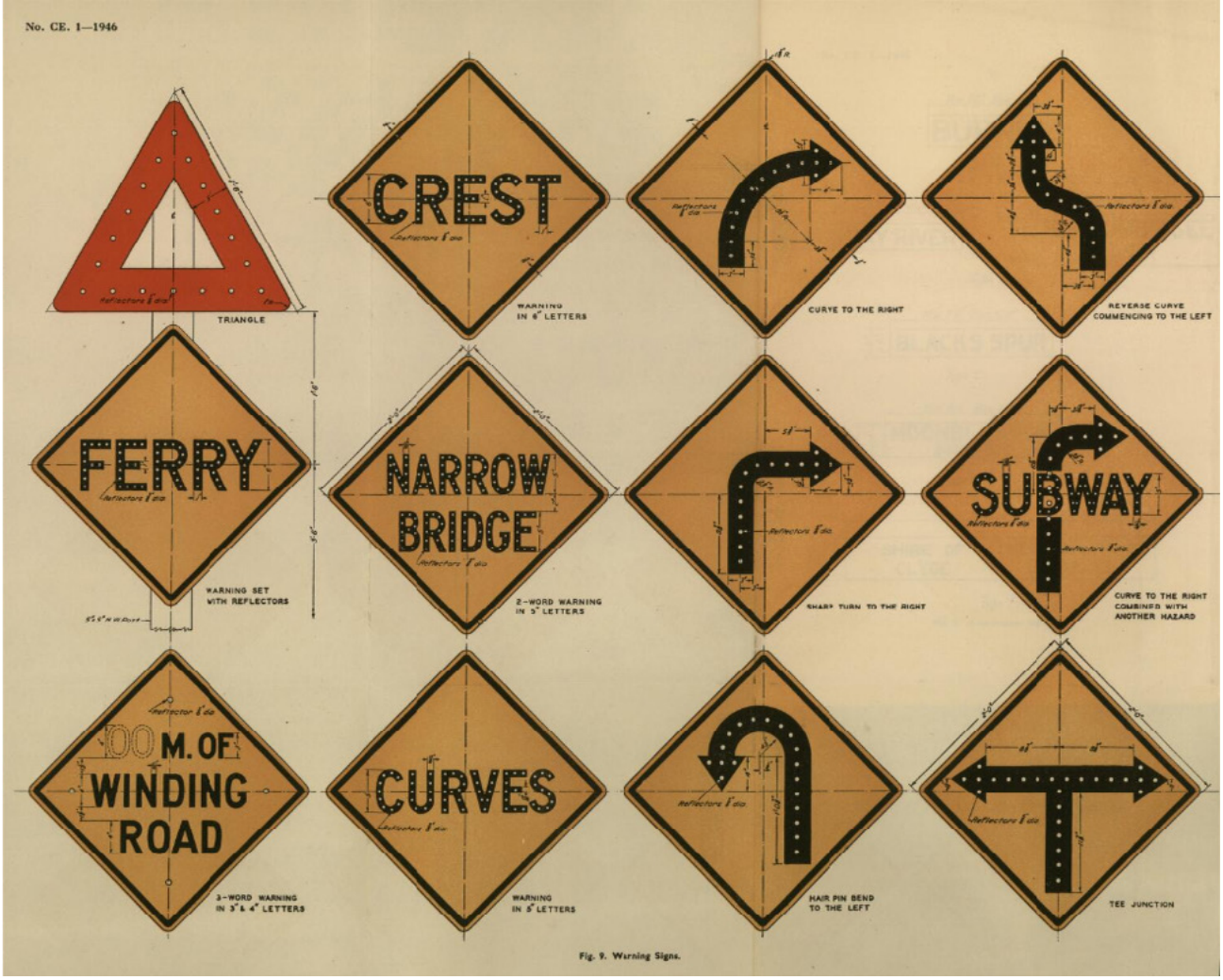
In 1993, Austroads commenced development of the National Exchange of Vehicle and Driver Information System (NEVDIS) to exchange vehicle and driver licence information across state borders. Austroads also signed its first agreement with the new National Road Transport Commission (now the National Transport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

In 1999, Austroads commenced work on a national telematics initiative. This evolved to become Transport Certification Australia (TCA), which commenced operation in 2007.

NEVDIS administration was relocated to the Austroads national office in 2015.

In 2018, the Transport and Infrastructure Council determined that TCA should be reincorporated into Austroads. Austroads formally assumed ownership of TCA in January 2019.

In 2022, Austroads embraced a new implementation role, leading the delivery of complex projects to embed change into transport practice.



Australian Standard Rules for the Design, Location, Erection and Use of Signs for the Guidance and Regulation of Road Traffic, 1946. Developed in 'the closest co-operation' of the State Road Authorities of Australia.

Changes in 2022–23

The number of implementation projects Austroads is undertaking on behalf of member agencies and the Austroads Board has grown, resulting in the need to increase the number of permanent and temporary staff. The project to harmonise temporary traffic management practice is well advanced. A small team is delivering the training framework, the registration system and the Austroads Innovative Temporary Traffic Management Device and Solution Assessment Scheme which commenced operation in July 2022.

The responsibility for management of AusRAP was transferred from Australian Automobile Association to Austroads in 2021. AusRAP is the Australian version of the International Road Assessment Programme (iRAP). In 2022-23 Austroads worked with member agencies to establish a vision and mission for the program. AusRAP will play a significant role in building a path to zero deaths and serious injuries.

Australian jurisdictions on the east coast are changing some of the telematics requirements for heavy vehicles using their road networks. Transport Certification Australia (TCA) has been assisting jurisdictions and industry with the change. This has resulted in a significant increase in the number of vehicles enrolled in schemes administered by TCA and provided road managers with access to new types of data through the Telematics Analytics Platform.

NEVDIS transitioned to become the sole issuer and administrator of World Manufacturer Identifiers (WMI) for Australian vehicle manufacturers. The WMI forms the first three characters of the Vehicle Idenification Number (VIN). There have also been changes to the administration of VINs, with manufacturers and importers now required to lodge VINs through both NEVDIS and the Road Vehicle Regulator, following the implementation of the *Road Vehicle Standards Act 2018*.

From the Interim Chair

Summary

- Austroads is governed by a Board of Directors, comprising a senior leader from each member agency
- Neil Scales, Austroads Chair for more than seven years, retired at the end of the financial year. The Board acknowledges his important contribution.
- Serving the needs of members remains central to Austroads purpose.
- The Board has approved the *Austroads 2023-27 Strategic Plan*, which sets an ambitious vision of being the leading provider of authoritative transport information products and services.

This year Austroads marks 90 years of bringing together road and transport professionals and leaders to collectively tackle hard issues. This year, has been especially challenging as extreme weather events have impacted communities across both Australia and New Zealand. Transport agencies have played crucial roles restoring lifeline routes, and ensuring communities remain connected.

On behalf of the Board, I acknowledge the enormous contribution of Neil Scales OBE who served as Austroads Chair from October 2016 to his retirement in June 2023. Austroads truly benefited from Neil's extensive experience and expertise. His leadership confidently steered the organisation into significant and lasting change, resulting in more mature operations and a strong financial position.

At the Austroads Improving Resilience in Transport Seminar held in Brisbane in February, Neil spoke about the importance of partnership. He rightly noted that true partnerships do not result in a zero sum gain. He could have been talking about the Austroads partnership. Austroads is a partnership that returns more than the sum of its parts. It is more than pooled research, more than common standards, more than knowledge sharing, and more than data sharing. And each year we ask the organisation to do more and be more, which it does with quiet determination.

In June, the Board approved the next strategic plan. The *Austroads 2023-27 Strategic Plan* sets an ambitious vision of being the leading provider of authoritative information products and services that are adopted and implemented for a safe, efficient, reliable and sustainable transport network across Australasia.

I am confident that the leadership of Geoff Allan and the Executive Group will deliver that vision as the organisation continues to evolve to meet the changing needs and priorities of its members. Austroads members operate in dynamic environments in which government policy and regulatory reform can be fast changing. We are now tackling the impacts of rapid climate change and evolutions in technology. Austroads will continue to prepare its members for transport reforms and changing operational environments.

Having served as Deputy Chair since July 2020, it has been an honour to act in the Chair's position until the Annual General Meeting. The Austroads Board meetings provide governance and direction to the organisation but also provide an opportunity to directly share experiences and challenges with other senior transport executives. I want to thank all of the Directors for their open knowledge sharing and support in this time of transition.

Louise McCormick FIEAust CPEng
Austroads Interim Chair

From the Chief Executive

Austroads has enjoyed another successful year supporting our members to deliver better outcomes for the community.

I have said in numerous public forums this year, how proud I am of the work of Austroads and its people. The Board has high expectations of the organisation because our people continue to deliver exceptional outcomes.

This year we continued to deliver reforms to temporary traffic management, and heavy vehicle driver licensing. At the same time, the NEVDIS team worked with licensing agencies to quickly instigate additional security measures in response to the theft of driver licence information in the Optus and Latitude Finance data breaches. That urgent work required teams to re-prioritise projects and make quick changes to a very large and complex system. Their responsiveness protected millions of Australians from identity fraud.

A significant achievement during the year was the completion of TCA's external ISO 9001 audit. TCA holds accreditation for its Quality Management system under ISO 9001 and recertification requires maintenance and ongoing improvements to our operations.

In the Austroads Work Program, there has been a significant reduction in project delays and a continuing upward trend in the use of our publications and engagement with our webinars. The number of vehicles enrolled in the National Telematics Framework schemes has grown by nearly 35% and a number of industries have volunteered data because of the insights delivered by our Telematics Analytics Platform.

While we have been focusing on finding efficiencies in our operations it has become clear that our organisation structure is no longer wholly supporting our needs. Late in the year, the Executive Group appointed Nous to provide us with advice on how we can improve. We are seeking pragmatic, clear and tangible actions for organisational design and operational improvement that is sustainable and delivers results. We will be reporting next year on the changes that will deliver better processes, better systems and better management of technology and data. This will be crucial to maintaining the professionalism and ambition which flows through our people and out to the broader community.

I am looking froward to the year ahead as we embark on the first year of work to deliver the new strategic plan. In closing, I acknowledge the tremendous support of Neil Scales, immediate past Chair of Austroads. Neil has been an inspiring leader. His direction has shaped and matured Austroads and his confidence in the organisation and its people has been transformative.

Dr Geoff Allan
Austroads Chief Executive

Summary

- The NEVDIS response to the Optus and Latitude Financial data breaches reduced the likelihood of identity theft for millions of Australians.
- Performance measures are healthy but the organisation is seeking advice about structural and operational changes to support sustainable improvement.
- We are positioning ourselves to become the leading provider of transport information and services.

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

Services: Assessment and approval of transport technologies, certification of service providers, and data exchange, analysis and reporting.

National Exchange of Vehicle and Driver Information System (NEVDIS)

Purpose: To exchange 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.

Our people

We employ 83 people. Most work full-time in either Sydney or 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.

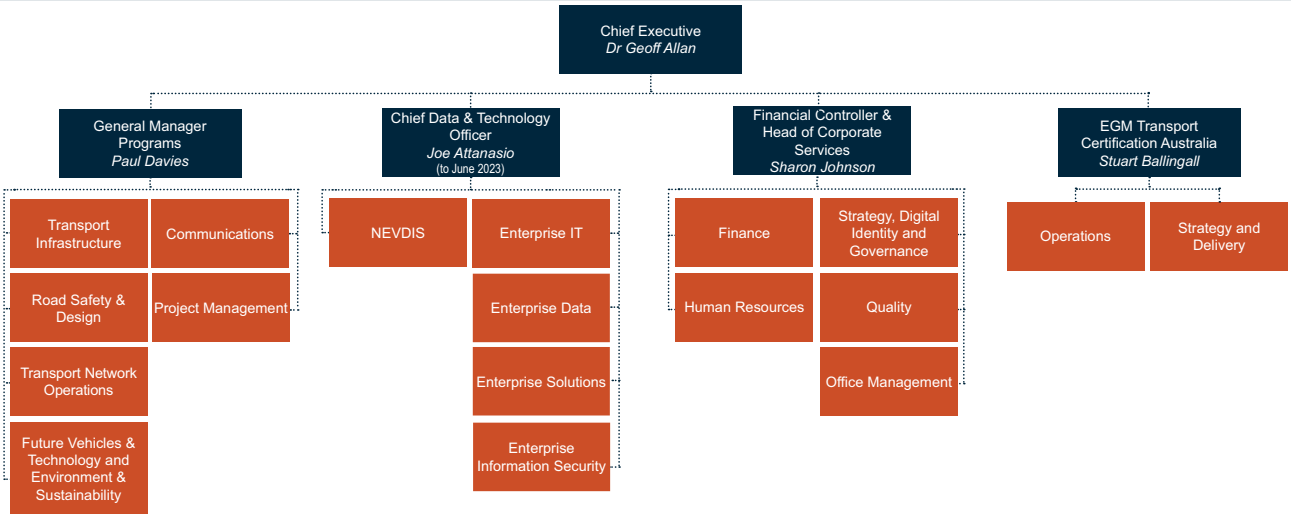
Development

All staff participate in performance and development goal setting, with targets set annually and reviews undertaken every six months. We encourage our staff to participate in external and internal training to ensure their skills and knowledge are continuously improved. This year we made LinkedIn Learning available to all staff in addition to opportunities for formal training, academic courses, mentoring and project-based learning.

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. This year, formal working from home contracts were established with all staff. An option to work from home for two days a week provides flexibility while supporting collaboration and connection in the office environment.

Structure



Austroads Executive Group

Dr Geoff Allan
Chief Executive

Experienced chief executive, managing director and senior leader. Record of transformational leadership. PhD 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
(to June 2023)

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

Sharon Johnson
Chief Financial Controller and Head of Corporate Services

Experienced CFO, governance and legal professional. CPA Australia Fellow, and Governance Institute of Australia and Chartered Governance Institute Chartered Associate.

Stuart Ballingall
Executive General Manager TCA

Experienced executive and director. Record of transport technology leadership. Chartered Engineer and Master of Business Administration.

Recognising excellence

Summary

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

15 exceptional people were recognised for their contribution to Austroads in 2022.

We also recognised excellence in bridge design and maintenance and Dr Liz de Rome for her work to rate the effectiveness of motorcycle protective clothing.

Austroads Awards

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.

Andrew Walker, Department of Transport and Planning Vic: Andrew has a long-standing and positive track record of leadership, timely delivery and high-value outputs for specifications and standards related to steel technology and testing and calibration of nuclear gauges. Andrew has represented Austroads on the Australasian Certification Authority for Reinforcing and Structural Steels. He was the Austroads expert representative on the Standards Australia committee ME-029-Fasteners, active in the review of *AS/NZS 1252*. He led the revision of the Australian Standards for field testing and blocks calibration of nuclear gauges and provided expert comments on the *AS 1289* series.

Hugo van Loon, Department for Infrastructure and Transport SA: Hugo has been a significant contributor to the road surfacings industry for more than 30 years. He has served as a member of the Austroads Asphalt Research Technical Group for more than 20 years and as a member of the Austroads Pavements Task Force for five years. He has contributed significantly to key projects and publications

John Venables, Main Roads WA: John has been the Main Roads Western Australia representative on the Road Tunnels Task Force since its inception and is its longest serving member. He has provided practical knowledge and experience to the Task Force on the operations and maintenance of road tunnels in Australia and made the facilities of the Northbridge Tunnel available to the Task Force members on a number of occasions for education purposes. John has participated in numerous Austroads projects including the development of the first *Guide to Road Tunnels*.

The **Austroads Special Commendation** recognises contributions by an individual that warrants special recognition.

John Rebbechi, Roadcor: John has been a significant contributor to the road surfacings industry for more than 50 years. His career has included significant contributions to Austroads committees and projects. In the past 25 years he was technical editor for many Austroads publications and has been a valuable contributor to the Austroads Bituminous Surfacings Technical Group.

Dr Nigel Preston, Viva Energy: Nigel is a national bitumen expert who has represented the bitumen supply industry at the Austroads Bituminous Surfacings Technical Group for over 20 years. His expert knowledge has contributed to the development of specifications for polymer modified bitumens (currently specified in *ATS 3110*) and numerous test methods.

Gerard Gnanaseelan, SAMI: Gerard is a national expert in the bitumen supply industry who has contributed his technical skills and knowledge to Austroads for 30 years. He has represented the bitumen supply industry at the Austroads Bituminous Surfacings Technical Group meetings, providing expert knowledge to the Binders Group on a regular basis. During his time on this committee, he has contributed significantly to the development of specifications for polymer modified bitumens (currently specified in *ATS 3110*) and numerous test methods.

Geoff McKernan, Australasian Tunnel Operators Group (ATOG): Geoff represented ATOG providing practical knowledge and experience to the Austroads Road Tunnels Task Force for 10 years. Geoff regularly made the activities of various tunnel operations available to the Task Force members. He supported Austroads projects relating to the management of tunnel assets and investigating ways to improve driver behaviour in tunnels. Geoff successfully project managed the project *Use of perceptual countermeasure treatments to reduce crash risks in tunnel*s (ART6137) which was completed in March 2022.

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

Maria Drysdale, Main Roads WA: In recognition of her exceptional work and management of an important project for the Transport Infrastructure Program, *Review of impact of service authorities on infrastructure projects* (APD6251).

Jade Hogan, Transport for NSW: In recognition of her long-term commitment to the objectives of Austroads through the efficient operation of the Austroads Safety Barrier Assessment Panel.

Steven Patch, Queensland Department of Transport and Main Roads: In recognition of his exceptional management of an important project for the Road Safety and Design Program *Incorporating Advanced Driver Assistance Systems (ADAS) into driver licensing, education and training practices* (SRL6287) to deliver a range of complex deliverables that aim to modernise practical driver licence testing, and his promotion of valuable future opportunities for Austroads to support driver licensing authorities and the general public with contemporary vehicle safety information.

Jerome Carslake, Monash University: In recognition of his management of an important and complex project for the Road Safety and Design project *Suicide in road transport* (SAG6224) and his exceptional work in coordinating engagement with a vast range of stakeholders to successfully deliver this sensitive project.

Albert Wong, Main Roads WA: In recognition of his ongoing contribution and commitment to the objectives of Austroads through his participation in the Austroads Road Design Task Force and management of Austroads projects *Guide to Road Design update – Parts 4, 4A, 4B and 4C: Intersections and crossings* (SRD6288) and *Update to Guide to Road Design Part 1 – design exceptions and extended design domain* (SRD6320).

Tracey Smith, Queensland Department of Transport and Main Roads: In recognition of her successful management of the Speed Information Management workstream from project *Guide to Road Safety – Speed Management: effective road authority practices* (SAG6290).

Joseph Le, Transport for NSW: In recognition of his leadership of the Austroads Safer Roads & Roadside Theme Group and his ongoing contribution and commitment to the objectives of Austroads through his management of important projects for the Road Safety and Design Program including *National harmonisation of road safety audit practices* (SAG6343) and *Revision of the Guide to Road Safety Part 6A: Implementation of Road Safety Audits* (SAG6221).

Jennifer Slocombe, Department for Infrastructure and Transport SA: In recognition of her exceptional work and contribution to the newly established Environment and Sustainability Program as well as representing Austroads and the Program on the PIARC Carbon Neutrality project.

Women in Road Safety Award

Austroads is a proud sponsor of the Australasian Road Safety Conference Women in Road Safety Award. In 2022, Dr Liz de Rome was awarded the prize for her ground-breaking testing program to inform motorbike riders about the performance of protective jackets, pants and gloves.

Geoff Allan presents Dr Liz De Rome with the 2022 Women in Road Safety Award.

Austroads Bridge Awards

The Austroads Bridge Awards recognise individuals and organisations that have delivered outstanding bridge structures and design across Australia and New Zealand. The awards were presented at the 11th Austroads Bridge Conference held in Adelaide in November 2022 proudly co-hosted by Austroads and the Department for Infrastructure and Transport South Australia.

Excellence in Innovation: InQuik Australia, Toorale Bridge Project
By InQuik, Alluvium Consulting Australia, and Pensar Infrastructure Group.

The InQuik bridge system was recognised for its unique construction approach. It is a semi-modular system, where the integrated steel formwork and reinforcing components are prefabricated off-site. After the foundations were completed, the Toorale Bridge was installed in four working days over a two-week period by a five-man crew. The final design of the bridge, weir and fishway reflects cultural and historic heritage values, with input from the Toorale Aboriginal Joint Management Committee, National Parks and Wildlife Service, NSW Fisheries and NSW Public Works Advisory.

Excellence in Asset Management: Auckland Harbour Bridge Emergency Repairs
By Beca, WSP, SRG Global, Waka Kotahi NZ Transport Agency, and ASM Fulton Hogan-HEB Joint Venture.

The Auckland Harbour Bridge (AHB), a critical asset for Waka Kotahi New Zealand Transport Agency. When a truck strike caused serious damage to the AHB, the team mobilised people with intimate knowledge and experience of the structure to deliver emergency repairs in record time. The estimated $30m cost to customers when the bridge was operating at reduced capacity was reduced by $19m through the team's rapid response.

Austroads 2022 Bridge Award winners.

Best Structure 35 metres or under: Hay Street Bridge Vertical Clearance Improvement Project

By BG&E, Bocol Constructions, MACA, and Main Roads Western Australia.

Constructed in 1968, the Hay Street Bridge complied with bridge height clearance standards at that time. More recently, the bridge had been hit by over-sized vehicles. The innovative design provided additional clearance to reduce the likelihood of collision. The methodology to cut out a significant part within the middle span of a continuous bridge is the first known application of its kind. The innovative design and construction of this project prolonged the bridge life beyond its 52-years. The approach cost approximately 10% of that for a replacement bridge.

Best Structure over 35 metres: Mandurah Bridge

By BG&E, Georgiou Group, Main Roads Western Australia, and City of Mandurah.

The Mandurah Bridge replaced an old traffic bridge, crossing the Mandurah Estuary. The new bridge was designed to provide visual connection to the water, improved pedestrian and cyclist access, safety, and reduced traffic congestion. The design included fishing platforms, social and historical heritage, and an association with the old bridge. A five metre wide shared path at a lower level than the road serves as a viewing platform for events in the estuary. The lower elevation minimises the length of ramps required for universal access. The innovative curved box cross section also impressed the judges.

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.

2022-23 overveiw

333m
NEVDIS vehicle and driver data transactions ↑ 10% on 21/22

13,000
vehicles enrolled in TCA administered schemes
↑ 35% on 21/22

74
active research projects on target
16% on 21/22

0
active research projects delayed
100% on 21/22

102
publications produced
→ consistent with 21/22

398,000
publications downloaded
↑ 2% on 21/22

709,000
website uses ↑ 26% on 21/22

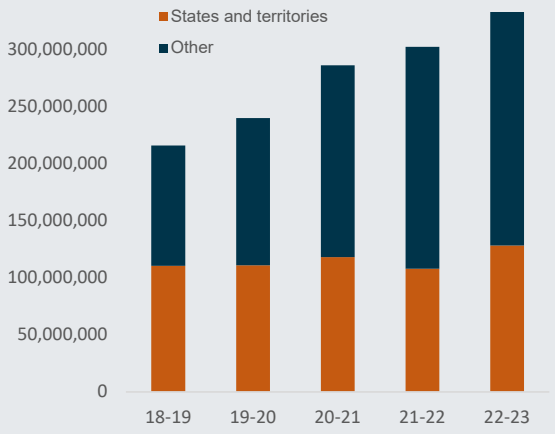
508
external references to Austroads publications ↑ 21% on 21/22

37,000
webinar participants ↑ 37% on 21/22

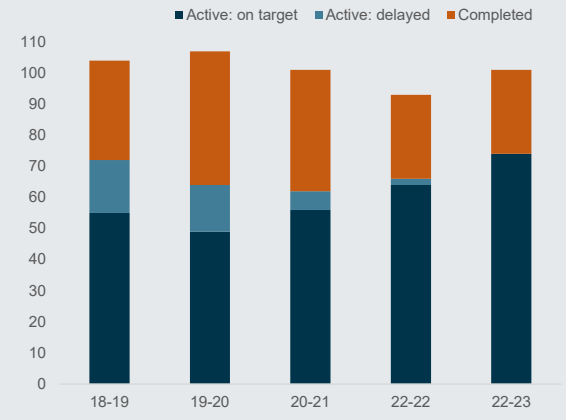
4
innovative temporary traffic management devices recommended for use by AITDSA (new scheme introduced in July 2022)

9/10
guides fully adopted by members
→ consistent with 21/22

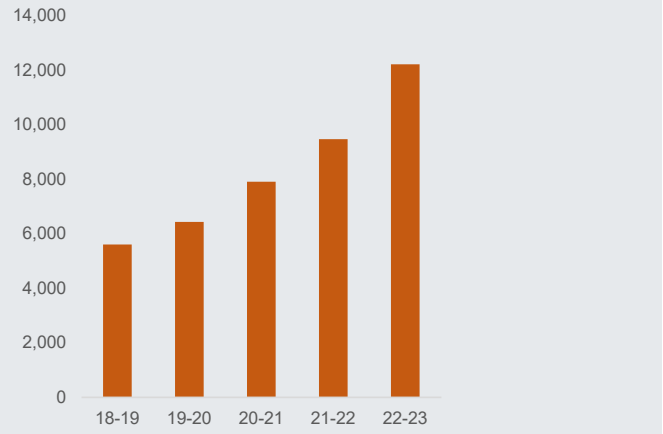
NEVDIS transactions



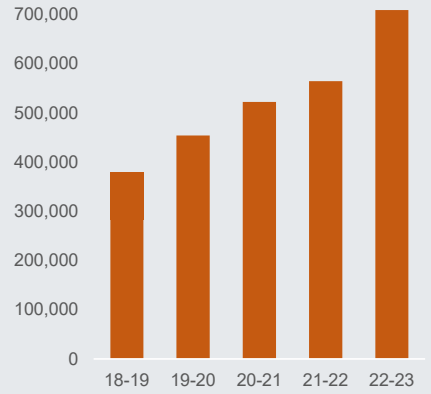
Research project delivery



Vehicles enrolled in TCA administered schemes



Website users



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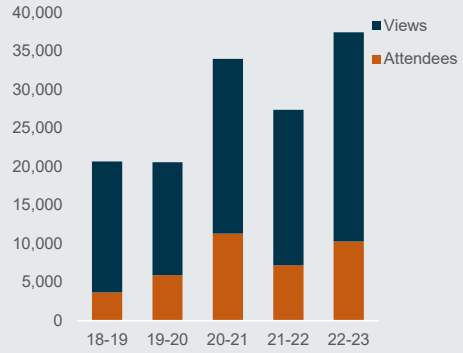

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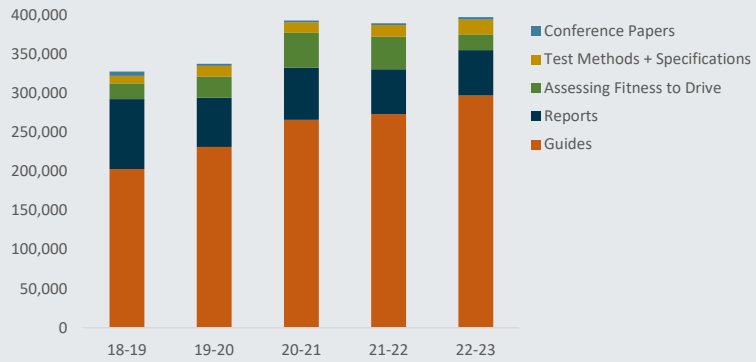
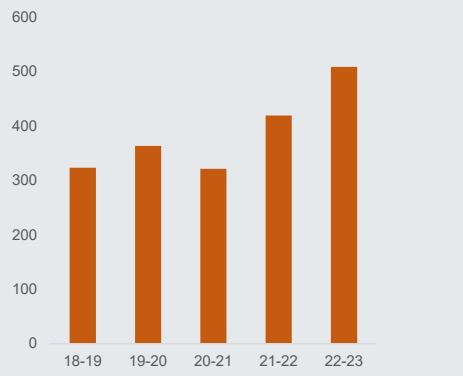


References to Austroads content



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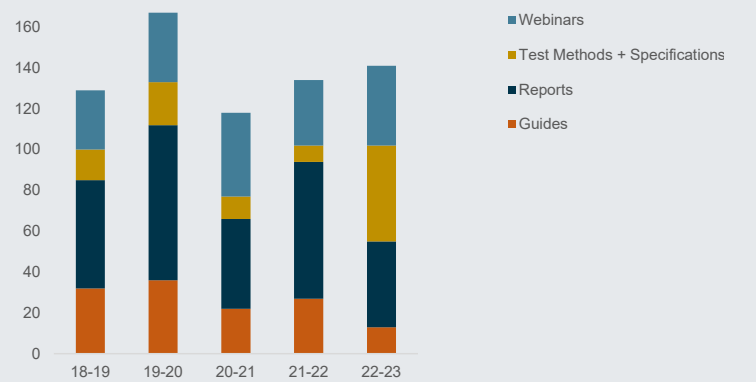


Strategic plan focus area

Infrastructure

Delivering affordable infrastructure that meets community needs

Bridges, like this one over the pictuesque Rakaia Gorge in New Zealand's south island, provide essential connections for communities. Bridge design and management must consider impacts of the local envionment, flooding events and traffic loads over the life of the structure.

Australian governments are investing record levels in infrastructure and road transport projects with states and territories spending 49-95% of their infrastructure budgets on road projects. Austroads administers contractual systems and technical specifications and guidance that help deliver national consistency in infrastructure projects.

Key developments

Harmonising civil construction prequalification for projects

The National Prequalification System delivers a harmonised framework for roadworks and bridgeworks construction contracts. Companies wishing to submit tenders to Australian road agencies for construction contracts must be prequalified under the scheme which classifies contractors based on their technical and managerial expertise, financial capacity and previous performance. The scheme is locally administered by the state and territory road agencies and supported by Austroads.

As at June 2023, 591 companies and consortiums were prequalified in the scheme. This number has remained steady over the year but reflects an increase of 25% since 2020.

Companies in the scheme can apply to have their prequalification status recognised outside the assessing jurisdiction. Around 20% of companies in the scheme have their prequalification status recognised by other jurisdictions. The scheme requirements are documented in guidelines published by Austroads which were updated in September 2022.

Harmonising technical specifications

The Austroads Technical Specifications for the construction of roads and bridges identify requirements for the supply of materials, treatments and infrastructure. Uniform technical specifications adopted by Australia and New Zealand will make contract and tendering processes easier for industry and government.

The development of the specifications is governed by the Austroads Technical Advisory Group, chaired by David Anderson. The group comprises the member agency chief engineers who are responsible for identifying and approving the specifications and are working to reduce local variations.

The 29 new specifications published this year are listed in the annexures and include collections detailing requirements for the supply of polymer modified binders, sealant, concrete, steelworks, bridgeworks, bridge bearings, bridge joints, and earthworks. An additional 20 specifications are forecast for publication by the end of 2023.

The 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 two significant collections of new and updated test methods for the testing of hot poured joint sealant and polymer modified binders. The 13 documents are listed in the annexures.

Embedding contemporary hydrology practice in road design

Drainage design is crucial to the safety and sustainability of road infrastructure and our detailed drainage guidance spans across three parts of the *Guide to Road Design*. In January we published updated guidance on hydrology and hydraulics to reflect the new work and methodology from Geoscience Australia's *Australian Rainfall and Runoff* (ARR) guidelines which support robust estimates of flood risk.

The update focussed on parts 5, 5A and 5B of the *Guide to Road Design*, incorporating the ARR's latest flow estimation techniques and design inputs. A different approach to terminology was applied for expressing flood probability and risk. New topics were added, including very rare and extreme floods, blockage, acceptable impacts, joint probability, and uncertainty.

Improving our understanding of pavement performance

Our road pavements, the layers of material placed over the natural ground that carry traffic, are complex. Pavement design choices and sustainable pavement management require an understanding of how the materials perform over time, under traffic loads and in the environment. Austroads member agencies have made significant investments over many years to develop a robust scientific evidence base to support the accurate prediction of the way pavements will wear.

During the year, Austroads updated its road deterioration models that predict the rutting, roughness, cracking and deflection of road pavements. The deterioration models were developed in 2010. Since then, traffic loadings and our climate have significantly changed.

The project used long-term datasets on pavement performance, accelerated loading facility (ALF) experimental data on the impact of surface maintenance and axle loads on pavement performance, and recently available traffic speed deflectometer (TSD) data to improve the explanatory capacity of the models. The updated models will help road agencies and industry predict future road conditions and better establish maintenance needs.

Other work to ensure our pavement performance knowledge remains current includes a review of the laboratory fatigue performance of locally manufactured asphalt mixes against the performance predicted by the Shell relationship used in Australia and New Zealand.

The mechanistic-empirical design system in Austroads' *Guide to Pavement Technology Part 2: Pavement Structural Design* uses a laboratory fatigue relationship developed by Shell in the 1970s to predict the fatigue life of asphalt layers. The testing specimens used 40 years ago are no longer representative of the modern mixes used today which increasingly incorporate polymer modified binders and recycled materials.

The benchmarking analysis found that the current Shell laboratory fatigue relationship overpredicted the laboratory fatigue performance of conventional dense graded asphalt (DGA) mixes used in Australia and New Zealand. New preliminary fatigue relationships were developed for DGA manufactured with conventional binders and high modulus asphalt. Further research work and additional fatigue testing are still required to refine and validate these relationships prior to implementation.

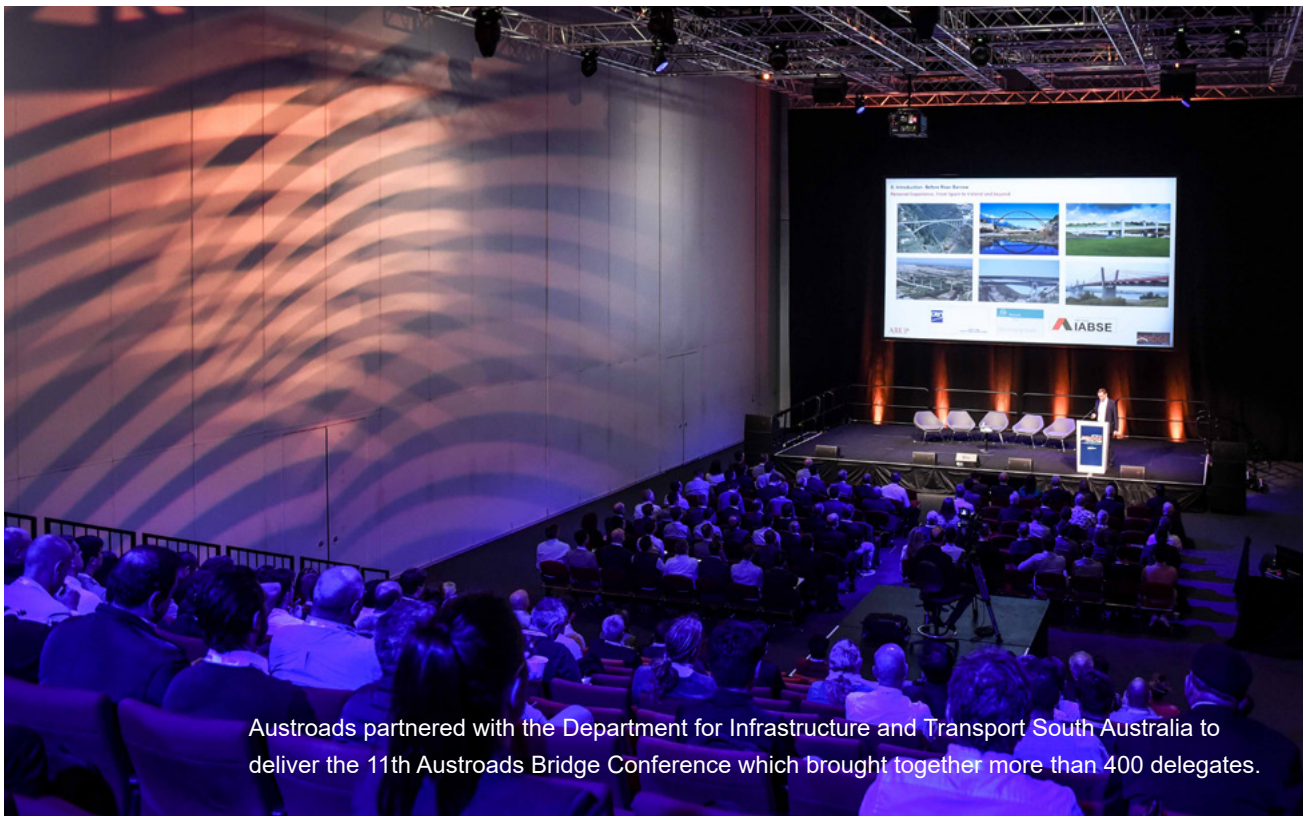
To date, no evidence has been provided to suggest that the thickness design outcomes achieved by using the in-service Austroads asphalt fatigue model are unacceptable or that asphalt layers have historically been over-designed. However, the work is an important step in moving the asphalt laboratory fatigue relationship forward with our changing asphalt mixes and technology.

Improving management of concrete cancer

Alkali aggregate reaction (AAR), often referred to as concrete cancer, is a chemical reaction that occurs when the alkalis in cement come in contact with certain types of aggregate, triggering the expansion of aggregate which can lead to loss of strength and spalling. This chemical process can prematurely deteriorate concrete structures, causing serious structural damage and requiring costly repairs.

Ensuring prior testing and management strategies are used before aggregates are incorporated into the concrete is vital to mitigate the risk. Austroads published a *Code of Practice for the Management of Alkali Aggregate Reactivity* to encourage infrastructure managers to proactively test for and manage concrete cancer.

In many instances, the approval of the aggregate (or blend of aggregates) will be subject to the concrete being manufactured with a blended cement containing supplementary cementitious materials in specified proportions.



Austroads partnered with the Department for Infrastructure and Transport South Australia to deliver the 11th Austroads Bridge Conference which brought together more than 400 delegates.

Reducing the impact of service authorities on infrastructure

Transport corridors are not just used for transport infrastructure, they also host utilities such as telecommunications, electricity, gas and water. Transport agencies and managers have long-term concerns about the lack of data about the placement of utilities in transport corridors and the cost of works associated with utility maintenance and upgrades.

In November 2022, Austroads published the findings of a research project that investigated the impacts of third-party assets on the successful delivery of road infrastructure projects across Australia and New Zealand. The problems arising from utility assets on major road and rail projects are complex, consistent and universal.

The project identified barriers and highlighted areas where a change is required to improve the efficient delivery of major infrastructure projects across Australian and New Zealand jurisdictions. This work will continue next financial year.

Sharing specialist bridge engineering knowledge

The 11th Austroads Bridge Conference brought together more than 400 bridge practitioners, material scientists and structural engineers who shared their knowledge and experience in Adelaide from 15 to 18 November 2022. Austroads partnered with the Department for Infrastructure and Transport South Australia to deliver the conference which featured high-calibre international and national speakers. The 146 peer reviewed conference papers, which were published on the Austroads website, are listed and linked in the annexure.

We rely on the generosity of sponsors and volunteers to deliver the event. We particularly acknowledge the major conference sponsor, LB Australia, and partners Granor Rubber and Engineering, Aurecon, Monkey Media for Infrastructure Magazine, BlueScope Steel Limited and Humes Concrete Products. Austroads also acknowledges the work of the organising committee and the assistance of the Bridge Task Force members.

The conference hosted the return of the Austroads Bridge Awards established to recognise the individuals and organisations that have delivered outstanding bridge structures and design across Australia and New Zealand.

Planning for the 12th Austroads Bridge Conference is underway. The 2025 conference will be held in Brisbane.

Strategic plan focus area

Technology

Optimising the benefits of new technologies

During the year we published guidelines for the installation and maintenance of low and zero vehicle emission charging infrastructure. An update will be released in 2024 following testing accessibility for people with limited mobility.

Technology plays a pivotal role in delivering safe, efficient and sustainable road transport. From traffic management systems and satellite navigation to electric vehicles and autonomous driving, technology is revolutionising the way we move on roads. A future of interconnected mobility will make road transport more convenient and safer for all users.

Key developments

Enabling trust in telematics technologies

Transport Certification Australia (TCA) administers the National Telematics Framework, a collaborative effort involving government agencies, transport operators, and technology providers. Its goal is to create a standardised, trusted and efficient telematics ecosystem that benefits both the road transport industry and the broader community by enhancing safety, protecting road infrastructure, and improving the productivity and efficiency of transportation operations.

TCA approves telematics devices and systems, and certifies service providers, to ensure they meet specified technical and performance standards. These assurance processes provide confidence in the accuracy and integrity of telematics data, which is crucial for various applications, including road safety, access management, and compliance monitoring. At the end of June 2023, TCA had 37 agreements with telematics service providers and suppliers, and 57 telematics devices and on-board mass (OBM) systems held TCA type approval.

TCA works closely with key stakeholders to enable sharing, analysis and reporting of telematics data, while ensuring that this occurs with appropriate security and privacy protections in place.

TCA's Telematics Analytics Portal was progressively enhanced during 2022-23, and the number of active users across national, state and local authorities more than doubled. High-quality assured telematics data is being used to monitor compliance with regulatory access conditions, and to inform road operation and policy decisions.

With the recent introduction of mass data from approved OBM systems, and the ability to fuse movement and mass data with other data, such as permitted routes and bridge data, TCA is enabling insights into road transport that have not previously been possible.

Low and zero emission vehicle charging infrastructure installation

In September 2022, Austroads published new *Guidelines for Low and Zero Emission Vehicle Charging Infrastructure Installation*.

The guidelines, the first of their kind in Australasia, are designed for use by local government and transport agency staff planning infrastructure to support the use of plug-in hybrid electric vehicles and battery electric vehicles. The guidelines detail lifecycle considerations such as site selection and planning, access, energy supply, design, operations, maintenance, decommissioning sites and the potential for further technological developments in the field. Use cases for both rural and urban contexts are provided.

With low and zero emission vehicle car sales in Australia expected to increase from 0.6% per year to 23% in 2030, electrical vehicle charging infrastructure must continue to develop alongside such rapidly evolving technology.

In 2023-24, the guidelines will be reviewed to ensure installation of charging infrastructure is accessible to people with reduced mobility.

Using technology to improve congestion

Smart motorways use applications and technology-based systems to more efficiently manage traffic, and improve the capacity and safety of roads. Austroads maintains guidance for transport agencies wanting to implement or manage smart motorways.

In March 2023, Austroads published a new guideline *Best Practice in Smart Motorways Operations* and a research report to help road managers prepare for future trends.

The guidelines provide transport agencies with practical information about the development of new and enhanced motorways, the operation and management of existing motorways, and resource capability planning.

The report considers the impacts of increasing expectations for enhanced traveller experience, urbanisation, inter-agency integration, growth of artificial intelligence, cybersecurity risks, proliferation of real time data and vehicle technology advances. It also proposes a Smart Motorways Classification Model, enabling Austroads member agencies to apply a Motorway Management Capability Framework and an Integration and Operation Capability Framework, as part of best practice.

Using artificial intelligence and machine learning to manage assets

In December 2022, Austroads published practical guidance to help expand the use of machine learning (ML) and artificial intelligence (AI) in pavement asset management. ML and AI are emerging technologies. The report offers insights into how they work, how to avoid common pitfalls in their development, and the types of decision making they best support.

AI and ML are predominantly used in asset management for pavement condition forecasting and optimisation of maintenance programs. The research considered new and different use cases, aiming to develop tools which help human experts make decisions, either by reducing the labour involved or providing additional insight to improve decisions and outcomes.

A case study sought to understand whether historical data could be used to train a ML model to reproduce expert pavement management decisions and whether the model can be applied to other road networks.

The second case study explored an extension to conventional Pavement Management System optimisation to provide insight into the network-wide implications of various multi-criteria funding allocation scenarios.

The promising results from both case studies suggest they are feasible; however, further work is required before the technology will reach operational capability.

The report was accompanied by a quick reference containing a set of practical resources to help define and scope AI/ML projects. It includes advice on forming teams, recruiting specialists, managing projects, understanding key terminology and concepts, and assessing the viability and risks of specific project ideas.

Improving the consistency of automated vehicle trials

Automated vehicles have the potential to make our roads safer and increase productivity, but we must ensure they do not increase emissions, car dependency or traffic congestion.

Trials are an important step to ensure that automated vehicles can be used safely and efficiently in Australian conditions. During the year, Austroads developed new guidance to aid with the evaluation and reporting of automated vehicle trials. The guidance provides organisations developing, approving or delivering trials with direction to improve the quality of trials and achieve greater harmonisation across jurisdictions.

The guidelines complement and supplement the *Guidelines for Trials of Automated Vehicle Trials in Australia* published by the National Transport Commission and Austroads, which will be updated in the second half of 2023.

Strategic plan focus area

Data

Managing and harnessing the decision-making power of data

TCA is supplying aggregated anonymised truck movement data to inform a Department of Transport and Planning Victoria study into the productivity returns of automation in empty container parks.

The collection, analysis and exchange of vast volumes of data enable real-time traffic management, predictive maintenance, and efficient route planning. From vehicle sensors and GPS tracking to smart infrastructure and crowd-sourced traffic information, data-driven insights empower authorities and commuters alike. This information both enhances daily commuting experiences and long-term infrastructure planning, enabling road transport to adapt to growing populations and environmental challenges while improving overall efficiency and safety.

Key developments

Improving the consistency of road asset data

The *Austroads Road Asset Data Standard* (RADS) provides road agencies and their suppliers in Australia and New Zealand with a specification for the data that supports common operational activities.

In October 2022, Austroads released the fourth edition of the RADS. The update includes minor revisions to the Priority Data Sets. Three machine-readable versions of the standard have been created using the following widely understood, platform-independent formats: Comma Separated Value (CSV), JavaScript Object Notation (JSON) and Extensible Markup Language (XML).

Standardising the collection of road asset data will reduce data collection costs, improve decision making associated with road investment and expenditure, and facilitate the implementation of national reforms.

Enabling insights into heavy vehicle movements

TCA's Telematics Analytics Platform (TAP) allows approved road managers and policy makers access to de-identified and aggregated road use information. The platform had 290 users at the end of June, an annual increase 105%.

The bulk of the data ingested into TAP is sourced from the 13,000 vehicles enrolled in schemes and programs associated with the National Telematics Framework. However, an increasing number of freight and supply chain stakeholders have agreed to share data voluntarily.

Voluntary participants derive insights into the 'footprint' of vehicle activities, either by commodity type or by industry sector, which enables the identification of issues, patterns and trends.

At the end of the year, there were 2,686 vehicles sharing data with TCA through industry-led data sharing arrangements. This number is forecast to grow with initiatives being driven by other industries and Austroads member agencies.

Exchanging vehicle and licence information to prevent fraud and theft

The National Exchange of Vehicle and Driver Information System (NEVDIS) exchanges information about vehicles and driver licenses across state borders. NEVDIS was established in 1998 and is owned by Austroads on behalf of the eight states and territory jurisdictions who contribute information. Its primary purpose is to prevent fraud and theft by ensuring 'one vehicle, one Vehicle Identification Number (VIN)' and 'one person, one driver licence'.

NEVDIS enables road authorities to interact across state borders and directly supports the transport and automotive industries. In addition to information supplied by road agencies, NEVDIS collects VIN data for compliance from vehicle wholesalers and stolen vehicle information from police. It also provides information to public and private sector organisations to facilitate provenance checking on vehicles, matching of biographic details on licenses, motor insurance underwriting and vehicle safety recalls.

During the year, NEVDIS met or exceeded its system availability targets of 99.9% uptime. Transactions have steadily increased over the last five years, to more than 332 million in 2022-23, a 54% increase on 2018-19 transactions.

The NEVDIS administration unit also decodes and uploads new Vehicle Identification Numbers (VINs) as vehicles are manufactured or imported into Australia, ensuring the vehicle is available for registration. The World Manufacturer Identifier (WMI) forms the first three characters of the VIN. NEVDIS is the sole issuer and administrator of WMIs issued to Australian vehicle manufacturers.

Mitigating the impacts of data breaches

In September 2022, Optus announced that a cyber attack had compromised 9.8 million data records of current and former customers. Some of the information released included driver licence details. In March 2023, Latitude Financial announced that approximately 7.9 million driver licence numbers and 103,000 copies of driver licences or passports had been stolen in a cyber attack.

The NEVDIS team worked with licensing agencies to quickly instigate additional security measures and verifications when licences were used as proof of identity. This work continues and has expanded to include a project that will include other identity cards.

Responding to the data breaches has had major resourcing and workload impacts on NEVDIS team and has delayed projects to introduce new functionality into the system.

Counting vehicles

In 2021, the Australian Bureau of Statistics announced that it would discontinue the vehicle census. The annual census collected statistics relating to vehicles which were registered with a motor vehicle registration authority.

Austroads has worked with the Bureau of Infrastructure and Transport Research Economics (BITRE) to supply data that would enable a replacement report to estimate the total number of registered motor vehicles in Australia.

Raw motor vehicle registry data requires significant cleaning and standardisation to produce nationally-consistent estimates. Variation in registration categories used across different jurisdictions, inconsistent allocation of vehicles to registration categories within jurisdictions, and the size of the registered vehicle fleet (approximately 25 million vehicles, including caravans, trailers, and plant and equipment) greatly complicates the process of consistently and accurately identifying and categorising vehicles.

BITRE have now produced 2022 and 2023 estimates underpinned by data from NEVDIS.

Supporting cloud connected road users

Cloud connected road users use information from portable and in-vehicle devices to assist with trip planning, warnings and advice when travelling. In July 2022, Austroads concluded a project that examined various cloud connected road user data provision methods and practices in Europe, the United States, Australia, and New Zealand. The report guides agencies on how to manage, enhance, and deliver data to users of cloud connected services. It describes the various business models and roles that agencies may use to support the technology ecosystem.

The report also offers advice about managing the six key data function areas that are critical to supporting cloud connected road users, including managing data foundations, governing data, planning and designing data, enabling, and maintaining data. The report serves as a basis for future support of more advanced cooperative and automated vehicles, since their requirements are expected to be extensions to the data, agency responsibilities, and functions detailed in this report.

Forecasting skills requirements for member agencies

Skills gaps across the infrastructure industry have been compounded by the global pandemic, supply side factors and rising demand. In the wake of these exacerbating factors, Austroads' latest workforce capability project is assessing the skill shortage facing Australia and New Zealand's transport agencies over the next decade and explored ways to address them.

The analysis, to be published in September 2023, will estimate the skills and capabilities required by Austroads member agencies to continue delivering their service objectives, identify potential and emerging workforce capability gaps, and provide agencies and related stakeholders with potential solutions to meet these gaps.

Strategic plan focus area

Safety

Improving safety for road users and workers

Road Transport Suicide Prevention, is the first report of its kind to be published by Austroads and takes a multi-disciplinary approach to understanding the best measures to prevent suicide attempts on Australian and New Zealand roads.

Around 1,500 people lose their lives and another 40,000 suffer serious injuries each year in road crashes in Australia and New Zealand. Aligning with global targets, Australia and New Zealand have set national targets of zero road deaths and zero serious road trauma by 2050. Austroads has been at the forefront of developing the guidance and evidence to support the implementation of life saving initiatives and road designs.

Key developments

Path to Zero

Austroads Path to Zero project was launched in November 2022. The project, *Charting a path to eliminating road death and serious injury*, is focused on developing a path to zero deaths and serious injuries through a holistic approach to the safety of all people using the road.

The project is supported by an Expert Advisory Committee (EAC), chaired by Eric Howard. The 11 EAC members ensure the project has access to the best and most up-to-date road safety knowledge and best practice.

The project has multiple streams that will deliver practical guidance to help progress the all-government-levels leadership needed to fully implement the necessary actions to reduce fatalities and serious injuries to zero by 2050. The first stream will define 'zero harm' and assess the current state and environment, and update the *Guide to Road Safety* Part 1 and Part 7.

Improving heavy vehicle driver safety

With a growing freight task and changing vehicle fleet, it is critical that heavy vehicle drivers are safe and equipped for the vehicle they are permitted to drive. Because of their size and distances covered, heavy vehicles are over represented in fatal road crashes, with around 20 per cent of fatal crashes attributable to heavy vehicle driver error. It is imperative that drivers are as skilled and experienced as practicable.

At the request of transport ministers, Austroads has undertaken a program of work to extensively review the National Heavy Vehicle Driver Competency Framework (NHVDCF) including:

- reviewing the current approaches to licensing in Australia drawing out similarities, differences and risks, as well as opportunities
- reviewing overseas licensing practice and seeking to identify trends and areas of better practice
- considering research findings in areas including learning models, factors impacting safe driving and heavy vehicle crash rates, and licensing systems and programs
- seeking industry feedback about issues with the current licensing system, job readiness of licence holders, and the learnings from industry-based training programs.

In August 2022, Austroads released a Consultation Regulation Impact Statement (RIS) which outlined policy options being considered and identified the likely costs and benefits of each of the options. The feedback received on the Consultation RIS informed a Decision RIS which was submitted to transport ministers for consideration in June 2023.

Managing the safety of drivers with a health condition

Australia enjoys a strong international reputation for initiatives relating to medical fitness to drive. In July 2022 Austroads launched a two year strategy to better embed the national *Assessing Fitness to Drive* standards into the practice of health practitioners.

Awareness and education are key domains of the implementation. Health professionals were an early focus, seeking to build confidence in addressing fitness to drive and embed early conversations into routine management of health conditions, impairments or disabilities likely to affect driving. A quarterly newsletter has been established, which includes practical guidance for health practitioners developed by health practitioners. Each edition is sent to more than 4,000 subscribers.

A new edition of *Assessing Fitness to Drive* was published in June 2022 with improved online access to the standards. These improvements have radically changed the way people access the content, with more than 177,000 online accesses and less than 20,000 PDF versions downloaded.

Improving the safety of motorcycle riders

During the year, Austroads completed two projects seeking to improve the safety of motorcycle riders.

Austroads funded a lane marking layout trial designed to improve motorcyclist safety by influencing travelling speed and lane position at critical curves. The trial was conducted on Mt Mee Road, a popular route amongst motorcyclists with a known crash history. The design trialled was a modified version of a peripheral transverse line marking treatment with incrementally wider painted blocks through the apex of the curve. Only the travel lane with right-hand curvature was evaluated since the trial design specifically aimed to reduce incidents of motorcycles crossing the centreline.

The trialled design demonstrated high potential to enhance safety by supporting motorcyclists to maintain safe speed and lane position on curves, and reducing the likelihood of crashes. Additional research is needed to confirm the long-term effects observed in the trial and to investigate potential additional benefits or unintended side effects.

The second project examined the appropriateness of the Learner Approved Motorcycle Scheme (LAMS). The scheme has not been formally reviewed since it was introduced in NSW in 2002 and then adopted by all states, territories, and New Zealand.

The review considered whether certain types of motorcycles should be added or removed from the LAMs, whether the ACT's LAMS should be adopted by other jurisdictions, and whether modifications should be allowed to LAMS motorcycles.

The project recommended:

- not removing any motorcycles from the LAMS list and not adopting ACT LAMS until further research is completed
- alowing all motor trikes to be added to the LAMS provided that they meet the current criteria
- allowing modifications for accessibility provided that the motorcycles comply with LAMS criteria and relevant standards and legislation
- allowing modifications to improve safety and functionality provided that the motorcycles comply with LAMS criteria and relevant standards and legislation
- encouraging a faster update of Antilock Braking System (ABS) and Traction Control System (TCS) for LAMS or mandating ABS and TCS for LAMS.

Austroads also hosted a webinar by Dr Liz de Rome, the winner of the Women in Road Safety Award presented by Austroads at the 2022 Australasian Road Safety Conference. Dr de Rome has established a groundbreaking testing program to inform motorbike riders about the performance of protective jackets, pants and gloves.

Improving the safety of drivers from overseas

In late 2022, Austroads completed an extensive review and proposed changes to the way driver licences issued overseas are treated. The licensing recognition scheme, which allows visitors to drive on their overseas licences and licences from certain countries to be converted to Australian licences, has been in place for 20 years.

The scheme is designed to provide access to Australian roads for visitors and new residents in a way that recognises the safety needs of all road users. The review recommended:

- restricting the time an overseas driver licence is recognised before the licence holder is required to convert to a local licence
- revising the assessment criteria (including adding a requirement for a Safe System approach to driver training and assessment), and application and review arrangements for countries seeking to have their licences recognised
- developing a comprehensive framework of educational material for overseas visitors wishing to drive in Australia
- reviewing the briefing materials provided for those intending to transfer their overseas licence to an Australian equivalent

- promoting data collection and analysis to determine the crash risk of overseas licence holders including tourists
- sharing information about emerging concerns in the management of overseas issued licences with domestic and international licensing partners.

A working group are facilitating the implementation of the recommended policies.

Improving road worksite safety

The safety of road workers and road users at and around road worksites is a key area of concern for Austroads member agencies and industry.

Austroads is coordinating a large implementation project that will harmonise temporary traffic management (TTM) practice with improved technical guidance, the harmonisation of the training environment for TTM practitioners, a registration framework for organisations seeking to deliver TTM services and a national approach to recognise new and innovative devices and solutions.

In September 2022, Austroads published a cost benefit analysis of the project. Drawing on crash data, the study estimated that nationally there are 18 fatal crashes, 245 serious injury crashes and 530 minor injury crashes at roadside worksites annually. The study found that a crash reduction at roadside worksites of approximately 5% would yield a reduction in crash costs that was equal to the costs of the Austroads project.

During the year, significant progress was made towards the delivery of the national training framework for TTM. Training material for the traffic controller and traffic management implementer courses was completed. The material for traffic management designer was drafted and is being reviewed by industry. In May 2023, Austroads launched its TTM train the trainer initiative which has, to date, certified more than 300 trainers to deliver Austroads TTM training.

The TTM Registered Training Organisation Framework has been finalised, following consultation with the training industry.

The Austroads Innovative Temporary Traffic Management Device and Solution Assessment (AITDSA) Scheme commenced operation in July 2022. AITDSA provides a way for innovative devices and solutions used for temporary traffic management to be assessed and recommended for use in Australia and New Zealand.

The AITDSA panel, chaired by Peter Duncan, met four times during the year and approved four products for adoption by jurisdictions.

Improving the safety of roadsides and barriers

Run-off-road and head-on crashes are the most common and severe types of crashes, particularly in rural environments and on high-speed urban roads. Installing high-performance safety barriers can create a safer environment for vehicle occupants by preventing vehicles from leaving the roadway and colliding with oncoming vehicles or hazards in the roadside. Safety barriers also protect road workers and others who may be in the roadside.

The Austroads Safety Barrier Assessment Panel (ASBAP) uses a structured system to assess the crashworthiness and suitability of road safety barriers, systems and devices for deployment on roads managed by Australian/New Zealand transport agencies. The panel met four times during the year and issued Austroads Technical Conditions of Use for more than 30 products including temporary and permanent barriers, and crash cushions.

Austroads members, along with the road safety barrier industry, have been concerned about the quality of installation of road safety barriers which may put the safety of the public and road workers at risk. The Austroads Safety Hardware Training and Accreditation Scheme (ASHTAS), launched during the year, delivers a high-standard and nationally consistent set of training outcomes for individuals installing and maintaining road safety barriers in Australia and New Zealand.

Austroads is currently undertaking a project to update the guidelines on selecting and designing bridge barriers. This project will verify the compliance of Austroads' *Standardised Bridge Barrier Design* guidelines against the relevant Australian Standards, and the American Association of Highway and Transportation Officials' (AASHTO) *Manual for Assessing Safety Hardware* (MASH). The outcomes of the project are expected to improve bridge barrier design and maintenance practice and achieve consistency and cost savings.

In July 2023, Austroads conducted testing which involved crashing a 36-tonne truck, a sports utility vehicle, and a small passenger car into a medium performance level bridge barrier. This design is the most common type of bridge barrier across Australia and New Zealand. The tests results will confirm if the structural performance of this bridge barrier design meets the requirements of the Australian Standards, and the AASHTO MASH.

The crash tests were world firsts. The 90 km/h test speed for the articulated truck and the use of test dummies in the sports utility that approximate the size and weight of a woman and child will provide unique datasets on the potential impacts of high-speed crashes into a bridge barrier.

The updated guidelines, a supporting research report and webinar are expected in 2024.

Improving the safety of roads

Management of AusRAP, the Australian version of the International Road Assessment Programme (iRAP), was transferred from Australian Automobile Association to Austroads in 2021.

As the AusRAP lead, Austroads will partner with the AAA, the Australasian College of Road Safety, the Australian Local Government Association, the Department of Infrastructure, Transport, Regional Development, Communications and the Arts, iRAP, state, territory and local governments and the Australian Road Research Board.

During the year, Austroads worked with the partners to set a vision and strategy for the program. The partnership will:

- maximise infrastructure planning, management and investment in safer roads for the benefit of all Australians
- work towards the target that more than 80% of travel is on 3-star or better roads for all Australian road users by 2030
- track performance and communicate (to the public and decision makers) the safety of infrastructure in line with global and local road safety performance targets and the *UN Decade of Action Safety Plan 2021-2030*
- lift the safety capability of road managers in all jurisdictions and across all levels of government.

In June 2023, Austroads published updated editions of its intersection design guidance and turning path templates based on best-practice evidence to improve road safety. The updates focused on pedestrian crossings over raised platforms, railway crossing design, rural channelised intersection design, acceleration lane lengths for heavy vehicles to accelerate from rest to a specified speed, compact roundabouts, radial design of roundabouts, bicycle lanes at roundabouts and geometry of interchange ramps.

Road safety auditors in Australia and New Zealand identify and mitigate risks to achieve a safer environment for all road users. Despite their importance, there is no common approach for road safety auditor training, accreditation, assessment, and ongoing professional development. Consequently, there is considerable variance in practice.

During the year, a project team consulted with government and industry to determine the appetite for a harmonised approach. There was overwhelming agreement that adopting a single harmonised register was a common-sense approach that would allow auditors to work more easily across borders and help clients to choose the right auditor for the job from a reliable pool of accredited professionals. In the coming year, the project team will settle key operational policy issues and then develop a plan to implement the agreed policy.

Preventing suicide in road transport

In April 2023, Austroads published a research report detailing the current statistics and best measures to prevent suicides on Australian and New Zealand roads. The report, *Road Transport Suicide Prevention*, is the first of its kind to be published by Austroads and takes a multi-disciplinary approach to understanding the best measures to prevent suicide attempts on Australian and New Zealand roads.

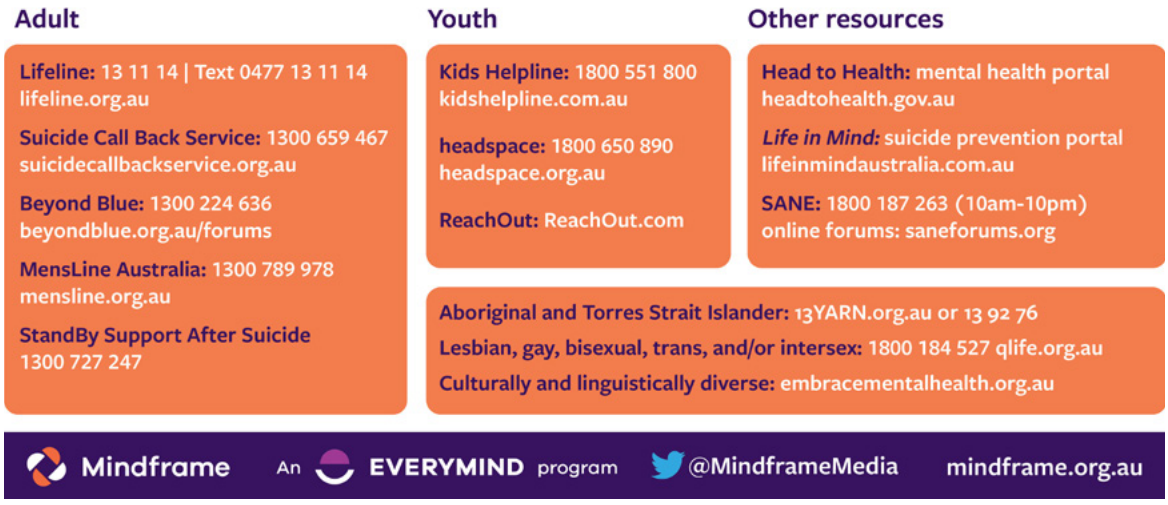
The report provides a comprehensive review of current suicide prevention methods used both in the road transport network and in other, high-risk areas. It includes comprehensive guidelines for safe communication about suicide for government agencies, industry stakeholders and the media.

It is important to understand that communication about suicide has the potential to do harm and it needs to be approached with caution. But the research shows that effective communication can make a difference.

The research project was a significant collaborative effort involving more than 100 partners. It shows how working together and shared responsibility is crucial to understanding the problem and reducing suicide. This research is a critical step towards addressing an issue that has often been overlooked.

While the report does not include graphic images of people who have died, it does reference and discuss studies that do. The report has a focus on road suicide and road suicide prevention data, interventions, research, and similar international strategies, yet this may be distressing for readers, particularly those who are vulnerable to suicide.

Caution is recommended for those reading the report and for those who search out the mentioned references. If this content has raised any issues or concerns for you, contact your GP or the services below for support. If yours or someone else's life is in danger, call 000 in Australia or 111 in New Zealand.



Sharing road safety expertise

In September 2022, Austroads' Chief Executive Geoff Allan welcomed the delegates of the Australasian Road Safety Conference in Christchurch, New Zealand. More than 700 practitioners from 18 countries attended the conference to share their knowledge, experiences and best practice in road safety research, practice, teaching and policy. Austroads is a long-term sponsor of the conference and the Women in Road Safety Award. In 2023, the conference will be held in Cairns and Austroads will partner with the Australian College of Road Safety to reduce the environmental footprint of the conference.

Strategic plan focus area

Sustainability

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

The resilience of road infrastructure has been in the spotlight as Australia and New Zealand experienced extreme weather events that damaged and destroyed roads, railway lines and bridges. Austroads and the Queensland Department of Transport and Main Roads presented a joint knowledge sharing seminar showcasing Queensland's transport infrastructure resilience and response to weather events.

Sustainability and resilience are paramount considerations in the planning and management of Australian and New Zealand roads. Road infrastructure provides essential connections for communities and both nations are acutely aware of the need for cooperative responses to the impacts of extreme weather events. To ensure long-term sustainability, there is a growing emphasis on environmentally friendly road construction practices and sustainable transportation options such as encouraging the use of low and zero emissions vehicles, active transport and public transport.

Key developments

Members environmental stocktake

In June 2023, Austroads published a high-level summary of the environment and sustainability initiatives of its eleven member agencies.

Transport is Australia's third largest source of greenhouse gas emissions, with the highest rate of growth. Most agencies are working towards a carbon emission reduction target and have an emissions reduction strategy in place. Agencies have also consistently invested in mode shift planning with the release of plans and strategies that encourage cycling and walking and research initiatives that focus on active transport such as 20-minute neighbourhoods and developing improved cycling routes.

The initiatives are grouped around five themes:

- Greenhouse gas (GHG) emissions: activities that reduce transport related GHG and initiatives including net zero transport, zero emission targets and transport mode shifts.
- Climate change resilience: activities that manage climate-related risks to transport assets and operations and initiatives including improving infrastructure resilience, assessing and managing both physical and transition climate-related risks.
- Circular economy: activities that reduce or minimise waste and initiatives including using sustainable material and incentivising circular economy innovations.
- Human health: activities that reduce the negative impacts on human health and address cultural connections and initiatives including encouraging active transport.
- Biodiversity: activities that reduce the negative impacts on flora and fauna and initiatives including fauna and flora protection design, ecological connectivity and land disruption minimisation.

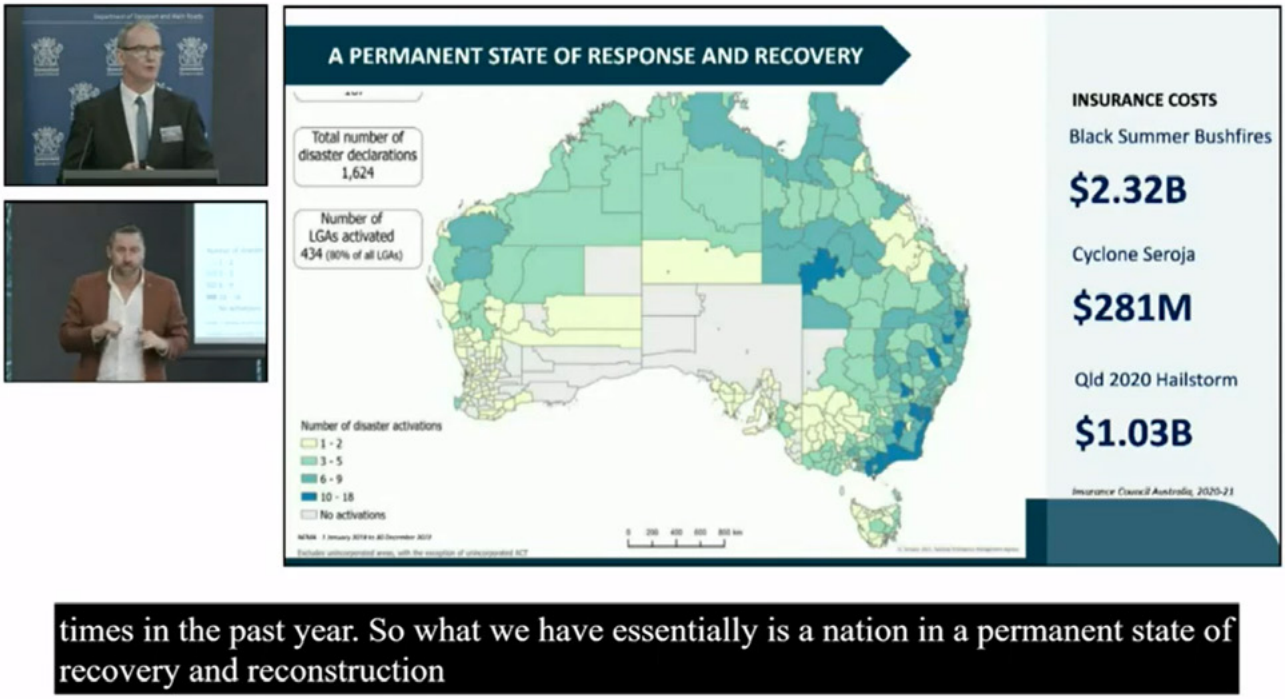
The information will be used by Austroads members to identify opportunities to introduce new initiatives and by Austroads to identify where nationally consistent guidance and support will be of benefit.

Incorporating recycled materials into road infrastructure

In July 2022, Austroads published a new edition of *Guide to Pavement Technology Part 4E: Recycled Materials*. The Guide explores the current use of reclaimed asphalt pavements, industrial slag, recycled crushed glass, construction and demolition waste, concrete and masonry, fly ash, plastics and crumb rubber in pavement construction. It focuses on performance impacts, national and international standards and specifications, potential environmental and health and safety risks, and economic and societal impacts.

In October 2022, Austroads published the results of the performance assessment of low melting point recycled plastics in asphalt and reclaimed plastic-modified asphalt, including their emission and microplastic release characteristics. The results are outlined in a report that completes Austroads research on waste plastics and their potential application in asphalt.

The findings show that, with appropriate mix design, plastic waste can be sustainably converted into value-added materials to potentially improve the durability of pavements and also help alleviate the environmental problems caused by plastic. The project also investigated the possibility of recycling reclaimed plastic-modified asphalt pavements (P-RAP) at the end of their service life. The inclusion of P-RAP did not have adverse effects on the performance of asphalt mixes, indicating it can be used as standard reclaimed asphalt material in pavement mixes.



Brendan Moon, Coordinator-General, National Emergency Management Agency, provided a nation wide perspective to the challenges of managing severe weather events at the Austroads and Transport and Main Roads resilience seminar.

Of the 450,000 tonnes of tyres that reach their end of life in Australia each year, 30% go to landfill, are buried or are illegally stockpiled. In December 2022, Austroads published research into incorporating recycled tyres from passenger and other non-truck vehicles into asphalt.

Most crumb rubber asphalt production comes from truck tyres. Passenger vehicle tyres contain more textile fibre, making them more comfortable for driving on the road but more complicated to recycle. Off-the-road tyres, mostly sourced from mining operations, are also challenging to recycle due to their size, which requires specialised equipment.

The report investigated the market-readiness of Australia and New Zealand and found that many recycling plants do not have all the equipment needed to recycle tyres from non-truck vehicles. There is, however, a growing interest thanks to new investment flows from tyre stewardship associations and government agencies.

During the year, Austroads also released a draft rejuvenator evaluation protocol, developed to increase the use of reclaimed asphalt in pavements. Reclaimed asphalt pavement (RAP) is commonly used in new asphalt mixes but use at high levels in a mix requires the use of rejuvenators to soften the binders which harden as they age. Australasian road agencies report that few use high concentrations of RAP because there are no local specifications to evaluate the performance of rejuvenators.

The draft protocol is an important first step in developing clear guidelines and specifications to assess rejuvenator performance, essential to increasing the uptake of reclaimed asphalt pavement and the use of high RAP content mixes in Australia and New Zealand.

Sharing infrastructure resilience expertise

Austroads and the Queensland Department of Transport and Main Roads presented a joint seminar in February 2023 showcasing Queensland's transport infrastructure resilience and response to weather events.

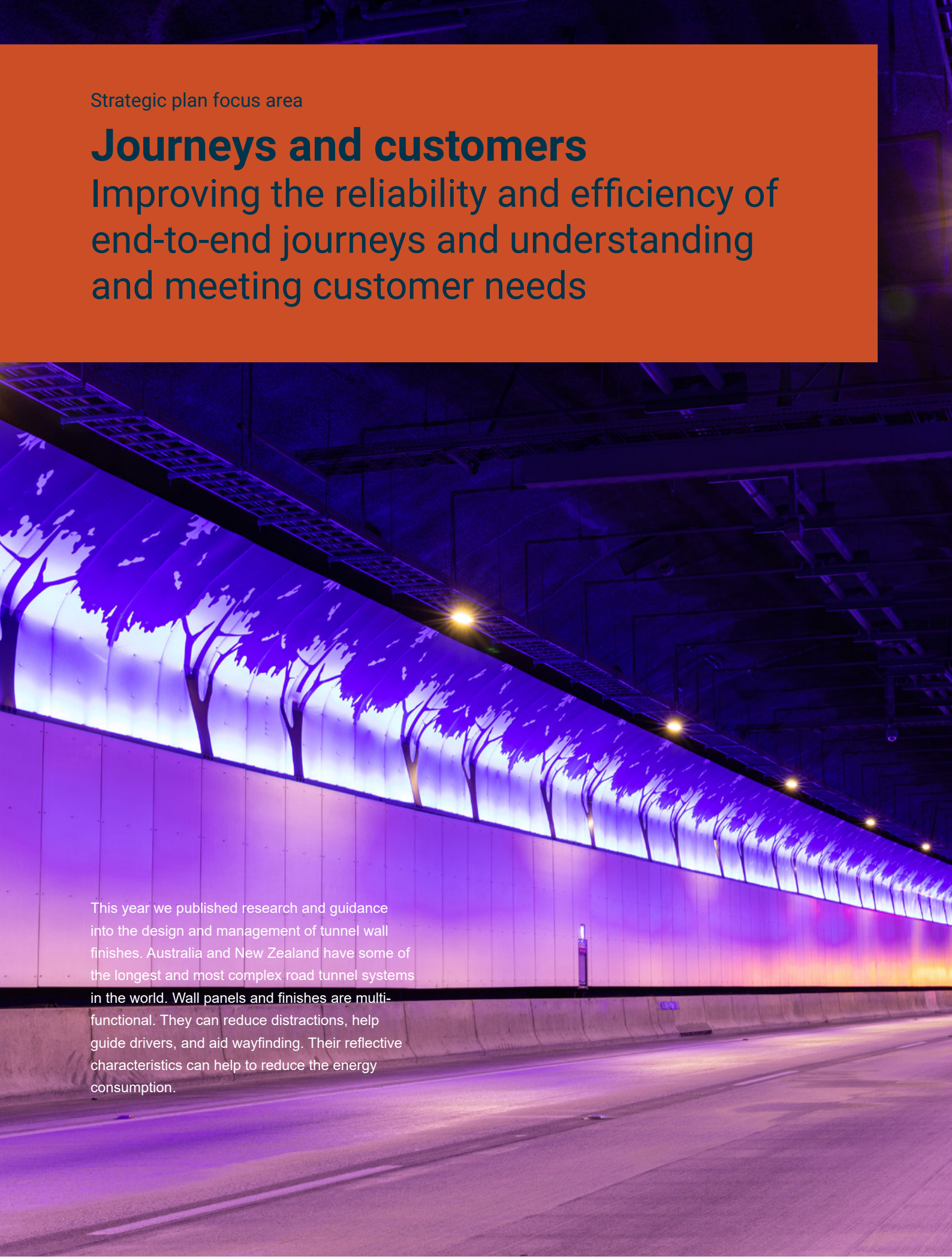
The event provided a platform for all tiers of government and industry representatives to share their knowledge, experiences and key learnings in disaster recovery management.

The seminar was chaired by Neil Scales OBE, the then Director-General of TMR. Geoff Allan, Austroads Chief Executive, chaired Session 3: Lessons Learned in Transport Infrastructure. A recording of the presentations and slides can be downloaded from the Austroads website.

Strategic plan focus area

Journeys and customers

Improving the reliability and efficiency of end-to-end journeys and understanding and meeting customer needs



This year we published research and guidance into the design and management of tunnel wall finishes. Australia and New Zealand have some of the longest and most complex road tunnel systems in the world. Wall panels and finishes are multi-functional. They can reduce distractions, help guide drivers, and aid wayfinding. Their reflective characteristics can help to reduce the energy consumption.

Australian and New Zealand transport agencies are increasingly embracing customer-centric approaches to curate journeys for road users. Agencies recognise the importance of providing efficient, safe, and user-friendly transportation experiences. Their efforts reflect a commitment to improving the overall quality of journeys, reducing congestion, and enhancing the overall road travel experience for customers.

Key developments

Maximising the experience of journeys in tunnels

Australia and New Zealand have some of the longest and most complex road tunnel systems in the world.

In-tunnel aesthetics are used in long and complex tunnels to reduce driver anxiety and distraction and in January 2023, Austroads published a technical report that focuses on the design, delivery and testing of different in-tunnel aesthetic features with the aim to improve the overall safety and experience of in-tunnel driving.

The study found that one of the most effective aesthetic features for in-tunnel design was lightly coloured wall coatings. Walls coated in a light colour created spaces that felt spacious to the driver and helped keep their focus on the road.

Wall panels and finishes are multi-functional. They can reduce distractions and hide any tunnel services which may be located along the walls. They can also help guide drivers, with colours and graphics aiding wayfinding. Their reflective characteristics can help to reduce the energy required to light the tunnel.

In April 2023, Austroads published a report proposing a specification framework for the design, installation and testing of road tunnel wall panels and finishes. It includes general performance characteristics, design life, durability, aesthetics and material, lighting, fire resistance and maintenance. The report recommends that the framework be developed into a formal Austroads technical specification following a review by transport agencies and industry.

Managing unplanned incidents

Transport agencies are under increasing pressures to meet customer needs for seamless connections across several transport modes. Multimodal incident management aims to maintain transport services and minimise disruptions in day-to-day journeys. It requires a coordinated response from multiple road and public transport operators to resolve incidents and restore the transport network to normal operating conditions.

During the year, Austroads published two reports to assist agencies with their multimodal incident management. A research report reviews current international and local multimodal incident management practices. The second report presents a set of reference architecture models, content and guidance for use by road agencies to identify, plan and improve their multimodal incident management capabilities.

Demystifying vehicle safety systems

The presence and use of technology in light vehicles has been increasing at a steady rate for several years. *Advanced Driver Assistance Systems: Driver Education Guide* provides a brand and model neutral list of Advanced Driver Assistance Systems (ADAS) functions found in vehicles in the Australian fleet. This guideline provides a high-level and simplified description of their functions, how they operate, and their shortcomings. Austroads is planning to develop this content further in 2023.

Austroads also published guidelines to assist driver licensing authorities to develop responses to the increasing presence of ADAS functions in vehicles used for training and testing new drivers. The guidelines will also be of interest to driver trainers and assessors who may need to consider how they respond to driver licence testing with ADAS functions. The American Association of Motor Vehicle Administrators (AAMVA) have been granted permission to use the content in the guidelines in the update of their *Guidelines for Testing Drivers in Vehicles with ADAS*.

Interoperable digital identity and mobile licences

Austroads, the American Association of Motor Vehicle Administrators (AAMVA) and the Association of European Vehicle and Driver Registration Authorities (EReg) have been working with global vendors since 2014 to deliver international standards for mobile driver licences and mobile identity.

In November 2022, Austroads and the Queensland Department of Transport and Main Roads hosted an event to foster collaboration between government and industry working on standards for internationally interoperable, secure and privacy-preserving mobile driver licences and digital identity. Global vendors and government bodies working with mobile wallets and driver licences also held a series of events to test the standards for clarity and completeness.

Resource sharing and effective collaboration are crucial in the development of digital products that are interoperable and designed to protect customers' privacy and security.

Consistent signage for low and zero emission vehicle drivers

The uptake of low and zero emission vehicles (LZEVs) 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 LZEVs adoption. The number of charging and refuelling facilities and dedicated parking areas increases and so does the need for clear and consistent signage.

In January 2022, Austroads published a report proposing a set of symbols for LZEVs and associated charging or refuelling infrastructure to be used on road signs and for road marking in Australia and New Zealand. In December 2022, an addendum was published summarising the testing results of the symbols. The results show that electric-powered vehicle and charging station symbols were well understood by the public. However, hydrogen fuel-cell powered vehicle and hydrogen refuelling station symbols did not pass the test.

The research concluded that the electric-powered vehicle and charging station symbols are suitable for use on future road signage and pavement markings. However, as the public's awareness of hydrogen as a fuel is still low, testing of hydrogen-related symbols should be repeated in the future.

Preparing the community for the 3G shutdown

Austroads and Transport Certification Australia have partnered with key industry players and organisations to provide high-level information on the impacts of the Australian 3G shutdown and what local government and transport industry need to do to prepare for the transition.

Between December 2023 and September 2024, Telstra, Optus and Vodafone will close their 3G networks to make room for new, faster services. The 3G network shutdown will affect vital equipment and services and the road transport sector is urged to start their transition immediately. New Zealand is also set to shut down their 3G services. The country will begin to close their 3G networks in August 2024 and will be finished with the transition towards the end of 2025.

When 3G networks are shut down entirely, devices that rely on 3G connectivity will no longer function. To continue to operate, those devices will need to be upgraded or replaced. Commonly affected devices include:

- telematics and vehicle/asset tracking devices installed in heavy and light vehicles, as well as general assets such as trailers and generators
- traffic management signs used in school zones, intersections and freeways
- weather systems and stations
- alarms/building entry
- devices that incorporate gateway or mesh backhaul
- personal emergency response systems
- phones and tablets.

Austroads Ltd
Directors' and financial reports

Contents

Directors' report

The directors of Austroads Ltd ('the Company') present this report on the Company for the financial year ended 30 June 2023.

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 (retired 3 June 2023)
- Louise McCormick
- Peter Woronzow
- Brett Gliddon
- Gary Swain
- John Hardwick
- William Tieppo
- Dr Ana Glavinic
- Alison Playford
- Matt Pennegar (resigned 14 April 2023)
- Maree Bridger (resigned 02 November 2022)
- Andrew Madsen (appointed 02 November 2022)
- Liz de Chastel (appointed 26 April 2023)
- Dennis Walsh (appointed 5 June 2023)
- Paula Stagg (appointed 12 June 2023).

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.

There have been no significant changes to the activities of the Company during the financial year.

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 101 projects underway or commence in 2022-23 financial year, including 27 projects that were completed. At the end of the financial year, there were 74 active projects, 40 of those were on track for completion on schedule.

A further 34 are at risk of delay against scheduled completion dates, these projects have had internal project milestones delayed but there are no current effects on scheduled completion dates. 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 following table 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

Use is a strong indication that the material produced by Austroads is trusted. Austroads Guides are increasingly used by members and the broader industry. Nearly 300,000 copies of the Austroads Guides were accessed during the year, a 9% increase on the previous financial year and a 47% increase on 18/19. The Guides, which cover the planning, design, operation and management of road infrastructure, are used extensively in Australia and New Zealand but their quality is recognised internationally. Austroads is providing support to the Cambodian Government to adapt the Guides to their local road environment.

Online tools, that help practitioners implement the technical approaches in the Guides, have also seen increased usage. Use of the Pedestrian Facility Selection Tool has increased by 33%, with more than 2,000 users in 22/23. Use of the pavement design software, AustPADS has increased 6% with more than 2,200 users.

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 Programme.

Case 2: Austroads' publications are regularly referenced in journal articles, books chapters, conference paper and academic theses. Last year Austroads publications were referenced in more than 500 journal articles, book chapters and theses. Year on year increases in this area have been very solid at 30% in 21/22 and 25% in 22/23.

Case 3: Austroads' recently developed guides on Advanced Driver Assistance Systems (ADAS) involved cooperation with the American Association of Motor Vehicle Administrators (AAMVA). The final pre-published guides were shared with AAMVA after they were endorsed by the Austroads Board in August 2022. AAMVA sought permission to use our content as they review their own *Guidelines for Testing Drivers in Vehicles with ADAS*.

Case 4: Partnerships for Infrastructure (P4I) has informally advised Austroads that the *Cambodia Technical Standards Update* project is considered as 'one of the most successful case studies to date' by P4I. The Australian Embassy Cambodia also released a social media post promoting our work to update Cambodia Ministry of Public Works and Transport's Technical Standards.

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 | 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 (retired 03 June 2023)

Neil was Director-General of Queensland Department of Transport and Main Roads. Along with almost 40 years experience in the transport industry, he is a Fellow of three major UK engineering institutions. He received an OBE for services to public transport in 2005 and in 2011 was awarded an honorary Fellowship from Liverpool John Moores University for his services to the region. Neil was awarded the John Shaw Medal by Roads Australia in 2021. The John Shaw Medal honours an industry champion who has made a lasting contribution to Australia's roads.

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

Louise is an Executive Engineer, Chartered Fellow and Senior Civil/ Structural Engineer with over 20 years experience in the public and private sectors. In 2022 Louise was appointed Commissioner for Infrastructure NT and awarded the John Shaw Medal by Roads Australia (honouring an industry champion who has made a lasting contribution to Australia's roads).

Louise has managed some of the Territory's largest transport infrastructure projects. She has played an active role in Engineers Australia, and her work has been recognised through industry 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 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 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 work 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 is Deputy Secretary, Transport and Infrastructure, Department of State Growth and Transport Commissioner for Tasmania. As Deputy Secretary Transport and Infrastructure, Gary's role spans network planning, capital program delivery, asset management, passenger transport policy, procurement, regulation, road safety, and registration and licensing. As Commissioner for Transport he makes complex statutory decisions, and supports coordinated outcomes between road managers, particularly state and local government. Gary has more than 25 years experience, primarily in the infrastructure sectors of transport, electricity, natural gas, and water and sewerage.

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 led 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.

William Tieppo | B.Eng - Civil Engineering

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.

Ana Glavinic | PhD

Ana is the Director, Technical Services and Planning within the Department for Infrastructure and Transport (DIT), encompassing engineering and environment and eustainability 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 (PhD) 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

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.

Andrew Madsen (appointed 02 November 2022)

Andrew was the acting First Assistant Secretary, Surface Transport and Emissions Policy Division at the Department of Infrastructure, Transport, Regional Development, Communications and the Arts. Andrew has worked in the Australian Public Service (APS) for 22 years across a range of policy, program and corporate areas in the Department and the former Department of Communications and the Arts. Andrew has recently left the APS to take up the role of Executive General Manager, Government Relations for NBN Co Limited. Andrew has bachelor's degrees in economics and law from the University of Tasmania.

Liz de Chastel | BRTP (Hons), Grad Cert M'ment, LFPIA (appointed 26 April 2023)

Liz is the Executive Director of Policy at the Australian Local Government Association (ALGA), a position she has held for five years and was recently appointed as the Interim Chief Executive of ALGA from May-August 2023. Liz has held senior roles developing policies for planning, housing, transport and regional development, in the NT and Qld Governments, SGS Economics and Planning and the Planning Institute of Australia.

Dennis Walsh | BEng, MEngSC, CPEng, RPEQ, MIEAust, M IPWEA, APEC Engineer Int PE (Aust), GAICD (appointed 5 June 2023)

Having worked in the transport sector both public and private for the past 35 years, Dennis is the Chief Engineer of Transport and Main Roads. He oversees all technical matters as they relate to the delivery of the Queensland Transport and Road Infrastructure Program. He is a Chartered Professional Engineer, member of Engineers Australia and graduate of Australian Institute of Company Directors.

Dennis has worked across areas including strategic planning, traffic and transport planning, road safety policy and engineering, road design, road operations, rail regulation, heavy vehicle operations and Intelligent Transport Systems. He has contributed to a range of national groups and is the Queensland Director on the ANCAP Board, a board member and Vice President of ITS Australia. He has recently been appointed as a Board member and Interim Chair of Transmax and Queensland's representative on the Austroads Board. He is on the interim board of CCAT and is an honorary member of Institute of Public Works Engineers Australia. He is also the recipient of the outstanding QUT Alumni Award 2021 and the Engineers Australia National Transport Medal 2023.

Paula Stagg (appointed 12 June 2023)

Paula is the First Assistant Secretary, Surface Transport and Emissions Policy Division at the Department of Infrastructure, Transport, Regional Development Communications and the Arts. Paula has policy responsibility for all surface modes of transport – road, rail, maritime and shipping, with a focus on productivity, safety, and reducing emissions across each of these transport modes. Over her career Paula has worked across a range of Government departments, contributing to policy in the areas of transport, energy, resources, climate change, the environment and water.

Maree Bridger | B.Ec, Executive MBA, CPA (resigned 2 November 2022)

Maree is the acting Chief Operating Officer at the Department of Infrastructure, Transport, Regional Development, Communications and the Arts. She has worked in the Australian Public Service for 14 years across a range of policy, program, corporate and service delivery areas. She 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.

Matt Pinnegar | LLB, BComms (resigned 14 April 2023)

Matt 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.

Company secretary

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

Dr Geoff Allan

Geoff is the Austroads Chief Executive. He was appointed to the board of Transport Certification Australia in March 2022 and was appointed Managing Director in May 2022. Geoff is Vice-President of PIARC (World Road Association) as well as Chair of PIARC's Strategic Planning Commission. Geoff serves on the Council (Board) of the Centre for Professional Engineering Education (CPEE). Geoff has worked in a variety of executive roles in the Queensland Government and the National Transport Commission. Geoff has a bachelor's degree in town planning, a master's degree in social science and a PhD in public sector management.

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
Louise McCormick	4	4
Peter Woronzow	4	2
Brett Gliddon	4	4
Gary Swain	4	4
John Hardwick	4	4
William Tieppo	4	3
Matt Pinnegar	3	1
Dr Ana Glavinic	4	4
Alison Playford	4	4
Maree Bridger	1	0
Andrew Madsen	3	3
Liz de Chastel	1	0
Dennis Walsh	0	0
Paula Stagg	0	0

Alternate directors attended meetings as follows:

Alternate Director	Alternate for	Attended meetings
Andrew Madsen	Maree Bridger	1
Des Snook	Peter Woronzow	2
Alan Martin	William Tieppo	1
Sanjiv Sathiah	Matt Pinnegar	1
Sanjiv Sathiah	Liz de Chastel	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 2023, the total amount that members of the Company are liable to contribute if the Company is wound up is $110 (2022: $110).

Auditor's independence declaration

The lead auditor's independence declaration for the year ended 30 June 2023 has been received and can be found on page 47 of the annual report.

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

Gary Swain

Director
25 October 2023

Pitcher Partners Sydney Partnership

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Sydney NSW 2000

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Sydney NSW 2001

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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 2023, 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

25 October 2023

Statement of profit or loss and other comprehensive income for the year ended 30 June 2023

	Notes	2023 $	2022 $
Revenue	2	33,496,482	32,365,340
Expenses			
Corporate Expenses	3(a)	8,696,003	6,447,048
Work Program	3(b)	10,065,038	8,228,495
Specific Projects	3(c)	344,203	501,652
Publications	3(d)	23,058	11,851
Other NEVDIS Related Expenses	3(e)	5,518,069	5,803,816
Depreciation and Amortisation Expenses		2,209,882	2,015,685
Total expenses		26,856,253	23,008,547
Surplus for the year		**6,640,229**	**9,356,793**
Other comprehensive income		**-**	**-**
Total comprehensive income for the year		**6,640,229**	**9,356,793**
Total comprehensive income attributable to members of the entity		**6,640,229**	**9,356,793**

Statement of financial position as at 30 June 2023

	Notes	2023 $	2022 $
ASSETS			
Current assets			
Cash and Cash Equivalents	4	24,345,203	31,636,442
Financial Assets at Amortised Cost - Term Deposits		26,358,428	11,396,514
Trade and Other Receivables	5	7,715,127	5,420,928
Other Assets	6	423,614	297,003
Total current assets		58,842,372	48,750,887
Non-current assets			
Plant and Equipment	7	875,590	892,304
Intangible Assets	8	1,087,236	2,719,566
Lease Assets	10	2,086,022	2,488,934
Total non-current assets		4,048,848	6,100,804
Total assets		**62,891,220**	**54,851,691**
LIABILITIES			
Current liabilities			
Trade and Other Payables	9	3,755,361	2,274,195
Lease Liabilities - Current	10	352,682	315,376
Provision for Employee Benefits	11	513,328	448,942
Other Liabilities	12	63,566	-
Total current liabilities		4,684,937	3,038,513
Non-current liabilities			
Lease Liabilities - Non-current	10	1,910,608	2,262,404
Provision for Employee Benefits	11	301,186	196,514
Total non-current liabilities		2,211,794	2,458,918
Total liabilities		**6,896,731**	**5,497,431**
Net assets		**55,994,489**	**49,354,260**
Equity			
Accumulated Surplus		2,580,147	5,494,657
NEVDIS Reserve	1(m)	53,414,342	43,859,603
Total Equity		**55,994,489**	**49,354,260**

The accompanying notes form part of these financial statements.

Statement of changes in equity for the year ended 30 June 2023

	NEVDIS Reserve $	Accumulated Surplus $	Total Equity $
Balance at 1 July 2021	36,005,859	3,991,608	39,997,467
Comprehensive income			
Surplus for the year	-	9,356,793	9,356,793
Transfer to Reserve	7,853,744	(7,853,744)	-
	7,853,744	1,503,049	9,356,793
Balance at 30 June 2022	**43,859,603**	**5,494,657**	**49,354,260**
Comprehensive income			
Surplus for the year	-	6,640,229	6,640,229
Transfer to Reserve	9,554,739	(9,554,739)	-
	9,554,739	(2,914,510)	6,640,229
Balance at 30 June 2023	**53,414,342**	**2,580,147**	**55,994,489**

Statement of cash flows for the year 30 June 2023

	Notes	2023 $	2022 $
Cash Flows from Operating Activities			
Member Contributions		32,042,759	32,183,114
Receipts from Customers and Other Sources		(2,183,829)	(2,207,366)
Payments to Suppliers and Employees		(23,023,424)	(20,600,318)
Interest Received		1,406,919	151,202
Interest Paid		(99,334)	(80,927)
Net Cash Inflow from Operating Activities	14	**8,143,091**	**9,445,705**
Cash Flow from Investing Activities			
Movement in Term Deposits		(14,961,914)	13,982,091
Purchase of Plant and Equipment		(157,926)	(533,411)
Purchase of Intangible Assets		-	-
Net cash from/(used in) Investing Activities		**(15,119,840)**	**13,448,680**
Cash Flow from Financing Activities			
Repayment of Lease Liabilities		(314,490)	(247,496)
Net cash used in Investing Activities		**(314,490)**	**(247,496)**
Net increase in cash held		(7,291,239)	22,646,889
Cash at the beginning of the financial year		31,636,442	8,989,553
Cash at the end of the financial year	4	**24,345,203**	**31,636,442**

The accompanying notes form part of these financial statements.

Notes to the financial statement for the year ended 30 June 2023

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 *Presentation of Financial Statements (*AASB 101), *Statement of Cash Flows* (AASB 107), *Accounting Policies, Changes in Accounting Estimates and Errors* (AASB 108), *Interpretation of Standards* (AASB 1048), *Application of Tiers of Australian Accounting Standards* (AASB 1053) and *Australian Additional Disclosures* (AASB 1054), 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 25 October 2023 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

	2023 $	2022 $
Revenues from contracts with customers		
Fees and Charges		
NEVDIS		
PPSR Enhancements Recovery	2,855,492	2,499,999
Safety Recalls	461,174	589,165
Data Extracts	249,302	257,462
Document Verification Services	8,527,271	7,788,805
VSA income	38,150	65,450
WMI income	32,200	74,200
Plate to VIN Services	3,539,263	3,110,256
NHVR-Data fee Income	1,035,666	1,026,635
RAV Project	250,000	358,200
	16,988,518	15,770,172
Other revenue		
Contributions		
Membership Contributions	2,582,187	2,532,011
Work Program Contribution	12,000,000	11,898,101
	14,582,187	14,430,112
Special Programs and Projects		
Australian Transport and Assessment Planning (ATAP)	304,170	132,830
Cambodia Ministry of Public Works & Transport - Technical Standards	136,434	–
Implementation - Temporary Traffic Management	31,450	–
Use of Road Grade Recycled Plastics	–	1,850,000
	472,054	1,982,830
Publications		
Gross Sales Revenue	20,738	13,524
	20,738	13,524
Interest Received		
Short Term Investments	1,406,919	143,123
Rental Bond Deposit	–	8,079
	1,406,919	151,202
Other Income		
Other income (Austroads)	26,066	17,500
	26,066	17,500
Total Revenue	**33,496,482**	**32,365,340**

Note 3: Expenses

	2023 $	2022 $
(a) Corporate		
Salaries and Related Charges	3,618,776	3,400,574
Program Management	2,818,169	2,277,596
Corporate Projects	347,235	77,963
Administration Expenses	593,618	122,146
Finance Cost	99,334	80,927
Other Expenses	1,218,871	487,842
	8,696,003	**6,447,048**
(b) Work Program		
Corporate Projects - Board Priorities	1,248,721	87,775
Safety	2,775,161	1,978,713
Assets	3,795,572	4,237,071
Network	1,519,783	1,477,184
Future Vehicles and Technology	511,474	349,895
Environment and Sustainability	214,327	97,857
	10,065,038	**8,228,495**
(c) Specific Projects		
International Participation	53,990	11,786
NGTSM/ATAP Jurisdictions/ Commonwealth funding carried over	152,014	183,928
Test Methods and Pavement Technology Worktips	–	25,000
Value of Travel Time Willingness to Pay	15,764	280,938
Cambodia Ministry of Public Works & Transport - Technical Standards	122,435	–
	344,203	**501,652**
(d) Publications		
Cost of Sales	**23,058**	**11,851**
(e) NEVDIS Expenses		
Subscription and Operating Costs	4,296,191	4,052,209
NHVR Maintenance	–	536,563
NEVDIS Other Projects	940,959	661,954
Other Rental Related Expenses	–	20,397
Other Expenses	280,919	532,693
	5,518,069	**5,803,816**
Total Expenditure	**24,646,371**	**20,992,862**

Note 4: Cash and cash equivalents

Cash at bank and on hand	16,581,815	11,136,442
Short-term deposits and deposits at call	7,763,388	20,500,000
	24,345,203	**31,636,442**
Cash at the end of the financial year is reconciled to the statement of cash flow as follows:		
Cash and cash equivalents	**24,345,203**	**31,636,442**

Note 5: Trade and other receivables

	2023 $	2022 $
Trade debtors	7,713,222	5,367,450
Sundry and other debtors	1,905	53,478
	7,715,127	**5,420,928**

Note 6: Other assets

CURRENT		
Prepayments	423,614	297,003
	423,614	**297,003**

Note 7: Plant and equipment

NON-CURRENT		
Furniture and Office Equipment		
At Cost	1,717,371	1,559,445
Accumulated depreciation	(841,781)	(667,141)
	875,590	892,304
Total Plant and Equipment	**875,590**	**892,304**

Note 8: Intangible assets

NON-CURRENT		
Software		
At Cost	8,287,463	8,287,463
Accumulated Amortisation	(7,200,227)	(5,567,897)
	1,087,236	2,719,566
Total Intangible Assets	**1,087,236**	**2,719,566**

Note 9: Trade and other payables

Trade and Other Payables	2,276,111	527,338
Other Payables	810,433	1,085,121
Accrued Expenses	668,817	661,736
	3,755,361	**2,274,195**

Note 10: Leases

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

Right of Use Assets		
Opening balance as at 1 July	2,488,934	–
Additions at cost	–	3,082,416
Depreciation charge for the year	(402,912)	(593,482)
Carrying amount at end of year	**2,086,022**	**2,488,934**
Lease Liabilities		
Current	352,682	315,376
Non-current	1,910,608	2,262,404
	2,263,290	**2,577,780**

	2023 $	2022 $
(b) Amounts recognised in Statement of profit or loss and other comprehensive income		
Lease under AASB 16 – interest on lease liabilities	96,382	80,927
Depreciation expenses on right-of-use assets	402,912	336,342

(c) Amounts recognised of cash flows

The total cash outflow for leases was $410,872 (2022: $328,423).

(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

	2023 $	2022 $
CURRENT		
Provisions for Employee Benefits	**513,328**	**448,942**
NON-CURRENT		
Provisions for Employee Benefits	**301,186**	**196,514**

Note 12: Other liabilities

	2023 $	2022 $
CURRENT		
Contract liabilities	**63,566**	**–**

Note 13: 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.

Note 14: Cash flow information

	2023 $	2022 $
Reconciliation of profit from ordinary activities to net cash generated from operating activities		
Surplus for the year	6,640,229	9,356,793
Adjustment for non-cash-flow items:		
Depreciation and amortisation	2,209,882	2,015,685
Gain on disposal of plant and equipment	–	–
Change in operating assets and liabilities:		
(Increase) in trade and other receivables	(2,294,199)	(2,238,390)
Decrease/(Increase) in other assets	(126,611)	667,357
(Decrease) in trade and other payables	1,481,166	(376,237)
Increase in other liabilities	63,566	–
Increase in provision for employee benefits	169,058	20,497
Net Cash Generated from Operating Activities	**8,143,091**	**9,445,705**

Note 15: Remuneration of directors

No remuneration was paid or payable to directors in respect to or during the financial year (2022: $Nil).

Note 16: Remuneration of auditors

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

	2023 $	2022 $
Audit of the financial statements	37,500	30,000
Other services	5,000	4,300
	42,500	**34,300**

Note 17: Commitments

Capital expenditure commitments contracted for not later than one year.

Contracted amount	–	–
Invoiced to date	–	–
	–	**–**

There are no other capital expenditure commitments contracted for as at 30 June 2023.

Note 18: Contingent liabilities or assets

At 30 June 2023, the Company has no contingent liabilities or assets (2022: Nil).

Note 19: Matters subsequent to the end of the financial year

On 1 July 2023, all employees of Transport Certification Australia Pty Ltd transferred to the Company.

From 11 September 2023, the Melbourne office for the Company and Transport Certification Australia Ltd changed to Level 17, Melbourne Central Tower, 360 Elizabeth Street, Melbourne Victoria 3000.

Apart from the above, no matters or circumstances have arisen since 30 June 2023 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 20: 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 2023

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 48 to 54, 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 2023 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.

Gary Swain

Director
25 October 2023

Independent auditor's report

PITCHER PARTNERS

Pitcher Partners Sydney Partnership

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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 2023, 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 including a summary of significant accounting policies, and the directors' declaration.

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 2023 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 2023 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

Auditor's Responsibilities for the Audit of the Financial Report (continued)

- 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

25 October 2023

Transport Certification Australia Ltd Directors' and financial reports

Contents

Directors' report

The directors of Transport Certification Australia Ltd ('the Company') submit herewith the annual financial report of the Company for the financial year ended 30 June 2023.

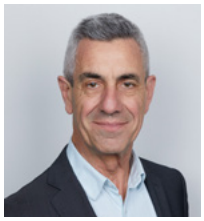
The names of the directors of the Company during or since the end of the financial year are:

- Dr Geoff Allan
- Joseph Attanasio (appointed 1 July 2022; resigned 3 July 2023)
- Stuart Ballingall (appointed 1 July 2022)
- Sharon Johnson (appointed 11 October 2022)

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

Information on Directors

Dr Geoff Allan
Geoff Allan is the Austroads Chief Executive. He was appointed to the board of Transport Certification Australia in March 2022 and was appointed Managing Director in May 2022. Geoff is Vice-President of PIARC (World Road Association) as well as Chair of PIARC's Strategic Planning Commission. Geoff serves on the Council (Board) of the Centre for Professional Engineering Education (CPEE). Geoff has worked in a variety of executive roles in the Queensland Government and the National Transport Commission. Geoff has a bachelor's degree in town planning, a master's degree in social science and a PhD in public sector management.



Joseph Attanasio (to 3 July 2023)
Joe Attanasio was the Austroads Chief Data and Technology Officer up until 3 July 2023. Joe has extensive ICT experience and leadership having held roles in Australian Public Service and a large not-for-profit. Joe holds an Executive MBA and Graduate Certificate in Management from University of New South Wales.

Stuart Ballingall
Stuart Ballingall is the Executive General Manager of the Company. Stuart has held senior roles with Transport for Victoria, VicRoads, and General Motors Holden, and has been an active member of various boards and committees in the transport domain, both nationally and internationally. Stuart holds an honours degree in engineering, an MBA, is a PhD candidate, and is a Fellow of Engineers Australia.

Sharon Johnson | BComm (Acc), FCPA, LLB, AGIA, ACG
Sharon Johnson was appointed to the role of CFO & Head of Corporate Services at Austroads in September 2022. Sharon has tutored at the University of Sydney Business School and worked across multiple industries in geographically diverse organisations where she has experience in areas including long range forecasting and costing, mergers and acquisitions, integration, legal, governance, risk and strategy. She is a Fellow of CPA Australia and holds a Bachelor of Laws, Graduate Diplomas in Applied Corporate Governance and Governance of ASX Listed Entities and Certificates in Training and Assessment.

The number of directors meetings and number of meetings attended by each of the directors of the Company during the period are:

Director	Eligible meetings	Attended meetings
Dr Geoff Allan	2	2
Joseph Attanasio	2	2
Stuart Ballingall	2	2
Sharon Johnson	2	2

Principal activities

The Company is a national organisation that provides assurance services relating to transport technologies and data to enable improved public purpose outcomes from road transport.

Priority outcome areas enabled by the Company's services include improved road safety, transport efficiency, freight productivity, asset management and sustainability.

The Company provides the following broad categories of service, providing opportunities to realise positive outcomes through the deployment of telematics and related intelligent technologies:

- **Assurance:** provide certification of telematics applications, schemes and associated services and data, development of functional and technical specifications for applications and features of the National Telematics Framework, accreditation of service providers and technology suppliers, type approval of devices and systems, and, auditing of service providers technology suppliers, applications, schemes and associated data.
- **Administration:** administer the National Telematics Framework, including the rules, specifications, agreements and digital infrastructure that it comprises. The Company supports applications, schemes and other initiatives on behalf of key stakeholders and maintains road access maps, scheme conditions. It also processes data and information.

- **Analysis and reporting:** being a trusted national entity that collects, stores and standardises data for aggregation and analysis to support the compliance, policy, planning, investment and operational decision making of key stakeholders. The Company manages the Telematics Analytics Platform to support user access to data and reporting services and provide core analysis and reporting capabilities to meet the needs of our key stakeholders.
- **Advice:** provide authoritative information and trusted advice on transport technologies and data to support policy and regulatory reform, and planning. The Company has well-developed knowledge on emerging vehicle and transport technologies, including telematics, connected and automated driving systems, and innovative mobility services.

The Company interacts with three distinct stakeholder groups in providing services across assurance, administration, advice and analysis and reporting, to deliver improved public outcomes:

- **Government authorities** that administer policies, regulations and programs using telematics and related technologies
- **Transport operators** that use telematics and related intelligent technologies in response to government or regulatory policies and programs
- **Service providers and suppliers** that develop and deliver telematics (and data) products and services to regulated industry sectors and transport operators.

The Company's Strategic Plan contains six Strategic Objectives (SOs), which align with and deliver the objectives and strategies of TCA's Members, participants and other stakeholders.

SO 1: Enable improved public purpose outcomes from road transport
Collaborate with key stakeholders to ensure that technology and data services are fit for purpose and can effectively contribute to desired outcomes. Contribute to policy and regulatory reform initiatives and other relevant projects to ensure that decision making is well informed.

SO 2: Administer an assurance framework that supports multiple assurance models and applications
Ensure availability of telematics applications at levels of assurance that are tailored to stakeholder requirements and are fit for purpose. Develop and evolve assurance services with consideration to supporting contemporary and evolving uses of technology and data.

SO 3: Increase the number and range of vehicles enrolled in telematics applications
Increase the number of vehicles that are enrolled in and contribute data to the National Telematics Framework. Expand the range of enrolled vehicles, including restricted access vehicles and general access vehicles, where appropriate.

SO 4: Develop our digital infrastructure to address emerging data demands and requirements
Evolve our digital infrastructure to support changing demands with data ingestion, storage, analysis and reporting, and to meet evolving security and privacy requirements. Improve user access to data, including de-identified and aggregated analysis and reporting.

SO 5: Provide support for evolving and emerging transport technologies
Improve TCA's readiness to provide services that support evolving and emerging technologies. Develop and maintain relevant knowledge and capabilities, including with connected and automated vehicles (CAVs) and associated Intelligent Transport Systems (ITS).

SO 6: Evolve our business practices and capabilities to meet changing requirements
Continue to develop our staff, including with their knowledge, skills and supporting systems. Partner with key government and industry stakeholders to achieve objectives. Evolve our business practices and funding model to ensure sustainability and resilience.

The above Strategic Objectives are measured on an annual basis against deliverables assigned to projects within the annual work program.

Review of operations

The expenditure program of the Company does not align with its revenue cycle and requires the utilisation of cash reserves in years where a shortfall in revenue exists. The surplus of the Company for the financial year amounted to $1,863,553 (2022: $2,764,758). As at 30 June 2023, the Company has net assets of $10,124,714 (2022: $8,261,161) including cash reserves of $9,814,538 (2022: $7,986,935).

Members guarantee

The Company is incorporated under the *Corporations Act 2001* and is a company limited by guarantee. 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 liabilities of the Company. At 30 June 2023 the number of Members was 1 (2022: 1 member).

Auditor's independence declaration

The auditor's independence declaration is included on page 62 of the annual report.

Signed in accordance with a resolution of directors made pursuant to s.298 (2) of the *Corporations Act 2001*.

On behalf of the Directors

Stuart Ballingall
Director
17 October 2023

Pitcher Partners Sydney Partnership

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Auditor's Independence Declaration
To the Directors of Transport Certification Australia Limited
ABN 83 113 379 936

In relation to the independent audit of Transport Certification Australia Limited for the year ended 30 June 2023, 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

17 October 2023

Directors' declaration

The directors 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 described in Note 3 to the financial statements.

The directors of the Company declare that:

1. The financial statements and notes as set out on pages 63-71 are prepared in accordance with the *Corporations Act 2001* and:
   a. comply with Accounting Standards as described in Note 3 to the financial statements and the *Corporations Regulations 2001*; and
   b. give a true and fair view of the Company's financial position as at 30 June 2023 and of its performance for the year ended on that date in accordance with the accounting policies described in Note 3 to 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.

Signed in accordance with a resolution of the directors made pursuant to s.295 (5) of the *Corporations Act 2001*.

On behalf of the Directors

Stuart Ballingall
Director
17 October 2023

Statement of comprehensive income for the year ended 30 June 2023

	Notes	2023 $	2022 $
Revenue and other income	4	9,653,178	9,791,851
Advertising and promotional expenses		(23,510)	(37,996)
Employee benefits expenses		(4,095,645)	(4,209,003)
Depreciation	4	(351,338)	(344,349)
Meeting expenses		–	(1,376)
Travel and accommodation expenses		(218,303)	(68,985)
Dues and subscriptions expenses		(24,797)	(149,653)
Consulting expenses		(1,656,618)	(877,056)
Office expenses		(1,151,092)	(1,153,366)
Finance cost	8	(10,856)	(26,049)
Other expenses		(257,466)	(159,260)
Surplus for the year		1,863,553	2,764,758
Other comprehensive income		–	–
Total comprehensive income for the year		1,863,553	2,764,758
Surplus attributable to member's of the entity		1,863,553	2,764,758
Total comprehensive surplus attributable to member's of the entity		1,863,553	2,764,758

The accompanying notes form part of these financial statements.

Statement of financial position
for the year ended 30 June 2023

	Notes	2023 $	2022 $
ASSETS			
Current assets			
Cash and cash equivalents	12(a)	7,897,249	7,986,935
Financial Assets at Amortised Cost - Term Deposit		1,917,289	–
Trade and other receivables	5	1,463,840	1,380,585
Other current assets	6	248,061	132,419
Total current assets		11,526,439	9,499,939
Non-current assets			
Plant and equipment	7	787,588	640,988
Right-of-use assets	8	45,488	263,832
Total non-current assets		833,076	904,820
Total assets		12,359,515	10,404,759
LIABILITIES			
Current liabilities			
Trade and other payables	9	425,990	745,045
Lease liabilities	8	70,498	317,418
Other current liabilities	11	998,000	249,667
Provisions	10	487,671	477,222
Total current liabilities		1,982,159	1,789,352
Non-current liabilities			
Lease liabilities	8	–	70,498
Provisions	10	252,642	283,748
Total non-current liabilities		252,642	354,246
Total liabilities		2,234,801	2,143,598
Net assets		10,124,714	8,261,161
EQUITY			
Accumulated surplus		10,124,714	8,261,161
Total equity		10,124,714	8,261,161

Statement of changes in equity
for the year ended 30 June 2023

	Accumulated Surplus	Total $
Balance at 1 July 2021	5,496,403	5,496,403
Total comprehensive surplus	2,764,758	2,764,758
Balance at 30 June 2022	8,261,161	8,261,161
Balance at 1 July 2022	8,261,161	8,261,161
Total comprehensive surplus	1,863,553	1,863,553
Balance at 30 June 2023	10,124,714	10,124,714

The accompanying notes form part of these financial statements.

Statement of cash flows
for the year ended 30 June 2023

	Notes	2023 $	2022 $
Cash flows from operating activities			
Receipts from members, participants, service providers and stakeholders		10,906,601	10,085,201
Payments to suppliers and employees		(8,611,055)	(7,518,473)
Interest received		141,721	9,270
Interest paid - lease		(10,856)	(26,049)
Net cash provided by operating activities	12(b)	2,426,411	2,549,949
Cash flows from investing activities			
Movements in term deposit		(1,917,289)	–
Payments for plant and equipment		(281,390)	(71,614)
Net cash used in investing activities		(2,198,679)	(71,614)
Cash flows from financing activities			
Payment of lease liabilities		(317,418)	(291,118)
Net cash used in financing activities		(317,418)	(291,118)
Net decrease in cash and cash equivalents		(89,686)	2,187,217
Cash and cash equivalents at the beginning of the financial year		7,986,935	5,799,718
Cash and cash equivalents at the end of the financial year	**12(a)**	**7,897,249**	**7,986,935**

The accompanying notes form part of these financial statements.

Notes to the financial statements

Note 1: General information

Transport Certification Australia Ltd ('the Company') is a company limited by guarantee, incorporated and domiciled in Australia.

The financial statements were authorised for issue on 17 October 2023 by the directors of the Company.

Transport Certification Australia Ltd's registered office and its principal place of business are as follows:

Registered office	Principal place of business
Level 6, 333 Queen Street Melbourne Victoria 3000	Level 6,333 Queen Street Melbourne Victoria 3000

From 11 September 2023, the registered office and principal place of business changed to Level 17, Melbourne Central Tower, 360 Elizabeth Street, Melbourne Victoria.

Note 2: Adoption of new and revised Accounting Standards

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.

Note 3: Summary of significant accounting policies

Reporting basis

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*. The Company is a not-for-profit for financial reporting purposes under Australian Accounting Standards.

The 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 mandatory disclosure requirements applicable to entities reporting under the *Corporations Act 2001*. 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 amounts presented in the financial statements have been rounded to the nearest dollar.

Accounting policies

The material accounting policies that have been adopted in the preparation of these statements are as follows:

(a) Cash and cash equivalents

Cash and cash equivalents includes cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities on the statement of financial position.

(b) Employee benefits

Provision is made for the Company's liability for employee benefits arising from services rendered by employees to the end of the reporting date. Employee benefits expected to be settled within one year have been measured at the amounts expected to be paid when the liability is settled, plus related on-costs.

Employee benefits which are not expected to be settled

within 12 months are measured as the present value of the estimated future cash outflows to be made for those benefits. These cash flows are discounted using market yields on national government bonds with terms to maturity that match the expected timing of cash flows. Long service leave becomes payable to employees on a pro rata basis after 7 years of continuous service. As at 30 June 2023, 5 employees have been employed for 7 years of continuous service (2022: 5).

(c) Financial Instruments

Initial recognition and measurement

Financial assets and financial liabilities are recognised when the entity becomes a party to the contractual provisions to the instrument. For financial assets, this is equivalent to the date that the Company commits itself to either purchase or sell the asset (i.e. trade date accounting is adopted).

Financial instruments are initially measured at fair value plus transaction costs except where the instrument is classified 'at fair value through profit or loss', in which case transaction costs are expensed to profit or loss immediately.

Classification and subsequent measurement

Financial instruments are subsequently measured at fair value, amortised cost using the effective interest method, or cost. Where available, quoted prices in an active market are used to determine fair value. In other circumstances, valuation techniques are adopted.

Amortised cost is calculated as the amount at which the financial asset or financial liability is measured at initial recognition less principal repayments and any reduction for impairment, and adjusted for any cumulative amortisation of the difference between that initial amount and the maturity amount calculated using the effective interest method.

The effective interest method is used to allocate interest income or interest expense over the relevant period and is equivalent to the rate that exactly discounts estimated future cash payments or receipts (including fees, transaction costs and other premiums or discounts) through the expected life (or when this cannot be reliably predicted, the contractual term) of the financial instrument to the net carrying amount of the financial asset or financial liability. Revisions to expected future net cash flows will necessitate an adjustment to the carrying amount with a consequential recognition of an income or expense item in profit or loss.

Financial Liabilities

Non-derivative financial liabilities other than financial guarantees are subsequently measured at amortised cost. Gains or losses are recognised in profit or loss through the amortisation process and when the financial liability is derecognised.

Impairment

At the end of each reporting period, the Company assesses whether there is objective evidence that a financial asset has been impaired. A financial asset (or a group of financial assets) is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events (a 'loss event') having occurred, which has an impact on the estimated future cash flows of the financial asset(s).

In the case of financial assets carried at amortised cost, loss events may include: indications that the debtors or a group of debtors are experiencing significant financial difficulty, default or delinquency in interest or principal payments; indications that they will enter bankruptcy or other financial reorganisation; and changes in arrears or economic conditions that correlate with defaults.

For financial assets carried at amortised cost (including loans and receivables), the Company recognises a loss allowance for expected credit losses on financial assets that are measured at amortised cost or fair value through other comprehensive income. Expected credit losses are the probability-weighted estimate of credit losses over the expected life of a financial instrument. A credit loss is the difference between all contractual cash flows that are due and all cash flows expected to be received, all discounted at the original effective interest rate of the financial instrument.

The Company used the simplified approach to impairment, as applicable under AASB 9.

Simplified Approach

The simplified approach does not require tracking of changes in credit risk in every reporting period, but instead requires the recognition of lifetime expected credit loss at all times. This approach is applicable to trade receivables.

(d) Derecognition

Financial assets are derecognised where the contractual rights to receipt of cash flows expire or the asset is transferred to another party whereby the entity no longer has any significant continuing involvement in the risks and benefits associated with the asset. Financial liabilities are derecognised where the related obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability, which is extinguished or transferred to another party, and the fair value of consideration paid, including the transfer of non-cash assets or liabilities assumed, is recognised in profit or loss.

(e) Impairment of Assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have been impaired. If such an indication exists, the recoverable amount of the asset, being the higher of the asset's fair amount less costs to sell and value in use, is compared to the asset's carrying amount. Any excess of the asset's carrying amount over its recoverable amount is recognised immediately in profit or loss.

Where the future economic benefits of the asset are not primarily dependent upon on the asset's ability to generate net cash inflows and when the entity would, if deprived of the asset, replace its remaining future economic benefits, value in use is determined as the depreciated replacement cost of an asset.

Where it is not possible to estimate the recoverable amount of a class of asset, the entity estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Where an impairment loss on a revalued asset is identified, this is debited against the revaluation surplus in respect of the same class of asset to the extent that the impairment loss does not exceed the amount in the revaluation surplus for that same class of asset.

(f) Income tax

The Company is exempt from income tax under Section 50-1 of the Income *Tax Assessment Act 1997*.

(g) Plant and equipment

Plant and equipment are carried at cost, less, where applicable, any accumulated depreciation and impairment losses. All assets are depreciated over their useful lives to the Company.

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 asset's employment and subsequent disposal. The expected net cash flows have not been discounted to their present values in determining recoverable amounts.

The depreciable amount of all fixed assets is depreciated on a straight line or diminishing value basis over the assets useful life to the entity commencing from the time the asset is held ready for use. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements.

The following useful lives are used in the calculation of depreciation:

Furniture and fixtures	6 – 20 years
Plant and equipment	2.5 – 20 years
Computers	2.5 – 10 years
Motor vehicles	4 – 7 years

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 Comprehensive Income.

(h) Right-of-use asset

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.

The Company has elected not to recognise a right-of-use asset and corresponding lease liability for short-term leases with terms of 12 months or less and leases of low-value assets. Lease payments on these assets are expensed to profit or loss as incurred.

(i) Provisions

Provisions are recognised when the Company has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

Provisions recognised represent the best estimate of the amounts required to settle the obligation at the end of the reporting period.

(j) Revenue

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

Operational fees and other service fees are recognised over the period to which the provision of services relate.

Application fees are recognised at a point in time when certifications are issued.

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 is recognised as income upon receipt of those income.

(k) Accounts Receivable and Other Debtors

Accounts receivable and other debtors will include any outstanding contributions from participants, and outstanding operational fees from IAP Service Providers at the end of the reporting period.

(l) 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 Australian Tax Office (ATO). In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the statement of financial position are shown inclusive of GST. The net amount of GST recoverable from, or payable to, the ATO is included with other receivables or payables in the statement of financial position.

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

(m) Accounts Payable and Other Payables

Trade and other payables represent the liability outstanding at the end of the reporting period for goods and services received by the Company during the reporting period which remain unpaid. The balance is recognised as a current liability with the amount being normally paid within 30 days of recognition of the liability.

(n) 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.

(o) Critical accounting estimates and judgements

The directors evaluate estimates and judgements incorporated into financial report 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 both externally and within the Company. During the year, other than stated below, there were no significant or material critical accounting estimates or judgements made by the directors.

Estimation of useful lives of assets

The Company determines the estimated useful lives and related depreciation and amortisation charges for its 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.

Lease term

The lease term is a significant component in the measurement of both the right-of-use asset and lease liability. Judgement is exercised in determining whether there is reasonable certainty that an option to extend the lease or purchase the underlying asset will be exercised, or an option to terminate the lease will not be exercised, when ascertaining the periods to be included in the lease term. In determining the lease term, all facts and circumstances that create an economical incentive to exercise an extension option, or not to exercise a termination option, are considered at the lease commencement date. Factors considered may include the importance of the asset to the Company's operations; comparison of terms and conditions to prevailing market rates; incurrence of significant penalties; existence of significant leasehold improvements; and the costs and disruption to replace the asset. The Company reassesses whether it is reasonably certain to exercise an extension option, or not exercise a termination option, if there is a significant event or significant change in circumstances.

Incremental borrowing rate

Where the interest rate implicit in a lease cannot be readily determined, an incremental borrowing rate is estimated to discount future lease payments to measure the present value of the lease liability at the lease commencement date. Such a rate is based on what the Company estimates it would have to pay a third party to borrow the funds necessary to obtain an asset of a similar value to the right-of-use asset, with similar terms, security and economic environment.

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.

Employee benefits provision

As discussed in Note 3(b), the liability for employee benefits expected to be settled more than 12 months from the reporting date are recognised and measured at the present value of the estimated future cash flows to be made in respect of all employees at the reporting date. In determining the present value of the liability, estimates of attrition rates and pay increases through promotion and inflation have been taken into account.

Allowance for expected credit losses

The allowance for expected credit losses assessment requires a degree of estimation and judgement. It is based on the lifetime expected credit loss, grouped based on days overdue, and makes assumptions to allocate an overall expected credit loss rate for each group. These assumptions include recent sales experience and historical collection rates.

(p) Comparative figures

Comparative figures have been adjusted to conform to changes in presentation for the current financial year where required by Accounting Standards or as a result of changes in accounting policy.

Note 4: Surplus for the year

Surplus for the year has been arrived at after crediting/ (charging) the following items of income and expense:

	2023 $	2022 $
Revenue from contracts with customers		
Application fees received from applicants	97,000	77,875
Operational fees	4,688,852	4,184,391
Other service fees	1,419,801	2,172,633
Other revenue		
Contributions received from members and participants	2,236,000	2,300,000
Contributions received from regulators	950,000	950,000
Major projects	-	82,500
Other income		
Interest income	164,294	12,588
Other revenue	97,231	11,864
	9,653,178	9,791,851
Depreciation	351,338	344,349

Note 5: Trade and other receivables

	2023 $	2022 $
Trade receivables	1,046,911	1,005,489
Other	416,929	375,096
	1,463,840	1,380,585

Note 6: Other current assets

	2023 $	2022 $
Security deposits	71,928	71,928
Prepayments	176,133	60,491
	248,061	132,419

Note 7: Plant and equipment

	Work in progress $	Computers $	Motor vehicles $	Furniture and fixtures $	Plant and equipment $	Total $
2023						
At cost	93,822	927,960	104,598	593,370	645,669	2,365,419
Accumulated depreciation	-	(715,657)	(52,769)	(210,601)	(598,804)	(1,577,831)
Carrying amount at the end of the year	93,822	212,303	51,829	382,769	46,865	787,588
2022						
At cost	9,679	910,985	52,769	575,899	634,010	2,183,342
Accumulated depreciation	-	(722,292)	(52,769)	(181,116)	(586,177)	(1,542,354)
Carrying amount at the end of the year	9,679	188,693	-	394,783	47,833	640,988

Note 8: Leases

The lease for the Company's Melbourne office expires 17 September 2023.

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

Right of use assets	2023 $	2022 $
Opening balance at beginning of year	263,832	482,176
Depreciation charge for the year	(218,344)	(218,344)
Carrying amount at end of year	45,488	263,832

Lease liabilities	2023 $	2022 $
Lease liabilities – current	70,498	317,418
Lease liabilities – non-current	–	70,498
	70,498	387,916

(b) Amounts recognised in the Statement of comprehensive income:

	2023 $	2022 $
Lease under AASB 16 – interest on lease liabilities	10,856	26,049
Depreciation expenses on right-of-use assets	218,344	218,344

(c) Amounts recognised of cash flows

The total cash outflow for leases was $328,628 (2022: $317,167).

(d) Extension options

The lease had an option to extend for further 4 years. The Company did not exercise the option to extend. The Company does not have an option to purchase the leased premises at the expiry of the rental period.

Note 9: Trade and other payables

	2023 $	2022 $
Trade payables	94,475	130,406
Goods and services payable	96,091	88,971
Accrued expenses	79,764	168,014
Other payables	155,660	357,654
	425,990	745,045

Note 10: Provisions

	2023 $	2022 $
CURRENT		
Employee benefits	487,671	477,222
	487,671	477,222
NON-CURRENT		
Employee benefits	252,642	283,748
	252,642	283,748

Note 11: Other current liabilities

	2023 $	2022 $
Participant payment for services in advance	998,000	249,667
	998,000	249,667

Note 12: Other current liabilities

(a) Reconciliation of cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents includes cash on hand and in banks and investments in money market instruments, net of outstanding bank overdrafts. Cash and cash equivalents at the end of the financial year as shown in the statement of cash flows is reconciled to the related items in the statement of financial position as follows:

	2023 $	2022 $
Cash deposits with Bank	7,897,249	7,986,885
Petty cash	–	50
	7,897,249	7,986,935

(b) Reconciliation of surplus for the year to net cash flows from operating activities

	2023 $	2022 $
Surplus for the year	1,863,553	2,764,758
Non-Cash items:		
Depreciation	351,338	344,349
Net (gain) loss on disposal of property and equipment	(396)	3,518
(Increase)/decrease in assets:		
Trade and other receivables	(80,845)	(621,000)
Other assets	(115,642)	(46,866)
Increase/(decrease) in liabilities:		
Trade and other payables	(319,273)	(40,756)
Provisions	(20,657)	28,011
Other liabilities	748,333	117,935
Net cash provided by operating activities	2,426,411	2,549,949

Note 13: Remuneration of auditors

	2023 $	2022 $
Audit of the financial report	32,500	26,800
	32,500	26,800

Note 14: Events after the reporting date

The Company's controlling entity, Austroads Ltd, has leased an alternate office premises at Level 17, Melbourne Central Tower, 360 Elizabeth Street Melbourne, with occupancy commencing 11 September 2023 for a lease period of 6 years and 6 months.

On 1 July 2023, all employees of the Company transferred to Austroads Ltd.

No other matters or circumstances have arisen since 30 June 2023 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 15: Economic dependence

The Company is dependant on its participants, being the Commonwealth, state and territory transport government agencies for the majority of its revenue used to operate the business. In the event of any shortfall in the yearly operational budget, the Member and participants may be required to provide additional funding on an ad hoc basis to support the Company.

Note 16: Capital management

The board of directors control the capital of the Company to ensure that the Company can fund its operations and continue as a going concern. The Company does not have any debt and its capital includes retained earnings and financial liabilities, supported by financial assets. There are no externally imposed capital requirements. Management effectively control the Company's capital by assessing the Company's financial risks and adjusting its capital structure in response to changes in these risks and in its funding needs. These responses include the management of funding levels from Members and participants and maintaining sufficient levels of working capital.

Note 17: Operational surplus/losses

The expenditure program of the Company does not align with its revenue cycle and requires the utilisation of carry forward cash reserves in years where a shortfall in revenue exists.

Note 18: Member guarantee

The Company is incorporated under the *Corporations Act 2001* and is a company limited by guarantee. 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 liabilities of the Company. At 30 June 2023 the number of Members was 1 (2022: 1 member).

Independent auditor's report

PITCHER PARTNERS

Pitcher Partners Sydney Partnership

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Independent Auditor's Report
To the Members of Transport Certification Australia Limited
ABN 83 113 379 936

Report on the Audit of the Financial Report

Opinion

We have audited the special purpose financial report of Transport Certification Australia Limited ("the Company"), which comprises the statement of financial position as at 30 June 2023, statement of 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 including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of Transport Certification Australia Limited 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 2023 and of its performance for the year then ended; and
(b) complying with Australian Accounting Standards to the extent described in Note 3, 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 3 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 Transport Certification Australia Limited
ABN 83 113 379 936

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 2023, 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 3 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 Transport Certification Australia Limited
ABN 83 113 379 936

- 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

17 October 2023

Annexures


Action
Haere Mai
Welcome
2022 Australasian
Road Safety Conference
Changing today
for tomorrow.

Task Force membership 2022-2023

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	ATAG Chair
David Barton	Department of Transport and Planning, Vic
David Bobbermen	Consultant
Dr Christian Christodoulou	Transport for NSW
Jonathon Dragos	Transport Canberra and City Services Directorate, ACT
Noel Dwyer	Department of Transport and Main Roads, Qld
Richard Edwards	Consultant
Michele George	Department of Transport and Main Roads, Qld
Andrew Iannos	Department for Infrastructure and Transport, SA
Brenda Looney	Waka Kotahi NZ Transport Agency
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
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
George Diamand	Transport Canberra and City Services Directorate, ACT
Andrew Golding	Department of Transport and Main Roads, Qld
Ambrose Lam	Transport for NSW
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
Nigel Powers	Australian Road Research Board
Gareth Prosser	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Vineta Risteki	Department of Transport and Planning, Vic
Ramon Staheli	National Transport Commission
Steve Verity	Australian Local Government Association/IPWEA

Bridges Task Force

Moustafa Al-Ani	Waka Kotahi NZ Transport Agency
Jay Brewster-O'Brien	Department of Infrastructure, Planning and Logistics, NT
Adam Lim	Main Roads, WA
Michael McGrath	Transport Canberra and City Services Directorate, ACT
Cam Middleton	UK Bridge Owners Forum
Phil Molloy	Department for Infrastructure and Transport, SA
Andy Ng	Department of Transport and Planning, Vic
Dr Torill Pape	Department of Transport and Main Roads, Qld
Nigel Powers	Australian Road Research Board
Parvez Shah	Transport for NSW
Vincent Tang	Department of State Growth, Tas
Ben van Zanten	Department for Infrastructure and Transport, SA
Trevor Williams	IPWEA
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
Ben Finnimore	Department of Infrastructure, Planning and Logistics, NT
Stacy Goldsworthy	Civil Contractors NZ
Sam Henwood	Transport for NSW
Phil Herrington	WSP
Paul Keech	Australian Local Government Association/IPWEA
Adam Leslie	Waka Kotahi NZ Transport Agency
Les Marchant	Main Roads, WA
Dr Michael Moffatt	Australian Road Research Board
Dr Kym Neaylon	Centre for Pavement Engineering Education
Andrew Papacostas	Department of Transport and Planning, Vic
Mike Pickering	Department of Transport and Main Roads, QLD
Bryan Pidwerbesky	Civil Contractors NZ
Pawel Potapowicz	Transport Canberra and City Services Directorate, ACT
Micah Sluczanowski	Department for Infrastructure and Transport, SA
Philip Stacey	Department of Infrastructure, Planning and Logistics, NT
Dr Robert Urquhart	Australian Road Research Board
Barry Walker	Department of State Growth, Tas

Project Delivery Task Force

Leo Coci	Main Roads, WA
Dr Ryan de Carteret	Transport for NSW
Graham Hobbs	Department of Transport and Main Roads, Qld
Colin MacKay	Waka Kotahi NZ Transport Agency
Adrian Paine	Department of State Growth, Tas
Raymond Paterson	Major Road Projects, Vic
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

Road Tunnels Task Force

Bob Allen	Australasian Tunnel Operators Group
Michael Beecroft	Australasian Fire and Emergency Service Authorities Council
Nigel Casey	Transport for NSW
Andrew Eckersley	Australasian Tunnel Operators Group
John Hawes	Australasian Fire and Emergency Service Authorities Council
Evan Lo	Department of Transport and Main Roads, Qld
George Mavroyeni	PIARC
Tony Mazzeo	Australasian Tunnel Operators Group
Terry McGavin	Waka Kotahi NZ Transport Agency
Georgia O'Connor	Australian Road Research Board
Tony Peglas	Australian Tunnelling Society
Dimi Polymenakos	Department of Transport for Planning, Vic
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 and Planning, Vic
Bernard Carlon	Transport for NSW
Sarah Clark	Department for Infrastructure and Transport, SA
Nigel Coates	Australian Local Government Association
Jo Cruickshank	Department of Infrastructure, Planning and Logistics, NT
Nicole Downing	Department of Transport and Main Roads, Qld
Craig Hoey	Department of State Growth, Tas
Adrian Ison	Transport Canberra and City Services Directorate, ACT
Peter Kolesnik	Department of Transport and Main Roads, Qld
Fabian Marsh	Waka Kotahi NZ Transport Agency
Mandi Mees	National Transport Commission
David Moyses	Main Roads, WA
Anne Napier	Transport Canberra and City Services Directorate, ACT
Beth Niemeier	Department of Infrastructure, Planning and Logistics, NT
Joanne Penaranda	Road Safety Commission, WA
Noelani Reardon	Department for Infrastructure and Transport, SA
Sanjiv Sathiah	Australian Local Government Association
Adam Stankevicius	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Chris Stream	Queensland Police Service
Marcelo Vidales	Department of Transport and Planning, Vic
Matthew Weatherby	National Heavy Vehicle Regulator
Glenn Weir	Victorian Police Service
Frances Stanford	Transport Canberra and City Services Directorate, ACT
Donna Stewart	Queensland Police Service
Glenn Weir	Victoria Police

Road Design Task Force

Sam Atabak	Department of Transport and Main Roads, Qld
Jonathon Dragos	Transport Canberra and City Services Directorate, ACT
Richard Fanning	Department of Transport and Planning, Vic
Sam Hatzivalsamis	Department of Infrastructure, Planning and Logistics, NT
Jade Hogan	Transport for NSW
Mike Hogan	Transport for NSW
Richard Landon-Lane	Waka Kotahi NZ Transport Agency
Mark Lenske	Department of Transport and Main Roads, Qld
Phil Rosser	Department of Transport and Planning, Vic
Matthew Stirling	Department of State Growth, Tas
Albert Wong	Main Roads, WA

Registration & Licensing Task Force

Chris Davers	Main Roads, WA
Paul Duignan	Transport for NSW
Ruth Graham	Transport for NSW
David Jordan	Transport for NSW
Daniel Kaden	Department of Transport and Main Roads, Qld
Julie Kirkovski	Department of Transport and Planning, Vic
Iain McAuley	Waka Kotahi NZ Transport Agency
Mandi Mees	National Transport Commission
Tim Mitchell	Department of Transport and Planning, Vic
Rod Paule	Transport Canberra and City Services Directorate, ACT
Rebecca Poduti	Main Roads, WA
Philip Smurthwaite	Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cth
Scott Swain	Department for Infrastructure and Transport, SA
Frances Taylor	Department of Transport and Planning, Vic
Kate Timbs	Transport for NSW
Greg Turner	Department of Infrastructure, Planning and Logistics, NT
Andrew Wright	Department of State Growth, Tas
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

Chris Coghlan	Department of Transport and Planning, 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
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
PaoYi Tan	National Transport Commission (Observers)
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
Sunil Matookchund	Department of Infrastructure, Planning and Logistics, NT
Denise McIntyre	Department of State Growth, Tas
Joanna Nikopoulos	Department of Transport and Planning, Vic
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

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Andrew Wall & Emily Lodder	Department of Transport and Planning, Vic

Freight Task Force

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Temporary Traffic Management Task Force

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Dennis Walsh	Department of Transport and Main Roads, Qld
Daniel Verdouw	Department of State Growth, Tas

Publications and webinars 2022-2023

Code	Title
Corporate reports	
AP-C114-23	Austroads Members Environment and Sustainability Initiatives Stocktake 2023
AP-C112-23	Code of Practice for the Management of Alkali Aggregate Reactivity Template
AP-C20-22	Austroads Annual Report 2021-22
AP-C96-22	National Prequalification System for Civil (Road and Bridge) Construction (2022 Edition)
Research reports	
AP-R690-23	Learner Approved Motorcycle Scheme Update
AP-R689-23	Multimodal Incident Management: Reference Architecture
AP-R688-23	Motorcycle Rider Perceptual Countermeasures
AP-R687-23	Update to Guide to Road Design: Intersections
AP-R685-23	Best Practice in Smart Motorways Operations: Motorway Future Trends
AP-R684-23	Australasian Pedestrian Facility Selection Tool [V2.2.2]: User Guide
AP-R683-23	Hydrology Update to the Austroads Guide to Road Design Part 5
AP-R682-22	Development of Machine-Learning Decision-Support Tools for Pavement Asset Management
AP-R682A-22	Quick Reference Using Artificial Intelligence and Machine Learning for Decision-Support
AP-R681-22	Passenger Cars and other Non-truck Tyres Crumb Rubber in Asphalt: National Market Analysis, Review of Industry Practices and Technology Transfer
AP-R680-22	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements: Final Performance and Environmental Assessment Part B
AP-R679-22	Review of Impact of Service Authorities on Infrastructure Projects
AP-R678-22	National Harmonisation of Temporary Traffic Management Practice: Benefit–cost Analysis
AP-R677-22	Multimodal Incident Management: Research, Principles and Capability Framework
AP-R676-22	Low and Zero Emission Vehicle Charging Infrastructure Installation
AP-R675-22	Assessing Fitness to Drive: Implementation Strategy 2022
AP-R674-23	Road Transport Suicide Prevention
AP-R673-22	Austroads Road Asset Data Standard: Version 4
AP-R667A-22	Standardised Signage and Pavement Symbols for Low and Zero Emission Vehicles: Testing Results Addendum
Technical reports	
AP-T375-23	National Harmonisation of Test Methods Used in Asphalt Performance Specifications
AP-T374-23	Road Tunnel Wall Panels and Finishes: Best Practice Approaches
AP-T372-23	Asphalt Laboratory Fatigue Relationship: Stage 1 Utilisation of Existing Data
AP-T371-23	Design, Delivery and Testing of Road Tunnel Aesthetic Features: Best Practice Approaches
AP-T370-23	Austroads Road Deterioration Model Update: Rutting
AP-T369-23	Austroads Road Deterioration Model Update: Roughness
AP-T368-23	Austroads Road Deterioration Model Update: Cracking
AP-T367-23	Austroads Road Deterioration Model Update: Deflection
AP-T366-22	Development of the Austroads Rejuvenator Evaluation Protocol
AP-T360-21	Network Signage for Over Height Vehicles Approaching Road Tunnels (Edition 1.2)
Guides	
AGRD04-23	Guide to Road Design Part 4: Intersections and Crossings – General
AGRD04A-23	Guide to Road Design Part 4A: Unsignalised and Signalised Intersections
AGRD04B-23	Guide to Road Design Part 4B: Roundabouts
AGRD04C-23	Guide to Road Design Part 4C: Interchanges
AGRD05-23	Guide to Road Design Part 5: Drainage-General and Hydrology Considerations

Code	Title
AGRD05B-23	Guide to Road Design Part 5B: Drainage-Open Channels, Culverts and Floodway Crossings
AGRD05A-23	Guide to Road Design Part 5A: Drainage: Road Surface, Networks, Basins and Subsurface
AGPT04E-22	Guide to Pavement Technology Part 4E: Recycled Materials
Guidelines	
AP-G34-23	Austroads Design Vehicles and Turning Path Templates
AP-G98-22	Guidelines for Low and Zero Emission Vehicle Charging Infrastructure Installation
AP-G99-22	Best Practice in Smart Motorways Operations
AP-G100-23	Advanced Driver Assistance Systems: Driver Education Guideline
AP-G101-22	Advanced Driver Assistance Systems: Practical Driver Testing Guideline
Test methods	
ATM-101-22	Method of Sampling Polymer Modified Binders, Polymers and Crumb Rubber
ATM-102-22	Protocol for Handling Modified Binders in Preparation for Laboratory Testing
ATM-103-22	Mass Change or Loss on Heating of Polymer Modified Binders after Rolling Thin Film Oven (RTFO) Treatment
ATM-111-22	Handling Viscosity of Polymer Modified Binders (Brookfield Thermosel)
ATM-112-22	Flash Point of Polymer Modified Binders
ATM-122-22	Torsional Recovery of Polymer Modified Binders
ATM-132-22	Compressive Limit of Polymer Modified Binders
ATM-280-22	Preparation of Hot Poured Joint Sealant for Laboratory Testing
ATM-281-22	Flow Properties of Hot Poured Joint Sealant
ATM-283-22	Heat Degradation of Hot Poured Joint Sealant
ATM-284-22	Cone Penetration of Hot Poured Joint Sealant
ATM-710-22	Chloride Content of Soil
ATM-780-23	Water Retention of Concrete – Filtration
Specifications	
ATS-3110-23	Supply of Polymer Modified Binders
ATS-3450-23	Microsurfacing
ATS-3470-22	Bituminous Pavement Crack Sealing
ATS-4450-23	Plastic Noise Walls
ATS-5110-23	Earthworks for Bridgeworks
ATS-5120-23	Construction of Reinforced Soil Structures
ATS-5140-23	Post-Tensioned Ground Anchors
ATS-5305-23	Formwork for Concrete
ATS-5315-23	Supply of Special Class Concrete
ATS-5316-23	Cementitious Mortar and Grout
ATS-5317-23	Coring of Hardened Concrete
ATS-5320-23	Placement of Concrete
ATS-5325-23	Precast Concrete Members
ATS-5341-23	Repair of Concrete Cracks
ATS-5410-22	Structural Steelwork – Fabrication and Erection
ATS-5430-22	Fabrication of Aluminium Components
ATS-5440-22	Fabrication of Stainless Steel Components
ATS-5510-23	Supply of Plain Elastomeric Bearings
ATS-5520-23	Supply of Laminated Elastomeric Bearings
ATS-5530-23	Supply of Pot Bearings
ATS-5540-23	Supply of Spherical Bearings
ATS-5570-23	Installation of Bridge Bearings
ATS-5620-22	Cold Applied Sealant Joints

Code	Title
ATS-5610-22	Compression Seal Expansion Joints
ATS-5630-22	Elastomeric Strip Seal Expansion Joints
ATS-5650-22	Bonded Metal-Elastomer Expansion Joints
ATS-5670-22	Finger Type Expansion Joints
ATS-5830-23	Incrementally Launched Prestressed Concrete Girders
ATS-5860-23	Bonded Anchors
Webinars	
WEB-R672-22	Guidance to Support Cloud Connected Road Users
WEB-AGRD06-22	Changes and New Elements of the Guide to Road Design Part 6
WEB-AGRD06B-22	Using the New Edition of the Guide to Road Design Part 6
WEB-AGPT04E-22	Assessing Waste Material in Road Surfacings
WEB-T346-22	Sustainable Road Tunnels
WEB-ASB-22	Standards Australia – Bitumen and Related Materials for Roads
WEB-AP-R677-22	Multimodal Incident Management
WEB-BITAM-22	Using Business Intelligence Tools in Road Asset Management
WEB-NAFHV-22	National Access Framework for Heavy Vehicles
WEB-R673-22	Implementing the Austroads Road Asset Data Standard
WEB-AP-G98-22	Guidance on the Installation of Low and Zero Emission Vehicles Charging Infrastructure
WEB-NSWMPF-22	NSW Movement and Place Framework
WEB-AP-G99-22	Best Practice in Smart Motorways Operations
WEB-R680-22	Use of Road-grade Recycled Plastics for Sustainable Asphalt Pavements Part 3: Performance Outcomes Part B and Future Recyclability
WEB-R679-22	Review of Impact of Service Authorities on Infrastructure Projects
WEB-ASHTAS-22	Austroads Safety Hardware Training and Accreditation Scheme
WEB-AGRD05A-23	Changes to the Guide to Road Design Part 5: Drainage – General and Hydrology Considerations
WEB-T366-22	Austroads Rejuvenator Evaluation Protocol for Increasing Asphalt Recycling
WEB-AGRD05B-23	Changes to Guide to Road Design Part 5 – Improvements to the Regional Flood Frequency Estimation Method
WEB-R681-22	Passenger Cars and other Non-Truck Tyres Crumb Rubber in Asphalt
WEB-ZW-23	Zebras and Wombats: Factchecking “False Sense of Security”
WEB-R682A-22	Success Strategies for Delivering Artificial Intelligence and Machine Learning Projects
WEB-QLD-IAP-TMA-23	Queensland’s Transition from IAP to TMA
WEB-R682B-22	Development of Machine Learning Decision Support Tools for Pavement Asset Management
WEB-ABAW-23	2022 Winners of the Austroads Bridge Awards
WEB-T367-70-23	Road Deterioration Model Update
WEB-VIC-OBM-23	Victorian Government’s Enrolment of Smart OBM
WEB-T372-23	Asphalt Laboratory Fatigue Relationships
WEB-T371-23	Best-Practice Guidance for the Design, Delivery and Testing of Road Tunnel Aesthetic Features
WEB-TTMP-23	Austroads National Harmonisation of Temporary Traffic Management Practice – Update
WEB-R689-23	Multimodal Incident Management – Reference Architecture
WEB-PROJECTS-23	Austroads Project Pipeline 2023-24
WEB-R687A-23	Overview of the Changes to the Guide to Road Design Part 4 Series
WEB-R687B-23	Using the Updated Guide to Road Design Parts 4 and 4A
WEB-R688-23	Motorcycle Rider Perceptive Countermeasures
WEB-R690-23	Learner Approved Motorcycle Scheme Update
WEB-MPC-23	When the Rider, not the Rubber, Hits the Road
WEB-R687C-23	Using the Updated Guide to Road Design Part 4B and 4C

Code	Title
Austroads Bridge Conference 2022 peer reviewed papers	
ABC2022-000-22	Austroads Bridge Conference 2022 Papers
ABC2022-001-22	A Rail Link to the Flinders Precinct
ABC2022-002-22	Adopting Advanced Design Techniques in the Design of Precast Segmental Viaduct: the Singapore Experience
ABC2022-003-22	Practical application of advanced bridge assessments in Class 1 heavy vehicle access decision-making
ABC2022-004-22	Alice River Bridge Pier 4 Settlement – Investigation and Rehabilitation
ABC2022-005-22	Analysis and Design of St Peters Interchange Bridges
ABC2022-006-22	Application of Austroads Guide AP-G95-21 for Assessment of Gantry Fatigue on the West Gate Tunnel Project
ABC2022-007-22	Ashton Avenue Integral Bridge
ABC2022-008-22	Assessment Methods for Historic Steel Truss Bridges
ABC2022-009-22	Auckland Harbour Bridge Emergency Repairs
ABC2022-010-22	Austroads guideline for the assessment of bridge structural capacity
ABC2022-011-22	Austroads Design and Construction Guidelines for the Delivery of Large Cantilever and Gantry Structures
ABC2022-012-22	Automation of 3D modelling for Infrastructure Projects
ABC2022-013-22	Birkenhead Bridge Bascule Span Deck Replacement
ABC2022-014-22	Specification for bonded anchors to allow for structural connections with a 100-year design life for bridges and tunnels
ABC2022-015-22	Bonded anchors for use in Victoria's Big Build Projects
ABC2022-016-22	An Exercise in Bridge Asset Management using the full suite of project management tools
ABC2022-017-22	Bridge Design and Construction for the Bruce Highway Upgrade at Caloundra Road to Sunshine Motorway
ABC2022-018-22	Austroads Project ABT6141 – Guide to Bridge Technology Part 7 Update: Bridge Inspection Harmonisation
ABC2022-019-22	Bridge Network Analysis Program
ABC2022-020-22	Parametric Design and Engineering of the Bridge of Remembrance, Hobart
ABC2022-021-22	Bridge over Cooks River at Tempe
ABC2022-022-22	Bridge Strengthening for New Class Trams and Road Vehicle Loadings
ABC2022-023-22	Bridge strengthening with CFRP in M80 Ring Road
ABC2022-024-22	Bridge to Zero
ABC2022-025-22	Bridges of the West Gate Tunnel Project
ABC2022-026-22	Strengthening Bridges of the West Gate Tunnel Project
ABC2022-027-22	Captain Cook Bridge Bearing Replacement and Halving Joint Strengthening Works
ABC2022-028-22	The Replacement of the Castlereagh Road Rail Bridge in Penrith Using a Self-Propelled Modular Transport System
ABC2022-029-22	Challenges in bridge barrier designs against more robust Australian Standards and MASH criteria
ABC2022-030-22	Bridge CNN Defect Prediction Models Using Existing Image Data
ABC2022-031-22	Designing a Complex Elevated Interchange over the Sea Using Precast Segmental Construction Techniques
ABC2022-032-22	Composite Dowel Bridge Construction in Australia
ABC2022-033-22	Concrete Technology and Durability in TMR – Past, Present and Future
ABC2022-034-22	Cross River Rail's Exhibition Viaducts
ABC2022-035-22	Curved steel trough girder bridges – Design for construction
ABC2022-036-22	Darlington Upgrade Project – Bridge Design for Manufacture and Assembly
ABC2022-037-22	Design and Construction of an Incrementally Launched Ramp for the Saar Interchange in Bahrain
ABC2022-038-22	Design and construction of civil structures on Mordialloc Bypass

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ABC2022-039-22	The Design and Construction of the Bridge over the Nepean River on Avon Dam Main Access Road
ABC2022-040-22	Design Challenges in Median Widening Between Historically Widened Bridges
ABC2022-041-22	Design of a challenging ramp connecting Footscray Road to CityLink Northbound as part of the West Gate Tunnel Project
ABC2022-042-22	The design of asymmetric continuous twin U-trough rail viaduct with hybrid pre-stressing
ABC2022-043-22	West Gate Tunnel Project Design of Cable Stay Shared User Path Bridge over Footscray Road
ABC2022-044-22	Design of Steel-Concrete Composite Box Girders Installed by SPMT on the Regency Road to Pym Street Project
ABC2022-045-22	The Design of the Bridge Over Parkes to Narromine Rail Line at 449.850km
ABC2022-046-22	Design of Victoria's First Network Arch Railway Bridge
ABC2022-047-22	DoT's journey to better manage its Structures: Structures Service Framework and Structures Inspection and Monitoring Strategy
ABC2022-048-22	Durability Design of the Sydney Gateway Project – Achieving a 100 Year Design Life in Aggressive Ground Conditions
ABC2022-049-22	Durability of Post-Tensioning Tendons – A Review from TfNSW Perspective
ABC2022-050-22	Echuca Moama Bridge Project - Campaspe River Road and SUP Bridge Challenges
ABC2022-051-22	Long-term effects of AAR in a 70-year-old concrete structure
ABC2022-052-22	Effects of increasing Limestone content of cement on concrete performance
ABC2022-053-22	Engineered Timber Bridges for Highways in New Zealand
ABC2022-054-22	Why do we need an engineering guideline for bridge asset management?
ABC2022-055-22	Design and Construction of the Eumemmerring Creek Bridge
ABC2022-056-22	Existing Ballasted Rail Bridge Assessment - Benefits of a Rail Structure Interaction Analysis
ABC2022-057-22	Extending the life of heritage bridges using advanced finite element modelling and analysis
ABC2022-058-22	Fatigue Design Methodology for Highway Sign Support Structures
ABC2022-059-22	Fatigue evaluation of ageing steel railway bridges on current rail network in Victoria
ABC2022-060-22	Frenchman's Creek Bridge Replacement
ABC2022-061-22	Development and utilisation of geopolymer concrete for bridge structures
ABC2022-062-22	Granite Island Causeway Replacement Project
ABC2022-063-22	Hay Street Bridge Vertical Clearance Improvement Project
ABC2022-064-22	Heavy Vehicle Impacts on Bridges – Case Studies in Risk Assessment
ABC2022-065-22	Heavy Vehicle Permitting, Bridge Assessment and the Potential Impact on Sustainability and the Economy
ABC2022-066-22	Heavy vehicles and bridges: What the data is telling us
ABC2022-067-22	High strength steel for composite bridge structures - benefits and issues
ABC2022-068-22	High Workability Concrete – Verification of Properties and Performance Criteria
ABC2022-069-22	Innovative Incrementally Launched U-Trough Girder Viaduct for Challenging Site
ABC2022-070-22	Information modelling implementation in Australia and New Zealand's Bridge Management Systems
ABC2022-071-22	Innovative Bridge Engineering Heritage Repair: Birkenhead GFRP BridgeDeck System
ABC2022-072-22	Innovative Solutions to Old Problems - Sustainable Upgrade of Existing Infrastructure - Strengthening & Rehabilitation of the LH Ford Bridge
ABC2022-073-22	The Benefits of Using InQuik Accelerated Bridge Construction Systems
ABC2022-074-22	Integral bridge with full height abutment requirement and design
ABC2022-075-22	Comparison of Internal and External Prestressing for Full Span Precast Segmental Bridge
ABC2022-076-22	Bridging Regional Communities – The Joy Baluch AM Brifge Duplication, Port Augusta
ABC2022-077-22	The design and construction of the extension and widening of the existing Karel Avenue grade separation over railway with the new bridge no.1595A
ABC2022-078-22	Load combinations and factors for the Waka Kotahi Bridge manual
ABC2022-079-22	Load Rating Factors Calculation for Bridge Deck as per AS5100.5 – A Tee-Roff Bridge Example
ABC2022-080-22	Load testing and Structural Health Monitoring from TfNSW's perspective

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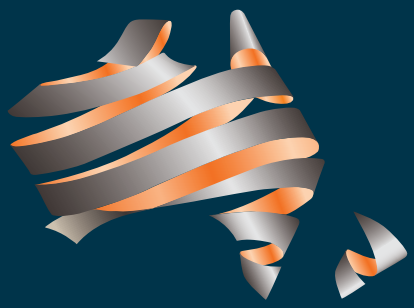
ABC2022-081-22	Longest weathering steel arch in Australia to carry light rail on the Parramatta Light Rail
ABC2022-082-22	Low-damage seismic bridge design
ABC2022-083-22	LXRP – Train Derailment on Elevated U-Trough Structures
ABC2022-084-22	West Gate Tunnel Project – Mackenzie Road Interchange Bridges
ABC2022-085-22	Maintenance challenges with the heritage listed Old Murray Bridge
ABC2022-086-22	Management of Structures with Concrete Halving Joints
ABC2022-087-22	Managing the suspension bridge in Kangaroo Valley (Hampden Bridge)
ABC2022-088-22	Metronet - Level Crossing Removal - Denny Av
ABC2022-089-22	Modification of Blaxland Avenue Overpass
ABC2022-090-22	Modular bridge expansion joints with integrated seismic fuse-elements
ABC2022-091-22	Modular Lightweight FRP Footbridges
ABC2022-092-22	Monash Freeway Upgrade – Forster Road Bridge Widening
ABC2022-093-22	Monash Freeway Upgrade - Warrigal Road Bridge Barrier Upgrade
ABC2022-094-22	Simplifying construction in a complex live Sydney City multi-track railway station with precast concrete bridge elements
ABC2022-095-22	Use of new generation spherical bearings for a challenging bearing replacement project
ABC2022-096-22	New methods for match cast segmental construction in Australia on the Grafton Bridge
ABC2022-097-22	The Design and Construction of the Northbound Bridge Over Shoalhaven River at Nowra
ABC2022-098-22	Old Murray Bridge Structural Assessment and Pier Replacement Design
ABC2022-099-22	Panmure Busway Bridge
ABC2022-100-22	Seismic Resilience, Sustainability, Accelerated Bridge Construction and Urban Design for the Peka Peka to Ōtaki Expressway Bridges
ABC2022-101-22	Pilot Study to Improve Sustainability of Bridges and Civil Structures
ABC2022-102-22	Preventing Brittle Failure of Steel Bridges
ABC2022-103-22	Design of the Princess Alexandra Cable Stayed Pedestrian Bridge – Cross River Rail
ABC2022-104-22	Adopting Probability-Based Bridge Assessments in Australasia
ABC2022-105-22	The Progression of Stable Unbonded-Fiber Reinforced Elastomeric Bearings
ABC2022-106-22	Recycled Bridges: A Review of Current and Emerging Recycled Material Technology
ABC2022-107-22	Reinforced Concrete Slender Bridge Column Design Review – Australian and International Standards
ABC2022-108-22	3D Reinforcement Modelling of Precast Trough Girder and Crosshead
ABC2022-109-22	Replacing the piers of an existing continuous box girder bridge with portal structures
ABC2022-110-22	Mitigating the risk of acidification in reinforced concrete bridge impressed current cathodic protection systems
ABC2022-111-22	Segmental Launching of the Redfern Station Southern Concourse Canopy
ABC2022-112-22	Selection of the most suitable electrochemical repair technique for rehabilitation of concrete bridges and structures
ABC2022-113-22	The SH1-18 Underpass on Auckland's Northern Corridor Improvements Project
ABC2022-114-22	Case Study: Sustainability in Bridge Engineering – SH2 Wairoa River Bridge Cycleway Extension
ABC2022-115-22	Considerations for Selection of Slab Track for the Melbourne Airport Rail Viaducts
ABC2022-116-22	"Smart" bridge components (expansion joints, bearings, seismic devices) for intelligent infrastructure
ABC2022-117-22	South Approach Structures on the Pattullo Bridge Replacement Project
ABC2022-118-22	Tonkin Gap & Associated Works Project – Southern and Northern Dive Structures with Integral Bridges
ABC2022-119-22	Stainless steel cross bracings for pier strengthening works
ABC2022-120-22	Bridge Strengthening Design and Construction – Dynon Road Bridge over Moonee Ponds Creek, West Melbourne
ABC2022-121-22	Strengthening of the Glenferrie Road arch bridge over Gardiners Creek
ABC2022-122-22	Structures on the Tonkin Gap Project in Perth

Code	Title
ABC2022-123-22	Embedding sustainability in standards and specifications
ABC2022-124-22	Sustainable approaches to active transport bridges
ABC2022-125-22	Sustainable bridges: new developments and opportunities
ABC2022-126-22	Sustainable Steel Bridges – by Design
ABC2022-127-22	Design and construction of Sydney Gateway network arch bridges
ABC2022-128-22	Sydney Gateway Project - Bridges
ABC2022-129-22	Sydney Gateway Viaduct Design Highlights
ABC2022-130-22	Sydney Harbour Bridge Rail Deck Upgrade
ABC2022-131-22	TfNSW's Rapid Bridge Assessment Tool (RBAT) – innovation towards freight productivity
ABC2022-132-22	Using Tier 1 Assessment to assist in making heavy vehicle access decisions
ABC2022-133-22	The 100+ club and a bridge that built a better community; Tirohanga Whanui walking and cycling bridge, Auckland, NZ
ABC2022-134-22	To Achieve Durable and Sustainable Concrete
ABC2022-135-22	Two bridges on Qantas Drive over Port Botany rail line and Alexandra Canal
ABC2022-136-22	UAV-based multi-layered data collection methods and defection algorithms for Predictive Analutics and Bridge Asset Management
ABC2022-137-22	Upgrading The Great Ocean Road Infrastructure: Strengthening Skenes Creek Bridge and Adding a New Pedestrian Path Works
ABC2022-138-22	The use of Level 2 inspection data in the bridge asset management process
ABC2022-139-22	Vehicle dynamic load effects on buried arch structures (dynamic load allowance discussion)
ABC2022-140-22	Vehicle Induced Dynamic Effects on Steel-Concrete Composite Bridges – A Comparative Study in Field Testing and Finite Element Analysis
ABC2022-141-22	Simple visualisation of projects using 360 Pano camera views embedded in project GIS portal for design development and stakeholder consultation
ABC2022-142-22	Development of new evaluation live load models for the Waka Kotahi Bridge Manual
ABC2022-143-22	Weathering Steel Bridges – An Australasian Experience
ABC2022-144-22	West Gate Tunnel Project - Driven Precast Concrete Piles in Coode Island Silt
ABC2022-145-22	Westconnex St Peters Interchange Integral Cut and Cover Structure Design
ABC2022-146-22	Westgate Tunnel Melbourne Footscray Rd Veloway - 2.5km long, elevated bike path



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