

DECADE OF ACTION FOR ROAD SAFETY - WHERE TO NOW?

The Decade of Action (DOA) was instigated by the United Nations Road Safety Collaboration¹ (UNRSC) to initially stem, and then reduce, the rate of increase in road fatalities worldwide using mitigating activities nationally, regionally and globally. While the increasing rate of road fatalities has been substantially curtailed in the 8 years of the DOA to date, based on current progress the aspirational target of halving road fatalities by 2020 will not be met. A UN Road Safety Trust Fund was formally launched in April 2018 to help address this issue. Its objective is to work towards 2020 global road safety and then effecting actions to meet future 2020 – 2030 road safety targets.

ARRB



OVERVIEW

The Australian Road Research Board (ARRB), as a member of the UNRSC, is committed to supporting and practically assisting the UNRSC and the UN Road Safety Trust Fund wherever possible to meet its future road safety targets. A workshop was held at the recent 28th International ARRB Conference (Brisbane, 30 April – 2 May 2018) to engage with road safety practitioners to identify road safety initiatives that may be considered in the short to long term that will be expected to deliver road safety benefits. Workshop participants included prominent road safety personnel drawn from state and local government and industry, including from ARRB's team of senior road safety engineers and human factors researchers.

The workshop assessed the objectives, successes and limitations in the Decade of Action to date, and then considered opportunities to deliver substantial road trauma reductions by (i) 2020 and (ii) beyond (2020-2030).

Michael Tziotis and Paul Hillier (ARRB), and Rob McNerney (iRAP) started the workshop by outlining the context and objectives for the Decade of Action for Road Safety, before providing some insights into performance to date, particularly in Low and Middle Income Countries. Dr Anna Chevalier (ARRB) provided an epidemiology example to illustrate the effectiveness of a multi-faceted approach from another policy area (reduction in smoking) that might be a positive influence / guide to the road safety challenge.

ARRB has distilled the deliberations of workshop participants in this document and will issue it directly to the UNRSC and UN Road Safety Trust Fund Committee.

WORKSHOP SUMMARY

PREPARED BY
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¹ UNRSC was proclaimed by the UN General Assembly (UNGA)

WORKSHOP OUTCOMES

DECADE OF ACTION — SUCCESSES AND LIMITATIONS

Although it is obvious that the number of fatalities has not reduced at the rate desired over the DOA, it is recognised that the targets set were undoubtedly a stretch. There have been tangible positive benefits / successes from the decade – not least that the initiative afforded a much-needed focal point and common ‘language’ for road safety – and discussion has led to action. The projection of ‘do nothing’ over the decade 2011-2020 estimated 1.9 million road fatalities per annum, considerably more than the 1.24 million per annum currently identified. The influence during the decade of the Global Financial Crisis (GFC) and a healthy improvement in crash data collection and analysis (significantly improving under-reporting trends in many countries) can also be identified.

STRATEGIES

Workshop participants were asked to identify and share strategies and programs for each of the five pillars that could be implemented to deliver substantial road trauma reductions by 2020, and over the 2020 – 2030 horizon. The full list of strategies identified by workshop participants are detailed in the table below. While it is recognised that some of initiatives are known, or have been previously considered, the opportunity presented itself to identify new measures of relevance to an international audience, while also identifying those known initiatives that have a strong evidence base.

FURTHER INFORMATION AND DISSEMINATION

ARRB welcomes the opportunity to assist further with the development of priority actions and/or delivery of the initiatives themselves. Permission is granted to forward this document to others, and to reproduce parts of this document with appropriate acknowledgement.

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STRATEGIES FOR CONSIDERATION TO DELIVER ROAD TRAUMA REDUCTIONS

The following table provides a full list of the strategies identified during the workshop. The strategies documented are not necessarily condoned by all workshop attendees or by ARRB, but rather record the outcomes from the broader group. During the workshop, delegates also identified those initiatives which they considered to have the highest priority and/or potential for maximum gains (designated with a ‘*’; or ‘**’ for those considered likely to deliver the greatest impact).

ROAD SAFETY MANAGEMENT

2018 - 2020	<ul style="list-style-type: none"> • Consistent and effective speed limits in single carriageway environments (**) • Accountability with focus on evidence-base decisions (*) • Prime Minister accountability (*) • Meaningful speed and road rules enforcement • Better advertising: simple road rule ads, less ‘soft’ ads • Evidence-based road safety programs / evaluations • Invest 10% of size of problem per year in prevention – i.e. 0.3% of GDP • Create National Road Safety Crisis Centre, with all stakeholders including health and welfare and insurance • Publish detailed data on national web-site • Implement higher infringement costs and demerit points • Zero tolerance for repeat offenders • Close loop holes for upholding infringements 	2020 - 2030	<ul style="list-style-type: none"> • Improve police and legal governance • Managing the road toll as a catastrophe – a new paradigm • Designing road system from user-centric perspective to ensure that it does not exceed human psychological tolerances • Use point-to-point technology to help manage fatigue • Improve crash data, including information regarding mobile phone use and distraction
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2018 -
2020

- Inspire the next generation of engineers to be passionate and motivated about road safety (**)
- Speed limits to be supported by appropriate changes to the road environment (**)
- Review of design standards to ensure 3-star, or better, designs as they apply for all road users (**)
- Ensure audio-tactile edge and centre lines on all roads (*)
- Increase separation between lanes on two-way roads (*)
- Provide separated cycle paths – take cyclists out of general traffic stream (*)
- Ensure separation of activities (including construction) along roads
- Fix pinch points and provide wide shoulders
- Encourage use of safe road furniture – forgiving poles, forgiving barriers
- Review of speed limits and point to point/ equivalent technology
- Campaigns to ensure awareness of road rules (e.g. promotion of 50 km/h speed limit on local street unless otherwise signed)
- Ensure centre lines are visible in wet weather

2020 -
2030

- Use transport and urban planning to promote car-free city centres (**)
- Focus on whole of society cost/benefit calculations and subsidise the results – including emphasis of health costs of inactivity (**)
- Target speed and infrastructure upgrades on a set % of the network per year (suggested 2.5%) to get >95% of travel on 3-star roads or better by 2030 (**)
- Direct a proportion (suggested 5%) of the transport budget to walking/cycling – with the objective to get road users out of cars (*)
- Implement a Vision Zero demonstration corridor by 2025, and include all national highways (high volume) by 2030
- Ensure safety barriers on high-volume roads
- Provide heavy vehicles rest areas
- Provide single-track sidewalks in rural areas

SAFER VEHICLES

2018 -
2020

- Mandatory vehicle safety condition inspections in all jurisdictions (**)
- Wider inclusion of mobile phone safety systems (e.g. 'I am driving' SMSs available mobile phone operating systems) (**)
- No vehicles allowed on the network with less than 3 star NCAP ratings (*)
- Alert systems to relay incidences of unsafe behaviour, especially for motorcyclists, as per current heavy vehicle systems (*)
- Mandatory Daytime Running Lights (DRLs) on all vehicles (*)
- Fit for purpose safety assurance requirements for autonomous vehicle
- Investigate systems to alert other road users of drivers using mobile phone (e.g. hazard lights)
- Research and set policy on maximum age of vehicles on network, i.e. vehicle rotation, suggested maximum 5 years old maximum age of vehicles would be applicable to some commercial fleets and would drive down age of private vehicles.

2020 -
2030

- Initiatives to encourage fleet replacement / updates (**)
- Personal accountability for vehicle condition / safety (e.g. learning from Takata airbag recall) (*)
- Seat belt systems linked to ignition (i.e. no seat belt worn, then vehicle will not start)
- Increase affordability of automation/active safety systems through harmonisation and mass production – high quality safety features on even mainstream / family cars
- Research a NCAP star rating for safe, ergonomic design of vehicle cockpits
- No vehicles <4-5 star NCAP rating to operate on network
- Pedestrian protection (e.g. crumple zones etc.) to be incorporated into all vehicles, not just focus on occupant protection
- NCAP test speeds/conditions to more realistically represent real life scenarios / impacts, especially side and rear impacts
- Set maximum ages for all vehicles – encourage / support 'rotation strategies'
- Investigation into next generation seat belts / arrestor systems – should we move to safety harnesses, especially trucks. Learnings from motorsport?
- Research into efficacy and desirability of heads-up displays on vehicles

- 2018 - 2020**
- Provide helmets to all relevant road users and mandate use (**)
 - Greater community awareness of Vision Zero – what achieving this means to society, community and individuals in tangible terms and hence why we as professionals are so passionate about achieving it (*)
 - Education to start at earliest possible opportunities – e.g. kindergarten and primary schools (*)
 - Increase awareness of the risks / hazards of using mobile phones when walking (*)
 - Develop and enforce strategy to reduce numbers of medically unfit drivers on the roads (*)
 - Continued / increased funding for drug testing (*)
 - Get tougher on driving and alcohol - decrease BAC limits (where currently not zero) (*)
 - Situation awareness skills programs
 - Longer learner and probationary driver period
 - Encourage/improve training quality for road users (including drivers, motorcyclists and bicyclists)
 - Greater community awareness of the trauma of seriously injured
 - Implement advanced driver training as part of progression through probationary licenses
 - Regulate energy drinks, which increase volatility and aggression
 - Require “bicycle license” prior to acquiring car learners’ license

- 2020 - 2030**
- Ban mobile phones from being present inside vehicles (put them in bags in boot etc.). Impose heavier fines for mobile usage. Hazard lights being programmed to come on when mobile phone is being used within vehicle (also shown in Safer Vehicles 2020-2030) (**)
 - Road safety education integrated and consolidated at all school levels (**)
 - Instigate campaigns to make road fatalities as unacceptable as drink driving (overcome the de-personalisation of the issue – ‘it won’t happen to me!’ attitude) (*)
 - Education for distracted drivers:
 - + Improve community understanding that state of mind can affect ability to “read” the road conditions.
 - + Provide training and guidance for young drivers (who are often not used to focusing on one task).
 - Improve access to driver training and testing in regional areas

POST CRASH RESPONSE

- 2018 - 2020**
- Provide and resource more motorcycle First Responders (*)
 - Increase resources assigned to ambulance provision, increase numbers and training of paramedics and trauma specialists (*)
 - Implement use of drones for first response
 - Incorporate bike racks on ambulances
 - Increase use of smartphone apps (e.g. to assist with diagnosing concussion) and video technology
 - Include first aid basic training as part of for learner and provisional licensing

- 2020 - 2030**
- Automated crash notification systems in vehicles (e.g. eCall) and further research on this and emerging systems (*)
 - Wide shoulders provided on high risk / high volume roads to allow consistent, unhindered access to First Responders and/or adopt strategies to afford rapid clearance of the roadway in crash scenarios (*)
 - Increase resources assigned to ambulance provision, emergency facilities, increase numbers and training of paramedics and trauma specialists
 - Undertake medical research on improving treatment of traumatic injury
 - Create a national trauma register with true financial costs mapped by crash type