Dear TAs Colleagues,

TAs branches continue to provide a voice through branch and national level CPD and advocacy, and a summary of recent and upcoming events are listed in this newsletter.

Our discussion papers on aviation and maritime have been finalised, and we will now be arranging for national webinars and further advocacy activities. Our focus on assisting and engaging with students interested in the transport sector continues with the efforts of our student membership working group chaired by Madison Elliott.

Congratulations to Scott Elaurant (TAs Deputy Chair) and Flori Mihai (TAs Secretary & Treasurer) on their new positions! I would also like to acknowledge International Women's Day and our female colleagues of TAs who are all inspiring in their own special ways, and we at TAs stand with you.

In this newsletter, TAs colleague Emmerson Richardson is introducing a conversation on transport and land use integration that is going to be a focus for TAs in the next few years in our dialogue with government agencies at all levels in Australia.

We are also privileged to hear from the following:

- 2020 Transport Medal Recipient Professor Graham Currie about 'The Patience Game' — Resilience and Opportunism for an Urban Transport Recovery.'
- 2006 Transport Medal Recipient Professor David Hensher about 'Working for Home and Implications for Revision of Metropolitan Strategic Transport Models.'

We will be touching base with our corporate members for an event in June and another in the second half of 2021.

We also introduce our colleagues helping us to fly the TAs flags in Northern Territory and Tasmania.

As a final note, while we are now in the midst of receiving COVID vaccinations while getting on with our lives, we must not forget the many who have succumbed to COVID.

Enjoy the May newsletter.

Kind regards,



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

Student member update

By Madison Elliott, Chair SMWG and Oliver Yang, Deputy Chair SMWG

The Student Membership Working Group (SMWG) had a productive quarter completing a number of tasks for the TAs Student Membership Vision Plan 2021-2026.

These tasks included:

- Finalising the university contact lists for faculty and student societies.
- Finalising the slide pack on the benefits of membership for students.
- Finalising and issuing the invitation for nominations for Student Representative to current TAs student members.





The invitation for nominations was sent out to current TAs student members at the beginning of the year to find a student representative (undergraduate and postgraduate) for each of the state committees. The role of the student representative will be to assist the TAs branch with tasks working towards the Vision Plan, engage in student-focused

events, outreach activities and voice student's opinions to the transportation industry. The call for nominations closed on the 31st March, and subsequently, the SMWG assessed each of the nominations and has informed respective students of their successful placement as a representative for their university. This currently includes one to two students for each TAs State Branch. The vision for the future will be to expand this to one to two students per university, working collectively to engage students nationwide.

The National Executive team encouraged the SMWG to elect the young professionals of the group into the newly formed roles of Chair, Deputy Chair and Secretary. The SMWG elected people for these roles in the March SWMG meeting, with the positions going to Madison Elliott, Oliver Yang and Yeuming Ma (Michael), respectively. Congratulations to each of these young professionals for taking an involved role in the group.

We have also had a number of new enthusiastic committee members from the TAs branches become involved in the group.

In the next quarter, the SMWG will be aiming to complete the following tasks:

 Reach out to university faculty contacts to arrange TAs Branch Committee members to provide a short presentation as well as ask faculty to share the Benefits of TAs slide pack with their students.

- Build a picture of the current student engagement activities across all branches to identify gaps.
- Each branch will approach its YEA chair to develop a relationship with the YEA committees.

The SMWG is looking forward to engaging with the universities and our student representative to drive the growth of student members over the next quarter.

Advocacy

Opinion Piece: The 'Patience' Game - Resilience and Opportunism for an Urban Transport Recovery

By Professor Graham Currie, Monash Institute of Transport Studies, Public Transport Research Group and TAs Transport Medal Recipient 2020

The COVID-19 recovery is the dominant strategic issue in Australia today, and a key to that is getting our cities back to work. For transport professionals, our part in this task might seem like juggling dynamite while Rome burns. The foundation of our mobility experience carpet has been pulled from under us by shutdowns which changed our entire understanding of travel. Now we have to manage transport systems as they return to an uncertain level of



activity which seems to demonstrate variable levels of return for different parts of the city and times of day. It's not an easy thing to do, folks!

Here are some thoughts to help the profession navigate this minefield.

I think it's important to realise that Australia's largest cities have not yet reached a 'new normal'. Indeed, there is nothing 'normal' about 2021. We may all like to think (and celebrate) that we no longer have a pandemic, but repeated 'short, sharp lockdowns' have shown that we are not there yet. What does this mean for the profession? It means we need to be very flexible and resilient; we need to start standardising the management of transport in cities around operational activities we undertook as 'one-offs' during the first shutdowns. We also need to anticipate this as a new feature of urban transport planning.

Then there are the problems of predicting the degree of long-term change in how we travel in our cities. Our research says there are three new big changes in travel going on in Australian cities today:

- 1. More people are working from home, which is acting to reduce commuting; something we have always wanted to better manage is crowded and congested peaks.
- 2. We are experiencing a modal shift from public transport to car driving caused by infection fear; something we never wanted as an aid to managing those congested peaks.
- 3. CBD activity is well down, again caused by increased working from home and infection fear.

There are other changes in travel, such as localised increases in walking and cycling, but in the context of total city travel, the above are the big three by a long chalk.

Increases in employees working from home is now a common media topic, but I urge the profession to be realistic and specific about the scale of the change in the long term. Only about 4 per cent of commuters worked from home before Covid. Our research suggests it may increase to only 6 per cent city-wide after the virus has gone. That's a big growth in individuals working from home, but not a big shift in total commuting and its impact on congestion is only ever likely to be small.

What is clear, however, is that CBDs are not going to be as busy; we estimate CBD commuting will decrease by as much as 20 per cent after the virus has gone. So we might expect our CBD to change in the long term, and it's time for us to start thinking about what we can, or should, do about that. One suggestion I can give is to stop thinking reactively about managing these so-called 'bad' problems. Try and think progressively and opportunistically about how we can turn these situations into positive solutions to the urban travel challenges we have all been seeking to address. For CBD's can we shift office space to more productive uses? Conversion to 24/7 activities or even cheap residential use could help our CBD transform into more European style CBDs.

The biggest challenge to my mind is a mode shift from public transport to car driving. This is already causing traffic congestion problems. What's interesting is the patterns of this congestion are not normal; I think it's the complex interplay of the three factors above that are causing this. But how should we manage this problem?

I urge the profession to avoid making long-term changes to infrastructure for a short-term problem that will ease as the virus problem is solved. The long-term vision is that Australian cities will return to a successful growth scenario and that infection fear will fade. Traffic congestion itself might well encourage 'swinging' car drivers back onto public transport, which has become more attractive as crowding has reduced. So the profession needs to become proficient in a new skill; the 'patience' game. We need to endure short term pain to ensure cities can function when we return to long term growth.

Input to Infrastructure Australia revised Assessment Framework

By Professor Phil Charles, University of Southern Queensland



Infrastructure Australia has been undertaking a refresh of their Assessment Framework and invited Transport Australia input. A presentation by David Tucker, Chief Infrastructure Assessment IA, was held on 7 April 2021, which provided useful insights into the changes proposed. Infrastructure Australia is aiming for the publication of the revised assessment framework in July 2021.

The draft of the framework has made the following changes:

- moved from five to four stages (which harmonises with other frameworks)
- separated the framework into the categories of overview; stage one to four guides and technical guides
- broadened the evaluation criteria
- provided a greater emphasis on non-economic benefits, including quality of life, sustainability and resilience

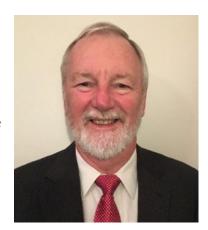
The four stages cover: defining problems and opportunities; identifying and analysing options; developing a business case; and post-completion review. Technical guides include program appraisal, multi-criteria analysis and economic appraisal. The framework retains the use of cost-benefit analysis but considers strategic, social and deliverability benefits more explicitly.

Integrated Urban Transport Systems Policy and Infrastructure Planning Discussion Paper

By Emmerson Richardson

Transport Australia society has begun an investigation into past and current transport policy and infrastructure provision to assess changes it considers necessary to improve transport outcomes in the future.

Past policies and practices in our growing cities have been unsuccessful in reducing congestion, greenhouse and other harmful emissions on a sustainable basis. This



is because the main focus has been on increasing road capacity for general traffic. This, along with insufficient consideration of demand management strategies and insufficient investment in more space-efficient and sustainable transport modes, has resulted in increased traffic across the networks, with negative impacts on both congestion and emissions. For example, during this time, greenhouse gas emissions have increased by 60% when emissions from other sectors have reduced. This is at a time when the Australian Government has set a target to reduce total emissions by 28% by 2030 (Australian Government, 2019).

TAs considers that a new paradigm for transport planning in cities, which improves both efficiency and liveability and reduces dependence on cars, may be more beneficial than the current system. Sustainable Mobility Management (SMM) is one alternative that is worthy of consideration. It utilises demand management and multi-modal transport and land use planning and targets a more modest level of car use that is compatible with network capacity. A major objective of SMM is to improve transport efficiency by reducing the volume of low occupancy vehicles in the traffic stream by a variety of means. These include the provision of priority lanes for bicycles, high volume public transport vehicles and high-value trucks, where the circumstances warrant it. A more comprehensive overview of the SMM approach can be found in "Delivering Sustainable Urban Mobility, ACOLA, Melbourne, 2015".

Infrastructure Australia (2019) is one of many organisations that has recognised the need to move away from the traditional planning approach of 'predict and provide', based largely on an extrapolation of past trends, to a more forward-looking 'vision and

validate' model. Others, including Engineers Australia (2016), have long been calling for comprehensive and integrated land use and transport infrastructure planning to ensure that scarce funds are directed to projects with the highest potential returns.

TAs understands that urban transport systems are complex and that optimum solutions are not always obvious. Given the complexity of the matter and the need for change, it is important there be engagement between professional groups such as TAs, industry and community groups, all levels of government, government agencies and others, such as Infrastructure Australia and independent state infrastructure bodies.

TAs is pleased to act on behalf of its members and work with partners such as Engineers Australia in a review of urban transport systems policy, including more effective transport and land use integration. We intend to prepare a discussion paper on the topic and will work closely with our members and a broad range of stakeholders, both during and after the completion of the preliminary discussion paper. We look forward to your input.

Working for Home and Implications for Revision of Metropolitan Strategic Transport Models

By Prof David Hensher, Engineers Australia and TAs Transport Medal Recipient, 2006



The COVID-19 pandemic has changed the way we go about our daily lives in ways that are unlikely to return to the pre-COVID-19 levels. A key feature of the COVID-19 era is likely to be a rethink of the way we work and the implications this may have on commuting activity. Working from home (WFH) has been the 'new normal' during the period of lockdown, except for essential services that require commuting.

In recognition of the new normal <u>as represented by an increasing amount of WFH</u>, we are developing models to identify the incidence of WFH and what impact this

could have on the amount of weekly one-way commuting trips by car and public transport. Using wave one of an ongoing data collection effort done at the height of the restrictions in March and April 2020 in Australia (noting other papers associated with late 2020), we have developed a number of days WFH ordered logit model and linked it to a zero-inflated Poisson (ZIP) regression model for the number of weekly one-way commuting trips by car and public transport. Scenario analysis is undertaken to highlight the way in which WFH might change the amount of commuting activity when restrictions are relaxed to enable changing patterns of WFH and commuting.

The findings provide one reference point as we continue to undertake similar analysis at different points through time during the pandemic and after when restrictions are effectively removed. The long term objective is to obtain models with parameters that reflect a stabilisation (or equilibrium) situation where we can be confident that the incidence of WFH will continue into the future and that hence defines the setting in which to establish appropriate adjustments for the presence of WFH in strategic transport model forecasts.

This research is part of an ongoing iMove Cooperative Research Centre (CRC) research project with Transport and Main Roads, Queensland, and Transport for NSW on Working for Home (WFH) and Implications for Revision of Metropolitan Strategic Transport Models. Below is a list of other related publications from **Working from Home (WFH) Project**, 2020-2022 *Version*: 10 April 2021

Beck, M. and Hensher, D.A. (2020) Insights into the Impact of Covid-19 on Household Travel, Work, Activities and Shopping in Australia – the early days under restrictions, **Paper #1**, Transport Policy, 96, 76-93. https://doi.org/10.1016/j.tranpol.2020.07.001 (one of the topmost downloaded papers in the journal since published).

Hensher, D.A., Beck, M. J. and Wei, E. (2021) Working from home and its implications for strategic transport modelling based on the early days of the COVID-19 pandemic, **Paper #2**, Transportation Research Part A, 148, 64-78.

Beck, M. J., Hensher, D.A. and Wei, E. (2020) Slowly coming out of COVID-19 restrictions in Australia: implications for working from home and commuting trips by car and public transport, **Paper #3**, Journal of Transport Geography, 88, 102466.

Beck, M. and Hensher, D.A. (2020) Insights into the impact of COVID-19 on household travel and activities in Australia – the early days of easing restrictions, **Paper #4**, Transport Policy, 99, 95-119. Online 19 August 2020 https://doi.org/10.1016/j.tranpol.2020.08.004.

Hensher, D.A., Wei, E., Beck, M.J. and Balbontin, C. (2021) The impact of COVID-19 on the time and monetary cost outlays for commuting - the case of the Greater Sydney Metropolitan Area after three months of restrictions, **Paper #5**, Transport Policy, 101, 71-80.

Beck, M.J. and Hensher, D.A. (2020) What does the changing incidence of Working from Home (WFH) tell us about Future Transport and Land Use Agendas? Transport Reviews, 41(3), 2020. (Shortened version for The Conversation, November 2020 to accompany Academy of Social Sciences Australia (ASSA)

podcast). https://doi.org/10.1080/01441647.2020.1848141.

Also https://theconversation.com/covid-has-proved-working-from-home-is-the-best-policy-to-beat-congestion-148926

Branch updates

Australian Capital Territory

By Jerome Catbagan, ACT Chair

The next Canberra TAs webinar is scheduled for 20 May at 12.00 pm titled 'Is 'Faster' Always Better in City Transport?' We are also looking to potentially host a joint webinar with TAs NSW in July or August on cycling, including an update of ACT infrastructure design standards, its current state in ACT and NSW and selected case studies.

The Canberra Branch recently called for nominations for two committee position, with three nominations received.

New South Wales

By David Lowe, NSW Chair

NSW has a fully functioning committee with new appointees to the key roles of Deputy Chair, Marketing and Communications and Student Membership Working Group delegate fully bedded in. We have recommenced meeting face to face at the Sydney Division offices in the Sydney CBD.

We have commenced a program of initiatives to actively seek to recruit members from outside of Greater Sydney with a particular focus across regional areas of NSW.

NSW is currently developing two webinars with dates yet to be confirmed. The first looks at the latest developments in light rail across Europe, and the second will be a presentation on the latest developments in heavy rail noise dampening.

In addition, the NSW branch has been asked to collaborate with Women in Engineering (WiE) on their Winter Gala event in June. TAs NSW will work with WiE in providing keynote speakers for that event.

Queensland

By David Hayward, QLD Chair

The Queensland Branch has welcomed six new committee members in 2021, including Adriana Gowthaman, Teck Kean Chin, Joshua Ellis, Jared Webster, Madison Elliott and Rhiannon Rutledge. They have all already made contributions to conference and event planning, discussion paper development, and other national working group activities.

The next planned Queensland webinars for April-June 2021 are as follows, with event details to follow:

- COVID-19 travel impacts (VLC and RACQ)
- Competing needs for kerb space in Brisbane CBD (Luke Robertson BCC, Andrew Demack – Bicycle Queensland, Anna Campbell – Queensland Walks)

South Australia

By Scott Elaurant, SA Chair

The South Australia (SA) committee welcomes the new member, pending registration, Alex Sabohanian of the Department of Infrastructure and Transport.

Scott Elaurant has taken on the role of National Deputy Chair. He will continue as SA Chair for his current term. Another SA representative for the National Committee will be selected at the April meeting.

SA is involved in progressing two Webinar events for April - May 2021:

 Climate Change and Transport Engineering Practice (Adaptation and Transition Engineering) (Prof. Michael Taylor and Prof. Susan Krumdieck) • Electric Vehicles in Australia (Scott Elaurant and Michael Roth)

The next face to face event mid-year will be a site visit to the SA Tonsley University campus and home of SAGE automation. Numbers may be limited, so please ensure you register early for this event.

Tasmania

By Nataliya Katsman, TAS Working Group

TAs Working Group in Tasmania is gearing up to grow its membership and activities to promote transport matters in the State and contribute at the National level. In the past few months, we have seen incredible support from our TAs and EA colleagues around the country. As a result of this support, Tasmanian TAs members had opportunities to contribute to the recently published Aviation discussion paper and be part of the TAs group that provided feedback to the Infrastructure Australia Assessment Framework and technical guides.

There are currently 17 TAs members in Tasmania who actively participate in monthly meetings and raise awareness of TAs agenda and events. That led to active engagement with the local EA Division to set up the Tasmanian TAs branch and initiated connections at the University of Tasmania to increase student membership in the State.

Victoria

By Peter Wills, VIC Chair

The next Victoria TAs webinar is scheduled for May 2021 and is titled 'Precincts and their role in delivering a global city'. We look forward to our panel of government, and private sector specialists outline their learnings from Australian and international projects.

On the committee side, we all ate too much chocolate at Easter and have been focusing on developing new ways of connecting with our members with a focus on early career professionals.

Our immediate past chair is leading a review of some important work in the Disability Discrimination Act and mobility-impaired space.

If you are interested in being involved in the Committee, please get in touch at tasvictoria@outlook.com.

Western Australia

By Flori Mihai, WA Chair

TAs WA colleague Emmerson Richardson has prepared a comprehensive submission for the WA Department of Planning, Land and Heritage regarding the recently released comments Policy for Medium Density Residential Housing Code. The

submission was released via Engineers Australia's WA Division. The new code was developed to encourage better-designed housing, which is more sustainable and functional with provision for more trees and gardens, provides better solar access and ventilation and creates safe and attractive streetscapes. The submission has reignited the conversation on transport and land use integration; this will be a focus for TAs in the next few years in our dialogue with government and agencies at all levels in Australia.

National Road Safety Week is from 16–23 May, and TAs' several events in WA will mark an ongoing interest in advocating for road safety improvements. You can now register for the 'Insights and Innovations to Inspire Thinking during National Road Safety Week' event on 18 May at 12.00 pm AEST.

TAs has always provided the forum for sharing knowledge on recent transportation developments from overseas. For example, TAs WA will host a presentation on the UK's high-speed rail system, High Speed 2, with Barry Moore, Major Project Executive from WSP, on 17 June.

Corporate members and partners

We are pleased to welcome two new corporate members, Indus Engineering and Strailastic.

Corporate members contribute to ongoing TAs papers and industry submissions to make sure views of the industry are represented with the government at both the state and commonwealth levels.

View the <u>corporate member</u> website page to access the list of corporate members and information on each. TAs welcomes the ongoing support of our corporate members, which are listed below:

- AECOM Australia Pty Ltd
- Aurecon Australasia Pty Ltd
- Data Audit Systems Pty Ltd
- Deloitte
- Department of Transport and Main Roads (TMR)
- EG
- GTA Consultants
- Indus Engineering Pty Ltd
- Lambert & Rehbein (SEQ) Pty Ltd
- Matrix Traffic & Transport Data Pty Ltd
- NATSIC
- NineSquared
- PSA Consulting (Australia)
- Research & Analytics Pty Ltd
- Rhelm Pty Ltd
- Strailastic Pty Ltd
- Transmax Pty Ltd
- Veitch Lister Consulting

Member achievements

Tasmanian Young Planner of the Year - Andrew Holmes

In late 2020, Andrew Holmes MPlan, BEng (Hons) BPhil was awarded the Tasmanian Young Planner of the Year award by the Planning Institute of Australia. This award is given to young planning professionals within five years of completing their planning degree for making an outstanding contribution or achievement. The recipient also shows strong promise and emerging capabilities in leadership, planning practice, innovation, enterprise and thinking.



Throughout 2020, Andrew was a strong advocate for place-based streets; streets that can both facilitate the movement of multimodal traffic but also make spaces desirable for people to slow down, relax and interact with each other. His advocacy work included delivering a PARK(ing) Day on Elizabeth Street in Hobart with the Tasmanian Young Planners in September (managing COVID plans were all new!), speaking on the radio about PARK(ing) Day and places for people, and speaking at a millennial forum hosted by Complete Streets.

Andrew's other advocacy work involved gathering support from local engineering and planning companies, institutes and foundations to write to the state Minister for Planning to alter the car parking requirements in the Tasmanian Planning Scheme. Andrew's proposal was to reword Clause C2.5.1 The number of on-site car parking spaces must be no less than the number specified in Table C2.1 to The number of on-site car parking spaces must be no more than the number specified in Table C2.1. This changes the parking requirements from minimum to maximum requirements.

Andrew attained a lot of support for this, including from the worldwide parking leader Prof. Donald Shoup, who commented that this was an 'elegantly simple proposal'. Andrew's main aim of this work was to start the conversation about car parking requirements more broadly.

Andrew, whilst also being a member of the TAs, is the 2021 Convenor of the Tasmanian Young Planners. He notes that communication and collaboration are important to action these place-based goals/dreams. He will be looking to unite and invite the young planners in Tasmania to TAs events, broadening TAs existing skillset in Tasmania.

 Andrew welcomes connection through <u>LinkedIn</u>, and you can see photos from the 2020 PARK(ing) Day <u>here</u>.

Michael Roth - Churchill Fellowship

A Churchill Fellowship offers everyday Australians a life-changing opportunity to travel overseas for four to eight weeks to explore a topic or issue that they are passionate about. As an internationally recognised award, recipients gain access to expertise from around the world.

Churchill Fellows are making a difference every day in all aspects of Australian life, across an incredibly broad and diverse range of issues such as agriculture; health; arts and music; building and architecture; business; sport; science; environment and more.

Churchill Fellows are totally diverse and invariably innovative. Their projects are the result of extra endeavour and absolute passion.



The Churchill Trust can support any worthwhile pursuit with no preconceptions as to what form it can take. This is evidenced clearly by the extraordinary variety of fields in which Churchill Fellows are involved. 1

We wish to congratulate Michael, a very worthy recipient of the Churchill Fellowship.

Michael is an experienced public policy developer and passionate advocate for a better transport system designed to meet peoples' expectations and improve safety, accessibility, affordability and sustainability. Michael has worked for the rail industry, Australian Government, Queensland Government, urban and rural local governments, community sector and as a consultant. Michael is currently self-employed as a Transport Policy Consultant, working on a range of projects on the future of mobility and the impacts of vehicle electrification on infrastructure, travel behaviours and regulations.

"Our health and cities would be much improved if fewer people drove cars and instead walked, cycled or used public transport, yet decades of efforts have achieved little," Michael said.

"Recent advances in digital and battery technology have made Light Electric Vehicles (LEVs) cost-effective and convenient. Many overseas cities have different regulations and cultures that have resulted in the rapid growth of LEVs.

"Australia is allowing some e-bikes and e-scooters, but we remain afraid to embrace most LEV and micro-mobility innovations. I intend to research the cities and interview the experts who have addressed the risks and maximised the benefits of this mobility evolution."

[1] Winston Churchill Trust - https://www.churchilltrust.com.au/

Upcoming events

Keep an eye out for the proposed events listed below. Once the events are finalised with a date and speakers, they will be advertised on the TAs website HERE.

May

- 18 May: <u>Insights and Innovations to Inspire Thinking during National Road Safety</u>
 Week
- 20 May: <u>Is Faster Always Better in City Transport?</u>
- Precincts and their Role in Delivering a Global City
- Aviation Transport Discussion Paper (read the discussion paper <u>here</u>)
- UK's High-Speed Rail System
- Electric Vehicles in Australia

June

- Electric Vehicles, Policy and Impacts
- Competing Needs for Kerb Space in Brisbane CBD

July

- Universal Access to Transport Discussion Paper
- Site Visit to Flinders at Tonsley, Flinders University Campus

August

 Cycling - Update of ACT infrastructure design standards, its current state in the ACT/NSW and selected case studies