

Welcome to the July edition of the Transport Australia Society Newsletter.

I hope you will find the contents of this newsletter and future newsletters informative for all three categories of TAs memberships. With the recent protest activities occurring globally, we all recognise that there is no place for racism. TAs and EA have a comprehensive [Diversity & Inclusion Program](#) that recognises the need to champion a diverse, inclusive, sustainable and values-led organisation and industry.

TAs members and a number of Australians have been “Working from Home (WFH)”, and this WFH non-transport policy generated a number of discussions within the transport industry (private and government). We have had our own members (including academia) participate in discussions which suggests that the time is right to consider the new transport paradigm. While COVID-19 has posed significant challenges for us all, it is clear that transport infrastructure is viewed as a sector that will deliver quick returns for the economy and employment. The Federal and State Governments are releasing a number of stimulus packages linked to planning, design and delivery of transport infrastructure projects.

TAs Executive Plan 2020-2021

The TAs National Executive Committee have developed its Executive Plan for 2020-2021 following a review of the [2018-2019 plan](#) and an analysis of the surveys of its corporate members, full members and university lecturers that run transport courses and subjects.

Advocacy Updates

TAs continues to be at the forefront of advocacy with the completion of “Port Transport Infrastructure”, good progress on “Climate Change & Transport” and commencement of “Universal Access to Transport” and “Aviation Transport Infrastructure” discussion papers. Thank you to our working group chairs and members for volunteering their interest and time in the development of the TAs discussion papers.

With the Federal Government (Federal Office of Road Safety (FoRS) leading the collaborative preparation of a new National Road Safety Strategy, TAs engaged with Ministers at the Federal and State levels responsible for road safety and shared TAs’ [Road Safety Discussion Paper](#). The engagement has been successful with requests for TAs to engage further with FoRS and TfNSW’s Centre for Road Safety in the preparation of the new NSW Road Safety Plan. TAs will continue on its program of engagement with transport leaders in the academic, government and private sectors.

TAs Webinars Update

COVID-19 has provided us with challenges in meeting and networking however we all have done well with opportunities to connect via TAs/EA national webinars as well as participating in various COVID related transport discussions. I’m pleased to also share

that TAs has communicated with a number of potential transport industry partners (e.g. Austroads, ARRB, ITSA, AITPM, etc) to ensure that we offer mutual benefits to our members through CPD events and responses to State and National level advocacy opportunities.

Two highly successful TAs webinars have been held, involving in excess of 300 participants. *Sustainable Cities* – led by Prof. Peter Newman AO with Dr Charlie Hargroves and organised by the WA TAs committee – focused on trackless trams. *Transport and COVID 19 - What has changed What does it mean?* was led by Scott Elaurant and John Devney, and organised by the SA TAs committee. Both webinars provided interesting and useful information that was delivered and received very well.

Our developing branches in Northern Territory, Tasmania and ACT are progressing well with participation in national transport CPD events, with ACT becoming an official TAs branch very soon. We are also progressing further national webinars and our second national transport conference in early 2022. I encourage you all to communicate with the TAs branch chairs and committee members in every city in Australia with any suggestions or queries you may have for TAs.

In wrapping up, let's look out for each other and promote post-COVID transport discussions to aid in creating a better transport future nationally and globally.

Stay Safe & Kind Regards,



Shalendra Ram
Chair, TAs National Executive
E: transport@engineersaustralia.org.au

MEMBER UPDATE

Corporate and Full Member Survey

In the first quarter of 2020 as part of the National 2020/21 Executive Plan, TAs completed a survey of its Members and Corporate Members as part of our planning and prioritising activities in the form of events, industry engagement and advocacy.

Click the following links to view the full **Member Survey results** & **Corporate Members Survey results**.

Below is a brief summary of the Corporate Member and Member survey results:

The TAs Corporate Survey went out to all 18 corporate members. Feedback was received from five.

- The diversity of types of events hosted by TAs is considered good, not just technical seminars.
- All responses noted interest in contributing to discussion papers and advocacy
- A round table event would be the best way of getting corporate members together and have keynote speakers (i.e. Roads Minister) in to have a more informal discussion.

The TAs Full Member Survey went to 392 members and responses were received from 85 members.

Some key actions emanating from this survey which TAs committee branches will prioritise in the second half of 2020 are as follows:

- More collaboration
- Continue CPD events – accredited training, webinars (national/international), student only events, more notice of events, catering
- More advocacy & influencing policy (e.g. climate change)
- Modelling of future transport / technology (plan in 10 yrs time)
- Preference for a National Conference to be held on a regular basis

Matrix Traffic and Transport Data

Over the last few months Matrix has received multiple queries within our industry asking for advice regarding current traffic conditions and whether volumes are beginning to increase to the 'new normal'. Matrix have undertaken a number a surveys across Australia and New Zealand to ascertain progressive traffic conditions, and observations of current trends and evolving movements as the pandemic situation progresses [are available on their website](#).

Matrix intends to share this information with the traffic industry to facilitate informed discussion and decisions around whether the time is right to proceed with any postponed jobs and new work.

The National Aboriginal & Torres Strait Islander Corporation (NATSIC)

The National Aboriginal & Torres Strait Islander Corporation (NATSIC) -Transport and Community Service is the National Peak Body dedicated to and focused on removing transport disadvantage for First Nations people throughout Australia. NATSIC's core business covers the full spectrum of transport related projects and services. This includes areas from urban planning, infrastructure design, construction and delivery of transport related services. We advocate for the involvement and engagement of First Nations people across all transport related sectors in the delivery of transport solutions. NATSIC's past and future successes are underpinned by creating sectors that are culturally competent, respectful and responsive to the collective aspirations of First Nations people. This is achieved by ensuring that these sectors recognise, acknowledge, value and respect knowledge, experience and spiritual connection to the lands and waters that First Nations people bring.

The COVID-19 Pandemic has had a dramatic impact on First Nations communities especially in rural and remote locations. A number of these communities had additional restrictions placed on them under the Federal Biosecurity Measures for entry and exit into and out of these Declared Biosecurity zones. Therefore, services

such as transport, Allied Health and social support programs were suspended, and this had significant health and wellbeing impacts on our most vulnerable people in these communities. These services are now recommencing, albeit slowly. NATSIC has NDIS programs in the APY Lands, Central Australia (SA) and Tiwi Islands in the NT which we have not been able to be delivered because of the Biosecurity Declarations. For further information or to discuss any project contact [NATSIC](#).

Research & Analytics

[Research & Analytics](#) is utilising the COVID-19 downtime as opportunities to enhance our internal mobile working and communication system, and maximise employees' professional development. We are also exploring new ideas and services to benefit our clients. One of our initiatives is an online journey time platform, together with our partner in the UK, for the Australian market. We use crowd-sourced data to deliver reliable journey time information for monitoring, visualisation and analysis. Using crowd-sourced data means we are moving away from the traditional journey time data collection method such as using GPS devices and/or sensors.

Email Contact@OneRandA.com if you are interested to find out more.

TAs Partnership activity as at July 2020

The following organisations have been invited to be “Partners” with TAs as they are complementary to, and potentially have mutual interests with, Transport Australia. The letters were signed by our National Chair.

- The Institute of Public Works Engineering Australasia (IPWEA) [another EA Technical society]
- Australian Institute of Traffic Planning & Management (AITPM)
- Intelligent Transport Systems (ITS) Australia
- Ports Australia will be part of the planned TAs webinar on TA's Discussion Paper on Maritime Transport
- Chartered Institute of Transport and Logistics Australia (CILTA), Supply Chain & Logistics Association of Australia (SCLAA) and Roads Australia (RA)
- Australia Logistics Council (ALC), iMOVE and Australian Airports Association

The key objective of these partnerships include: dissemination of CPD Events / National Conference Info; joint submissions on national transport policy issues; and comment on discussion papers and policies.

Power of Engineering

As an industry, it is our responsibility to shape the next generation of thinkers, creators and leaders so that they may advance Australia's future transportation network. [Power of Engineering](#) is a non-profit organisation that aims to encourage Year 9 and 10 female, regional, and Indigenous students to pursue a career in engineering. This is achieved through hosting free one-day events at high schools and universities whereby students participate in design challenge workshops, hear from inspiring speakers and go on site visits. If you are interested in showcasing to these

students how you make an impact within the transportation industry, please visit [here](#) to get in contact.

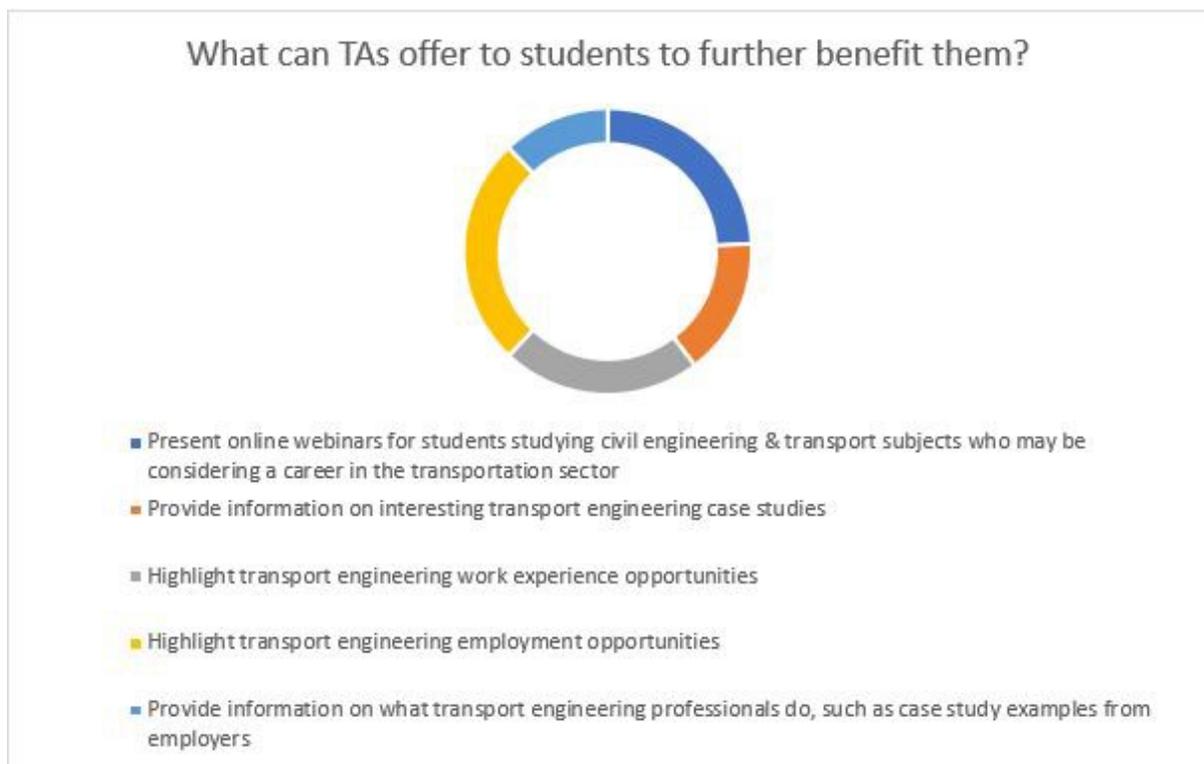
STUDENT MEMBER UPDATE

A Survey of the University Lecturers who teach Transportation

In the first quarter of 2020, TAs completed a survey of its student members to gauge current engagement with TAs and to plan for future initiatives. A survey was sent to lecturers at a number of universities across Australia. Click the following link to view the full [Student Members survey results](#).

Below is a brief summary of the Student Members survey results:

- There were 15 responders
- 67% of responders have heard of TAs, and 74% of responders have not recommended their students to sign up for TAs
- 27% of responders have had contact with TAs this year, with the other 73% of responders either having contact with TAs last year, cannot remember their last contact with TAs, or have not heard of TAs before
- 80% of responders would like more info on TAs and the benefits it offers students
- 100% of responders would like to see TAs highlight transport engineering employment opportunities for their students, and 93% of responders would like to see TAs present online webinars for students studying civil engineering and transport subjects who may be considering a career in the transportation sector



TAs Plan to engage further with students

TAs has formed a Working group to focus on activities and tasks for students, lecturers and universities that teach transportation. Some short to medium term tasks include:

- Draft TAs information (PowerPoint presentation) for universities and organise with lecturers to make a short presentation about TAs and provide an opportunity for students to ask questions
- TAs student membership working group to discuss and plan further actions over the next 6 months

Q&A with University Students doing Transportation

This segment shines the spotlight on several university students from across the country, as they share their thoughts on transport engineering education in Australia and the key transport issues keeping them up at night.

NOTE: These represent the opinions of the individuals and not their respective institutions.

| | <i>What are students looking for in transport engineering education in Australia?</i> | <i>Which transport issues do students think are priorities for Australia?</i> |
|---|--|--|
| Vinh Ho – Master of Engineering (Civil and Infrastructure) – University of South Australia | <p>I strongly believe that there is a lack of transport engineering vacancies to help students have hands-on experience in the transportation field. During their university years, students are mostly equipped with theoretical knowledge instead of professional practices. This leads to a significant ineffectiveness when working within industrial environments. For example, a great number of graduate transport engineers are unfamiliar with transport management software such as VISSIM, AISUM or Sidra to cope with transport challenges. Therefore, transport engineering education in Australia should provide industrial experience for</p> | <p>In the past couple of decades, the needs of vehicular traffic have become one of the top priorities of traffic engineers. This has led to a lack of attraction for people when walking in the street environments. Therefore, several activities such as walking down the streets or using streets for a series of either economic or social activities seems to be relatively restricted. In other words, the development of car-oriented areas is currently concentrated on instead of pedestrian-oriented areas. Hence, it is essential to take account of a wide range of street functions and user needs based on the requirements of pedestrians, rather than vehicular traffic, in street planning and design.</p> |

students to help them prepare for their future career.

Thiruni Edirisinghe
- Bachelor of
Commerce
(Finance) / Bachelor
of Engineering
(Civil) - Monash
University

As a student in transport engineering, I think there could be more emphasis on the different sectors of transport taught at university. The content we learn is generally oriented towards roads, bridges, pavements and vehicle traffic. I think students would benefit from learning more about the rail space, especially with the growing number of rail projects across the country. I also think that students should have the opportunity to learn how to use different programs or software used in industry - other disciplines in civil engineering involved using specific programs that helped consolidate my knowledge in those areas. This would help students be better prepared with practical experience when working as a professional engineer.

Daniel Conley -
Bachelor of
Engineering (Civil
and Structural) -
University of
Adelaide

People looking for careers in transport engineering in Australia are looking to make a positive impact on society. Transport plays such a key role in the functioning of our cities and people's daily lives, underpinning efficient economies and prosperous communities. As a result, the education of future transport

One of the main issues in Australia is the growing demand for transport options that are reliable, efficient and sustainable. In larger cities, we have problems with congestion on roads, and while we continue to make upgrades by adding new lanes to freeways or creating new bypasses, we are not solving the core issue. I think we should aim to encourage the use of active transport (such as walking or cycling) for short trips, and to invest more into improving our public transport systems. I completed my final year research project on how drones can be used to improve the way our rail networks are monitored and managed. With technologies such as drones, we can pave the way to improving the reliability and efficiency of train services, which is one of the determining factors for choosing between transport options. Overall, these solutions are more environmentally friendly and sustainable in the long-run, and would also alleviate the pressures on major roads.

I believe issues of sustainability and liveability are front of mind for students when we think about how we want to see Australian cities grow in the coming decades. My personal transport during my time studying has been primarily made up of public transport and walking, because it is convenient. Students see the value in these transport modes. The value of

**Xanthia Dubler –
Bachelor of
Engineering –
Queensland
University of
Technology**

professionals should not just be about designing roads for more cars, but also think about the holistic impacts that our transport decisions have. Learning is more engaging and more effective when we see the transport system and the city through the eyes of the user, and when we understand the impacts on land use and economics that our work can have. I think shifting to a focus on the integration between land use and transport – through measures such as Accessibility – and learning practical and industry-relevant skills to apply this, would be a great step.

My highlights from my transport engineering education have been when industry professionals visit universities to share their experience and expertise. These visits give students a sneak peek into what life will be like following graduation and provides an insight into the multitude of areas that transport engineers can pursue in their career. Not only do these professionals provide a better understanding of transport engineering but they are always open to supporting and mentoring students outside of the university bubble. The other aspect of the transport engineering education that I've loved is learning the exact practical skills that we'll be using in our professions. Transport modelling, data analysis and even urban

high-quality public transport combined with walking and cycling have shown to create great value for cities overseas. Moving forward, I would expect many transport engineering students share my view that our car-centric view of transport needs to change. Responding to climate change and sustainability challenges is an imperative – and these sustainable transport modes do this. There are challenges along the way, especially in Australian cities that have grown around private vehicles, but these are the challenges that my peers and I are excited to find solutions for throughout our careers.

There are several issues that many Australian students have with our current transport system. These include the constant increasing congestion, lack of support for public and active transport and lack of innovation in the area of fully integrated transport systems and autonomous vehicles. The most pressing issue is that the current approach by many governments is to build more rather than smarter. We need to begin changing the mindset of policy-makers from prioritising the building of bigger and wider roads to creating more efficient ways to move around without the use of private vehicle. If the level of funding used for road upgrades each year was channelled into public and active transport upgrades we could see significant changes in how Australians travel, particularly when commuting.

planning subjects give us an amazing base of information that feeds perfectly into the real-world.

Why should students join Transport Australia?

As a student, any industry experience is highly applauded, and TAs provides students who are interested in transport with direct access to professionals in the industry. This includes but is not limited to:

- The opportunity to attend chartered professional development events, where future employees and colleagues are likely to attend
- Updates on transport policies through the year through TAs submissions
- Exposure to transport subject areas (road pricing, education, active transport, MAAS, road safety) via TAs discussion papers
- The opportunity to meet peers from different sectors, all interested in the transport field

UPCOMING AND RECENT EVENTS

Transport and COVID 19 - What has changed What does it mean (Webinar 7th May 2020)

COVID-19 has had a dramatic impact on transport of people and goods around the road at a local, national and international level. The changes have resulted from formal restrictions to border movements and group activities in countries that have implemented “lockdowns”, as well as individual responses to risk and new personal circumstances.

This session examined the changes to transport, and what this could mean for transport policy and planning. Speakers will review the evidence for what has changed, including a global context but focusing on Australian data, and go on to discuss implications of COVID-19 responses for transport policy, and what potential changes in transport system planning and operations as the world emerges from COVID-19 restrictions.

Speakers: Scott Elaurant (Director, Six Cats Consulting) & John Devney (Director, GTA Consultants)

Attendees: The webinar platform attracted a large attendance with approximately 300 registering nationally

Engineering Challenges for the City of the Future – Webinar (4th June 2020)

The session examined Sustainable Centres of Tomorrow: People and Place (Peter Newman), and Exploring the Potential for Artificial Intelligence and Blockchain to Enhance Transport (Charlie Hargroves). Peter and Charlie reported on their research projects, funded through the Sustainable Built Environment, National Research Centre, on how new autonomous technology and smart systems technology are providing new opportunities for how we build the city of the future. The potential of Trackless Trams (using autonomous sensors to provide speed and stability) and Smart Systems like AI, Blockchain and IoT, can make transport much better. However there still needs to be choices about what it is for rather than letting the technology be directing how we proceed. This is why we will still need old fashion common sense to help build the city of the future. The choices will be presented to see what kind of future we would prefer.

One of the key lesson taken away from the webinar is How technology disruptors can be used to deliver sustainable transport options; what are the possible choices for integration.

Speakers: Peter Newman (Professor of Sustainability, Curtin University) & Charlie Hargroves (Senior Research Fellow, Curtin University)

Attendees: The webinar duration was 60 min including 20 min of Q&A and was attended by over 350 people. It received a high Survey Score of 4.5 out of 5.

Transport After COVID – Webinar (3rd June 2020)

Due to popular demand, this webinar can be viewed at [EA OnDemand](#).

The webinar looked at the mid-term (1-5 year) future outlook of transport given the impact of the COVID-19 pandemic. It will explore the potential effects including risks, opportunities and trends. The webinar included three distinct sessions which examine the transport impacts of COVID 19 at a local level as well as across the planning and operational fields:

- Flattening the Transport Curve – We all know the COVID-19 restrictions have brought a significant change in traffic volumes but what are the actual numbers?

Speakers: Rachel Kohan and Sophie Zachulski

- COVID-19 crisis, transport behaviours and the Movement of Place Framework - Discussion on how the post COVID-19 environment will change our travelling behaviours over the medium to long-term and how it will provide a greater focus on the Movement and Place frameworks developed by State Governments in Australia, informing changes in the design and operation of our transport networks.

Speakers: Dr David Adams and Darcy Bevan

- COVID-19 and Public Transport from Response to Recovery : This discussion largely focuses on capacity considerations, and what adjustments to services and travel patterns will be needed as restrictions are lifted and we transition to a 'new normal'. Gareth Mills and Eleanor Short will discuss a white paper developed for an Australian context building from earlier work in North America which aims to outline a framework for assessing the capacity of public transport

Speakers: Gareth Mills and Eleanor Short

Attendees: the webinar platform attracted a large attendance with approximately 450 participants.

Light Rail – Lessons Learnt (Webinar 30th July 2020)

Details: Light rail is having a huge resurgence across the world, including in Australia. Melbourne has the world's largest tram network, but what can we learn from these new systems? This seminar will focus on lessons learned from the operation of Melbourne's light rail network, benchmarking of interstate and international light rail networks and the development of Australia's newest light rail systems in Newcastle, Canberra, Sydney and the Gold Coast.

Speakers: Emilie Van de Graaf (Director, Passenger and Network Innovation – Yarra Trams) & Scott Elaurant (Director, Six Cats Consulting)

Registration: <https://www.engineersaustralia.org.au/event/2020/07/light-rail-lessons-learnt-31951>

Transport Vision 2030 beyond (Webinar Aug or Oct 2020; to be confirmed)

Details: Professor Graham Currie is the recipient of the 2020 TAs / Civil College National Transport Medal. Graham and TAs are currently discussing the potential presentation; possibly Transport Vision 2030 and Beyond.

Speaker: Professor Graham Currie

Registration: TBC

Road Safety Discussion Paper (Webinar Sept 2020; to be confirmed)

Details: A Panel discussion is planned around TAs's Road Safety Discussion Paper. Further information will be shared by WA TAs Branch and Working Group Chair, Dr. Brett Hughes.

Speakers: Dr Brett Hughes (WA TAs); Gabby O'Neill (FORS); Rob McInerney (iRAP)

Registration: TBC

Maritime Transport Infrastructure Discussion Paper (Webinar Oct 2020; to be confirmed)

Details: A Panel discussion is planned around TAs's Maritime Transport Infrastructure Discussion Paper. Further information will be shared by NSW TAs Branch and Working Group Chair, Mike Veysey

Speakers: Michael Schaumberg (Qld TAs); Port of Brisbane representative and Ports Australia representative

Registration: TBC

UPDATE ON DISCUSSION PAPERS

Universal Access Transport Discussion Paper

Rather than focusing on only compliance with required legislation to provide access to those with disabilities, providing a transport network which provides universal access to those with a range of transport needs provides a much better outcome to society. Currently, one in five people in Australia has a disability, and this will increase as the population ages. Providing a network which caters to the needs of people with different ways of moving, including children, young people, aging people, people with shopping, prams or luggage and those with a range of disabilities, not just those with physical mobility needs, will all benefit.

We hope the discussion paper on Universal Access Transport will promote the importance of universally accessible transport and the benefits it can bring to society, and will advocate for those with a range of accessibility needs. It will promote international and national best practice and will encourage the transport planning, engineering and related professions to engage, improve and innovate.

TAs are in the early stages of planning this paper and have had a number of sessions to outline the scope, purpose and development timeframe of the paper.

We aim to have a National Webinar on this topic once the paper is finalised later in 2020.

Aviation Discussion Paper

TAs commenced discussions on preparation of a national Australian Aviation Sector Discussion Paper earlier this year before COVID-19 intervened, with resulting huge impacts for air travel demand domestically and internationally for the foreseeable future. As a result, the paper was put on hold while the health and economic impacts of the virus became clearer. We are currently watching the situation closely and expect to soon restart the Aviation paper process, with consideration being given to the next few years and what that means for the sector given the unknowns around future passenger air travel demand, the status of airlines in Australia and internationally, and

the nature of air freight in future. The intent is to prepare the paper and communicate the outcomes to TAs members before the end of 2020.

Maritime Transport Infrastructure Discussion Paper

The **Maritime Transport Infrastructure Discussion Paper** has been reviewed by EA Corporate.

The Discussion Paper is the result of some great work by a team (Coordination Chair – Michael Veysey & Technical Lead – Michael Schaumburg) supported by Working Group members from across Australia. The DP has also been independently reviewed by a few industry colleagues (e.g. Port of Brisbane, retired Port of Melbourne, and Ports Australia).

TAs is planning a national webinar on the Maritime Transport Infrastructure DP fairly soon.

This document has been produced by the Transport Australia society (TAs) of Engineers Australia as a discussion paper with an aim to improve marine transport infrastructure and services in Australia. It does not represent a formal position statement of Engineers Australia but is intended to inform discussion in relation to the important issues and challenges faced in the industry currently, and to ensure the industry has the capacity and capability to efficiently harness future growth opportunities from new and expanded industries.

Climate Change Discussion Paper

The TAs Climate Change discussion paper is about the interaction of transport and climate change. This includes both the impact of transport activities as a cause of climate change, and the potential effects of climate change on transport infrastructure and operations.

This paper is intended to give practical advice to engineers working in transport on what are appropriate ways in which their work on projects may be done responsibly and ethically, conscious of their obligations as EA members to take climate science into account in their work.

The Climate Change working group has defined the DP scope, agreed a draft DP outline of contents, and written draft one page background papers on each State and Territory. Preparation of the paper has commenced and is approximately two-thirds complete.

The working group will meet again on 22 July to review the draft paper. It will then discuss conclusions and recommendations. After that the paper will be forwarded to internal and independent reviewers.

Holding a National Webinar for the climate change DP in 2020 has not yet been discussed. However, it is a possibility after August 2020, pending interest and speaker availability.

Road Safety Discussion Paper

TAs has been liaising with government departments responsible for Road Safety, attaching our [Discussion Paper \(DP\) on Road Safety](#). We advised them that the purpose of our paper was to inform discussion to reduce the massive social and economic impact of road crashes, particularly from an engineering viewpoint. While the DP recognises and supports recent road safety initiatives, it also provides some different perspectives and recommendations that have not yet been applied, but which could provide significant opportunities to realise further improvements.

In the immediate future, we urged the government to consider the recommendations in the DP: as part of the National Road Safety Strategy, during Road Safety Week 2020, and in the economic stimulus packages to rebuild the Australian economy and society following the coronavirus impacts and restrictions. During these activities and beyond, TAs advised the government departments that TAs was keen to develop a constructive dialogue with governments, using the many experienced and knowledgeable professionals who were willing and available to engage positively. We requested participation in roundtable discussions, help organise professional workshops, assist in preparing policy positions or provide industry feedback.