

24<sup>th</sup> September 2021

The Committee Secretariat  
Department of the Senate  
PO Box 6021  
CANBERRA ACT 2000

Dear Joint Select Committee on Road Safety

**iRAP Questions on Notice – 13 September 2021**

Further to the public hearings on 13 September I am pleased to provide additional information in relation to the contributions by iRAP and other organisations.

In relation to the iRAP Question on Notice examples of funding linked to Star Ratings on roads have been provided on the following pages.

In addition to the questions the following additional information is also noted.

- AiRAP Partnerships and safest route and mode choice. The Australian Government supported iMOVE project in NSW is making innovative progress in the accelerated and intelligent coding of RAP data attributes with their recent press release here <https://imoveaustralia.com/project/accelerated-and-intelligent-rap-data-collection/>.
- iRAP notes and agrees with the Australasian College of Road Safety disappointment that the Infrastructure Australia 2021 Australian Infrastructure Plan did not take an active policy stance on raising the safety of Australia's highways to a 3, 4 and 5-star level. The conscious statement to not act is even more concerning as highlighted below from page 318 of the Plan.

**Road safety:** The *2021 Plan* does not attempt to cover significant policy reform opportunities relating to road safety, although some recommendations would benefit this area.

Excerpt from Infrastructure Australia [2021 Australian Infrastructure Plan](#)

Yours sincerely

—  
Rob McInerney

## Examples of funding linked to Star Ratings on roads

A range of Government and Development Bank agencies specify minimum Star Ratings as part of road projects. Examples include:

- The UN Member State agreed Global Road Safety Performance Targets include Target 3 for all new roads to be built to a three-star rating or better for all road users and Target 4 for more than 75% of travel for each road users to be at that same minimum safety standard for all road users.



- The UN Secretary General's report (A/370/86 - September 2015) recommends that member states should "improve infrastructure, including by targeting the highest volume 10% of existing roads and set appropriate infrastructure star rating targets for all relevant road users and adopting minimum three-star standards and road safety audits for all new road construction".
- The World Health Organisation has included Star Rating targets and recommendations in a ranges of key publications <https://www.who.int/roadsafety/publications/en/>.
- The G20 Global Infrastructure Hub hosted by the Australian Government has included the 3-star or better standard in their guidance documents on Quality Infrastructure.

### Additional industry example: Transport Infrastructure Safety Standards

In support of the United Nations (UN) Sustainable Development Goals to halve road deaths and injuries (Goal 3.6) and build Safe and Sustainable Cities (Goal 11.2), UN Member States have agreed on 12 Global Road Safety Performance Targets<sup>20</sup>. Targets three and four relate to transport and road infrastructure safety standards including the specification for all new roads to meet a three-star or better star rating for all road users.

Governments around the world have now adopted Star Rating targets for new and existing roads. The targets are being used for both public and private sector infrastructure including the Wellington Gateway Project in New Zealand where a minimum four-star standard was specified; Highways England with a target of 90% of travel on three-star or better roads; Concession Roads in Brazil where three-star or better standards are being specified and Indonesia where toll increases will be subject to meeting a four-star standard.

Development institutions are also encouraging client countries to meet the UN targets with the

World Bank, Asian Development Bank, Millennium Challenge Corporation, Caribbean Development Bank and others including three-star or better targets on transport and road projects.

In 2018 the online Star Rating for Designs (SR4D) tool was released to "empower designers and road engineers to assess the road safety of a design and improve its safety star rating before the implementation of civil works"<sup>21</sup>. The SR4D tool can also "strengthen the road safety audit process, complementing it with an objective and repeatable qualification of road user fatality and serious injury risk and support the wider and more immediate application of Star Ratings as a safety performance metric" and could be considered as a requirement when developing output specifications for highway projects.

Further information can also be found at <https://www.irap.org/> and a 'Business Case for Safer Roads' is found at <https://www.vaccinesforroads.org/business-case-for-safer-roads/>

- <https://www.vaccinesforroads.org/case-studies-of-success/> includes a range of case studies from around the world.
- The Global Sustainable Mobility for All initiative hosted by the World Bank includes the following [indicators for Safety](#):
  - 3.2) % of existing roads that have safety rating or high-riskspots or sections identified and improved in each country and
  - 3.3) Countries that have compulsory road safety audits and inspections or minimum star rating standards for new roads
- Highways England has established Star Rating Policy Targets for the road network and reports on progress on a regular basis <https://www.gov.uk/government/publications/the-strategic-road-network-star-rating-report>. The Star Rating of Designs is now built into their term network contracts.
- The New Zealand Government developed a High Risk Rural Roads Guide (refer [conference presentation](#) and [guide document](#)) that provides a very useful treatment philosophy that has been adapted by other RAP Programmes around the world.
- Building on the [first concession road project in Brazil](#) to include 3-star or better criteria in Sao Paulo State the Federal Government has now committed to including the results-based financing for all concessions in the country (e.g. <https://irap.org/2020/05/sao-paulo-to-use-irap-methodology-on-the-largest-concession-contract-in-brazil/>).
- Transurban have assessed their toll-road assets in Australia and the USA with an estimated 90% of travel at a 4-star or better standard.
- Development Bank examples include:
  - World Bank <https://blogs.worldbank.org/transport/human-lives-need-not-be-lost-road-crashes-much-less-current-levels-0>
  - Asian Infrastructure Investment Bank <https://irap.org/2020/11/aiib-first-project-in-lao-to-improve-star-rating-of-nh-13/>
  - Asian Development Bank ([https://resources.irap.org/General/IRAP\\_Samoa\\_CCIR\\_SR4D\\_Case\\_Study.pdf](https://resources.irap.org/General/IRAP_Samoa_CCIR_SR4D_Case_Study.pdf))
  - Millenium Challenge Corporation has now integrated minimum Star Rating targets in investments from Moldova, El Salvador, Philippines, Nepal, Ivory Coast and Senegal with further projects under development.

- NACTO have established Star Rating for all road users as part of their Global Street Design Guide <https://globaldesigningcities.org/2020/09/29/star-rating-your-street-plans-with-irap-and-the-global-street-design-guide/>

## Neighborhood Main Streets | 30m

SOURCE: IRAP STAR RATINGS OF NACTO-GDCI'S GLOBAL STREET DESIGN GUIDE

Existing Conditions iRAP Star Rating



Existing Conditions Description

Redesign iRAP Star Rating

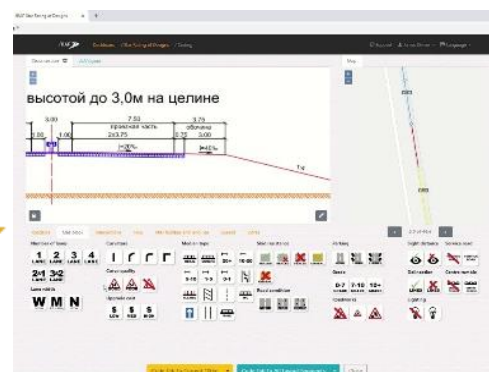


NACTO-GDCI Design Guidance

## Star Rating for Designs <https://irap.org/star-rating-for-designs/>

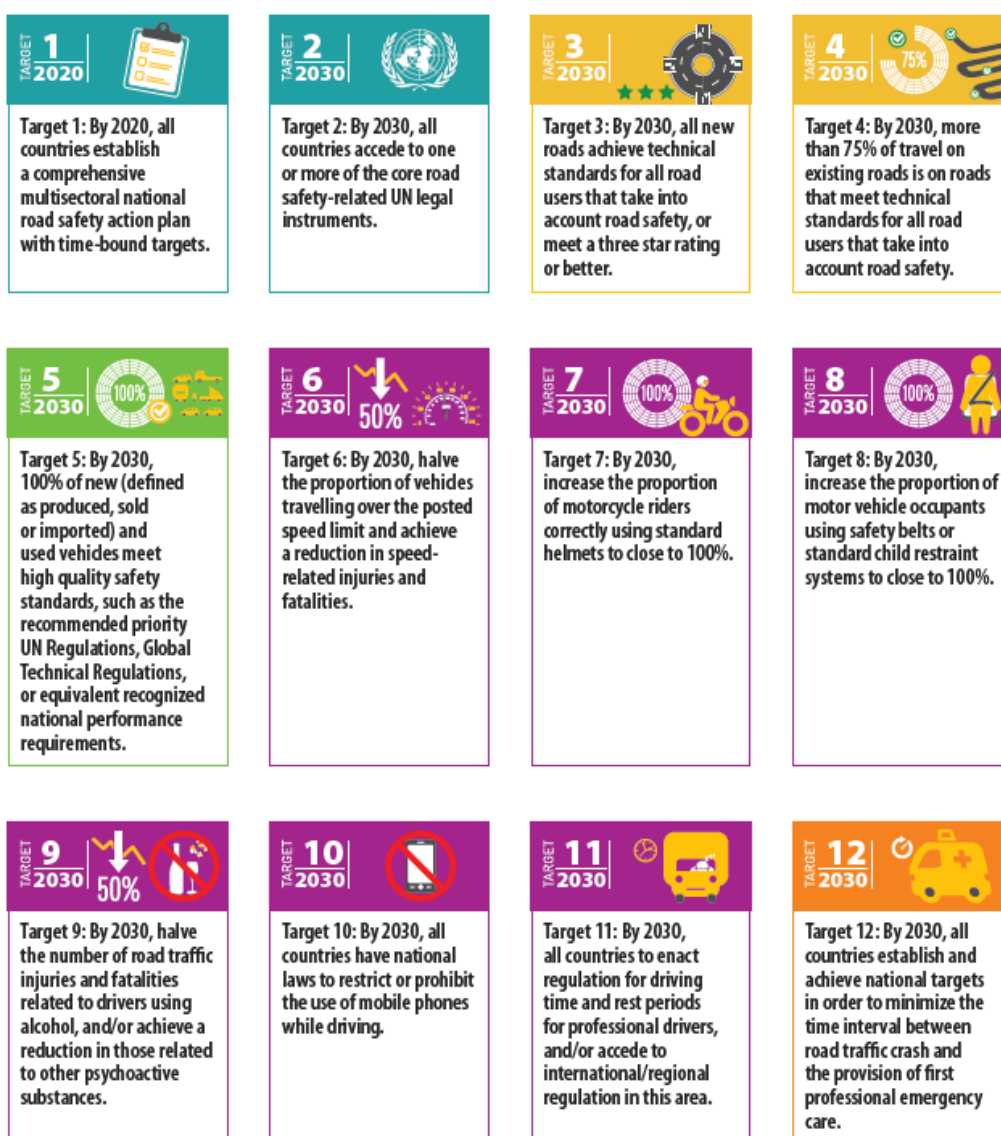
With the support of donor funds from the World Bank Global Road Safety Facility and FIA Foundation iRAP has developed the free Star Rating for Designs web-app to allow road designers to quickly and easily assess the Star Rating of a proposed design for pedestrians, cyclists, motorcyclists and vehicle occupants as required. This also allows central reporting and monitoring by the client specifying or funding the work. This tool is well suited to the measurement of the current Federal Government stimulus programme with associated training and capacity building of stakeholders as required.

**STAR RATING  
FOR DESIGNS** ★ ★ ★  
SAFE ROADS, RIGHT FROM THE START



See <https://www.who.int/roadsafety/publications/en/> for further details.

# GLOBAL ROAD SAFETY PERFORMANCE TARGETS



- PILLAR 1: Road safety management
- PILLAR 2: Safer roads and mobility
- PILLAR 3: Safe vehicles
- PILLAR 4: Safe road users
- PILLAR 5: Post-crash response

Following the request of the United Nations General Assembly, on November 22, 2017 Member States reached consensus on 12 global road safety performance targets. For more information: [http://www.who.int/violence\\_injury\\_prevention/road\\_traffic/road-safety-targets/en/](http://www.who.int/violence_injury_prevention/road_traffic/road-safety-targets/en/)