

13 August 2020

The Committee Secretariat
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2000

Dear Joint Select Committee on Road Safety

Questions on Data, Targets, Speed Management and Road Standards

On behalf of iRAP I am pleased to provide the following response to your questions on notice dated 30 July 2020.

1. **Data:** What nationally consistent data relating to vehicle accidents would you like to see collected, and which body should collect the data? Should the data be made public?

In addition to the timely and harmonised reporting of fatality and importantly serious injury information as outlined in the Inquiry into the National Road Safety Strategy recommendations (TOR 1 and Recommendation 5); the National Trauma Registry agreed datasets and recent recommendations of BITRE and Austroads, iRAP encourages the routine reporting of the following:

- Immediate reporting of hospitalisation data (24 hour definition) that is already available as part of patient data entry systems
- Reporting of ICD10 codes of injury from every level of hospital (rural, regional and city)
- Accurate geo-coding of the information for ultimate mapping purposes
- Annual AusRAP Risk Mapping of casualty crashes per km and casualty crashes per kilometre travelled (e.g. as per UK, Spain) – with data provided by States and published by the AusRAP hub. This can support Hon. Min Thistlethwaite's suggestion for sat-nav apps.

This day to day body count (reported from the health system) and annual geo-spatial mapping must be visible to the Standing Committee if established, the Office of Road Safety and public.

To shine a spotlight on the human and global impact of trauma iRAP has worked together with the Transport Accident Commission in Victoria – together with global partners – to produce the following resources:

- <http://www.tac.vic.gov.au/road-safety/statistics/online-crash-database/irap-road-injury-dashboard>
- <https://www.vaccinesforroads.org/human-impact/>
- <https://www.vaccinesforroads.org/global-impact-of-injuries/>

Daily reporting of this form would transform community and political support for action with the scale and urgency needed to ensure 400,000 Australians are not killed and injured between now and 2030. iRAP would fully support such initiatives

In addition to the individual human impact iRAP recommends the following:

- the Star Rating of the Vehicles involved in the crash
- the Star Rating of the Road where the crash occurred

This can be easily completed if the national Star Rating maps are already published and can also be easily completed using free iRAP tools such as the Star Rating Demonstrator to undertake a spot star rating at the scene of a crash (at the time or from a photograph). See <http://demonstrator.vida.irap.org/> and the example cross sections.

As discussed with Mr Pat Conaghan MP and Hon Sharon Bird MP in my hearing, the cause of a head-on crash is the undivided road; the cause of the run-off road fatality is the unprotected trees; the cause of the pedestrian death is an unsafe crossing with high speeds of traffic. Building a greater understanding and informing community debate with this information will create a unified appreciation that some roads are safer than others – and the opportunities to save lives and serious injuries with safer roads.

What Star Rating is Picton Road? You can do a quick calculation yourself with the [Demonstrator](#).

2. **Targets:** The 2018 Inquiry into the National Road Safety Strategy 2011-20 Report recommends the Commonwealth and states commit to an interim target of vision zero for all major capital city CBD areas, and high volume highways by 2030. Does your organisation support the Commonwealth and state governments adopting this target?

Yes.

If our goal is to be Vision Zero everywhere by 2050 – we must be Vision Zero in the high-risk high-volume areas by 2030; the regional networks and suburbs by 2040 and everywhere by 2050. It will focus attention on achievable sections of road. The actual length of road to reach the recommended 2030 target in CBDs and high-volume highways will be small, achievable and high-impact.

As an example, the Ai-RAP global partnership is mapping where 75% of motorised travel occurs worldwide to support the Global Road Safety Performance Target for >75% of travel on the equivalent of 3-star or better roads. In NSW that equates to only 5.9% of the entire network.

3. **Speed Management:** Does your organisation support the installation of point to point speed cameras on all Commonwealth funded roads in the future? Should the Commonwealth Government make the allocation of funding to the states conditional on this commitment being met?

Yes

Coupled with conditional road standards below the management of speed is critical. As an indication the Star Rating of roads is based on the maximum of the speed limit or actual operating speeds. Ensuring operational speeds align with the speed limit is an easy way to ensure the benefits of a well-designed road are not undone by avoidable speeding.

4. **Road Standards:** To what safety standard should all Commonwealth funded road projects be built? Should funding for projects be conditional on a particular safety standard being met?

All Commonwealth funded road projects on the National Highway network should be 4-star or better for vehicle occupants and 3-star or better in all other cases for all road users at the location.

All Commonwealth funded road projects on local government roads should be 3-star or better for all road users (pedestrians, cyclists, motorcyclists and vehicle occupants).

It is noted that technology and speed management solutions can always be deployed to meet these standards where the infrastructure costs are deemed prohibitive and justified as such.

Where Vision Zero outcomes are desired by 2030 any road projects should aim for 5-star performance (and justify any departure from achieving that standard with an associated body count or estimate of the lives lost and injuries caused because of the relaxation in standards).

These targets will support the TIC approved National Road Safety Strategy Action Plan https://www.roadsafety.gov.au/action-plan/2018-2020/priority_action_2 that seeks “to improve the star ratings across the whole road network, with the aim to achieve 3-star AusRAP ratings or better for 80% of travel on state roads, including a minimum of 90% of travel on national highways.”

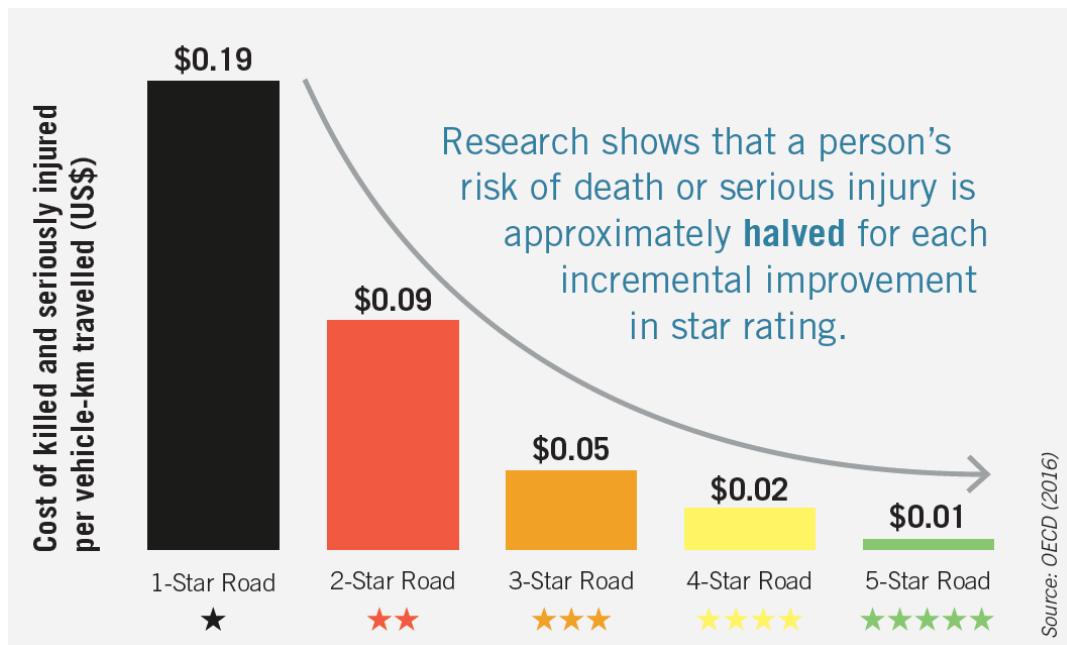
Examples of where this is already being used in Australia using Federal funding include:

- https://www.midlandhighway.tas.gov.au/about_the_action_plan and the June 2020 press release from the Premier of Tasmania (http://www.premier.tas.gov.au/releases/planning_the_final_projects_on_the_midland_highway)
- Bruce Highway monitoring by TMR and the case study of success (<http://resources.irap.org/General/IRAP%20Bruce%20Highway%20Case%20Study.pdf>)
- Recent investment prioritisation on the Princes Highway by Transport for NSW and to be designed by AECOM using the free Star Rating for Designs software.

This minimum standard would be aligned with the UN Member State agreed Global Road Safety Performance Targets of which Australia is a signatory. Refer Target 3 and Target 4 (https://www.who.int/violence_injury_prevention/road_traffic/12GlobalRoadSafetyTargets.pdf?ua=1). The same standard is recommended by the G20 (via the Global Infrastructure Hub hosted by Australia) as part of their specification on [Quality Infrastructure](#).



The rationale for this minimum standard is reflected in the OECD publication below and is the same standard applied by Development Banks in low and middle-income countries. This minimum standard was also summarised in the BITRE Report in 2014 (https://www.bitre.gov.au/sites/default/files/report_140.pdf) and has still not been applied.



<https://www.oecd.org/publications/zero-road-deaths-and-serious-injuries-9789282108055-en.htm>

iRAP Select Committee Submission excerpt

As provided in iRAP's full submission to the select committee in relation to the terms of reference (point d) regarding the incorporation of safe system principles the following section is reproduced for this question on notice.

"As an example, the following clause can be added to all Federal road funding allocations for both major projects and road safety targeted funding. Similar approaches are being adopted by high-income governments and low and middle-income country governments via the multi-lateral development banks.

"The new road shall be built to an 'x'-star standard for all road users. This includes for pedestrians, cyclists, motorcyclists and vehicle occupants where present. The before and after star rating and the before and after fatality and serious injury estimates shall be reported.

Before Star Ratings and Fatal and Serious Injury Estimate

Road User	★	★★	★★★	★★★★	★★★★★	FSI Estimate
						
						
						
						

After Star Ratings and Fatal and Serious Injury Estimate

Road User	★	★★	★★★	★★★★	★★★★★	FSI Estimate
						
						
						
						

The Federal Department and the Standing Committee could then have simple annual reports detailing the length of road and kilometres of travel moved to a 3, 4 and 5-star standard across the entire funding portfolio. This will provide good governance and reporting supportive of the current national targets agreed by Ministers for increasing the percent of travel on 3-star or better roads across Australia.

Within the safe system context iRAP is working with the European Union and other partners to ensure the combined performance of new driver assistance technologies, vehicle safety standards, road design standards and technology / ITS deployment are implemented to minimise the occurrence of death and injury. For further details see <https://eurorap.org/slain-project/> and <https://www.irap.org/2017/12/event-snapshot-innovation-2017/>.

As part of the global programme all AusRAP partners will immediately benefit from any breakthroughs and methodologies and global partners will benefit from Australian ingenuity.

While not the core expertise of iRAP, the approaches for the other elements of the safe system can be easily included. For example:

- All Federal Government National Highway investment shall include point to point speed cameras, distraction and seat-belt monitoring and rest areas to support safe user behaviour.
- In line with Federal Government leadership of vehicle safety (refer Recommendation 7 of the Inquiry Recommendations) to support ANCAP, Heavy Vehicle Regulation and rapid adoption and alignment with minimum European vehicle standards all major projects can include targeted communications with communities along new corridors about vehicle safety standards and potential incentives for after-market retrofit technologies.”

Concluding Statement

As highlighted in other submissions, iRAP stands ready to build on the current success and usage of the AusRAP programme partnerships across Government. We encourage and support local leadership and ownership of each RAP Programme and look forward to a great programme here.



As highlighted by The Deputy Prime Minister the Hon. Michael McCormack and Indian Transport Minister Hon. Nitin Gadkari in the event this week, the united focus of the IndiaRAP and AusRAP initiative can be the foundation for win-win infrastructure investment partnerships between the two countries that deliver on road safety targets.

The unified focus on 3-star and better roads also provides great aid and trade potential in the region (from Vietnam, Indonesia to the Pacific) as we work with our neighbours to help them meet the Global Road Safety Performance Targets.

New private and public-sector results-based financing partnerships linked to the 3-star or better targets are also being mobilised globally that ensure a common language, common specifications and an efficient industry response to meeting the global targets and ultimately halving road deaths and injuries by 2030 in support of the UN SDGs.

Yours sincerely

Rob McInerney
CEO, iRAP