

2022 Utilities Forum



Hosted by APA Group – Melbourne Victoria



Introduction

After a two-year hiatus, 2022 saw the return of the sixth the National Road Safety Partnership Program (NRSPP) Utilities Forum kindly hosted in Melbourne by APA Group.

The 2022 forum was attended by 15 utility organisations from electrical, gas, telecommunications and water sectors, and expert input into the two-day event came from Australian Automobile Association, IAG, Monash University Accident Research Centre and Transport Accident Commission.

The Utilities Forum is an industry specific forum which has continuously evolved year-on-year based on feedback from the forum partners since its formation in 2015. The structure of the forum is informed by the analysis and identification of themes and risks from members fleet data. The data is collected via a template and online survey prior to the event. The forum itself takes place under Chatham House Rules allowing for frank, open, and trusted discussions among peers around performance, issues, and risk management approaches.

The forum creates dynamic and free-flowing conversations, guided by the analysis of the aggregated member data. What is unique with the forum, is the ability for partners to provide their first-hand experiences as case studies which others can build upon.

The forum included four core components:

1. Attending partners pre-completed a template which allows benchmarking between attendees of their risks, performance, operational safety management systems and development progress;
2. Identification of trends amongst partners that have occurred over the duration of the forums which are discussed;
3. Guest speakers provide presentations on relevant topics; and
4. A workshop session is held the day before focusing on a key risk and mitigation solutions for the sector.

Within these core components the key sessions for 2022 included:

- Ice Breaker session – TAC's Passive Alcohol Driver Detection System fitted to a RAV4; and road safety corporate social responsibility;
- Pre-Covid and Post-Covid insights on fleets and workplace road safety;
- Vehicle selection and what is fit-for-purpose for utilities;
- Telematics, implementation, application, and monitoring systems;
- New world the utility sector is operating in – CGU;
- Understanding key risk exposure compared to other sectors;
- Understanding driver fatigue, innovative research, and emerging technologies.

The 2022 Utilities Forum

Icebreaker kindly sponsored by TAC

The 2022 icebreaker was sponsored by TAC and hosted by Transurban at their City Link Facility and attended by 20 partners including guest organisations Australian Automobile Association, Ganbina and Monash University Accident Research Centre. The venue provided easy access to a car park and large meeting room where TAC could not only share two pilots underway but demonstrate a RAV4 fitted with the real-world technology. The pilots included:

- **Passive Alcohol System (PAS)**

The Transport Accident Commission in partnership with the Driver Alcohol Detection System for Safety (DADSS) Research Program, from the US, has brought the technology to Victoria to develop plans for a fleet trial. The PAS technology detects alcohol in a driver's breath when they first enter the vehicle, which is significantly different from existing ignition interlocks and breathalysers.

To demonstrate the technology TAC has fitted a Toyota RAV4 with PAS which allowed partners to sit in the vehicle and experience the technology first hand.



Vehicle manufacturers and Tier 1 suppliers planning on integrating the DADSS sensor/system into their products, will have the final say on how the system functions within the vehicle. The DADSS sensor/system will provide a signal output that is proportional to the Blood Alcohol Concentration (BAC) measured. That output will be provided to and used by an onboard decision module or control module within the vehicle.

That module will respond to a positive BAC measurement above a given threshold in one of two ways:

1. Allow the vehicle's engine to start, but lock the transmission; or
2. Lock the vehicle's ignition so that engine will not start.

Disabling or inhibiting the sensor through nefarious means will result one of the 2 actions above being taken. Neither gets the vehicle operator very far.

In terms of fleets, the DADSS technology eliminates the risk of workers driving the vehicle if they have an above threshold BAC level and thus potentially harming other road users. The vehicle remains immobile allowing the organisation to address the issue through other supportive policies.

- **Empowr Mobility**

Empowr is a NRSPP social enterprise which is exploring how to lease ex fleet 5 Star **ANCAP** vehicles to aspiring mobility disadvantaged young people and promote safe driver behaviour. The pilot vehicles are fitted with an in-car behaviour change platform that captures driver data and provides insights and nudges to encourage positive driving behaviour.

The TAC funded pilot commenced on 5 October 2021 and provided two vehicles, supplied by IAG, to individuals at two community groups, **Ganbina** and **Barwon Water**, and field trials commenced from the 4th July 2022. Ganbina received a fifth vehicle for their general community engagement program, however this vehicle was not fitted with the Empowr technology. The pilot concluded mid-October 2022 and the three vehicles supplied to Ganbina remained with the drivers following the conclusion of the pilot for another three months. The following page has the two insights from the midway report.

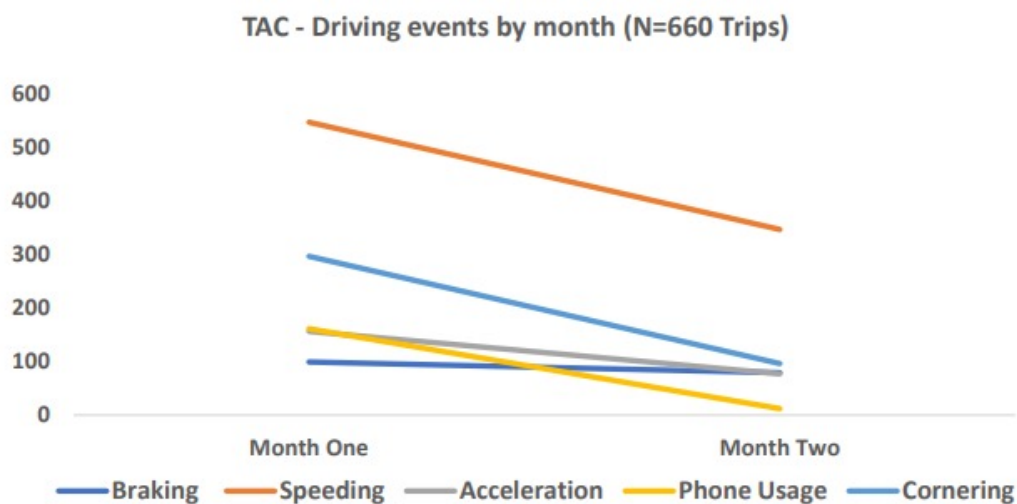


Figure 1: TAC – Aggregated driving performance by events by month

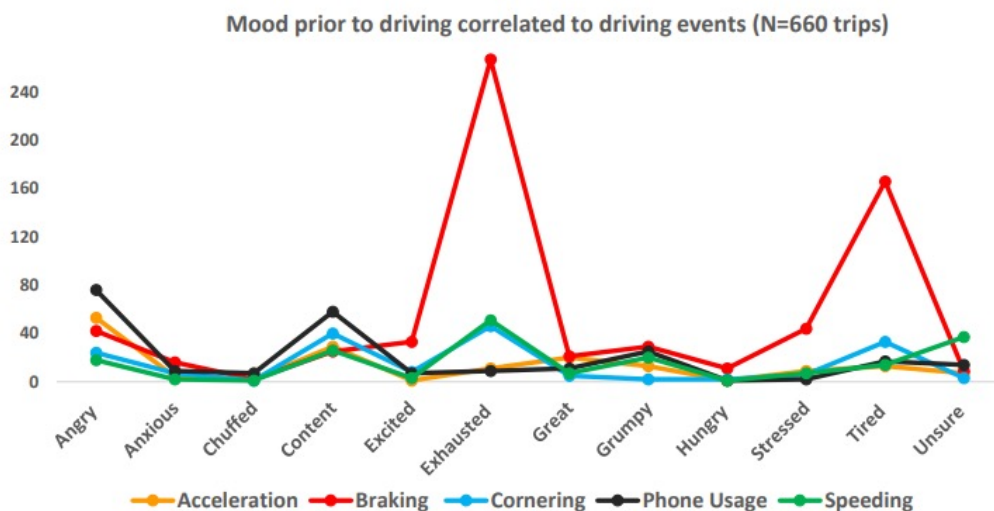


Figure 3: TAC – Mood prior to driving correlated to driving events (N=1842) over time months 1-2

- Ice Breaker Dinner featuring [Katherine Teh](#)

The 2022 dinner was held at a private function venue where Katherine Teh touched on the importance of utilities companies' social licence to operate, and challenged the partners to consider emerging disruptions to fleet operations through electrification of the fleet and the fourth industrial revolution. As part of the disruption, Katherine presented ideas of how to bring their workforce along on the journey through a change management approach known as DAVE – (Declare, Acknowledge, Vision and Evaluate).

2022 Forum kindly hosted by APA Group

Once again, the forum was conducted under Chatham House rules, and this led to an open and generous sharing of information, issues, and solutions. Due to an emergency gas supply related issue the venue has to be shifted from APA Group Board Room to Holiday Inn conference room. Participants were provided with a copy of the entire exhibit pack of analysed data for the discussion.

Key outcomes of the facilitated morning sessions focused on understanding the key safety issues common throughout the participant group including;

1. Facilitated discussion on the data in context of what was of interest to participating organisations, rather than sequentially presenting all the data findings
2. Focused presenter/workshop discussion style on a key risk(s)
3. A wrap up, review of key risks, forum feedback and planning for the following.

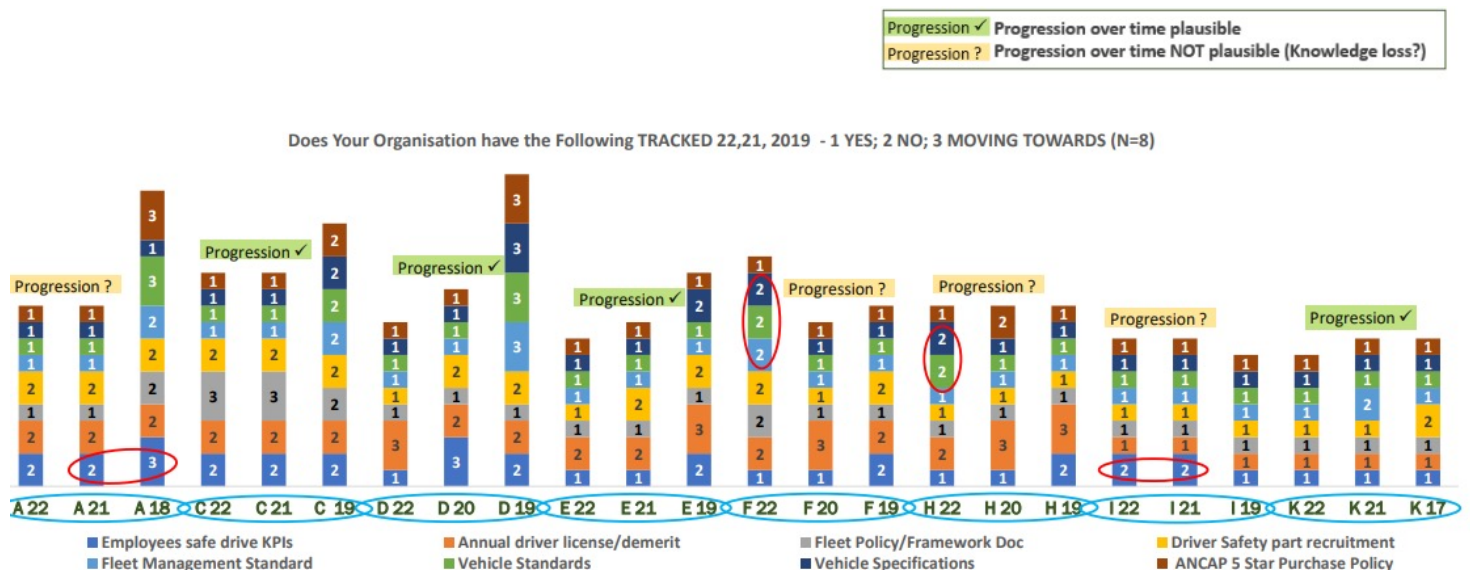
Key findings from the Forum

At the commencement of the forum attendees were invited to share what they wanted out of the day, three key themes emerged:

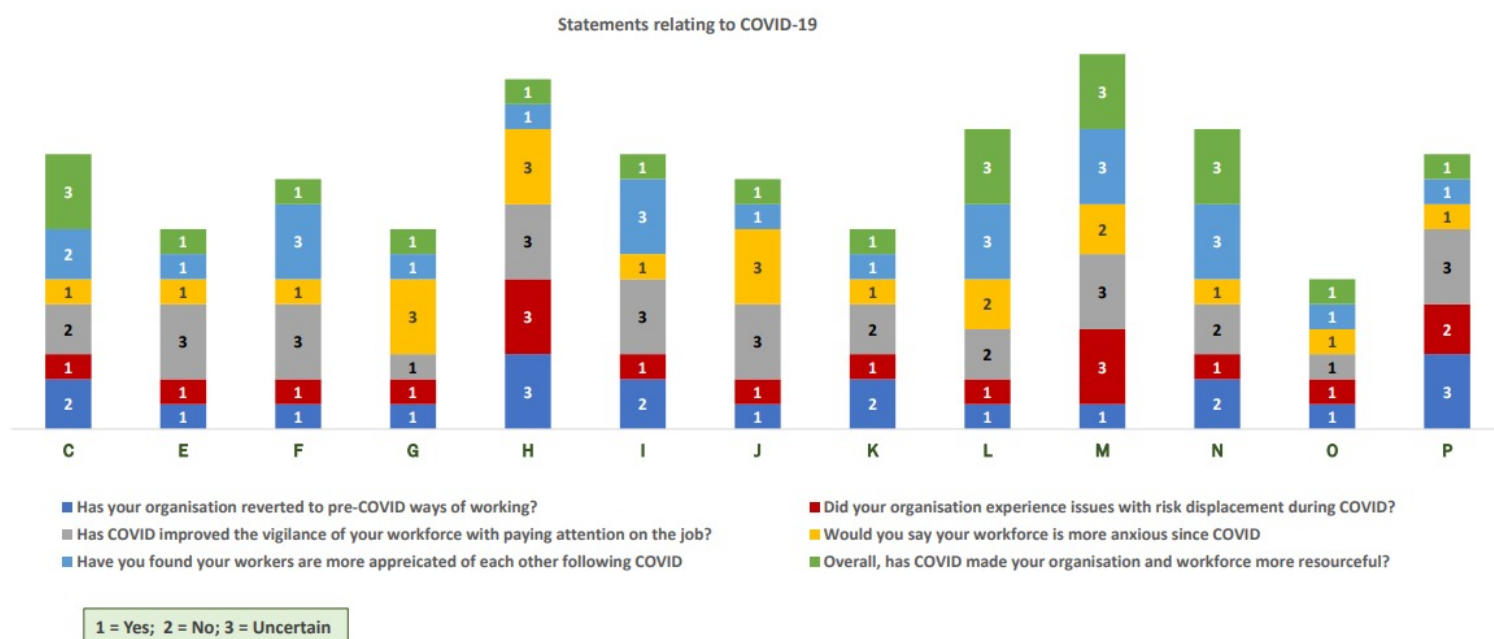
1. To have a chance to look ahead, see the big picture and what trends may be emerging as a sector instead of just being bogged down in day-to-day operations;
2. Understanding key issues and how different peers are approaching them; and
3. To better understand data and how different culture, performance and systems may influence it.

There were several key findings which emerged on the day which were:

- Significant turnover of leadership and key staff has occurred since the last forum in 2019 which has resulted in knowledge loss with regards to systems, processes, and mitigations – s



- A vehicle related issue which one organisation thought was unique to them, was being experienced by two other member partners who utilised the same vehicle;
- Introduction of the 5-star ANCAP ratings expiry period raised questions over what is the safest fit-for-purpose vehicle for utility companies;
- When combined, human factors were identified as the key risk for the sector in relation to fatigue, driver distraction and work-related stress;
- Covid-19 disrupted all partners, but most saw it as an opportunity to utilise to create new habits, as indicated in the figure below;
- A barrier that exists was the ability to sustain and create the new culture because of work force changes in leadership, personnel and fatigue from major event disruptions being the norm through drought, fires, floods and Covid-19;
- All partners had an Alcohol and Other Drug policy and welcomed the TAC session featuring the application of the Driver Alcohol Detection System which is being piloted on the RAV4 which would make alcohol a more manageable risk.



Areas for Improvement

Since 2017, 36 utility partners have contributed to the Utilities Forum with a core cohort of ten remaining constant throughout. Some partners only attend when the forum is held in their state. A key issue for the 2022 forum was several partners withdrawing citing high levels of staff turnover as the key reason why. Additionally many of those who withdrew also cited being overwhelmed and exhausted because of Covid-19 and the number of extreme weather events resulting in the utility sector companies being overloaded with reconnecting customers services.

Another point the partners raised which they felt strongly about, was that there was to be no leeway with attendee's being admitted to the forum without making the effort to complete the template. Those who completed the template, felt that those who did not make the effort to complete benefited from those who did. Equally delaying completion post the closure date inhibits the value of the data analysis as delays mean a simple top-level analysis is all that is possible rather than a deeper more meaningful analysis.

As a result of this discussion the forum organisers suggested changing the format of the template to online where possible to reduce the burden of completing manually as is the current format. The entire template was added to an online survey for members to record which questions were relevant and crucial and which were not so relevant. They were also asked to nominate if they would prefer an online or manual completion format for each question.

The current Utility Forum template collects data in the following categories.

- Business Profile
- Fleet Size
- Ownership & Management Model

- Operating Environment & Utilisation
- Technology Profile
- IVMS Purpose & Priorities
- IVMS Thresholds
- How were IVMS Thresholds determined?
- Organisational Policies
- Information Capture
- Hazard Reporting
- Driver Training
- Journey Management
- Journey Management Documentation
- Driver Behaviour Data
- Infringement Types
- Infringement Details
- Insurance & Crash Data
- Incident Profiles at Fault, Not At Fault
- Priority Transport Risks
- Fatigue Management
- Forum Expectations

The results of the survey to members concerning changing (or not) the template content and format for future forum events will be tabled at the next Executive meeting to be held late Feb 2023. The outcome of this discussion and agreed preferred method for completed the template will be communicated to the group.

It is likely that the option to complete parts or all of the template manually will remain available to those partners who prefer to do so.