

arbo



Annual Report 2021-22





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01:

Chair's Report

For the third successive financial year, it is my pleasure to report that ARRB has both achieved a surplus and maintained self-sustainability, as it shapes Australia and New Zealand's transport future.

This is a huge achievement in the light of the adverse impact of COVID-19 on transport industry logistics in general, outlining the quality, strength and support of ARRB's staff and leadership team during difficult times.

I would like to acknowledge my fellow ARRB directors for their work, and Chief Executive Officer Michael Caltabiano and his team for putting ARRB in a strong financial position.

ARRB has shown the ability to not only become financially self-sustainable but to move strategically, overcoming the impact of the pandemic while still delivering services to customers and clients.

As we continue to see a move towards our road agencies becoming transport agencies, ARRB has adapted accordingly by widening its scope from roads to all modes of transport. As part of strengthening ARRB's role as the National Transport Research Organisation (NTRO) for Australia and New Zealand, it has brought in the Australasian Centre for Rail Innovation (ACRI), effective 1 July, 2022, to be part of the NTRO.

ACRI chair Hon John Anderson AC, a former Deputy Prime Minister and Commonwealth Minister for Transport, has joined the ARRB Group board, bringing his expertise and passion for transport to our quality group of directors.

As well as road and rail, ports and airports are now areas in which ARRB – through the NTRO lens – can assist Australia and New Zealand's transport agencies and the private sector.

Sustainability and safety continue at the core of ARRB's work in the road space. I have seen this first-hand with Main Roads Western Australia's joint initiative with ARRB – the Western Australian Road Research Innovation Program (WARRIP) – guiding the ongoing development of a sustainability assessment tool, and WARRIP's project focusing on infrastructure vulnerability due to climate change.

These projects are critical as the nation addresses net zero and climate change and its impact on our transport networks – which we've seen and felt due to the devastating bushfires and flooding across the country over the past two years.

ARRB also has an important role to play in supporting Australia's national road safety strategy. ARRB's experts gave important evidence to the Federal Parliament Inquiry into Road Safety. We continue to research ways we can reduce the trauma on our roads by developing cutting-edge, data-driven solutions for all levels of Government.

As well as ARRB's WARRIP joint initiative, important pavement research continues to be developed through our other partnership program of works with the Queensland Government's Department of Transport and Main Roads – NACOE.

NACOE – the National Asset Centre of Excellence – is working on delivering better quality road construction with improved sustainability overlays and network resilience.

Both programs are delivering excellent benefit cost ratios – great investments for our road agencies and ultimately our road users.

Right now, we are seeing a once-in-a-generation investment in transport infrastructure. The key to making this “big build” successful for future generations is harnessing the technology being developed, combining it within sustainable projects and creating resilient, future-proof infrastructure.

ARRB is at the forefront of this and I have great confidence its team, research and services will keep driving Australia and New Zealand's transport future forward.



Peter Woronzow
ARRB Chair

02:

CEO's Report

In 2021-22, ARRB began the process of transforming into the National Transport Research Organisation (NTRO) in response to the transition of our shareholding members - formerly State Road Agencies - into State Transport Agencies.

The NTRO will be an innovation portal through which Government and industry can gain great outcomes across all modes of transport. It will offer innovative research and practical solutions to challenges across road, rail, ports and airports.

ARRB has great experience in the road sector but we have already found ourselves being sought after across rail, ports and airport projects. Now we are directly meeting the need for the multi-modal approach to transport policy and operations we now see across Australia and New Zealand.

In early 2022, the Australasian Centre for Rail Innovation (ACRI) joined the ARRB Group and it is now being incorporated into the NTRO as NTRO Rail from 1 July, 2022.

We have also established NTRO Ports and NTRO Airports to serve those sectors. Our skillsets and ARRB's 60+ years' experience in asset management and infrastructure performance and measurement fit the need within the rail, ports and airports sectors for innovative solutions.

ARRB opened a Canberra office in March 2022 – branded as the first NTRO office. That now gives ARRB a network of offices in every mainland State in Australia, including our world-class materials laboratories in Melbourne. It's the perfect foundation for us to serve across the entire transport sector – road, rail, ports and airports.

As we plan further growth into the future, ARRB continues to deliver a positive return on investment to our members for the third successive year. The investment in research activities to advance the knowledge base that is made possible by being well run ensures that ARRB and the NTRO

will continue to serve the needs of the transport sector in Australia and New Zealand.

We remain financially self-sustainable, meeting targets and delivering projects on time and on budget.

Throughout the financial year, ARRB continued to invest in new technology and tools to aid the transport sector. Our third Intelligent Pavement Assessment Vehicle (iPAVE) was purchased, painstakingly kitted out by our Infrastructure Measurement team in Melbourne, and will take to the road later in 2022 to measure and monitor the road network with world-first technology, including ground-penetrating radar. This new iPAVE will be based at our Brisbane office.

We invested in creating data-driven solutions married to technology that the industry needs. We developed what we believe is a data-fuelled game-changer in the road safety space, NetRisk2, which provides engineers and asset managers with a tool that will improve network-wide safety outcomes. Safer retroreflectivity measurement and monitoring is now possible with less downtime for road closures thanks to our iLINE vehicle. A national crash and traffic volume database is also complete, as well as the development of a sustainability assessment tool for road construction called InfraCalc.

ARRB invested in new survey vehicles and state-of-the-art equipment to collect and analyse data from all points of the road network – however remote – across the sealed and unsealed road environment. We have also secured a second Accelerated Loading Facility (ALF), which effectively simulates the effect of heavy vehicle traffic on pavements, to

be established in Western Australia to complement our hard-working ALF in Victoria.

ARRB continues to develop its footprint in the certification space, delivering rigour around the transport industry's processes, people, products, and services. The newly branded NTRO Certification offering is available across road, rail, ports and airports.

Our relationships with all levels of Government continue to strengthen. ARRB's Sustainability and Materials Performance team completed an important piece of research work for the Commonwealth to strengthen our ties with the nation's top layer of Government. The two-part report and 10 fact sheets of Best Practice Advice for Recycled Materials in Road and Rail Infrastructure will properly inform the "big build" when it comes to increasing use of recycled materials and arriving at more environmentally friendly solutions for transport construction.

ARRB's transport research laboratories are the nation's Reference Laboratory, and now incorporate Victoria's Department of Transport laboratories – making us the transport materials research and testing centre for Victoria.

Our joint venture initiatives with Queensland's Department of Transport and Main Roads (NACOE) and the Western Australian Department of Transport (WARRIP) continue to excel in their benefit cost ratios, providing excellent outcomes for Government, industry, taxpayers and road users. We are also working closely with Major Road Projects Victoria on a series of initiatives, including training, and we're developing a suite of solutions supporting the Department for Infrastructure and Transport in South Australia.

None of this would be possible without our people. ARRB has a remarkably diverse workforce and skillset – something the organisation has consciously worked towards. Employees

from 25 different countries work at ARRB. Just over 40% of ARRB's workforce are women. We are proud to be walking the walk when it comes to diversity. Diversity of people and a global staff brings a diversity of ideas to shape our transport future, and we are seeing that in the outcomes being achieved.

The effects of the pandemic haven't slowed ARRB down despite the challenges of remote working and logistics. We remain focused on continuing to grow in 2022-23 and taking the next step in developing the National Transport Research Organisation (NTRO) to serve Australia and New Zealand's needs across road, rail, ports and airports



Michael Caltabiano
Chief Executive Officer, ARRB



03:

Our Board

CHAIRMAN – PETER WORONZOW

Peter Woronzow is the Director-General, WA Department of Transport. Peter has worked within Main Roads WA for 37 years, most notably as Director-General of MRWA, and Executive Director, Financial and Commercial Services. His extensive experience in accounts, procurement and management provides strong, strategic leadership in managing financial, corporate and commercial solutions. He is a member of CPA Australia.

NEIL SCALES OBE

Neil Scales OBE is the Director-General for the Department of Transport and Main Roads, Queensland. He was previously the Chief Executive and Director-General of Merseytravel, the transport authority for Merseyside in the north of England. Mr Scales has held executive roles with transport and engineering companies and has consultancy experience with several agencies, including the World Bank and the European Commission. Mr Scales is the current Chairman of Austroads and Deputy Chair of the ARRB Group Board.

HON JOHN ANDERSON AO

The Hon John Anderson AO was the Deputy Prime Minister of Australia for six years and is a former leader of the National

Party. He served as a member of the Federal Parliament for nearly two decades. He is a former Transport and Regional Services Minister, remains active in the not-for-profit sector, and is a sixth-generation farmer.

KEVIN REID

Kevin Reid is currently Chief Advisor at Waka Kotahi – the New Zealand Transport Agency. He has more than 25 years' experience in the planning, design, construction, maintenance and operation of highway networks in New Zealand, the United Kingdom and the Caribbean. Kevin leads a team of 60 professional transport planners, engineers and scientists responsible for providing technical leadership for the delivery services on New Zealand's State Highway network.

NICK MARINELLI

Nick brings extensive leadership experience and industry knowledge, with more than 35 years' experience in the infrastructure and construction materials sectors. From June 2017 to June 2019, Nick, as CEO Fulton Hogan Australia, led the company's combined Australian businesses of Construction, Infrastructure Services and Utilities. Nick has experience across multiple infrastructure sectors, including civil construction, water, telecommunications, asset management and road maintenance activities.



STEPHEN TROUGHTON

Stephen has experience managing businesses in Australia, the United Kingdom (UK) and the Middle East with extensive technical expertise in major infrastructure and property. He is a Fellow of Engineers Australia and a Graduate of the Australian Institute of Company Directors (AICD). After recently working on Queensland's Cross River Rail project, he is currently Program Director for Transgrid.

LOUISE MCCORMICK

Louise is the Northern Territory Infrastructure Commissioner, charged with actively pursuing investment and driving major projects in the NT. She is an Executive Engineer, Chartered Fellow and Senior Civil/Structural Engineer with more than 20 years' experience in the public and private sectors. Louise is the former General Manager of the NT Government's Department of Infrastructure, Planning and Logistics Transport and Civil Services division, and is a Fellow of Engineers Australia chartered in Civil, Structural and Executive Engineering.

IAN WEBB

Ian Webb served as Chief Executive of Roads Australia, the national peak body for Australia's road industry from 2003 to 2018 and has an extensive knowledge of the stakeholders

and policy issues facing the industry. During this period, he was also seconded to Geneva as Director-General of the International Road Federation. His career includes 17 years as a career diplomat and 30 years at Chief Executive level in both the public and private sectors in NSW and Victoria.

DR COLLETTE BURKE

Collette has spent more than 25 years in the design and construction sector with major contractors in road and rail. As well as being a co-founder of two engineering consultancy firms – Exner Group and Karsta Middle East – she was also Victoria's first Chief Engineer. Collette is also an internationally acknowledged researcher and authority on risk management and the delivery of value for money in major infrastructure projects.

PAMELA HENDERSON

Pamela is the Executive Director of Technical Services at Transport for NSW, which provides specialised technical capability and services for the delivery, operations and management of the NSW transport network across all modes, and focuses on innovation and driving best practice in engineering. An electrical engineer, she also has 25 years of experience working in the energy industry. Pamela is also a member of the UTS Transport Research Centre advisory board.

04:

Our Expertise

ASSET PERFORMANCE

Incorporating our Asset Management and Bridge Structures teams, this Asset Performance group aims to shape Australia's future in the asset space for the next decade and beyond. A new and emerging field of Assurance Systems will put ARRB at the forefront of understanding next generation asset performance. Our team of experienced and talented staff from a range of backgrounds will be charting new territory across the transport asset base, including asset modelling and performance.

SUSTAINABILITY AND MATERIAL PERFORMANCE

Sustainability, better recycling of existing materials and improved environmental outcomes are informing Australia's "big build" of infrastructure. ARRB is developing guidelines and specifications for the use of sustainable materials in road and transport infrastructure and has a world-class transport laboratory facility based in Melbourne to drive this. ARRB specialises in life cycle and economic assessment, environmental management advice on transport projects, and is building new and lasting relationships with Local Government across Australia to spearhead the implementation of next generation materials and safety outcomes.

SAFER SMARTER INFRASTRUCTURE

ARRB is working on what the next generation of road surface technology – and our mobility corridors themselves – should look like. We are expert in understanding the design and review of pavement thickness, asphalt mix and sprayed seals, as well as the characterisation of new materials. ARRB possesses a core skill set in pavement engineering expertise, which we are able to advance across our key shareholder group and externally to the private sector for smarter construction outcomes. With safety on all projects paramount, ARRB can embed safety within projects, including mining, freight and new and existing road design projects.



SUSTAINABILITY,
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IMPROVED ENVIRONMENTAL
OUTCOMES ARE INFORMING
AUSTRALIA'S "BIG BUILD"
OF INFRASTRUCTURE

ARRB's state-of-the-art transport research laboratories in Fishermans Bend, Melbourne

MOBILITY FUTURES

What does the future of mobility look like? ARRB is working on the answers. Through our cutting edge work with next generation transport systems such as driverless technology, hydrogen power and electric vehicles, and analysing the data ARRB collects from Australia's road networks, we can provide information to help stakeholders make data-driven decisions to ensure the transport network operates at its optimum – both today and into the future. ARRB is leading the transition towards a safer, integrated mobility future by providing advice to shape policy and legislation, and an enhanced understanding of how mobility solutions and humans interact and how this interaction will change with the evolving transport ecosystem.

INFRASTRUCTURE MEASUREMENT

ARRB is focussed on the acquisition of next generation of infrastructure data across Australia's transport networks. We have assembled a suite of high-tech infrastructure measurement tools to help Australia better manage its road networks. ARRB added its third Intelligent Pavement Assessment Vehicle (iPAVE) to the fleet in June 2022, which includes world-first technology for measuring and monitoring the road network. From our iPAVEs and our Intelligent Safe Surface Assessment Vehicle (iSSAVE) to a fleet of network survey vehicles being updated and improved upon regularly, ARRB is able to measure our road networks so our stakeholders can better manage them in a variety of ways.

NTRO CERTIFICATION AND COMPETENCY BASED TRAINING

Our certification and training arm aims to provide confidence to the transport sector through the certification of products, processes, people and organisations. From development of industry standards and training to conformance and capability assessments, certification and maintenance of accreditation registers, ARRB offers an independent, reliable source of assurance to the industry and Government alike. ARRB is also the industry leader in providing training – both workshops and online learning – to the industry and our stakeholders on best practice in the transport space.

05:

Our Role

ARRB is transitioning into the National Transport Research Organisation (NTRO), expanding its work across all modes of transport; roads, rail, ports and airports. At the heart of our business is integrated mobility – innovative, impactful mobility solutions that benefit all Australians and New Zealanders.

We collaborate with all levels of Government, transport agencies, consultants and private sector organisations on all aspects of transport and mobility. ARRB delivers transport solutions that are safer, more sustainable and value-for-money.

ARRB has delivered more than 60 years' continuous service to the road and transport sectors of Australia and New Zealand. We are the source of independent, reliable, and robust guidance on the delivery of next generation infrastructure to serve the mobility needs of our community. Now we are now also supporting the rail, ports and airports spaces to serve their needs.

ARRB has a clear role of partnering with its members at Local, State and Federal Government levels to provide timely, accurate and impactful means of achieving their objectives.

As we transition to a mobility-based society, the nature of the supporting transport infrastructure must change together with the attitudes to using this resource.

ARRB has deep connections across UK, Europe, USA, Asia and China, giving access to vast amounts of new knowledge.

Using this with our own new knowledge and established expertise, we will play our part in forging the mobility future that all Australians and New Zealanders desire.



06:

ARRB HAS FOUR
CORPORATE
VALUES, WHICH SIT
AT THE HEART OF
EVERYTHING WE DO

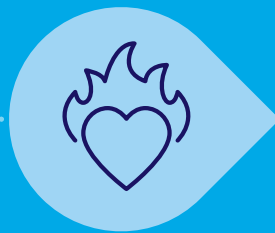
Our Values

ARRB has four corporate values, which sit at the heart of everything we do as an organisation. They are emblazoned on the walls of every office nationwide as a constant reminder of what we strive for. Employees who embrace and show commitment to these values are recognised with a series of awards through our individual State offices and nationally with an annual awards ceremony.



COLLABORATIVE

We communicate openly and constructively to deliver world-class research because our people work together and with partnering organisations and clients.



ENERGY AND PASSION

We have a passion for good ideas (big and small), for expertise and for helping each other out. Positive energy is created by loving what we do, creating fun and having a 'can and will do' attitude.



INTEGRITY

We offer independent, impartial research and communicate clearly, honestly and respectfully with each other and we do what is right for our clients, our staff, our industry and our community.



TRANSFORMATIVE

We are continuously looking to improve the world around us, moving forward and innovating. The mobility solutions of the future will require adaptable skills, technologies and ideas.

How we recognise our staff

REGULAR AWARDS IN EACH STATE

Staff are recognised regularly throughout the year with awards for those who best epitomise each of our values.

ANNUAL AWARDS

A national winner for each of our four values is chosen. They are recognised and awarded at a special ceremony held at our Port Melbourne headquarters.

INSIGHT NEWSLETTER

A monthly internal newsletter for all staff highlighting achievements of both the company and individual staff members.

NTRONET

ARRB's staff intranet – called NTRONET to recognise our work as the National Transport Research Organisation (NTRO) – provides staff with all information they need at their fingertips.

07:

DAWE Report

Waste materials such as plastic, glass, organic food waste and tyre rubber can now be used with more confidence in building Australia's roads and railways thanks to a critical new report from ARRB.

The report, conducted on behalf of the Commonwealth Department of Climate Change, Energy the Environment and Water, provides an independent, expert review on how to safely and successfully increase the use of recycled materials in road and rail infrastructure.

The report says many recycled materials are shown to actually improve the performance of roads. It also recommends plastic and organic food waste – two of Australia's problem waste areas – can be more widely used for building and maintaining road and rail infrastructure.

Plastic can be used for applications such as building noise walls, while organic food waste was earmarked for more widespread use in landscaping and erosion control.

ARRB says using more recycled materials in the construction, rehabilitation and maintenance of road and rail infrastructure has a host of benefits for Australia, including less waste sent to landfill, lower greenhouse gas emissions, job creation and better, more durable roads.

Despite a long history of using recycled materials in infrastructure, it's still not business-as-usual within the road and rail sectors.

The report says the reasons are a lack of awareness and education, the disconnection between market demand and supply, lack of specifications and guidelines and most importantly, the lack of consistent and scientific evidence to report on longer-term performance and sustainability

benefits. That's something ARRB says should change as a result of this report.

"This project provides robust, evidence-based knowledge on how to optimise the uptake of recycled materials in infrastructure projects," ARRB says in the report.

"There is ample opportunity to increase (recycled materials) content within transport infrastructure applications, or even the frequency that they are used.

"There are also emerging recycled materials technologies that present a significant opportunity for increased uptake. Improved awareness and education in how these materials are used, supported by policy and procurement drivers, new and improved specifications and more modern recycling facilities with increased capacity, can all contribute to increases in the use of recycled materials, sustainability outcomes delivering on the principles of a circular economy."

Produced by ARRB's Sustainability and Materials Performance team, the report examined 10 recycled materials for their potential use within road and rail infrastructure. These were crushed concrete and brick, crushed glass, reclaimed asphalt pavement or RAP, crumb rubber, ground granulated blast furnace slag, fly ash, bottom ash, recycled organics, recycled ballast and recycled plastics.

The report, in two parts, shows significant economic and environmental benefits for the majority of recycled materials in road and rail infrastructure.

08:



The brand new iPAVE3 is ready to measure Australia and NZ's road network using world-first technology

iPAVE 3

ARRB has added a third Intelligent Pavement Assessment Vehicle (iPAVE) to its fleet – featuring a step change in world-first technology.

The newest addition to ARRB's infrastructure measurement fleet features:

- › measurement capability in both left and right wheel paths (using dual beam deflection measurement technology)
- › additional sensors and improved sensor technology
- › smaller reporting intervals
- › improved temperature control system
- › ground penetrating radar.

The ability of the new iPAVE to measure in both left and right wheel paths simultaneously is world-first technology, separating the new iPAVE from its two other siblings that ARRB runs on the road network around Australia and New Zealand.

Like the other iPAVEs, it travels up to 80km/h, allowing data to be collected at traffic speed. Together, ARRB's other two iPAVE vehicles have collected more than 600,000km of the Australian and New Zealand road networks combined.

iPAVE 3 arrived at ARRB's Port Melbourne headquarters, in late February 2022 before ARRB's team got to work on getting the vehicle fully operational for Australian conditions.

It will be based in ARRB's Queensland facility, with its first assignment measuring the road network in spring 2022.

Benefits of the new iPAVe include:

- › much faster than current deflection measuring devices, meaning increased network coverage
- › lower cost
- › more data on road performance
- › improved safety
- › allows us to make more informed maintenance decisions by removing the guesswork.

09:

NACOE

The National Asset Centre of Excellence (NACOE) is a joint initiative between ARRB and Queensland's Department of Transport and Main Roads (TMR). This program is focused on the improvement in road pavement innovations and asset performance whilst also contributing to improving road safety initiatives to help save lives, on projects that aim to reduce the carbon footprint of roads, and on delivering significant cost savings to the people of Queensland.

ARRB works with TMR to deliver engineering excellence through cutting edge road research and innovation in key disciplines, including sustainable material performance, pavement engineering and asset management.

The NACOE initiative has been running since 2013 and will continue under its current contract to at least 2026.

Projects undertaken during 2021-22 include:

- › intelligent Compaction – assessment of the benefits and limitations for road construction
- › working in a new partnership with the Western Australian Department of Main Roads to develop a Sustainability Assessment Tool to help drive the uptake of new, innovative pavement technologies
- › evaluating the suitability of the pavement quality indicator (PQI) as a non-destructive density conformance test for asphalt layers during construction
- › investigating what is available in the video imagery market to predict near-misses on the road network and potentially incorporating these tools into future road safety analysis
- › sustainable sprayed sealing practices, including investigation into pre-treatment options for sprayed sealing
- › more flood resilient bridge approaches.







10:

WARRIP

The Western Australian Road Research and Innovation Program (WARRIP) is a joint initiative between ARRB and Main Roads Western Australia (MRWA).

The WARRIP venture recognises MRWA's desire to focus on road infrastructure-related research. It enables MRWA to significantly increase the capability and effectiveness of its specialist technical areas and deliver excellence and better value from every dollar spent.

WARRIP continues to show an outstanding benefit cost ratio (currently 8.6) to MRWA since the inception of the research program.

WARRIP's focus is on research in the pavements, bituminous surfacings, asset management and structures areas. It aims to deliver innovative, sustainable, and cost-saving solutions for road infrastructure projects throughout Western Australia via the successful implementation of research findings from this program.

Key projects in 2021-22 include:

- › incorporating Bushfire Impacts into Road Design (joint project with NACOE) to help agencies consider bushfire risk in the same way that they consider flooding when planning, designing and constructing infrastructure
- › planning for infrastructure vulnerability due to climate change
- › investigating the suitability of WA mining waste for road infrastructure projects, which helped MRWA develop a framework for assessing any proposed waste materials for their suitability characteristics for road applications
- › improving decision-making and Works Program development with continuous network strength and condition data as a key outcome from the use of the intelligent pavement assessment vehicle (iPAVE). The development of a rutting deterioration model and validation of the results to better identify rehabilitation requirements across the network was an outcome of the program of works
- › WARRIP continuing to partner with NACOE to develop the sustainability assessment tool and investigate the use of recycled plastics in road infrastructure.

11:

ADVI Emerging Vehicle Experience

The Australia and New Zealand Driverless Vehicle Initiative (ADVI) teamed with Transport for NSW to run the Emerging Vehicle Experience (EVE) in May 2022.

The event was held at Transport for NSW's world-class Future Mobility Testing and Research Centre in Cudal, NSW.

Held over two days, the event was designed to connect future transport leaders, enable industry development and drive learning, development and connection.

The latest ground-breaking technology in autonomous vehicles was uncovered with various vehicle displays and testing demonstrations, as well as numerous workshops and presentations throughout the free event.

Leading executives and technical experts were in attendance, speaking about how Australia is working towards safely and effectively implementing autonomous vehicles into our road network.

Key speakers included NSW Minister for Regional Transport and Roads, Sam Faraway PM and ADVI Chairman and ARRB CEO Michael Caltabiano.

With safety very much on the agenda on Day 2, presentations included ARRB's National Discipline Leader of Mobility Futures, Dr Charles A. Karl, and Volvo Cars Australia's Certification and Engineering Manager David Pickett, teaming up to present on the autonomous vehicle safety case for Australia.

Among the vehicles on display at the event, the autonomous shuttle from Ohmio was in action at the centre as well as driverless electric vehicles and e-scooters.

One of the stars of the show was ARRB's XC90 Hybrid iSCAN – the vehicle mapping, annotating and digitally overlaying all aspects of the Australian and New Zealand road network.

The event was the scene of a major announcement by the NSW Government of a \$9.5 million investment in the Future Mobility Testing and Research Centre in Cudal, setting regional NSW up to play a major role in the future of driverless vehicles in Australia.

ADVI is the peak industry advisory body for driverless vehicle activities in Australasia. Overseen by ARRB, ADVI aims to safely accelerate the adoption and use of driverless vehicles in Australia and New Zealand.



12:

NetRisk2



ARRB has developed new technology that will help save lives on our roads.

NetRisk2 is a new, web-based tool that provides road managers the chance to test out the impact that road improvements and changes – such as road widening, wide centre line markings and clearing the road side of obstruction – will have on road safety before work begins.

The press of a button can show road managers what effect a change – such as creating a better road surface or changing the speed limit – will have on improving a road's safety and compare different solutions to optimize the results. Road agencies and Councils can then prioritise the work which is shown to deliver the most community benefit.

Already there has been significant interest – particularly from Local Government – in implementing NetRisk2 on their road networks.

Sunshine Coast City Council became NetRisk's first subscriber in late June and many others are expected to follow in the first few months of the 2022-23 financial year.

Local Government controls 80% of Australia's roads and ARRB believes the focus of providing Councils with a new

tool that will actively improve road safety is the step change needed to deliver better outcomes.

NetRisk2 combines the two leading road risk assessments – the AusRAP Star Ratings system and the Australian National Risk Assessment Model (ANRAM) – into a single interface.

It has been developed over several years of research and development by ARRB as a practical, effective method to help Australia achieve its Vision Zero aim in line with the National Road Safety Strategy.

The strategy aims to reduce the annual number of road fatalities by at least 50 per cent and serious injuries by at least 30 per cent by 2030, and pledges zero deaths and serious injuries on Australian roads by 2050.

NetRisk2 was launched in May 2022 with demonstrations to road managers at separate events around Australia. Since the launches, ARRB's team has been busy demonstrating NetRisk2 to road agencies and Councils either in-person or online.

13:

National crash database

The National Transport Research Organisation has announced a new dataset that will help drive the National Office of Road Safety's long-term goal of zero road deaths and serious injuries by 2050.

We understand the annual average daily traffic (AADT) provides a national view of traffic volume across Australia. We have already built the first national crash database that provides a harmonised view of road crashes across Australia. We are now able to visualise individual road lengths and support Local and State Governments with insights driven by data to solve safety zone problems before they become fatality zones.

To deliver Vision Zero, road safety investment decisions must be made with a data driven perspective. Until now this has always been a hindrance to improving road safety. The national crash database solves this long-standing problem for Australian road managers with harmonised crash data across all states and territories presented on Local Government boundaries. The national crash and traffic volume database will help to understand where improvements need to be made to deliver maximum return on investment.

The national crash database will generate reports at different geographies (Local, State and National) and different temporal periods, to understand fatality and serious injury (FSI) trends and where Australia's largest road risks are.

The spatial dataset can also be cross referenced to road surveys and other existing NTRO/ARRB datasets to identify road characteristics, which could provide new insights on the journey to make our roads safer.

With the project currently under way, the database aims to allow a national level of usable data analysis of crash data that contains key metrics to help achieve safer roads with fewer fatal and serious injury crashes.

Viewable via dashboard and web map application, the dataset is integrated with other road safety tools including NTRO's latest in road safety technology, NetRisk2.



14:

Brimbank Council recycled glass in roads

ARRB is working with an innovative Victorian Council, monitoring an important project which will potentially open the way for more recycled glass to be used in roads.

Brimbank City Council in Melbourne's west is working with ARRB on the Australian-first project to trial finely crushed recycled glass in asphalt on two residential streets in Deer Park.

Brimbank is the first Local Government area to lay this much glass in the road surface on its roads. It includes up to 10 per cent recycled glass and 25 per cent recycled asphalt.

This project brings us a step closer towards 100 per cent recycled roads, with reduced costs and a reduced waste stream for all Local Governments.

The trial is broken up into six sections across 800 metres of road in Newbury Street and Gould Street in Deer Park. Council is working closely with ARRB to continue to test and monitor the performance of the road surface over the next two years. If the results of the trial are successful, it will significantly reduce the amount of waste going to landfill.

Multiple suppliers of recycled glass materials – Downer, Alex Fraser and Fulton Hogan – are involved in the trial. There are also control sections that were constructed without recycled glass for comparison purposes.

Brimbank City Council, Sustainability Victoria, ARRB and the Victorian Department of Transport co-funded the innovative road project.



Left: Brimbank Mayor Cr Jasmine Nguyen.

Right: ARRB's survey vehicle testing and monitoring the recycled glass roads in Brimbank City Council

15:

ARRB in Defence

ARRB's Mobility Futures team is working on several projects in the defence space pertaining to connected and automated vehicles.

Robotic and autonomous systems have the potential to fundamentally change the way the Army fights, trains and organises itself.

Investment in these technologies is critical to be competitive in the future autonomously enabled battlespace. ARRB has developed a strong track record in working with defence and private enterprise to look at the safe operation of connected and automated vehicles.

Recently ARRB partnered with the Institute for Intelligent Systems Research and Innovation (IISRI) at Deakin University to design and build, as a platform agnostic concept demonstrator, an autonomous leader-follower convoy with advanced obstacle avoidance.

A multi-vehicle convoy is being developed and tested at multiple locations where the lead vehicle is being conventionally crewed by a human operator or being tele-operated remotely by a human controller.

The project is now focused on navigating the challenges associated with the use of autonomous vehicles on public roads, culminating in a simulated logistics delivery from an airport, along a main supply route, to deliver supplies to a tactical field location.

This concept demonstration on public roads will enable Army to develop its capability in the safe operations of its future autonomous systems on Australia's public road network, not just in off-road environments. The project will aid Army to understand how and where autonomous vehicles could be best employed for military advantage, informing capability investment decisions into the future.

ARRB's Mobility Futures team has also presented at the past two Army Robotics Expos, showing ARRB's capabilities around autonomous vehicles and their potential, safe application within defence.

**ARRB'S MOBILITY
FUTURES TEAM HAS
ALSO PRESENTED
AT THE PAST TWO
ARMY ROBOTICS
EXPOS**



16:

Glow in the dark line markings

ARRB is working with the Victorian Department of Transport to develop a framework to trial glow in the dark line markings in regional Victoria.

The new type of photo-luminescent paint is being used to increase road safety by helping drivers see where the road is going beyond the reach of headlights or where headlights are pointing off the road due to tight curves.

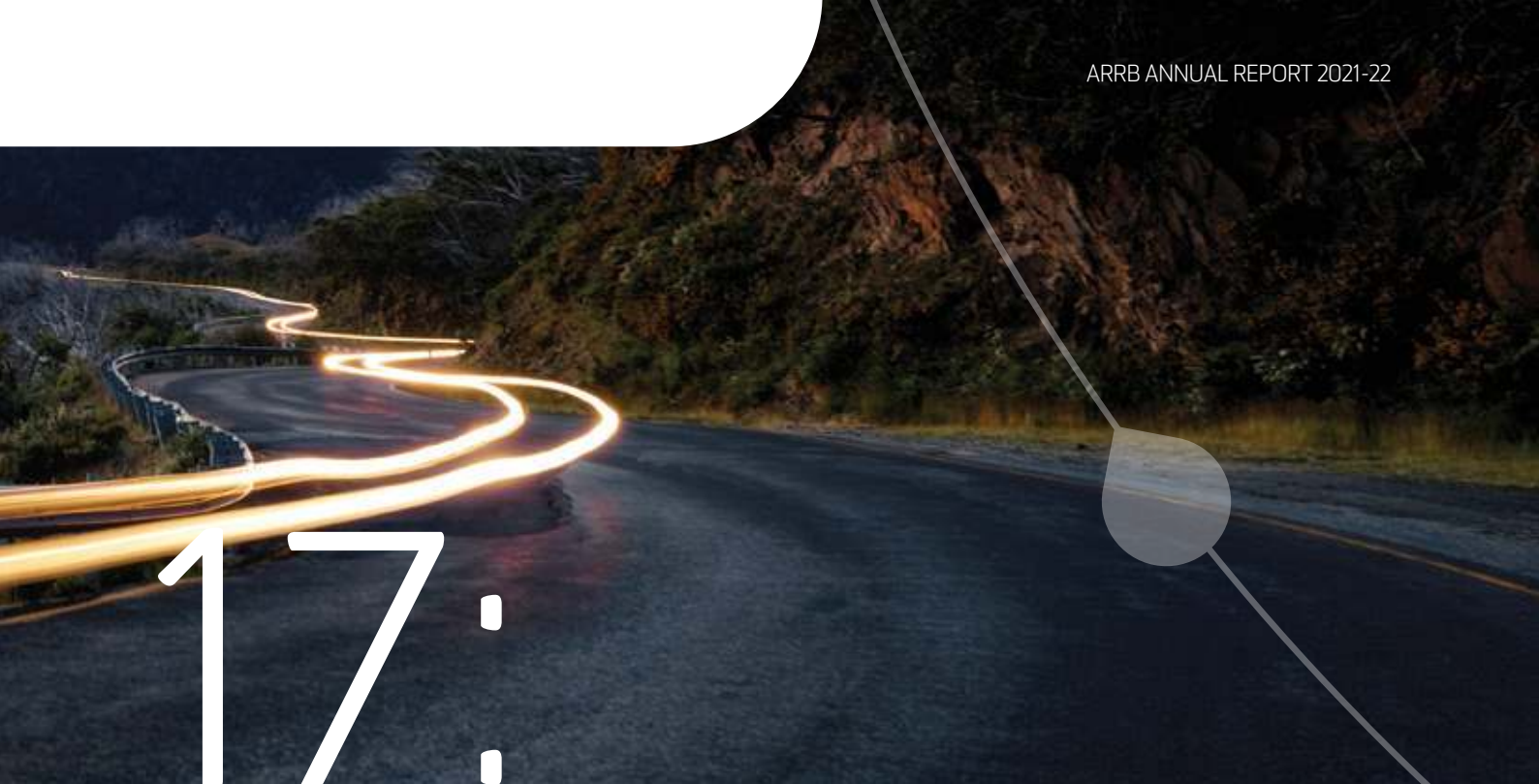
ARRB sees great potential for self-illuminating line marking to provide safety benefits on roads with sharp crests and tight curves of a complex alignment.

This is because a car's headlights are unable to illuminate the line marking beyond the range of the headlights in front of the vehicle, whereas self-illuminating lines are not limited by the direction the headlights are pointing as they light up without requiring vehicle headlights.

Where street lighting would be expensive or impractical to install, glow in the dark markings can be a quick and cost-effective solution, while also being able to reduce light pollution in the sky.

ARRB is pursuing trials to identify the performance of the paint in wet weather, as well as whether the lines are easily detectable by automated vehicles throughout the day and night.

ARRB is speaking with several State transport agencies to explore if the technology can be used on a broader scale.



ARRB plastic noise wall specification

ARRB has collaborated with Major Roads Projects Victoria (MRPV), ecologiQ and the Victorian Department of Transport (DoT) to develop a new technical specification for plastic noise walls to be used in road infrastructure.

The specification allows up to 100% recycled material content and is an Australian first for a technical document of this nature.

This project will enable noise wall manufacturers to source material from various supply lines and encourage varying design solutions.

The advantages of using recycled plastic noise walls over other more traditional materials (including concrete, timber and steel) include:

- › the panels being lighter and safer to install and maintain
- › they can be manufactured in any colour or pattern
- › better acoustic performance due to the void created within the panel
- › most importantly, the use of recycled post-consumer plastics.

However, requirements must be kept in mind to consider whilst constructing recycled plastic noise walls, including acoustics or sound insulation being the main purpose of the noise wall, performance including impact resistance, UV stability, fire resistance, as well as light reflection, graffiti resistance and various other criteria.

Recycled plastic noise walls have successfully been trialled on the Mordialloc Freeway in Melbourne's southeast. The project includes 11.7 km of noise walls that have a 75% recycled content, which is estimated to be equivalent to 30 million plastic bottles or waste from 25,000 homes in one year.

From left: Victorian Department of Transport's Nick Foa, Member for Southern Metropolitan Region, Nina Taylor MP, Victorian Roads and Road Safety Minister Hon Ben Carroll MP, and ARRB CEO Michael Caltabiano at ARRB headquarters



Hon Ben Carroll MP visits ARRB headquarters

Victoria's Roads and Road Safety Minister Hon Ben Carroll MP got to know his Department's newest addition when he visited ARRB headquarters in Port Melbourne in April 2022.

Victoria's Department of Transport is now using ARRB's Intelligent Pavement Assessment Vehicle – or iPAVE – to measure and help manage its road network.

Minister Carroll visited ARRB's Port Melbourne headquarters with a team from the Department of Transport, including Head of Transport Services Nick Foa, and the local Upper House Member of Parliament and Victorian Government Legislative Council Whip, Nina Taylor MLC.

ARRB Chief Executive Officer Michael Caltabiano took the group on a tour of our facility, including a deep dive into our transport research laboratories and a look inside the inner workings of the iPAVE.

The iPAVE has the latest in data collection technology to help determine which roads most urgently need upgrades and repairs, saving time and money. It collects data in a single pass at normal traffic speed – making the process of monitoring, measuring and managing road networks better for all concerned. Importantly, it also allows professional engineers the ability understand the condition of what's under the road surface, allowing proper maintenance decisions to be made and prioritised.

"To think you can have a vehicle travelling literally at 80km/h, making the assessment of the road surface, and more than that though, what's under the surface – looking at the structural impact of the road, is fantastic technology for Victoria," Minister Carroll said.

The Department of Transport will use the iPAVE across the roads it controls in Victoria

"The iPAVE vehicle is capable of doing the entire Victorian (road) network in one year," Mr Foa said.

"That means better information, received far more quickly."

The iPAVE is the flagship of a large fleet of ARRB survey vehicles, which allow roads in all States and Territories to be measured and better managed. ARRB has three iPAVE vehicles operating across Australia and New Zealand.

"We can now assist road owners to do the right treatment in the right place at the right time, optimising the use of taxpayers' dollars, and keeping our roads safe and well maintained," Mr Caltabiano said.

ARRB is also working with the Victorian Government on a variety of sustainability-based projects as part of the State's Recycled First commitment.

19:

Unwanted paint now used in road construction

Can unwanted paint be successfully used in road construction?

ARRB is working with Australia's official product stewardship program for Australian paint, Paintback, to look at whether reclaimed water-based paint can have a beneficial use in road infrastructure applications.

The project, run by ARRB's Sustainability and Materials Performance team and being conducted within ARRB's state-of-the-art research labs facility in Port Melbourne, is investigating the use of reclaimed water-based paint in the following applications:

- › rejuvenation type products involving bitumen emulsions
- › stabilisation of granular materials
- › dust suppressants
- › non-structural concrete for low-risk road applications.

ARRB believes this project will develop materials solutions and blends that can be up-scaled and produced with a view to being introduced into general infrastructure construction and rehabilitation works.

The project was also advertised on billboards around Victoria in early 2022.



Left: The ARRB / Paintback collaboration was seen on billboards all around Victoria
Right: ARRB's Dr James Grenfell at work examining how we can use unwanted paint in road construction



AT THE HEART OF
OUR BUSINESS IS
INTEGRATED MOBILITY –
INNOVATIVE, IMPACTFUL
MOBILITY SOLUTIONS THAT
BENEFIT ALL AUSTRALIANS
AND NEW ZEALANDERS

20:

Freight rail sustainability

ARRB has partnered with the Australasian Centre for Rail Innovation (ACRI) and Arup to explore sustainability options for freight rail, focusing on recycled materials.

The study explores and highlights material options available for Australasian rail providers to drive their implementation and improve the sustainability of the rail sector.

A variety of materials were explored in this project including recycled plastic, ballast, concrete, water, rubber, glass, steel and sustainable options for lubricants.

As the uptake of recycled materials increases, this project aims to promote greater uptake of recycled materials in rail and drive an increase in research, trials and implementation across rail networks in Australia and New Zealand.

Re-using materials used in rail, from major construction to day-to-day operation and maintenance, offers a huge opportunity to reduce waste and the industry's net impact on the environment.



21:

ARRB gives evidence to Federal road safety inquiry

ARRB road safety expert David McTiernan gave testimony to the Federal Government's Joint Select Committee on Road Safety for 2021-22.

The key areas spoken about were:

- › risk ratings for roads
- › lifting vehicle safety
- › workplace road safety and the gig economy
- › safety at roadworks
- › heavy vehicle rest areas and their safety
- › setting appropriate speed limits to meet the use and function of the road and the infrastructure that is present
- › high-risk behaviour
- › blameless crash investigations and better investigations into near-miss road crashes to help prevent future fatalities.

The committee is investigating and identifying opportunities to improve road safety programs and relevant policy in the health, education, industry, transport and other sectors; embed road trauma prevention across agencies; and reduce road trauma affecting the workplace.

This inquiry had a significant focus on heavy vehicles and the gig economy.

ARRB has a long history of providing expert technical support for the processes of Government, and we were privileged to be asked to give evidence and to help shape a more effective road safety future for all Australians.

Mr McTiernan gave evidence before Committee Chair Darren Chester MP, Deputy Chair Matt Thistlethwaite MP, and committee member Maria Vamvakinou MP.

22:

National Interest Services

This year marks the 60th anniversary of the MG Lay Library at the Australian Road Research Board (ARRB) now based at Port Melbourne head office.

It was established to service the needs of road research, facilitate the transfer of knowledge, and assist the realisation of turning research into practice. The library has a long history of working with, and through, road agency libraries to deliver national land transport outcomes that would not be possible on an individual basis. This relationship was formalised under a National Interest Services (NIS) program, created and funded by its members to provide land transport information services in the national interest. NIS funding members include the Federal, State and Territory Departments of Transport.

The NIS program provides structured and systematic access to authoritative land transport knowledge. This includes the Australian Transport Index (ATRI), the only national land transport publications database and a major contributor to TRID, the free, international transport database managed by the US Transportation Research Board. A key component of

this task is the collection, preservation and dissemination of all relevant material produced here in Australia and New Zealand.

Additional curated resources supporting the decision-making needs of the Australian land transport sector include the ARRB Knowledge Base, the weekly email news alert Making News in Transport, the Rail Knowledge Bank and its monthly alert and the Transport and Road Update (TARU).

The NIS fosters and supports a network of information professionals through chairing the Tranzinfo network of Australian and New Zealand transport-related libraries, including academia, Government and the private sector. It is also a part of the network of international libraries that collaborate under the International Transport Forum/OECD's International Transport Research Documentation (ITRD) program. These networks provide contact points to transport-related libraries across Australasia and internationally.



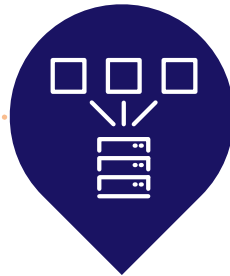
Left: National Interest Services librarians Meegan McPherson, Jill Aron and Lisa Butcher at work
Right: The M G Lay Library is now based at the National Transport Research Centre – ARRB's headquarters in Fishermans Bend, Melbourne

2021-22



COVERAGE

**+200,000
RECORDS**
IN THE NIS PUBLIC-
FACING DATABASES



CURRENCY

**+4000
RECORDS
ADDED**
IN THE LAST FINANCIAL YEAR



AUTHORITATIVE

INCLUDES
**CORE
PAPERS**
FROM CONFERENCES AND
**PEER
REVIEWED
TRANSPORTATION
JOURNALS**



USAGE

**OVER
48,000**
GLOBAL
USERS

50,000
conference papers &
93,360
journal articles

Over 13,000
digitised records in the ARRB
Knowledge Base

+200,000
records in the NIS
public-facing databases

60
YEARS OF
CURATION

Over 9,500
records in the Rail
Knowledge Bank

With
59,500 records
specific to Australian authors
and organisations

Including the 1st edn copy of
Australasian Roads 1908

23:

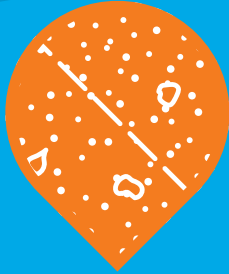
What ARRB's national research labs have done during 2020-21

The total number of tests: 11,322

The total mass of material tested: 35,240 kg



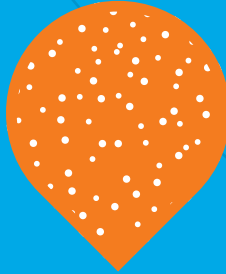
BITUMEN


2,299

TOTAL TESTS

1,729kg
TOTAL MASS OF
BITUMEN TESTED

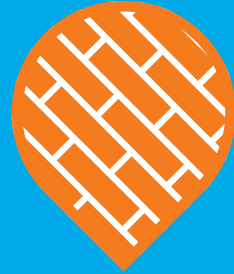
ASPHALT


3,171

TOTAL TESTS

TOTAL MASS
OF ASPHALT
**TESTED
19,991kg**

PAVEMENTS


430

TOTAL TESTS

5,929kg
TOTAL MASS OF
PAVEMENT TESTED

Laboratory highlights

807
BINDER
EXTRACTIONS

Development of material assessment methodologies used to evaluate sustainable materials generated outside of traditional sources for use in the road construction industry.

Tested a wide variety of asphalt types (crumb rubber, recovered carbon char, EME2, high RAP (Reclaimed Asphalt Pavement), high glass) for flexural stiffness and fatigue.

Development of new and innovative testing for:

- › Abrasion of asphalt and high friction surface treatments
- › Microplastic determination on asphalt materials

Materials performance testing and assessments on:

- › High RAP and high glass containing asphalts
- › Crumb rubber and plastic additive binders and asphalts
- › Recovered carbon char asphalts
- › Deformation assessment on high glass granular pavements
- › Deformation assessment on a byproduct of alloy steel production It

614
DYNAMIC
SHEAR
RHEOMETER
VISCOSITIES

24:

ARRB in the media

ARRB has bolstered its media profile significantly in recent years and we reached new levels of exposure for our work in 2021-22.

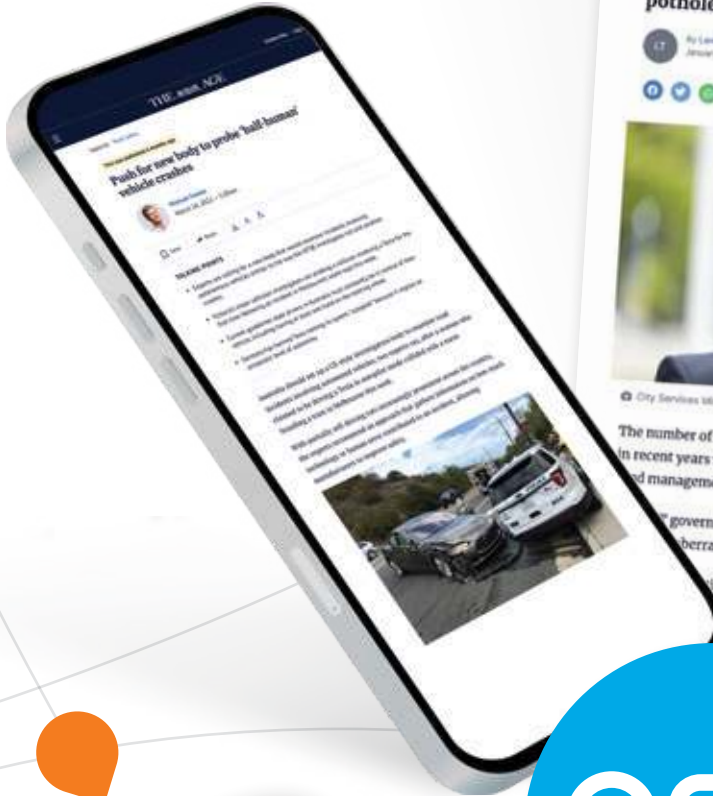
Our media outreach has resulted in our work, and importantly that of our clients and members, being regularly featured in trade media. Much of our work has also made it into mainstream media – either media calling upon ARRB's expertise for comment, or highlighting ARRB's project work and its value to the broader community.

During 2021-22, ARRB, its work and its people, featured in more than 100 separate media items, including the ABC, Nine News, *Sydney Morning Herald*, *The Age*, *Herald-Sun*, *The Canberra Times* and WIN News.



WINNEWS







25:

Financial Report

ARRB Group Limited | ABN 68 004 620 651

For the Year Ended 30 June 2022

Directors' Report

In accordance with a resolution of the Board, the Directors present their report, together with the financial statements, for the year ended 30 June 2022.

DIRECTORS

The following persons were Directors of ARRB Group Limited (ARRB) during the whole or part of the financial year and up to the date of this report unless otherwise stated:

P WORONZOW CHAIRMAN

Chair of Governance and Remuneration Committee

Member of Superannuation Policy Committee

CPA, Bachelor of Arts (Economics), Graduate Diploma in Public Sector Management

Position with Current Employer: Director of Infrastructure WA

Acting Director General of Transport,

Acting Commissioner of Main Roads, Acting CEO of the

Public Transport Authority in Western Australia.

Director – Austroads

N SCALES OBE DEPUTY CHAIRMAN

Member of Audit, Risk and Finance Committee

Member of Governance and Remuneration Committee

MBA, DMS with Distinction, MSc. Control Engineering & Computer Systems, BSc. Engineering, Vincent Fairfax Fellow

(VFF) Position with Current Employer: Director-General Department of Transport and Main Roads, Queensland

NTC Commissioner Director – Roads Australia

Chairman - Austroads

K REID

Member of Strategy and Development Committee

BSc (Hons), Civil Engineering, Chartered Engineer, CEng (UK)

Member of the Institution of Civil Engineers, (UK) MICE,

Chartered Member of Engineering NZ (CMENZ),

Member of the Institute of Directors NZ (MloD),

Position with Current Employer: NZ Transport Agency (NZTA)

– Chief Advisor

L MCCORMICK

Member of the Audit Risk and Finance Committee

B. Eng (Civil), Dip Project Management

Fellow of Engineers Australia, Chartered Prof. Engineer

(Civil, Structural and Executive) Registered Prof Engineer of Queensland, National Engineering Register.

Position with Current Employer: Infrastructure

Commissioner, Infrastructure NT Northern Territory

Director – Austroads

S TROUGHTON

Chair of the Audit Risk and Finance Committee

Member of Governance and Remuneration Committee

Fellow of Engineers Australia, GAICD

Chartered Professional Engineer, Chartered Engineer (UK),

Member of the Institution of Civil Engineers (UK)

I WEBB

Chair of Strategy & Business Development Committee
 Director/Chairman, Prahran Market Board (current)
 Former Chief Executive, Roads Australia
 Former Director General, International Road Federation,
 Geneva

N MARINELLI

Member of Audit, Risk and Finance Committee
 Member of Strategy & Business Development Committee
 BBus (Acc), GAICD
 Director - MACA Ltd.
 Former Chief Executive, Fulton Hogan Australia Pty Ltd
 Former Chair, Citywide North Melbourne Asphalt Pty Ltd
 Former Director, Fulton Hogan Egis O&M Pty Ltd

DR C BURKE

Member of Strategy & Business Development
 Bachelor of Engineering
 Master of Project and Construction Management
 PhD in Risk Management on the Life Cycle of Construction
 Projects
 Director Exner Group
 Director VicTrack
 Victoria's first Chief Engineer

P HENDERSON

Member of Governance and Remuneration Committee
 Bachelor of Engineering (Electrical Hon.)
 Advanced Diploma Management, GAICD
 Position with Current Employer: Executive Director Technical
 Services Infrastructure & Place - Transport for NSW

J ANDERSON

Master of Arts
 Former Deputy Prime Minister
 (Appointed March 2022)

DIRECTORS' SHAREHOLDINGS

The Company is a Public Company Limited by
 Guarantee and has no share capital.

No Directors hold shares in the Company.

Directors' Report (Cont...)

MEETINGS OF DIRECTORS

The number of meetings of the company's Board of Directors ('the Board') and of each Board committee held during the year ended 30 June 2022, and the number of meetings attended by each director were:

DIRECTOR	COMMITTEES									
	BOARD		AUDIT & RISK		GOVERNANCE & REMUNERATION		STRATEGY & BUS DEV		SUPERANNUATION	
	H	A	H	A	H	A	H	A	H	A
P Woronzow	8	7			1	1			2	2
N Scales	8	8	3	3	1	1				
K Reid	8	8					2	1		
L McCormick	8	6	3	2	1	1				
S Troughton	8	8	3	3						
I Webb	8	8					2	2		
N Marinelli	8	8	3	3			2	2		
DR C Burke	8	8								
P Henderson	8	8								
J Anderson	2	2								

H – represents the number of meetings held during the time the director held office or was a member of the relevant committee

A – number of meetings attended

COMPANY SECRETARIES

Mark Steidle

B.Acc, CPA

Chief Commercial Officer, ARRB Group Ltd

Kent Wong

FCPA, FCMA(UK), CGMA(UK), MComm (Acct)

Senior Technology Leader, Finance Governance and Compliance, ARRB Group Ltd

Registered Members of ARRB Group Ltd

- › Department of Transport, Victoria
- › Transport for New South Wales
- › Environment, Planning and Sustainable Development Directorate – ACT Government
- › Transport Canberra and City Services Directorate (TCCS)
- › Department of Transport and Main Roads, Queensland
- › Department of Infrastructure, Planning and Logistics, Northern Territory
- › Main Roads Western Australia
- › Department for Infrastructure and Transport, South Australia
- › Department of State Growth, Tasmania
- › Australian Local Government Association
- › Department of Infrastructure, Transport, Regional Development and Communications – Commonwealth of Australia
- › New Zealand Transport Agency

Members liability

Each Member undertakes to contribute to the company's property if the company is wound up while he, she or it is a Member or within one year after he, she or it ceases to be a Member, for payment of the company's debts and liabilities contracted before he, she or it ceased to be a Member and of the costs, charges and expenses of winding up and for an adjustment of the rights of contributors among themselves, such amount as may be required by not exceeding one hundred dollars (\$100.00).

Principal activities

During the year the principal activities of the company consisted of:

1. Transport innovation projects on a fee-for-service basis to deliver superior technology and new transport solutions. Increasingly these projects are undertaken as collaborative research programs including under the National Asset Centre of Excellence (NACOE), Western Australian Road Research and Innovation Program (WARRIP) and other agency specific programs with Major Road Projects Victoria (MRPV), the Department for Infrastructure and Transport, South Australia and local government. The innovation programs yielded significant improvements in practice through development of guides to best practice, new specifications and promotional activities including webinars, training events, workshops and other outreach activities.
2. Providing information on road and transport matters considered to be in the national interest including infrastructure measurement and data capture, analytics on big data sets and knowledge management
3. Delivering over 1,000 innovation and new knowledge projects to the road and transport industry across Australia and New Zealand
4. Researching, developing and the supply of new and emerging technologies and technical services.

Dividends

The company Constitution precludes the declaration or payment of any dividends.

Directors' Report (Cont...)

Review and results of operations

Operations were focused on ongoing implementation of the 2020-2024 strategic plan which was in its second year. The plan is designed to enable ARRB to continue its journey reinvigorating the organisation's standing as the National Transport Research Organisation (NTRO). To this end significant efforts commenced to grow the NTRO business across rail, ports and airports to complement the longstanding roads business.

A significant initiative in this direction was the interactions between the NTRO and the Australian Centre for Rail Innovation (ACRI) involving a proposed merger which was pursued during 2021-22 and successfully completed on 1 July 2022. This provided an immediate boost to the NTRO business with the rail sector.

Our mission as the NTRO is to create knowledgeable, innovative, and impactful mobility solutions for our community through the intellect, experience, and integrity of our people.

Our vision is 'An Integrated Mobility Future which is safe, sustainable and a driver of economic well-being'.

Outlined below are the three strategic focus areas developed to enable the achievement of outcomes through planned action:

Infrastructure Sustainability and Resilience

Every Australian, every day, is reliant on the transport system. Community demands on the system are changing rapidly and constantly. The system's sustainability and resilience has never been more important to ensure its long-term viability and level of service offering. Moving to integrated mobility solutions will bring constant opportunities for improvement.

Safer Roads and Infrastructure

User-centric and safe mobility will be a lens through which all new infrastructure and the maintenance of current transport infrastructure will be assessed. A "safe system" approach will lead to the development of new and innovative ways of delivering smarter, better, and more efficient use of precious resources that deliver better, safer outcomes for the community.

The NTRO has secured long term agreements to consistently measure state road infrastructure across all member agencies including the use of world leading iPAVE technology. During the year the NTRO secured the new iPAVE3 which is world best infrastructure measurement technology with much higher data rates, enhanced pavement strength evaluation and ground penetrating radar.

We are developing a suite of new tools to support better decision making for member agencies and industry including as an example, the NETRISK2 tool for transport safety risk assessment and development and economic evaluation of safety works programs.

Value for Money

Our stakeholders are custodians of vast amounts of taxpayer and ratepayer funds. At the forefront of everything the NTRO does is the need to ensure that the taxpayers and ratepayers are getting value for money in their safe and sustainable transport systems.

A significant development in this area was the transitioning of the DOT Victoria laboratories and field testing services into the NTRO national Reference Laboratories based in Port Melbourne. Rather than separately maintaining laboratories, DOT Victoria saw the value proposition in this merger in maintaining technical excellence and capability in partnership with the NTRO.

The financial result for the year is a consequence of sustained focus on efficiency and accountability. Despite a difficult operating climate, impacted significantly by the COVID-19 pandemic and adverse La Nina wet weather patterns, the company has delivered a consecutive net surplus. ARRB's focus on commercial transformation has resulted in a year-on-year positive operating cash performance and a strengthened balance sheet. In view of the growth in the business we implemented a new Enterprise Resource System (ERP) in the form of Salesforce.

We delivered strongly on our member agency and Austroads innovation programs including full program delivery for the NACOE for TMR Qld, WARRIP for MRWA and a significant range of innovation projects for MRPV for the DoT Victoria, the DIT South Australia and State Growth

Tasmania. The benefits for member agencies derived through these programs involve benefit cost ratio of well in excess of 10, driving great value outcomes from the investment with the NTRO.

We thank the leadership team and all the staff at ARRB for their excellent work, resilience and commitment to ARRB as we grow to be the NTRO. Our staff are proud of their work and have a passion for applying their skills for the benefit of members and clients. We look forward to developing the next generation solutions for Australia's transport needs.

Significant changes in the state of affairs

There were no significant changes in the state of affairs of the company that occurred during the year not otherwise disclosed in this report or the Financial Statements.

Matters subsequent to the end of the financial year

The impact of the COVID-19 pandemic is ongoing across all aspects of the business including movement across state borders, events, training, staff retention and attraction and face to face engagement adversely impacted. Overall NTRO operations have remained effective and productive in the face of the adverse operating conditions. The situation continues to develop with measures imposed by the Australian and New Zealand Governments, State jurisdictions and other countries are now being moderated while at the same time staff sick leave taken has dramatically increased, impacting productivity.

On 1 July the ACRI merged into the NTRO including an ongoing portfolio of rail related research and innovation projects.

No other matter or circumstance has arisen since 30 June 2022 that has 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.

Likely developments and expected results of operations

At the date of this report, we are not aware of any likely developments in the operations of the company, other than business as usual.

Environmental regulation

The company is not subject to any significant environmental regulation in respect of its activities

Directors' benefits

During the year, the Company has paid an amount of \$30,476 to the Exner Group for business development. Dr Collette Burke is the Managing Director of the Exner Group.

Except for the above, during the year no Director has received or become entitled to receive a benefit (other than a remuneration benefit included in note 20 to the Financial Statements) because of a contract that:

- a. the Director or
- b. a firm of which the Director is a member or
- c. an entity in which the Director has a substantial financial interest; has made (during the year ended 30 June 2022 or at any other time) with:
 1. the company or
 2. an entity that the company controlled or
 3. a body corporate that was related to the company when the contract was made or when the Director received, or became entitled to receive the benefit (if any).

Insurance of officers

During the year, ARRB Group Ltd paid a premium of \$12,642 (ex GST) to insure the Directors, Company Secretaries, and the Senior Managers.

The potential liabilities insured are legal costs that may be incurred in defending civil or criminal proceedings that may be brought against the officers in their capacity as officers of the company, and any other payments arising from liabilities incurred by the officers in connection with such proceedings, other than where such liabilities arise out of conduct involving a wilful breach of duty by the officers or the improper use by the officers of their position or of information to gain advantage for themselves or someone else or to cause detriment to the company. It is not possible to apportion the premium between amounts relating to the insurance against legal costs and those relating to other liabilities

Indemnity and Insurance of auditor

The company has not, during or since the end of the financial year, indemnified or agreed to indemnify the auditor of the

Directors' Report (Cont...)

company or any related entity against a liability incurred by the auditor.

During the financial year, the company has not paid a premium in respect of a contract to insure the auditor of the company or any related entity.

Proceedings on behalf of the company

No person has applied to the Court for leave to bring proceedings on behalf of the company, or to intervene in any proceedings to which the company is a party, for the purpose of taking responsibility on behalf of the company for all or part of those proceedings.

No proceedings have been brought or intervened in on behalf of the company with leave of the Court.

Auditor

RSM Australia continues in office.

This report has been made in accordance with a resolution of Directors.



S Troughton

Chair of Audit, Risk and Finance Committee

Sydney

Date

Rounding of amounts to nearest thousand dollars

The company is an entity to which ASIC Instrument 2016/91 applies and, accordingly, amounts in the financial statements and Directors' report have been rounded to the nearest thousand dollars.

Auditor independence declaration

A copy of the auditor independence declaration is set out on page 8 of this Financial Report.



P Woronzow

Chair of Board of Directors

Perth

Date:

**RSM Australia Partners**

Level 21, 55 Collins Street Melbourne VIC 3000
PO Box 248 Collins Street West VIC 8007

T +61(0) 3 9286 8000

F +61(0) 3 9286 8199

www.rsm.com.au

AUDITOR'S INDEPENDENCE DECLARATION

As lead auditor for the audit of the financial report of ARRB Group Limited for the year ended 30 June 2022, I declare that, to the best of my knowledge and belief, there have been no contraventions of:

- (i) the auditor independence requirements of the Australian professional accounting bodies in relation to the audit; and
- (ii) any applicable code of professional conduct in relation to the audit.

RSM AUSTRALIA PARTNERS

B Y CHAN
Partner

Dated: 13 October 2022
Melbourne, Victoria

THE POWER OF BEING UNDERSTOOD
AUDIT | TAX | CONSULTING

RSM Australia Partners is a member of the RSM network and trades as RSM. RSM is the trading name used by the members of the RSM network. Each member of the RSM network is an independent accounting and consulting firm which practices in its own right. The RSM network is not itself a separate legal entity in any jurisdiction.

RSM Australia Partners ABN 36 965 185 036

Liability limited by a scheme approved under Professional Standards Legislation



Statement of Profit or Loss and Other Comprehensive Income

For the year ending 30 June 2022

	Notes	2022 \$'000	2021 \$'000
Revenue	2	41,953	38,717
Expenses			
Employee benefits	3	24,053	22,597
Depreciation and amortisation	3	3,603	3,528
Borrowing	3	627	604
Direct materials	3	1,166	897
Direct other	3	6,506	5,029
Short term lease rental	3	100	166
Professional and consulting fees	3	3,595	2,632
Other	3	1,995	1,525
Total expenses		41,645	36,978
Surplus for the year		308	1,739
Other Comprehensive Income			
Items that will not be reclassified to the profit and loss			
- Defined Benefit Superannuation Plan actuarial gain		169	760
- Adjustment of depreciation on sale of NSV to IRSM		4	4
- Loss on change in market value of investments at fair value through other comprehensive income	11	(1,482)	-
Items that may be reclassified subsequently to the profit and loss			
Foreign Currency Fluctuation Reserve			
- Share of loss on translation of foreign currency of joint venture	10	(20)	(107)
Other comprehensive (loss)/income for the year		(1,329)	657
Total comprehensive (loss)/income for the year		(1,021)	2,396

The above statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes

Statement of Financial Position

For the year ending 30 June 2022

	Notes	2022 \$'000	2021 \$'000
Current Assets			
Cash and cash equivalents	4	6,963	25,895
Receivables	5	10,191	5,374
Contract Assets	6	2,086	2,203
Prepayments		700	851
Other		74	188
Total Current Assets		20,014	34,511
Non-Current Assets			
Property, plant and equipment	7	18,825	14,963
Right-of-use assets	8	13,934	13,086
Intangible assets	9	29	79
Investments accounted for using the equity method	10	1,061	878
Financial assets at fair value through other comprehensive income	11	18,768	-
Retirement benefits	15	55	-
Total Non-Current Assets		52,672	29,006
Total Assets		72,686	63,517
Current Liabilities			
Interest bearing liabilities	12	7,950	-
Trade and other payables	13	3,436	3,756
Employee entitlements	14	4,776	4,696
Contract liabilities	16	10,387	9,076
Lease liabilities	17	1,474	1,262
Total Current Liabilities		28,023	18,790

The above statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes

Statement of Financial Position (Cont...)

For the year ending 30 June 2022

	Notes	2022 \$'000	2021 \$'000
Non-Current Liabilities			
Employee entitlements	14	640	613
Lease liabilities	17	14,203	13,159
Retirement benefits	15	-	114
Total Non-Current Liabilities		14,843	13,886
Total Liabilities		42,866	32,676
Net Assets		29,820	30,841
Equity			
Reserves	20	(1,536)	(34)
Retained earnings		31,356	30,875
Total Equity		29,820	30,841

The above statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes

Statement of Changes In Equity

For the year ending 30 June 2022

Notes	Reserve \$'000	Retained Earnings \$'000	Total Equity \$'000
Balance at 1 July 2020	73	28,372	28,445
Surplus for the year	-	1,739	1,739
Other comprehensive income			
- share of loss on foreign currency translation of joint venture	(107)	-	(107)
- adjustment on the depreciation on sale of NSV to IRSM	-	4	4
- actuarial gain on Defined Benefit Superannuation Plan	-	760	760
Balance at 30 June 2021	(34)	30,875	30,841
Balance at 1 July 2021	(34)	30,875	30,841
Surplus for the year	-	308	308
Other comprehensive income			
- share of loss of foreign currency translation of joint venture	(20)	-	(20)
- adjustment on the depreciation on sale of NSV to IRSM	-	4	4
- actuarial gain on Defined Benefit Superannuation Plan	-	169	169
- loss in market value of investment	(1,482)	-	(1,482)
Balance at 30 June 2022	(1,536)	31,356	29,820

The above statement of changes in equity should be read in conjunction with the accompanying notes

Statement of Cash Flows

For the year ended 30 June 2022

	Notes	2022 \$'000	2021 \$'000
Cash flows from operating activities			
Cash was provided from:			
Receipts from customers		36,813	38,598
Interest received	2	2	69
		36,815	38,667
Cash was provided to:			
Payments to suppliers and employees		(34,275)	(24,196)
Interest paid	3	(34)	-
Net GST payment to ATO		(1,846)	(3,295)
Net cash inflow from operating activities	26	660	11,176
Cash flow from investing activities			
Proceeds from sale of property, plant and equipment		122	-
Payment for property, plant and equipment		(6,229)	(1,303)
Payment for intangible asset		(25)	(25)
Payment for investment		(20,250)	-
Net cash outflow from investing activities		(26,382)	(1,328)
Cash flow from financing activities			
Lease payments		(1,160)	(1,081)
Proceeds from borrowings		7,950	-
Net cash outflow from financing activities		6,790	(1,081)
Net (decrease)/increase in cash held		(18,932)	8,767
Cash at the beginning of the financial year		25,895	17,128
Cash at the end of the financial year	4	6,963	25,895

The above statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes

Notes to the Financial Statements

For the year ended 30 June 2022

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

This special purpose financial report has been prepared in accordance with Australian equivalents to International Financial Reporting Standards (IFRS), other authoritative pronouncements of the Australian Accounting Standards Board and the *Australian Charities and Not-for-profits Commission Act 2012*.

New or amended Accounting Standards and Interpretations adopted

The company has adopted all of the new or amended Accounting Standards and Interpretations issued by the Australian Accounting Standards Board (AASB) that are mandatory for the current reporting period. Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

Basis of preparation of financial report

ARRB Group Limited is not a reporting entity because in the directors' opinion, it is unlikely that users exist who are unable to command the preparation of reports tailored so as to satisfy, specifically, all their information needs.

This is a special purpose financial report that has been prepared for the sole purpose of complying with the *Australian Charities and Not-for-profits Commission Act 2012* requirements to prepare and distribute a financial report to the members and must not be used for any other purpose. The directors have determined that the accounting policies adopted are appropriate to meet the needs of the members.

The measurement basis adopted in preparing this financial report is historical cost, except for certain assets which, as noted, are at valuation. Unless otherwise stated, the accounting policies adopted are consistent with those of the prior year.

The Company has applied Accounting Standard AASB 101 Presentation of Financial Statements and other applicable Australian Accounting Standards with the exception of the disclosure requirements in the following:

AASB 7	Financial Instruments Disclosures
AASB 124	Related Party Disclosures.
AASB 13	Fair Value Measurement

While not fully complying with the disclosure requirements of AASB 124, the Company discloses remuneration to directors (Note 21). The reader should also be aware of the relationship between ARRB Group Limited and its members, who are generally the government organisations which manage roads in Australia and New Zealand. ARRB Group Limited is a public company limited by guarantee and its members cannot benefit financially from its performance. The ARRB Group Limited operates as a not-for-profit entity and, in commercial transactions, on an arm's length basis from its members. Equally, members are also often clients and competitors. At the annual meeting, members may be entitled to elect some of their representatives as directors.

Foreign currency translation

Functional and presentation currency

The functional currency of the Company is measured using the currency of the primary economic environment in which the Company operates. The Financial Statements are presented in Australian dollars which is the Company's functional and presentation currency.

Notes to the Financial Statements (Cont...)

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of transactions. Foreign currency monetary items are translated at the year-end exchange rate. Non-monetary items measured at historical cost continue to be carried at the exchange rate at the date of the transaction. Non-monetary items measured at fair value are reported at the exchange rate at the date when fair values were determined.

Exchange differences arising on the translation of monetary items are recognised in profit or loss, except where deferred in equity as a qualifying cash flow or net investment hedge.

Exchange differences arising on the translation of non-monetary items are recognised directly in other comprehensive income to the extent that the underlying gain or loss is directly recognised in other comprehensive income, otherwise the exchange difference is recognised in the profit or loss.

Revenue recognition

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.

Other goods/services

Revenue is recognised when goods/services have been dispatched/provided to a customer pursuant to a sales order and the associated risks have passed to the carrier or customer.

Impairment of assets

Assets that have an indefinite useful life are not subject to amortisation but are tested annually for impairment. Assets that are subject to amortisation/depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units).

Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value, and bank loans. Bank loans are shown within interest-bearing liabilities in the current liabilities on the Financial Statements.

Trade and other receivables

All trade debtors are recognised at the net amounts receivable as they are due for settlement. The ability to collect trade debtors is reviewed on an ongoing basis, with an allowance for expected credit losses recognised. Other receivables are recognised at amortised cost, less any allowance for expected credit losses.

Contract Assets

Contract assets are recognised when the Company has transferred goods or services to the customer but where the Company has yet to establish an unconditional right to consideration. Contract assets are treated as financial assets for impairment purposes.

Contract assets comprised of contract jobs and expense jobs. Contract jobs and work in progress are valued at cost, plus profit recognised to date less any provision for anticipated future losses. Cost includes both variable and fixed costs relating to specific contracts, and those costs that are attributable to the contract activity and that can be allocated on a reasonable basis.

Fair value estimation

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement or for disclosure purposes.

The nominal value less estimated credit adjustments of trade receivables, contract works in progress and payables are assumed to approximate their fair values.

Property, plant and equipment

All property, plant and equipment are stated at historical cost less depreciation. Historical cost also includes expenditure that is directly attributable to acquisition of the item.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the company and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the Statement of Profit or Loss and Other Comprehensive Income during the financial period in which they are incurred.

Depreciation on other assets is calculated using the straight-line method to allocate their cost or revalued

amounts, net of their residual values, over their estimated useful lives, as follows:

Leasehold buildings & improvement	Estimated useful life or unexpired period of the lease
Right-of-use assets	Estimated useful life or unexpired period of the lease
Furniture, fittings & equipment	2 - 10 years
Plant and equipment	3 - 10 years

Assets residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date and no changes have been made.

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 incentive received, any initial direct costs incurred, and, except where included in the cost of inventories, an estimate of cost 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 and loss as incurred.

Accounting for associate entity

The interest in the associate entity is accounted for using the equity method. Under the equity method, the share of the profits or losses of the entity is recognised in the income statement, and the share of movements in reserves is recognised in the balance sheet.

Notes to the Financial Statements (Cont...)

Investments and other financial assets

Investments and other financial assets are initially measured at fair value. Transaction costs are included as part of the initial measurement, except for financial assets at fair value through profit or loss. Such assets are subsequently measured at either amortised cost or fair value depending on their classification. Classification is determined based on both the business model within which such assets are held and the contractual cash flow characteristics of the financial asset unless an accounting mismatch is being avoided.

Financial assets are derecognised when the rights to receive cash flows have expired or have been transferred and the consolidated entity has transferred substantially all the risks and rewards of ownership. When there is no reasonable expectation of recovering part or all of a financial asset, its carrying value is written off.

Financial assets at fair value through profit or loss

Financial assets not measured at amortised cost or at fair value through other comprehensive income are classified as financial assets at fair value through profit or loss. Typically, such financial assets will be either: (i) held for trading, where they are acquired for the purpose of selling in the short-term with an intention of making a profit, or a derivative; or (ii) designated as such upon initial recognition where permitted. Fair value movements are recognised in profit or loss.

Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income include equity investments which the consolidated entity intends to hold for the foreseeable future and has irrevocably elected to classify them as such upon initial recognition.

Impairment of financial assets

The consolidated entity recognises a loss allowance for expected credit losses on financial assets which are either measured at amortised cost or fair value through other comprehensive income. The measurement of the loss allowance depends upon the consolidated entity's assessment at the end of each reporting period as to

whether the financial instrument's credit risk has increased significantly since initial recognition, based on reasonable and supportable information that is available, without undue cost or effort to obtain.

Where there has not been a significant increase in exposure to credit risk since initial recognition, a 12-month expected credit loss allowance is estimated. This represents a portion of the asset's lifetime expected credit losses that is attributable to a default event that is possible within the next 12 months. Where a financial asset has become credit impaired or where it is determined that credit risk has increased significantly, the loss allowance is based on the asset's lifetime expected credit losses. The amount of expected credit loss recognised is measured on the basis of the probability weighted present value of anticipated cash shortfalls over the life of the instrument discounted at the original effective interest rate.

For financial assets mandatorily measured at fair value through other comprehensive income, the loss allowance is recognised in other comprehensive income with a corresponding expense through profit or loss. In all other cases, the loss allowance reduces the asset's carrying value with a corresponding expense through profit or loss.

Trade and other payables

These amounts represent liabilities for goods and services provided to the Company prior to the end of the financial year which are unpaid. The amounts are unsecured and are paid within the agreed terms of trade. Due to their short-term nature they are measured at amortised cost and are not discounted.

Borrowings

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in the Statement of Profit or Loss and Other Comprehensive Income over the period of the borrowings using the effective interest method.

Contract Liabilities

Contract liabilities - effectively represent the Company's obligation to transfer goods or services to a customer and are recognised when a customer pays consideration, or when the Company recognised a receivable to reflect its unconditional right to consideration (whichever is earlier) before the Company has transferred the goods or services to the customer.

Borrowing costs

Borrowing costs incurred for the construction of any qualifying asset are capitalised using the period of time that is required to complete and prepare the asset for its intended use or sale. Other borrowing costs are expensed.

Provisions

Provisions for service warranties are recognised when the Company has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount has been reliably estimated. Provisions are not recognised for unknown operating losses.

Employee benefits

Wages and salaries, annual leave and sick leave

Liabilities for wages and salaries, including annual leave expected to be settled within 12 months of the reporting date are recognised in other payables in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled, at their nominal values.

The portion of annual leave expected to be settled more than 12 months are classified as non-current liability. It is based on the experience of employee annual leave taken pattern. It is measured as the present value of the estimated cash outflows to be made by the entity. Consideration is given to expected future wage and salary levels. Expected future payments are discounted using market yields at the reporting date on national government guaranteed bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Provisions made in respect of employee benefits which are not expected to be settled within 12 months are measured at their present value of the estimated future cash outflows

to be made by the entity in respect of services provided by employees up to the reporting date. Regardless of the expected timing of settlements, provisions made in respect of employee benefits are classified as a current liability, unless there is an unconditional right to defer the settlement of the liability for at least 12 months after the reporting date, in which case it would be classified as a non-current liability.

Long service leave

The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government guaranteed bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows. Provisions made for unconditional long service leave would be classified as a current liability, where the employee has a present entitlement to the benefit. A non-current liability includes long service leave entitlements accrued for employees with less than seven years of continuous service.

Employee benefit on-costs

Employee benefit on-costs are recognised in employee benefit liabilities and costs when the employee benefits to which they relate are recognised as liabilities.

Employee incentives

The Company recognises a liability and an expense for bonuses based on the employee's performance against criteria of their employment contract. The Company recognises a provision where contractually obliged or where there is a past practice that has created a constructive obligation.

Retirement benefit obligations

The Company operates both defined benefit superannuation plan and defined contribution superannuation plan for the employees' retirement, disability or death.

The defined benefit plan provides defined lump sum benefits based on years of service and final average salary. The defined contribution plan receives fixed contributions from the Company and the Company's legal or constructive obligation is limited to these contributions.

Notes to the Financial Statements (Cont...)

A liability or asset in respect of defined benefit superannuation plan is recognised on the face of the Financial Statements, and is measured at the present value of the defined benefit obligation at the reporting date plus unrecognised actuarial gains (less unrecognised actuarial losses) less the fair value of the superannuation fund's assets at that date and any unrecognised past service cost. The present value of the defined benefit obligation is based on expected future payments which arise from membership of the fund to the reporting date, calculated annually by independent actuaries using the projected unit credit method. Consideration is given to expected future wages and salary levels, experience of employee departures and periods of service.

Expected future payments are discounted using market yields on national government bonds at the reporting date with terms to maturity and currency that match, as closely as possible, the future cash outflows.

Actuarial gains and losses arising from experience, adjustments and changes in actuarial assumptions are charged or credited to the Statement of Profit or Loss and Other Comprehensive Income over the employees' average remaining working lives.

Past service costs are recognised immediately in income, unless the changes to the superannuation fund are conditional on the employees remaining in service for a specified period of time (the vesting periods). In this case, the past service costs are amortised on a straight-line basis over the vesting period.

Future taxes that are funded by the entity and are part of the provision of the existing benefit obligation are taken into account in measuring the net liability or asset.

Contributions to the defined contribution fund are recognised as an expense as they become payable. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

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.

Income tax

The Company was granted income tax exempt status under section 50B of the Income Tax Assessment Act 1997, GST concessions under Division 176 of A New Tax System (Goods and Service Tax) Act 1999 and FBT rebate under 123E of the Fringe Benefits Tax Assessment 1986.

Intangibles

Development cost

Expenditure during the research phase of a project is recognised as an expense when incurred. Development costs are capitalised only when technical feasibility studies identify that the project will deliver future economic benefits and these benefits can be measured reliably. Development costs have a finite life and are amortised on a systematic basis matched to the future economic benefits over the useful life of the project. Development costs are amortised over three years.

Rounding of amounts to nearest thousand dollars

The Company is an entity to which ASIC Instrument 2016/91 applies and, accordingly, amounts in the financial statements and Directors' report have been rounded to the nearest thousand dollars.

Comparative figures

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

When the Company applies an accounting policy retrospectively, makes a retrospective restatement or reclassification in its financial statements, a Financial Statement as at the beginning of the earliest comparative period is disclosed.

Critical accounting estimates

The Directors evaluate estimates and judgements incorporated into the 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 externally and within the company.

Contract Assets

Significant judgements are made with respect to the recoverable amounts of contract assets.

In making their judgement, management considered:

- › whether the total contract revenue could be measured reliably
- › whether the contract costs to complete the contract and the stage of contract completion at balance date could be reliably measured, and
- › whether the contract costs attributable to the contract can be clearly identified and measured reliably so that the actual contract costs incurred can be compared with prior estimates.

After reviewing contract transactions management are satisfied that the above criteria have been met and the recognition of the revenue in the current year is appropriate, in conjunction with the recognition of the appropriate contract works in progress/revenue in advance amounts.

Coronavirus (COVID-19) pandemic

The impact of the COVID-19 pandemic is ongoing with aspects of the business such as events, training, staff onboarding and face to face engagement adversely impacted. Overall ARRB operations have remained effective and productive. The situation continues to develop, and measures imposed by the Australian and New Zealand Governments, state jurisdictions and other countries, require an agile and proactive approach to maintain business continuity and safe outcomes in this rapidly changing operating environment.

Judgement has been exercised in considering the impacts that the Coronavirus (COVID-19) pandemic has had, or may have, on the company based on known information. This consideration extends to the nature of the products and services offered, customers, supply chain, staffing and geographic regions in which the company operates. Other than as addressed in specific notes, there does not currently appear to be either any significant impact upon the financial statements or any significant uncertainties with respect to events or conditions which may impact the company unfavourably as at the reporting date or subsequently as a result of the Coronavirus (COVID-19) pandemic

Notes to the Financial Statements (Cont...)

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 or a similar value to the right-to-use asset, with similar terms, security and economic environment.

Lease make good provision

A provision has been made for the present value of anticipated costs for future restoration of leased premises. The provision includes future cost estimates associated with closure of the premises. The calculation of this provision requires assumptions such as application of closure dates and cost estimates. The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs for sites are recognised in the statement of financial position by adjusting the asset and the provision. Reductions in the provision that exceed the carrying amount of the asset will be recognised in profit or loss.

NOTE 2 - REVENUE

	2022 \$'000	2021 \$'000
Revenue from contracts with customers	41,617	38,481
Interest	2	69
Share of profit of IRSM associate entity	199	137
Profit on sale of fixed assets	122	-
Sundry income	13	30
Total revenue	41,953	38,717

NOTE 3 - EXPENSES

	Notes	2022 \$'000	2021 \$'000
Employee benefits			
Salaries, wages and on-costs		19,843	18,167
Termination benefits		64	195
Employee bonuses and incentives		-	495
Employer superannuation contribution - normal		2,093	1,797
- additional		-	44
Long service leave and annual leave		2,053	1,899
		24,053	22,597
Depreciation and amortisation			
Amortisation - intangibles		75	95
Depreciation - buildings		246	246
- plant and equipment		2,116	2,134
- building right-of-use assets		1,166	1,038
- plant and equipment right-of-use assets		-	15
		3,603	3,528
Finance costs			
Interest and finance charges - borrowing		34	-
Interest and finance charges - lease liabilities		593	604
		627	604
Direct materials			
		1,166	897
Direct other			
Contractors		5,529	4,057
Travel and entertainment		930	710
Others		47	262
		6,506	5,029
Short term lease rental			
		100	166
Other			
Professional and consulting fees		3,595	2,632
Administrative		651	727
Travel and entertainment		346	87
Facilities and Maintenance		611	690
Other		387	21
		5,590	4,157
Total expenses		41,645	36,978

Notes to the Financial Statements (Cont...)

NOTE 4 - CURRENT ASSETS – CASH AND CASH EQUIVALENTS

There is no material difference between the fair value and the carrying amount of cash and cash equivalent.

	2022 \$'000	2021 \$'000
Cash at bank and on hand	6,313	7,745
Short-term deposits and deposits at call	650	18,150
	6,963	25,895

The weighted average interest in the cash at bank and deposits is 0.01% (2021: 0.37%)

Reconciliation of cash

Cash at the end of the financial year is reconciled to the Statement of Cash Flows as follows

Cash and cash equivalents	6,963	25,895
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NOTE 5 - CURRENT ASSETS - TRADE AND OTHER RECEIVABLES

	2022 \$'000	2021 \$'000
Trade debtors	9,800	5,334
Other receivables	391	40
Total receivables	10,191	5,374

(a) Fair value

The amounts are stated at fair values as they are expected to be settled, in the short term, less allowance for impairment loss.

(b) Interest rate risk

Trade and other receivables are non-interest bearing therefore not exposed to interest rate risk.

(c) Credit rate risk

The company has a large number of customers. The majority are the federal government, state and local authorities and as a result the risk of default is limited.

NOTE 6 - CURRENT ASSETS – CONTRACT ASSETS

	2022 \$'000	2021 \$'000
Contract work-in-progress	2,086	2,203

NOTE 7 - NON-CURRENT ASSETS – PROPERTY, PLANT AND EQUIPMENT

Movements in the carrying amounts of each class of property, plant and equipment between the beginning and the end of the reporting period:

\$'000	Leasehold Buildings & Improvements At Cost	Furniture, Fittings & Equipment At Cost	Research & Survey Equipment At Cost	Plant & Equipment At Cost	Capital Work in Progress At Cost	Total
Cost / Revaluation						
Balance at 1 Jul 2021	6,013	9,363	17,432	2,527	1,226	36,561
Addition	-	1,068	588	-	4,573	6,229
Disposal	-	(37)	(961)	-	-	(998)
Balance at 30 Jun 2022	6,013	10,394	17,059	2,527	5,799	41,792
Accumulated Depreciation						
Balance at 1 Jul 2021	677	5,099	13,580	2,242	-	21,598
Addition	246	823	1,267	24	-	2,360
Disposal	-	(30)	(961)	-	-	(991)
Balance at 30 Jun 2022	923	5,892	13,886	2,266	-	22,967
Net Book Value						
1 Jul 2021	5,336	4,264	3,852	285	1,226	14,963
30 Jun 2022	5,090	4,502	3,173	261	5,799	18,825

Notes to the Financial Statements (Cont...)

NOTE 8 - NON-CURRENT ASSETS – RIGHT-OF-USE

\$'000	Leasehold Buildings & Improvements
Cost	
Balance at 1 Jul 2021	17,226
Addition	2,014
Disposal	(1,155)
Balance at 30 Jun 2022	18,085
Accumulated Depreciation	
Balance at 1 Jul 2021	4,140
Addition	1,166
Disposal	(1,155)
Balance at 30 Jun 2022	4,151
Net Book Value	
1 Jul 2021	13,086
30 Jun 2022	13,934

NOTE 9 - NON-CURRENT ASSETS – INTANGIBLE ASSETS

	2022 \$'000	2021 \$'000
Opening balance	79	149
Addition	25	25
Amortisation expense	(75)	(95)
Balance at the end of the year	29	79

The intangible assets represent the purchase of Big Cloud business specialising in software development and software hosting business.

NOTE 10 - NON-CURRENT ASSETS - INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	2022 \$'000	2021 \$'000
Investment in Indian Road and Survey Management Private Limited	1,061	878

Investment in Indian Road and Survey Management Private Limited (IRSM) is accounted for using the equity method of accounting. ARRB's share in IRSM is currently 50%. ARRB is considered to have 'significant influence' in IRSM, as outlined in AASB 128 Accounting for Associates, paragraph 7. The share of profit is shown in Note 2, Revenue.

The summarised presentation of aggregate assets, liabilities and performance of IRSM is as follows, based on percentage of ARRB's share:-

	2022 \$'000	2021 \$'000
Current assets	1,565	1,368
Non-current assets	424	344
Total assets	1,989	1,712
Current liabilities	864	780
Non-current liabilities	64	54
Total liabilities	928	834
Net assets	1,061	878

Share of revenue, expense and results		
Revenue	926	689
Profit before tax	199	137
Carrying amount at the beginning of the year	878	844
Share of profit	199	137
Share of loss of foreign exchange fluctuation	(20)	(107)
Adjustment of depreciation of sale of equipment	4	4
Carrying amount at the end of the year	1,061	878

Notes to the Financial Statements (Cont...)

NOTE 11 - NON-CURRENT ASSETS - FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2022 \$'000	2021 \$'000
Investment in		
Local and overseas diversified investment fund	9,801	-
Local and overseas fixed interest investment fund	8,217	-
Cash	750	-
	18,768	-

These are investments in various ANZ investment funds stated at fair value. The movement of the value of investments is accounted for in the Statement of Comprehensive Income. The bank holds a fixed charge on our investment for ARRB's liabilities to the bank.

NOTE 12 - CURRENT LIABILITIES – INTEREST BEARING LIABILITIES

	2022 \$'000	2021 \$'000
iPAVE loan	5,052	-
Working capital loan	2,446	-
Asset loan	452	-
	7,950	-

The weighted average interest rate for the bank loans is 1.67% (2021: NIL).

The bank holds a fixed charge against the investment funds for ARRB's liabilities to the bank.

NOTE 13 - CURRENT LIABILITIES – TRADE AND OTHER PAYABLES

	2022 \$'000	2021 \$'000
Trade payables	1,534	2,821
Other payables	1,902	935
Total payables	3,436	3,756

There is no material difference between the fair value and the carry amount of trade payables and other payables.

NOTE 14 - EMPLOYEE ENTITLEMENTS

	2022 \$'000	2021 \$'000
Provision for employee entitlement - annual leave - short term	1,661	1,607
Provision for employee entitlement - annual leave - long term	531	319
Provision for employee entitlement long service leave	2,584	2,770
	4,776	4,696
Non-current - provision for employee entitlement long service leave	640	613

NOTE 15 - RETIREMENT BENEFITS

Retirement plan

The Company operates both defined benefit superannuation plan and defined contribution superannuation plan for the employees' retirement, disability or death.

The parent entity, ARRB Group Ltd, has a defined benefit plan and a defined contribution plan. The defined benefit plan provides lump sum benefits based on years of service and final average salary. The defined contribution plan receives fixed contributions from the company and the company's legal or constructive obligation is limited to these contributions.

The following sets out details in respect of the defined benefit plan only.

	2022 \$'000	2021 \$'000
Retirement benefits	(55)	114

a. Financial Position amounts

	2022 \$'000	2021 \$'000
Present value of the defined benefit obligation	5,534	8,711
Fair value of defined benefit plan assets	(5,589)	(8,597)
Net (assets)/liabilities in the Statement of Financial Position	(55)	114

Notes to the Financial Statements (Cont...)

NOTE 15 - RETIREMENT BENEFITS (CONTINUED)

b. Categories of plan assets

The break-down of assets for disclosure purposes is as follows:

Asset Type	2022	2021
Australian equities	18.00%	17.00%
International equities	19.00%	19.00%
Australian fixed interest	15.00%	17.00%
International fixed interest	12.00%	13.00%
Property	8.00%	10.00%
Alternative assets (growth)	12.00%	9.00%
Alternative assets (defensive)	6.00%	5.00%
Cash	10.00%	10.00%
Total	100.00%	100.00%

c. Reconciliation

	2022 \$'000	2021 \$'000
Reconciliation of the present value of the defined benefit obligation which is partly funded:		
Balance at the beginning of the year	8,711	8,403
Current service cost	190	220
Net interest expense	55	66
Member contribution	-	-
Actuarial gains arising from changes in financial assumptions	(877)	67
Actuarial losses arising from changes in experience assumptions	166	(15)
Benefits and tax paid	(2,711)	(30)
Balance at the end of the year	5,534	8,711

	2022 \$'000	2021 \$'000
Reconciliation of the fair value of plan assets:		
Balance at the beginning of the year	8,597	7,530
Interest income	54	59
Return on plan assets (excluding interest income)	(380)	919
Employer contributions	28	119
Benefits paid	(2,710)	(30)
Balance at the end of the year	5,589	8,597

d. Amounts recognised in Statement of Profit or Loss and Other Comprehensive Income

The best estimate of contributions expected to be paid to the plan during 2023 was \$28,072.

	2022 \$'000	2021 \$'000
Current service cost	190	219
Net interest on the net defined benefit liability	1	7
Defined benefit cost recognised in the Income Statement	191	226
Remeasurement of the net defined benefit liability	(331)	(867)
Total included in employee benefits expense	(331)	(867)
Total defined benefit cost	(140)	(641)
Actual return on plan assets	(326)	978

Notes to the Financial Statements (Cont...)

e. Principal actuarial assumptions

The principal actuarial assumptions used (expressed as weighted averages) were as follows:

	2022	2021
Discount rate	4.70%	0.80%
Future salary increases	3.00%	3.00%
Price inflation	2.50%	2.50%
Number of active defined benefit members	3	4
Weighted average duration of defined benefit plan (years)	4	3

f. Projected defined benefit cost for 2022

The following table sets out the estimated defined benefit cost recognised in the Income Statement for the year ending 30 June 2023.

	2022 \$'000	2021 \$'000
Reconciliation of the present value of the defined benefit obligation which is partly funded:		
Current service cost	134	190
Net interest	(3)	1
Defined benefit cost	131	191

g. Employer contributions

Employer contributions to the defined benefit section of the plan are based on recommendations by the plan's actuary. Actuarial assessments are made at no more than three-yearly intervals, and the last such assessment was made on 30 June 2021.

The objective of funding is to ensure that the benefit entitlements of members and other beneficiaries are fully funded by the time they become payable. To achieve this objective, the actuary adopted a method of funding benefits known as the aggregate funding method; this funding method seeks to have benefits funded by means of a total contribution which is expected to be a constant percentage of members' salaries over their working lifetimes.

The economic assumptions used by the actuary to make the funding recommendations were a long-term investment earning rate of 5% pa, a salary increase rate of 3.3% pa.

On 14 May 2021, the Superannuation Committee agreed the recommendation from the actuary to cease the employer contribution back dated from 1 April 2021.

h. Net financial position of plan

In accordance with AASB 1056 Superannuation Entities, the plan's net financial position is determined as the difference between the present value of the accrued benefits and the net market value of plan assets. This has been determined as at the date of the most recent financial report of the superannuation fund (30 June 2021), and a surplus of \$669K was reported.

NOTE 16 - CURRENT LIABILITIES – CONTRACT LIABILITIES

	2022 \$'000	2021 \$'000
Income received in advance	840	758
Contract work in progress - revenue received in advance	9,547	8,318
Total contract liabilities	10,387	9,076

There is no material difference between the fair value and the carrying amount of contract liabilities

NOTE 17 - LEASE LIABILITIES

	2022 \$'000	2021 \$'000
Lease liabilities current	1,474	1,262
Lease liabilities non-current	14,203	13,159

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.

Notes to the Financial Statements (Cont...)

NOTE 18 - FINANCING ARRANGEMENT

Unrestricted access was available at balance date to the following lines of credit: -

	2022 \$'000	2021 \$'000
Total facilities		
Bank loan facilities	12,154	4,454
Other credit facilities	1,250	1,250
	13,404	5,704
Used at balance date		
Bank loan facilities	8,598	-
Other credit facilities	1,025	673
	9,623	673
Unused at balance date		
Bank loan facilities	3,556	4,454
Other credit facilities	225	577
	3,781	5,031

The bank holds a fixed charge over the assets and undertakings of the company.

NOTE 19 - MEMBERS' GUARANTEE

The company is a company limited by guarantee. The liability of each of its members is limited to \$100.

NOTE 20 - RESERVES

	2022 \$'000	2021 \$'000
Foreign Currency Translation Reserve		
Balance at beginning of year	(34)	73
Movement during the year	(20)	(107)
Balance at the end of year	(54)	(34)
Financial assets at fair value through other comprehensive income reserve		
Balance at beginning of year	-	-
Movement during the year	(1,482)	-
Balance at the end of year	(1,482)	-
Total	(1,536)	(34)

NOTE 21 - REMUNERATION OF DIRECTORS

	2022 \$'000	2021 \$'000
Aggregated remuneration paid to or payable to the directors	159	169

The names of persons who were directors of ARRB Group Limited at any time for the year are as follows:

P Woronzow (Chairman)	I Webb (Non-Executive Director)
N Scales (Deputy Chairman)	N Marinelli (Non-Executive Director)
V Gardiner (Non-Executive Director)	Dr C Burke (Non-Executive Director)
L McCormick (Non-Executive Director)	P Henderson (Non-Executive Director)
K Reid (Non-Executive Director)	J Anderson (Non-Executive Director)
S Troughton (Non-Executive Director)	

Notes to the Financial Statements (Cont...)

NOTE 21 - REMUNERATION OF DIRECTORS (CONT...)

The following table shows the schedule of fees available to the independent non-executive directors:

Chairman	\$60,274	\$7,534	\$7,534	\$75,342
Deputy Chairman	\$42,694	\$7,534	\$7,534	\$57,762
Non-Executive Directors	\$25,114	\$7,534		\$32,648

Non-executive directors are encouraged to be a member on one committee only. If an independent non-executive director is a member on two committees, they will be remunerated accordingly. Besides, the above schedule of fees are the amounts the directors are eligible to claim for their services, they can opt to waive their fees.

NOTE 22 - DIRECTOR INTEREST IN CONTRACT

During the year, the Company has paid an amount of \$30,476 (2021: \$75,428) to the Exner Group for business development. Dr Collette Burke is the Managing Director of the Exner Group.

Except for the above, during the year no Director has received or become entitled to receive a benefit (other than a remuneration benefit included in note 20 to the Financial Statements) because of a contract that:

- a. the Director or
- b. a firm of which the Director is a member or
- c. an entity in which the Director has a substantial financial interest; has made (during the year ended 30 June 2022 or at any other time) with:
 - 1. the company or
 - 2. an entity that the company controlled or
 - 3. a body corporate that was related to the company when the contract was made or when the Director received, or became entitled to receive the benefit (if any)

NOTE 23 - REMUNERATION OF AUDITORS

During the year the auditor of the company and its related practices earned the following remuneration:

	2022 \$'000	2021 \$'000
Audit or review of financial reports of the company	61	57
Other services	11	10
Total remuneration	72	67

NOTE 24 - CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Contingent Assets

There are no contingent assets at balance date.

Contingent Liabilities

After receiving a payment of \$201K from the Company, Macquarie Bank has issued Bank Guarantee for

(a) the amount \$160K in favour of Department of Transport, Victoria for the performance of projects engaged with the Company and

(b) the amount of \$41K in favour of the landlord for the ACT office

NOTE 25 - CAPITAL COMMITMENTS

Capital commitments due

	2022 \$'000	2021 \$'000
Not later than one year	1,534	4,285
Later than one year but not later than 5 years	-	29
Total	1,534	4,314

Notes to the Financial Statements (Cont...)

NOTE 26 - RECONCILIATION OF PROFIT FROM ORDINARY ACTIVITIES AFTER INCOME TAX TO NET CASH INFLOW FROM OPERATING ACTIVITIES

	2022 \$'000	2021 \$'000
Operating profit after income tax	308	1,739
Adjustment for non-cashflow items		
Depreciation and amortisation	3,602	3,528
Net (profit) / loss on sale of non-current assets	(122)	3
Change in operating assets and liabilities		
Increase in receivable	(4,750)	(657)
Decrease in inventory	1,300	404
Increase in payables	277	6,159
Net cash inflow from operating activities	660	11,176

NOTE 27 - EVENTS AFTER BALANCE SHEET DATE

The impact of the COVID-19 pandemic is ongoing across all aspects of the business including movement across state borders, events, training, staff retention and attraction and face to face engagement adversely impacted. Overall NTRO operations have remained effective and productive in the face of the adverse operating conditions. The situation continues to develop with measures imposed by the Australian and New Zealand Governments, State jurisdictions and other countries are now being moderated while at the same time staff sick leave taken has dramatically increased, impacting productivity.

On 1 July the ACRI merged into the NTRO including an ongoing portfolio of rail related research and innovation projects.

No other matter or circumstance has arisen since 30 June 2022 that has 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.

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 outlined in Note 1 to the Financial statements.

The directors declare that the financial reports and notes set out on pages 9 to 35.

- a) comply with Australian Accounting Standards as detailed in Note 1 to the Financial statements
- b) give a true and fair view of the company's financial position as at 30 June 2022 and of its performance for the financial year ended on that date in accordance with the accounting policies described in Note 1 to the Financial statements.

In the directors' opinion:

- a) the Financial statements and notes are in accordance with the Australian Charities and Not-for-profits Commission Act 2012
- b) 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.



P Woronzow

Chairman

Melbourne

Date:



S Troughton

Chair of Audit, Risk and Finance Committee

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INDEPENDENT AUDITOR'S REPORT To the Members of ARRB Group Limited

Opinion

We have audited the financial report of ARRB Group Limited (the Company), which comprises the statement of financial position as at 30 June 2022, the statement of profit or loss and other comprehensive income, the statement of changes in equity and the statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the financial report of the Company has been prepared in accordance with Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012*, including:

- (a) giving a true and fair view of the Company's financial position as at 30 June 2022 and of its financial performance and cash flows for the year ended on that date; and
- (b) complying with Australian Accounting Standards to the extent described in Note 1 and Division 60 of the *Australian Charities and Not-for-profits Commission Regulation 2013*.

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 ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (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 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 to assist the Company to meet the requirements of Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012*. As a result, the financial report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

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Other Information

Those charged with governance are responsible for the other information. The other information comprises the information included in the Company's annual report for the year ended 30 June 2022, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

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

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

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

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Australian Charities and Not-for-profits Commission Act 2012* (ACNC Act) and for such internal control as the directors determine is necessary to enable the preparation of the 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, directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has 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.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: http://www.auasb.gov.au/auditors_responsibilities/ar4.pdf. This description forms part of our auditor's report.



RSM AUSTRALIA PARTNERS



B Y CHAN
Partner

Dated: 17 October 2022
Melbourne, Victoria

arrb





A photograph of a winding asphalt road through a dense forest. The road curves from the bottom left towards the upper right. The forest is filled with tall, slender trees and lush green ferns. Sunlight filters through the canopy, creating a dappled light effect. The image has a white curved border at the top and bottom.

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