

Keeping Track

PWI NSW Newsletter
December 2020

A year in the Rail Industry like no other

Welcome to the PWI's final newsletter for 2020.

2020 has been without doubt one of the most challenging and demanding years, with everyone in Australia being impacted on in some way.

We have moved through the horror of the devastating bushfire season in January and February, particularly on the eastern seaboard to be hit with the global pandemic caused by the coronavirus that sent us into a technical (although unofficial) economic recession and then into a very real recession.

In Australia, we are fortunate to see the end of many restrictions and most Australians are now focused on recovery and growth, whereas the rest of the world is still gripped by the continuing effect of this virus and imposed restrictions that are still in place around the world. However, this week we have seen how precious the lifting of restrictions are and how quickly this can change.

Like most business, the PWI has not been immune from the impacts of COVID-19. We have had to overcome significant operational challenges to provide our members with ongoing service. We set up our technical meetings, AGM and our Annual Convention as virtual events and are looking forward to 2021 where we can run our events as both "virtual and live" events.

What has been pleasing to see is how the Rail Industry has banded together and kept working during these difficult times as an essential industry.

In this issue...

- I 2020 PWI Annual Convention
- I ARA Update
- I 2021 PWI Awards Night
- I 2021 Executive Breakfast
- I 2021 Winter Dinner
- I August Technical Meeting

Overall, the construction, infrastructure, engineering, project management and government sectors have performed better than many other Australian industries.

Thank you to the PWI Committee for all their effort and their ability to adapt to these difficult and challenging times to set up and deliver live streaming events and continue to deliver great events for our members.

In 2021, we are looking forward to announcing our new PWI Cadets and meeting up will all our members at the many events we have planned. Our first event will be our PWI Awards night in February.

So, have a great Xmas and Happy New Year and do not forget to reach out to your friends and colleagues over this holiday period.

Stay safe.

Mark Harris

PWI NSW President

2020 PWI Annual Convention



The show goes on - virtually!

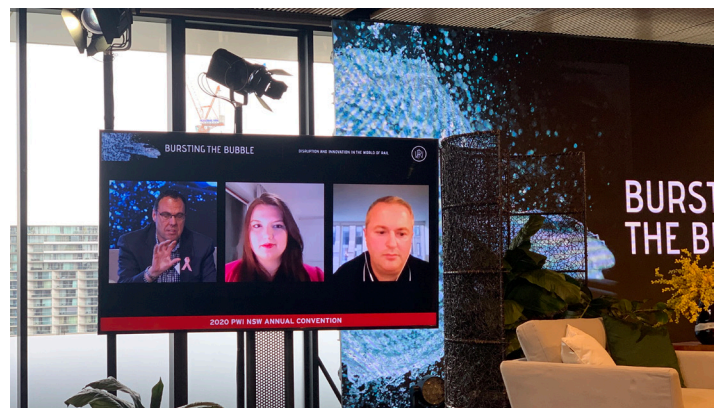
For the first time in its 46 year history, this year's Annual Convention was held 100% virtually. Due to restrictions around large gatherings due to COVID-19, the Convention Sub-Committee was forced to consider how we could hold a covid-safe event, while still delivering the best-value rail industry conference.

It was very much keeping with the convention theme this year, focusing on disruption and innovation in the world of rail, and understanding from other industries how we can burst the metaphorical bubble that holds back our thinking.

Our keynote speaker was Gary Denman from Google Cloud Australia. There is arguably no one better qualified than Gary and Google to demonstrate how to do innovation.

Gary has been part of the Technology industry for the past 30 years working across the UK, Malaysia and Australia. During this time Gary has been involved with customers and industries as they transition through the implementation of IT in the 90's, Y2K, the .com boom, the GFC, Cloud transformation and most recently the COVID 19 pandemic.

Gary spoke about Google's innovation framework and '10x' thinking - the mindset that true innovation happens when you try to improve something by 10 times rather than by 10%. In order to truly innovate, we can't be held back by our existing models, thoughts and ways of working. Instead, our industry needs to reframe the problem and totally reimagine how to approach it.



One of the benefits of a virtual event was that we were able to seamlessly host presentations from overseas. Annika Schmidt from Siemens Mobility GmbH presented on a new and more efficient way of planning day-to-day rail operations. Siemens Demand Responsive Transportation (DRT)

2020 PWI Annual Convention



solution first detects and predicts deviations from the assumed passenger demand using a variety of data sources. The system is then able to optimise the timetable by deciding if and which changes to the timetable are needed to accommodate the predicted passenger demand, and develops an optimised theoretical train schedule.

The system then develops the final executable train schedule, taking into account the limitations of the line and further optimisations such as driver availability and energy optimised train runs.

From here the timetable is put into operation. By harnessing the power of data, and using that data to drive efficient outcomes in railway operations, the best outcomes for passengers can be achieved, all while delivering significant cost savings and optimal use of resources (trains, drivers, line capacity).

Mario Dimovski is the founder and Chief Creator at Tradiebot Industries. Tradiebot Industries is an advanced software company that draws on the advanced potential of immersive technology. Beaming in from Chicago, Mario demonstrated the power of their specially developed Virtual Reality (VR), Augmented Reality (AR) and app- and web-based technology for more intuitive learning and skills development.

Tools like Tradiebot have applications to other industries, including the rail industry. In addition to identifying and managing rail assets in the field, this technology can be used for calling out overlaying dangerzones, identification of critical equipment and providing instructions on how to replace life expired components. This could be the way we address the skills shortage.



In his presentation, Gerard Francis, CEO of WillowRail and Global Head of Infrastructure, outlined two major challenges being faced in the rail industry today; the need to connect multiple siloed solutions and fixing the problem of reactive maintenance.

2020 PWI Annual Convention



WillowRail (a joint venture between Willow and Strukton Rail) offers a digital twin solution, that combines operational data and asset management information into a simple and intuitive software platform. This allows for improved network performance, better decision making with the right data at the right time, and a more connected and mobile workforce, with real-time location tracking, asset repair status and database updates. Technologies like WillowRail's digital twin help us make better use of data and information we already have to improve the efficiency of our operations and maintenance practices.

We were then treated to a thought-provoking presentation from Jacqueline Linke, with '*An incipient moment in rail ... innovation is the vaccine not the virus!*'. Her presentation was a call to arms for our industry, noting that crisis offers us an incipient moment which we can use to pause, reflect, and select action to progress, to change things- experiment with things- with the possibility of not just surviving the crisis, but thriving as a result of it.

True innovation requires us to open our mindsets, and teach our people the capabilities to think differently.

Our open panel session this year was in keeping with the theme of the convention, where we were able to feature four of our Ken Erickson Innovation Award entrants. Gareth Beynon, Ken Erickson Award chair hosted the session with David Mackney - John Holland CRN, Andrew Mackenzie - Sydney Trains, Amel Tokalic - Plateway and John Langford - CPB. They tackled the subjects of how to navigate the constraints of funding for innovations in their organisations, their thoughts around achieving a step change in the way we do things, the best ways of driving innovative ideas that are successful, and how innovation is a lived value that is applied everyday.

We were then excited to hear from Caroline Wilkie, CEO of the Australasian Railway Association (ARA). Caroline outlined her vision of the ARA, which is very much focused on advocacy - railing the profile of the rail sector and being the voice of the industry on key issues.

We're looking forward to being back in a live format next year, but the Convention Sub-Committee are pleased to have been able to still deliver an exceptional convention even in the midst of a pandemic.

ARA forges ahead with strong policy agenda

The significant role rail will play in the nation's economic recovery was a key focus of the Australasian Railway Association's (ARA) advocacy program in 2020.

We moved quickly to respond to COVID-19, introducing new opportunities for members to network and share as they met the new challenges 2020 presented.

The extensive work of the rail industry to keep essential services moving during the pandemic should be acknowledged and the ARA thanks the many rail workers who have continued to support their communities during the year.

We worked closely with industry and government leaders to highlight rail's essential role in supporting the nation's economic recovery, advocating for new and existing projects to be prioritised as part of stimulus measures.

Value of rail confirmed with new research

The industry's contribution was confirmed with the release of our new research report, Value of Rail 2020, in November.

The report confirmed the industry contributes \$29.8 billion to the economy and is responsible for 165,000 direct and indirect jobs. The ARA is already acting on the report's findings.

The report confirmed passenger rail is the most popular form of public transport, and was set to see patronage continue to rise before the onset of COVID-19.

The findings confirmed Australia faces significant environmental and safety costs if people do not return to the network when the time is right.

We have started tracking rail patronage levels to support and inform the safe return of people to the network, and are working closely with operators to highlight the measures they have introduced to keep public transport services safely operating.

Our research also confirmed rail will take on the lion's share of Australia's growing freight task in the period to 2030, after a year where rail freight

operators were vital to keeping supply chains moving. We released the ARA's new freight and ports strategy during the year to identify how government and industry can best work together to promote greater use of rail freight. This work will be further supported by new research to be released in 2021.

The ARA's long-term focus on the development of a national approach to rail continued on many fronts in 2020. We released new procurement guides for rollingstock, signalling and construction, highlighting the importance of greater national consistency to deliver between outcomes for both government and industry.

The value of such an approach was further emphasised in our research report on fast tracking rail innovation, released in October. It confirmed Australia is lagging behind its international counterparts when it comes to rail innovation and technology and adoption, but there are clear steps we can take to create a vibrant innovation culture in the country. This will remain a key focus for us in 2021.

Advocacy agenda supported by strong events program

These issues and many more were discussed as part of our very first webinar program, introduced in 2020 in response to COVID-19 restrictions. Our webinars attracted more than 5000 registrations during the year and will remain a permanent fixture on the ARA calendar even as we return to more physical events in 2021.

We also took a new approach to AusRAIL in 2020, acknowledging the growing value of providing opportunities to network and share information after a year spent mostly apart.

We took advantage of our new online format by significantly expanding the program to include more international and local industry leaders, and more specialist streams.

The insightful conversations delivered across the three days confirmed there is a great deal to look forward to for the industry in the year ahead. We look forward to supporting the industry as it embarks on the opportunities ahead.

2021 PWI Awards Night



PWI NSW AWARDS NIGHT

– Friday 12 February 2021 –

Tickets on sale for the first (in-person) networking event of the year

The long wait is over!! Join your rail industry colleagues and peers (in person) to celebrate the annual PWI Awards.

The Awards Night has been scheduled for Friday 12 February, 2021 and will be held in the Ivy Ballroom (Level 1, 320 George St, Sydney). The event will include a 3 course dinner, drinks and a chance to network in a COVID safe environment.

The night will feature the presentation of the 2020 PWI Awards nominations and announce the winners of the Young Achiever Award, Welders Award, Alan Barham Maintenance Award, and the Steve Maxwell Platelaying Award (both Major and Minor categories).

Tickets are on sale now!! Members can purchase their tickets [HERE](#).

Tickets are available to members only and are \$190pp. Tickets numbers will be limited so purchase your tickets now to avoid disappointment.

Tickets are available via Eventbrite only. This is a member only event and you must be a financial member to purchase your tickets.

We hope you can join us.

PWI Executive Breakfast

Permanent Way Institution NSW

Executive Breakfast



Joint keynote guest speakers

**Howard Collins OBE, Chief Operations Officer,
Transport for NSW**



**Alexander Wendler, Chief Development Officer,
Transport for NSW**



PWI Executive Breakfast to be held in early 2021

Look out in the New Year for your invitation to the 2021 Executive Breakfast.

This event is tentatively scheduled for 12 May 2021, where we look forward to hearing about the future of the NSW Transport industry through the eyes of both Howard Collins OBE in his role of Chief Operations Officer (and new role as Acting Deputy Secretary for Greater Sydney - TfNSW), and Alexander Wendler in his role Chief Development Officer.

We are also very much looking forward to bringing together the executive representatives from our corporate membership, who have enjoyed our previous breakfast events and relish the chance to network with their industry peers – we have had nothing but positive feedback from those who have attending in the past.

2021 Winter Dinner

**JOHN
HOLLAND**



Winter Dinner

Friday 18th June 2021

Join your colleagues and friends for fine food, drinks, networking and entertainment at the PWI NSW Winter Dinner.

2021 Winter Dinner proudly sponsored by John Holland

The 2021 Winter Dinner will be held on Friday 18th June 2021 at Doltone House Hyde Park, with John Holland, one of the PWI's long-time Platinum Members, sponsoring the event.

Our PWI committee are looking forward to hosting you again for one of the biggest and most popular networking nights in the rail industry calendar. Bring your partner and colleagues for an evening of fine food and wine, great entertainment and a chance to catch up with your rail counterparts.

Stay updated with details on pwinsw.org.au/events.

November Technical Meeting



On Thursday 26 November, Tim Parker, Executive Director, Projects at Sydney Metro presented at our final Technical Meeting for the year, with the meeting hosted on Teams.

Tim provided our members with an update on Sydney Metro, in particular, the under construction City and Southwest Line. From the north west, metro rail is being extended under Sydney Harbour, through new underground city stations and beyond to the south west.

Tim delved into the City and Southwest Line Wide scope to take us 'behind the hoardings' to show what Sydney Metro have been doing.

This involves making room for the growing fleet by expanding the existing facility at Tallawong, with an extra 13 new stabling roads and a new maintenance shed.

Another important component is the Northern Connection - linking the Metro Northwest Line with City and Southwest at Chatswood. Work includes building the open dive structure and realigning the Sydney Trains track to its final location over the tunnel dive.

The challenges at Central Station are enormous, akin to open heart surgery, building alongside, underneath and on top of a live railway. Metro



are using a top down approach to building the platforms, where the top level is constructed first and then used as a working platform to support logistics for the deep excavation beneath.

It was amazing to see the great progress being made, with Tim providing details on the unique challenges at each of the stations, the innovative Northern Concourse canopy, the methods for tunnel fitout including a new automated drilling rig to make the process more efficient, and the conversion of the Bankstown Line, including works at Sydenham Junction, a new aqueduct, and the use of mechanical gap fillers.

Thanks for a very interesting and jam packed presentation Tim.

PWI Sponsors

Our Platinum Corporate Member, LendLease, is now Coleman Rail - an Acciona Company

ACCIONA is a global company headquartered in Spain with a presence in more than 40 countries. Since establishing a presence in Australia in 2002, ACCIONA has invested more than AUD \$1 billion through local investment opportunities and project development. As a national business, ACCIONA employs more than 1,000 people across the country.

Subsidiary Coleman Rail provides construction services for major rail and transport infrastructure projects Australia-wide. The expertise covers construction, upgrades and maintenance, complemented by an in-house capacity to undertake civil, mechanical, utilities, services relocation and building works. Most projects are delivered within live operating environments and constrained sites. The highly skilled and experienced resources include a large permanent direct labour workforce as well as experts in engineering, commercial, construction, safety and environmental management.



Welcome to our new Gold Enhanced PWI member, MP Rail.

MP Rail have an award winning track record. They combine world-class technicians, engineers and project managers with specialist plans and equipment to deliver end-to-end solutions for even the toughest rail challenges.

MP Rail are specialists in aluminothermic welding, and have won the PWI's Welders Award four times since 2012.



Welcome to our new Corporate Members, Di Mattia Transport, Georgiou Group, STRAILastic Australia and International Lighting.

Di Mattia Transport has a long history in providing quality services, primarily in the rail maintenance and infrastructure industries while maintaining strong support to the construction industry including civil excavation, industrial haulage and general transport logistics.



Established in 1977, Georgiou Group is a leading building and civil construction company, delivering a wide range of engineering services professionally and capably. With more than 40 years' experience and located in WA, NSW and QLD, it is their vision to be 'the best people to work with'.



STRAILastic Australia are experts in noise protection systems for railways, and are a brand of KRAIBURG STRAIL GmbH who is a well-known partner to the railways for more than 50 years. They specialise in fibre reinforced compound noise protection systems and noise attenuation solutions.



International Lighting is not just about supplying the best lighting brands in Australia. The team at International Lighting understands the products and more importantly how to use them to get the best results. Energy Efficiency, standards compliance, installation hardware and architectural style can all be developed in association with their team of professionals.



PWI Sponsors

The Permanent Way Institution would like to thank its Enhanced Corporate Members for their continued support.

Platinum Enhanced Members



PWI Sponsors

Gold Enhanced Members



PWI Sponsors

Silver Enhanced Members



PWI Sponsors

Corporate Members

The Permanent Way Institution would like to thank its Corporate Members for their continued support.

Advisian	Kellogg Brown & Root
AECOM Pty Ltd	Liftronic Pty Ltd
Amey	LINK Rail and Civil
Anric Rail	Linmag Australia Pty Ltd
Arcadis Australia Pacific	Loram
Arenco	Martinus Rail
Aurecon Australia Pty Ltd	Meadows Consulting Pty Ltd
Australian Rail Track Corporation Ltd	Middleton Group
Beca Pty Ltd	Mott McDonald
BloorRail Pty Ltd	Multi Civil & Rail Services Pty Ltd
Brefni Pty Ltd	Northern Fencing Specialists
Calibre	Pidgeon Civil Engineering
Cardno	Plateway Pty Ltd
CGC Recruitment	Preston Hire
CR Rail	Rail, Tram & Bus Union NSW
Degnan	Randstad
Delkor Rail Pty Ltd	Rhomberg Rail Australia Pty Ltd
Di Mattia Transport	Robson Civil Projects
Edilon Sedra Australia	Rocla Concrete Sleepers
Endeavour Mutual Bank	SEQR Talent
Gartner Rose Pty Ltd	STRAILastic Australia
Geofabrics Australasia Pty Ltd	Strukton Rail Australia
Geoimage	Sydney Trains
Georgiou Group	Taylor Rail Australia
GHD Pty Ltd	Thermit Australia Pty Ltd
Gilgandra Shire Council	Turnbull Engineering
HKA Global Pty Ltd	VIZIONX Pty Limited
InfraSol Group Pty Ltd	voestalpine VAE Railway Systems Pty Ltd
Infrastructure Nation Pty Ltd	Vossloh Cogifer Australia
International Lighting	Willow Inc
Jacobs Group (Australia) Pty Ltd	

Benefits of PWI NSW Corporate Sponsorship

Platinum Membership

- Entry to the Convention for up to 10 employees (or clients)
- Large Logo on the Convention banner
- Recognition on the front cover of the yearly Journal
- Company logo on luncheon tables at the Annual Convention
- Company advertising / promotional items provided into Convention registration bags (supplied by Sponsor)
- Opportunity to chair a session at the Annual Convention
- Recognition and logo on back cover of the yearly Journal
- A Platinum membership certificate provided at the AGM
- Recognition as a Platinum Member in the PWI newsletters
- Recognition as Platinum Member on the PWI website
- Three free entrants to the Annual PWI Golf Day if sponsorship is offered
- Double sided A4 colour advertisement in the yearly Journal
- Framed Membership Certificate issued upon joining and updated certificates issued annually

Gold Membership

- Entry to the Convention for up to five employees (or clients)
- Large Logo on the Convention banner
- Company advertising / promotional items provided into Convention registration bags (supplied by Sponsor)
- Recognition and logo on the inside front cover of the yearly Journal
- Separate recognition in the Journal as a Gold Member and supporter of PWI
- A Gold membership certificate will be provided at the AGM for each year you are a Gold Member
- Recognition as a Gold Member in the PWI newsletters
- Recognition as Gold Member on the PWI website
- Two free entrants to the Annual PWI Golf Day if sponsorship is offered
- Double sided A4 colour advertisement in the yearly Journal
- Framed Membership Certificate issued upon joining and updated certificates issued annually

Silver Membership

- Entry to the Convention for up to three employees
- Logo on the Convention banner
- Recognition and logo on inside back cover of the yearly Journal
- A Silver membership certificate will be provided at the AGM for each year you are a Silver Member
- Recognition as a Silver Member in the PWI newsletters
- Recognition as Silver Member on the PWI website.
- One free entrant to the Annual PWI Golf Day if sponsorship is offered
- Double sided A4 colour advertisement in the yearly Journal
- Framed Membership Certificate issued upon joining and updated certificates issued annually

Corporate Membership

- Entry to the convention for one employee
- Single page advertisement in the Journal
- Recognition of membership in Newsletters and the yearly Journal
- Logo displayed on the day of the convention (at random between sessions)
- Opportunity to provide presenters and sponsorship of Technical meetings
- Opportunity to provide additional sponsorship for PWI Golf Day and Winter Dinner events including one free entry for sponsor
- Annual Membership Certificate available for download and printing

Annual Membership

Platinum Corporate (limit of 4)	\$11,300 (incl. GST)
Gold Corporate (limit of 8)	\$5,600 (incl. GST)
Silver Corporate (limit of 16)	\$3,400 (incl. GST)
Corporate	\$1,140 (incl. GST)

Membership correspondence to:

Membership Secretary
Steve Naumovski
Email: membership@pwinsw.org.au
Phone: 0400 300 246