## PARTNERSHIP

PROGRAM

# 2018 Utilities Forum: 11 October 2018 APA Head Office - George St - Sydney Report

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Prepared with support from the Utilities Forum Working Group and NRSPP Partners



### **Attending Delegate Organisations:**

APA Group | AusGrid | Electranet | Epic Energy | Essential Energy | Ecolab | Horizon Power | Nestle | NBN | Santos | SA Power Networks | SA Water | Telstra | Water Corporation

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### **Summary**

In 2015, the National Road Safety Partnership Program. (NRSPP) recognised the value of a national forum specifically for utility businesses from around the country. The first event took place in Glenelg, Adelaide hosted by SA Power Networks and has now become a strongly supported annual forum bringing together major utility organisations from around Australia. This sector is characterised by complex and diverse fleets and the forum provides an opportunity to identify common transport risks and how they may be mitigated.

The overriding purpose of the event is to provide a forum where organisations from the utilities sector can discuss their major transport risks, how they are mitigated, benchmark road safety performance and how the KPIs are influenced.

In 2018, the forum was held in Sydney, hosted by <u>APA Group</u> (APA) and was again strongly represented by utilities from across the country. The day prior to the forum delegates were also offered two unique opportunities, the first was a visit to <u>Crashlab</u> to watch a live <u>ANCAP</u> crash test, and the second a networking dinner including an informal Q&A with <u>Professor Ann Williamson</u> and <u>Dr Carmel Harrington</u> on driver distraction, sleep and fatigue.

The forum achieved the following key outcomes:

- Through the Utilities Forum Template, which partners completed ahead of the day, an understanding of participants' capabilities and limitations with respect to fleet management data and key lag and lead safety performance indicators.
- A strong industry specific repository of fleet profile and risk data.
- Understanding of key safety issues common throughout the participant group including;
- Facilitated sharing of learnings and information on what worked for other organisations, what did not work and what pro active approaches have been implemented by other organisations.

- The development of a strong peer network that was evident through the formal sessions and continued informally throughout breaks during the day and the evening's networking event.
- The industry led development of solutions to organisational transport risks, specifically, developing and implementing innovative fleet safety and management solutions through peer network.
- Developing improved driver and fleet safety culture, reducing vehicle incidents and near misses while maintaining peer communications and learnings on fleet safety and management.
- Recognition by participants that the forum fulfilled expectations, and that they will continue to engage with the working group and attend future events.

At the conclusion of the forum, participants were asked to provide feedback on the event. A short questionnaire covering aspects of the profile template, workshop format, content and delivery was provided.

Overall feedback was overwhelmingly positive and the outcomes, comments and feedback documented during the event provide strong support for the continuation of the program in a manner and frequency to be determined by the working group.

The 2018 forum really focused on discussion and networking between partners around key topics and risks. A criticism of the 2017 forum was there was not enough discussion time allocated which based on the feedback was addressed. In fact, the partners want more in 2019 on the systems and managing risks and less on lead / lag indicators. The Chatham House rules and strong trust built over the four years has helped with the forum dynamics.

The forum agreed that another will be held in 2019 with the date and location yet to be finalised.

#### Introduction

In 2015, the NRSPP recognised the value of a national forum specifically for utility businesses from around the country. The first event took place in Glenelg, Adelaide hosted by SA Power Networks and has now become a strongly supported annual forum bringing together major utility organisations from around Australia. This sector is characterised by complex and diverse fleets and the forum provides an opportunity to identify common transport risks and how they may be mitigated.

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### **Background**

The Australian utilities sector is diverse, often state and service sector focused in its operations, it does however extend to national organisations operating in multiple jurisdictions. their activities generally demand transport related operations using a complex mix of vehicles to undertake the services they are responsible for. Vehicles range from light to heavy and often include customised vehicles for specific tasks relating to the asset. Depending upon the utility provider, maintaining the company's assets may also include establishing and servicing roads to access them. These road assets may be publicly accessible or solely for the use of the utility provider.

The establishment of the Utilities Forum facilitated knowledge sharing across states, services and organisations. It provided an opportunity for utilities operating in all states to meet in a single location with an aligned and focused purpose, that being road transport safety.

## Scale of the Road Safety Problem



Worker fatalities involving vehicles 2007-2016

Australian research indicates that road crashes are one of the leading causes of work-related fatalities, injuries and absences from work. Over the years 2007 to 2016, nearly two thirds of worker fatalities in Australia involved vehicles. Of those vehicle related fatalities 45% were due to collisions on a public road. Staggeringly, <u>Safe Work Australia</u> statistics also indicate that 59% of workplace bystander fatalities are due to a vehicle collision.

### In the 14 years from 2003 to 2016









Figure 1 Infographic - Source Safe Work Australia

The latest published data (Safe Work Australia) shows that the transport, postal and warehousing sector had the highest number of workplace fatalities for 2016. The utilities sector (categorised as electricity, gas, water and waste services) also shows an increased proportion of fatalities in 2016 compared to its 10-year average, whilst the information, media and telecommunications sector remains largely unchanged.

The number of fatalities in the utilities sector places it as the fifth highest source in the latest data, however the rate at which worker fatalities occur is actually the third highest at 5.8 fatalities per 100,000 workers in 2016. This rate is significantly higher than construction and mining at 3.3 and 2.7 fatalities per 100,000 respectively.

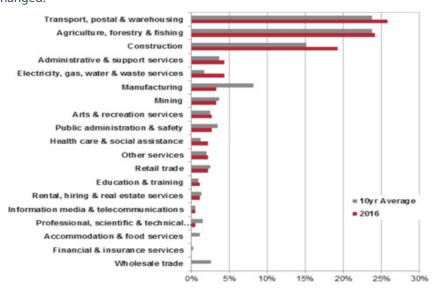


Figure 2 Fatalities by Sector

Against this industry backdrop, focused effort continues nationally to reduce road trauma in the community. <u>The National Road Safety Strategy (2011-2020)</u> aims to reduce road crash fatalities and serious road crash injuries by 30%. In the case of fatalities this equates to a reduction from a baseline of 1426 road fatalities per annum to a figure of around 1000.

In the period 2011 to 2016, actual results remained on trend, however data to August 2018 shows a plateau around 1200 fatalities per annum.

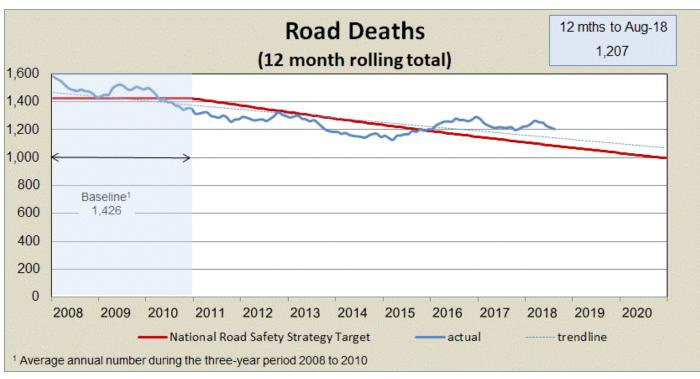
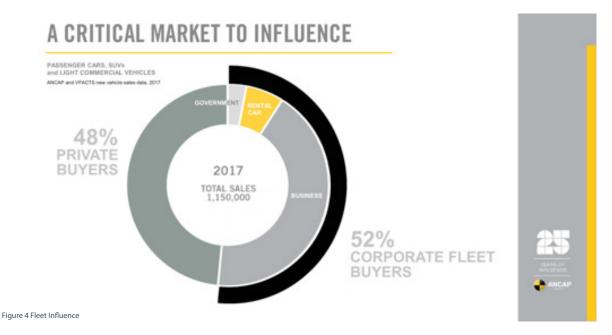


Figure 3 Fatalities National Road Safety Strategy Target

Fleet owners and operators significantly influence the use of vehicles and are responsible for over 50% of all new vehicle purchases. Decisions made on 'fit for purpose' purchase and use of these assets can directly and positively affect the safety of all road users and influence the make-up of carparks in Australia for a decade or more into the future.

As a significant industry sector, Utilities can influence of the quality and specification of vehicles that colleagues, family and friends drive and interact with on the roads each and every day.



Percentage of vehicles purchased by fleet

**52**%

Research also shows that work related road crashes cost the Australian community approximately \$1.5 billion annually (Davey, 2005). Further, based on Australian workers compensation data, work related road crash injuries are estimated to cost approximately \$500 million per year.

Safe Work Australia (2017) provided NRSPP directly with data that outlines the claims data for the electricity, gas and water sector and the communications sector. The data showed overall reductions in the number of serious claims from 1240 in 2010/11 to 895 in 2014/15 for the electricity, gas and water sector and from 700 to 590 over the same period for the communications sector. The median compensation paid in these respective sectors increased from \$13,433 in 2010/11 to \$16,117 in 2014/15 for the electricity; gas and water sector and decreased from \$11,600 to \$10,500 for the communications sector.

Electricity, gas and water	2010/11	2011/12	2012/13	2013/14	2014/15
No. of serious claims	1250	1180	1015	960	895
No. of serious claims involving vehicles	65	75			
No. of serious claims involving vehicles for 2010/11 to 2014/15					240
Incidence rate (serious claims per 1000 employees)	5.7	6.3	4.9	5.3	5.8
Frequency rate (serious claims per million hours	3	3.3	2.6	2.7	3.1
Median time lost (weeks)	9.8	9.8	9.8	9.8	9.8
Median compensation paid	\$13,433	\$15,267	\$16,933	\$22,783	\$16,117
Information media and					
Information media and telecommunications	2010/11	2011/12	2012/13	2013/14	2014/15
	<b>2010/11</b> 700	<b>2011/12</b> 755	<b>2012/13</b> 600	<b>2013/14</b> 610	<b>2014/15</b> 590
telecommunications					
No. of serious claims	700	755			
No. of serious claims  No. of serious claims involving vehicles  No. of serious claims involving	700	755			590
No. of serious claims  No. of serious claims involving vehicles  No. of serious claims involving  vehicles for 2010/11 to 2014/15  Incidence rate	700 65	755 75	600	610	590 <b>325</b>
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Source: ANCAP / VFacts 2018

## Forum Methodology

The Utilities Forum Guiding Partners consist of Epic Energy, Essential Energy, Hyrdo Tasmania, Origin Energy, SA Power Networks, SA Water, Telstra, Water Corporation and CGU/IAG who steer the direction and development of the forum.

For 2018, forum development was relatively unchanged from previous years with regards to the collection and analysis of data and structure of workshops. The reason for this was based primarily on feedback provided by delegates in 2017, the wider partner cohort and a recognition in the value of consistent historical trend data.

The most significant change for 2018 was the introduction of a site visit (the ANCAP crash test) and a networking dinner that comprised informal presentation/Q&A the day before.

Based on participant feedback, these changes significantly added value to the overall event.

#### Stage 1. Develop a Profile and Risk Template

A data template was developed with the assistance of the working group, for 2018 comprised 20 key data capture categories and over 100 fields and provided detailed B2B and trend insight.

No.	Description	No.	Field
1.	Business Profile	11.	Hazard Reporting
2.	Fleet Size	12.	Driver Training
3.	Ownership & Management Model	13.	Journey Management
	Operating Environment & Utilisation		
4.	Documentation	14.	Journey Management
5.	Technology Profile	15.	Driver Behaviour Data
			_
6.	IVMS Purpose & Priorities	16.	Infringement Types
7.	IVMS Thresholds	17.	Infringement Details
, ,	Time Time Should	171	igemene Details
8.	How were IVMS Thresholds determined?	18.	Insurance & Crash Data
9.	Organisational Policies	19.	Insurance Incident Profiles
10.	Information Capture	20.	Priority Transport Risks

Table 2 Data Capture Template - Key Categories

The template was distributed prior to the forum and data was collected, collated and prepared for presentation at the event. The data was then used as a framework for discussion on the day, and also used to produce benchmarking reports.

The template is instrumental in developing resources and the agenda for the forum.

#### Stage 2. Conduct Utilities Forum

After the preceding three events in Adelaide, Melbourne and Perth, APA kindly hosted the fourth event in their George Street Sydney head Office.

Thirteen delegate organisations attended the day and two utilities provided data but were unable to attend. By changing the location of the forum each year, the attendee profiles do change, however it is an equitable solution and popular with utilities forum partners. Although a slightly lower number of Utilities attended as compared to 2017, representation within attending organisations was stronger than previous years. Further, those unable to attend reiterated their continuing interest and engagement with the forum.

Similar to the previous year's forums, the event followed a structured format that comprised the following:

- welcome and overview of the NRSPP
- setting the scene
- ascertaining the size and scope of the transport safety risk
- identifying what participants want to get out of the forum
- · identifying what has changed
- presenting the profile and benchmarking data captured in the template
- facilitated discussion on the data in context to participating organisations
- a dedicated workshop on vehicle mass and payload considerations delivered by Chris Dhu from <u>Essential</u> <u>Energy</u>
- a wrap up / review of key risks and planning for 2019

The most significant departure from previous events was the ANCAP crash test site visit and networking dinner the day prior. These events significantly enhanced the dynamic at the forum by providing opportunity for participants to interact prior to the day and by delivering additional rich and relevant road safety knowledge.

#### Stage 3. Feedback Forms

Forum participants completed a feedback form at the end of the forum. This will be used inform the template design, content and format of future events.

#### The 2018 Utilities Forum

The Utilities Forum provides a unique opportunity for the sector to discuss their major transport risks, how they are mitigated, benchmark road safety performance and how KPIs are influenced.

On day prior to the forum, attendees participated in viewing an frontal ANCAP crash test followed by an interactive session facilitated by CEO of ANCAP, James Goodwin, and a range of vehicle engineering experts. Utility providers were able to ask the questions the burning questions specific to their interests relating to what makes the vehicle safer but equally how to balance this with performance and loading. Of course, our delegates are seasoned professionals, nevertheless there was a palpable excitement as they lined the glass gantry above the crash test area and an audible collective gasp as the test vehicle violently impacted the crash stand.

Shortly after the event, we were taken onto the Crashlab floor for a close-up inspection of the vehicle and a review of the raw video footage and the session facilitated by James Goodwin afterwards was generous in both time and shared information.

Information supplied by ANCAP included broader industry fleet survey results that showed increasingly sophisticated fleet safety requirements.

The ANCAP Crash Test was followed by a dinner event where Professor Ann Williamson and Dr Carmel Harrington led a discussion regarding sleep and driver distraction. Of particular relevance is the release of findings from the recent Australian Naturalistic Driving Study which Ann was part of. The discussion focused on the key distractions, how sleep relates and can amplify effects and then how this can be managed by utility companies. By the end of day one, delegates were already deep in discussion, sharing information and ready for the forum.

## FLEET SURVEY RESULTS

- 91% have a vehicle selection policy which includes a minimum ANCAP safety rating:
  - o 56% required a 5 star minimum
  - o 38% required a 4 star minimum
  - o 6% were unsure
- 47% require autonomous emergency braking (AEB) to be fitted.
- 42% require lane support systems (LDW and/or LKA) to be fitted.
- 22% required speed assistance systems (manual speed limiter and/or ISA).
- 64% request the aftermarket fitment of cargo barriers.
- 43% request the aftermarket fitment of bullbars.
- 21% request the aftermarket fitment of upgraded suspension.
- · 5% request the aftermarket fitment of rollover protection systems.

YEARS OF INFLIENCE

Figure 5 Fleet Survey results provided by ANCAP

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The formal workshop (October 11th) was hosted by APA at their Sydney offices. Also joining this year's forum were Ecolab and Nestle who had similar light vehicle fleet types to the utility sector.

Once again, the forum was conducted under **Chatham** House rules and this led to an open and generous sharing of information, issues and solutions. The facilities provided by APA were excellent with a layout that was highly conducive to a facilitated workshop environment.

Delegate expectations for the day included insight into:

- **Policy**
- Providing a safe mobile working environment
- Understanding and solutions for Mass and payload issues on light commercial vehicles
- Options to lobby and influence vehicle suppliers.
- As the group moved through the agenda, different road safety issues within the industry were discussed. Including:
- Scope of the Problem and Risks;
- Demographics of Organisations Involved;
- Systems and Process Development;
- Technology;
- Lead Indicators; and
- Lag Indicators.

Throughout these agenda items, several key topics emerged. Discussions tended towards the use of telematics, telematics thresholds, driver behaviour and mass limits for light commercial vehicles.

Discussions throughout the morning and early afternoon worked through common themes and this provided strong segue into the afternoon workshop topic. This session facilitated by Chris Dhu of Essential Energy, provided a detailed insight into issues and solutions for mass and weight limits of Light Commercial Vehicles. Of particular interest was how tool of trade builds can dramatically affect the mass limits on axles, shift weight balance, limit payloads and increase braking distances.



Figure 6 2018 Utilities Forum Workshop - delegates in action

As the group moved through the agenda, different road safety issues within the industry were discussed. Including:

- Scope of the Problem and Risks;
- Demographics of Organisations Involved;
- Systems and Process Development;
- Technology;
- Lead Indicators; and
- Lag Indicators.

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The workshop session also included a live demonstration of the **Pedders Suspension** on-line fleet weight matrix calculator. After substantial interest from delegates at the forum, access to the calculator has now been granted to Utilities Forum partners courtesy of Pedders via the NRSPP.

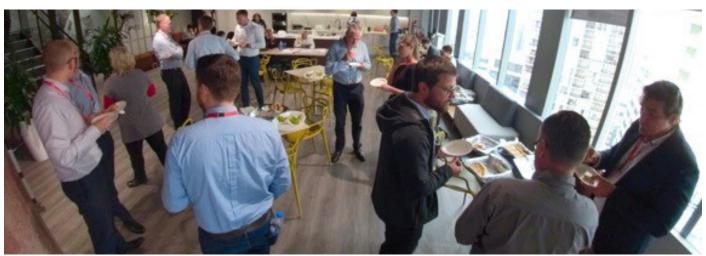


Figure 7 Delegates enjoying APA's hospitality during a break



Figure 8 Mobile Asset Mass - workshop

## **Template Data**

The presentation of data obtained from the templates was relevant, understood and appreciated, providing the catalyst for informed discussion during the day. For instance, although only 7% of respondents hadn't implemented (or commenced implementing) a five-star ANCAP policy actual numbers lag behind policy. The introduction of new safety features takes a number of years, this is seen in the template data. It also correlates with ANCAPs insight into the average age of Australian vehicles and the time required to make sweeping changes to the profile on our roads.

ANCAP 5 Star operational manual vehicles - 60%

**ANCAP 5 Star operational automatic Vehicles - 80%** 

Participants also indicated that the development and implementation of transport related policies and measures had progressed over the last twelve months, this can be seen in the following charts.

## Systems and Process Development

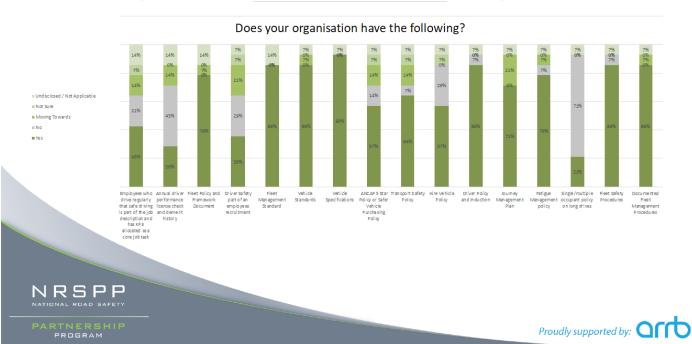


Figure 9 Systems and Process Development

Proudly supported by:

## **Lead Indicators**

#### Overview

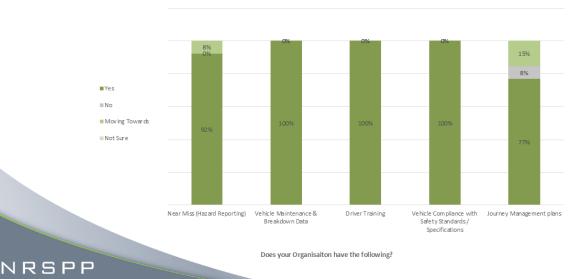


Figure 10 Lead Indicators Overview

## **Lead Indicators**

An example of an organisation who has been part of the NRSPP Utilities Forum since 2016.....

Lead Indicators	2016	2017	2018
Near Miss (Hazard Reporting)	YES	YES	YES
Vehicle Maintenance & Breakdown Data	<b>Moving Towards</b>	<b>Moving Towards</b>	YES
Driver Training	YES	YES	YES
Vehicle Compliance with Safety Standards / Specifications	YES	<b>Moving Towards</b>	YES
Journey Management plans	Moving Towards	<b>Moving Towards</b>	YES

Figure 11 Participant Example - Lead Indicators

Another aspect captured in the template data related to IVMS / Telematics solutions and priorities. During the forum this led to lively discussion on the technologies, implementation, thresholds, monitoring and management policies of organisations. A takeaway from this discussion was that for some organisations IVMS introduction is still in an early phase and that organisations still grapple with the technology, use and organisational culture. Organisations with more mature telematic systems in place are happy to assist peers with implementation thus avoiding costly and culturally implementation mistakes they have made.

# In-Vehicle Monitoring System Priorities

#### **Light Commercial Vehicles**

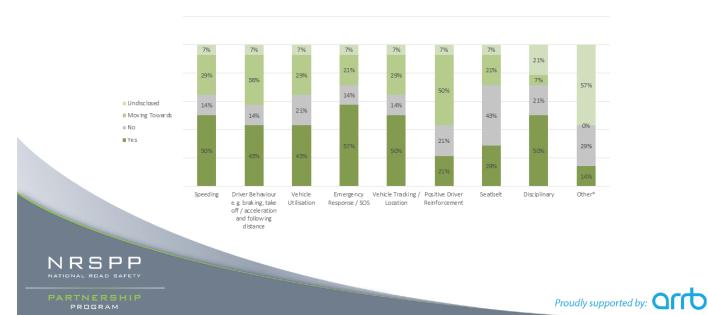


Figure 10 Lead Indicators Overview

## **Determination of IVMS Thresholds**

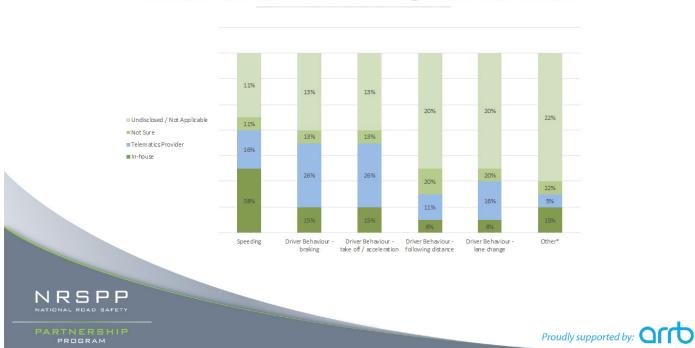


Figure 13 - How do you determine IVMS thresholds?

In 2018, participating organisations were once again asked to profile their organisation and fleet management operations. The information provided reveals a diverse range of operations, fleet management and funding preferences.

## **Participant Overview**

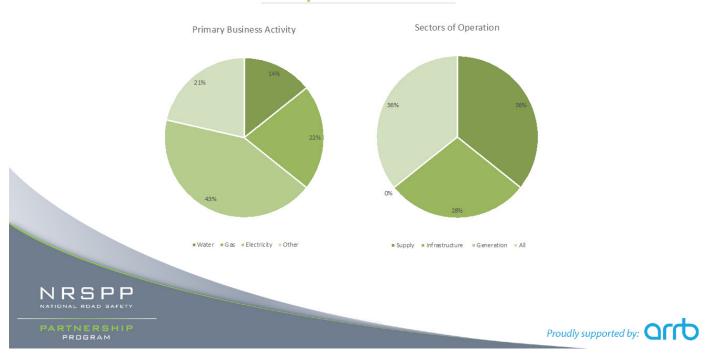


Figure 14 - Primary Business Activities

# Ownership Model Overview



Figure 15 Ownership and Fleet Management Models

The quality of discussion throughout the day was exceptional and whilst key themes remained on track, rich insight provided by participants ensured value to all that were in attendance.

In relation to larger risk issues all were in agreement at a strategic level, however it was within these conversations that elements such as the following came to the fore:

- Dropped trailers
- Heavy vehicle 'rollaways'
- Harassment of workers based on their organisation (branded vehicles)
- GVM upgrades compromising the effectiveness of calibrated computer-based systems.

Prior to closing the event, delegates were asked to consider how the forum had gone and what they'd like to see in 2019. A number of points were captured in that discussion and participants were also invited to provide more detailed feedback at the end.

Discussion points for consideration in 2019 included:

Don't make the event too big, but;

- diversity of industry sectors could be beneficial (e.g. .
   Nestle and Ecolab in 2018)
- video conferencing for those unable to attend in person
- more focus on CoR and vehicle design

Overall, there was strong agreement on the value of the forum and that the site visit and networking dinner was well liked.

### **Opportunities & Actions**

With a full day of rich discussion, opportunities for the development of additional resources was abundant. An extensive list of potential items identified for the utilities group in 2019 included the following:

#### 1. Questions & Answers

- Risk management of deliveries
- Power to Weight Ratio in Vehicles
- What are the traits of safer drivers?
- How does the technology work in a vehicle?
- How to introduce an Alcohol and Other Drugs Policy?
- How does lifestyle impact workplace road safety?
- Culture and complacency and ensuring a continuous improvement approach.
- How do you treat breaches?
- What is the right measure for vehicle asset utilisation that drives both safety and efficiency?
- Are incentives driving the wrong behaviour jobs, sales, repairs, etc.
- Telematics how to best use the data to drive culture?
- Balance of privacy with safety.
- How do we extend safety measures to contractors?
- Mass load of trailer and how does that affect the GVM and related issues of light vehicles?

#### 2. Poster

- Develope a poster on risk management of deliveries in conjunction with NRSPP.
- Develop with the NRSPP an educational poster for shift workers to educate on risks of driving following knockoff.

#### 3. Fact Sheets

- Electric Vehicles Safety Feasibility.
- Top 5 most common crashes and what vehicle technology can help mitigate these.
- Telematics thresholds what should they be and why.
- · Mental health and relationship with the road.

#### 4. Ouick Facts

Mental Health and Transport

## Participant Feedback

At the conclusion of the forum, participants were asked to provide feedback on the event. A short questionnaire covering aspects of the profile template, workshop format, content and delivery was provided. Some questions invited a simple scored response (1-5) with 5 being the best, others a brief commentary.

The feedback received was positive and constructive. Participants strongly endorsed the content and format of the event and interest in attending future forums. Feedback was predominately in the 4/5 range with a few 3s relating to the data presentation, data questions being better broken down and data collection in the template. That being said, there were comments regarding the more data collected the better as helped the partners compile all relevant data and systems into a single annual reference point.

Did the forum fulfil your reason for attending?

All partners provided a 5 demonstrating it was worth attending with comments such as "Provide wider scope for my own SHE scope to improve?"

#### **Presntations:**

 ANCAP was a stand out session. Understanding the context, scope and value to the marketplace ensures a better understanding of the rating system.

#### What else respondents would want to see next year:

- Utilise interactive tools with webcasting polls to help further enhance interaction.
- What modifications are doing to utility vehicles and how they impact safety

#### What respondents said about that data template:

 Break down the detail further such that more data is collected; Expand on the template questions further; collect the data but no need to present it all, look for where there are trends / changes or alignment with key risks identified.

#### Potential 2019 attendance:

 Keep focus on utilities or those closely aligned with similar fleets to ensure dialogue remains tight on common risks.

For further information please refer to

nrspp.org.au