iRAP Policy Fact Sheet

Star Rating Targets

This factsheet supports the application of star rating targets by policy makers worldwide. It provides an overview of iRAP, the basis of the global Star Rating Methodology and the free use of materials worldwide, examples of policies already in place and a framework to explore local policies in your country.

Who is iRAP?

The International Road Assessment Programme (iRAP) is a registered charity dedicated to preventing the more than 3,500 deaths and 100,000 injuries that occur on roads every day worldwide.

At the heart of the iRAP approach is a spirit of cooperation. iRAP freely provide the tools to help development banks, governments, funding agencies, automobile associations, research institutes and other non-government organisations worldwide. iRAP activities have been undertaken by partners in more than 70 countries and include:

- inspecting high-risk roads and developing Star Ratings, Safer Roads Investment Plans and Risk Maps
- providing training, technology and support that will build and sustain national, regional and local capability
- tracking road safety performance so that funding agencies can assess the benefits of their investments.

What is the Star Rating of Roads and how is it governed?

Star Ratings are based on road inspection data and provide a simple and objective measure of the level of safety that is ‘built-in’ to the road for vehicle occupants, motorcyclists, bicyclists and pedestrians. Five-star roads are the safest while one-star roads are the least safe. Research worldwide suggests that crash costs are approximately halved for each incremental improvement in star rating.

The iRAP model is fully documented and specifications to undertake star rating assessments are freely available:

- The iRAP Methodology Fact Sheets
- The iRAP Star Rating Specifications
- The Road Safety Toolkit

The model development and the technical integrity of iRAP protocols worldwide is overseen by the Global Technical Committee (GTC). The GTC reports direct to the iRAP Board and is made up of experts from leading road safety organisations and research agencies from around the world including ARRB (Australia), MRI Global (US), TRL (UK), IMT (Mexico), RIOH (China), MIROS (Malaysia), SWOV (Netherlands) and LabTrans (Brazil). The GTC ensures that the latest road safety research is included and that the model is consistently applied. An “Innovation Framework” is in place to ensure local expertise can be applied and continuous improvement shared globally.
Who can undertake star rating assessments?

The star ratings can be undertaken by any trained road safety professional. Government staff, development bank staff, consulting engineers, automobile associations, research agencies can all undertake their own star rating assessments. iRAP provide a range of free software, methodology documents, research and technical papers, presentations and specification documents to support partners worldwide.

As a global standard it is essential that all partners adhere to the required quality specifications and the consistent application of the star rating methodology worldwide. Government agencies, development institutions and road owners specifying and using star rating assessments rely on, and benefit from the mutual high quality application of assessments by all partners and suppliers worldwide.

Accredited supplier networks are also available where a partner wishes to approach multiple suppliers for a quote, or the assessments can be tendered in accordance with the publically available documents detailed above. Enhanced services are offered by independent iRAP Centres of Excellence and other specialist consultants where more detailed knowledge and experience with the models is required.

What star rating targets are appropriate for your road network or project?

iRAP partners worldwide have helped develop a Star Rating Policy Discussion Paper to help inform the setting of appropriate star rating targets based on local needs and available resources.

The use of star rating targets provide an objective measure of infrastructure safety and simplify road safety policy management, communication and accountability. The star rating can be used for network level targets, corridor and road hierarchy specific performance targets, or linked to maintenance and operational management of the road asset. Examples include targets for 4-star roads of national significance (New Zealand), 4-star roads for pedestrians and cyclists in linear settlements (Asian Development Bank) and 90% of travel on 3-star or better by 2020 (UK).

For newly constructed roads the star rating target can be specified at the planning and design stage (e.g. the new road shall be 4-star standard for pedestrians and vehicle occupants at the desired operating speed of 60km/h). The improved star rating can also be confirmed prior to opening and the outcome celebrated within the project team, road agency and the public.

The appropriate star rating target for an individual road network or project will reflect the existing standard of the road, the strategic purpose of the route and the volume of particular road users, available funding and political will. In principle targets should seek to maximise deaths and serious injuries saved per unit of investment and therefore in general higher volume roads will have higher star rating targets. iRAP encourage the setting of a minimum 3-star performance management goal for new projects and targets linked to vehicle travel for existing networks.

How is iRAP funded and is there a charge to use the iRAP standard?

iRAP is a UK registered charity and is subject to the UK Charities Law. iRAP direct costs of developing and applying the star rating methodology on a global scale is largely met through philanthropic funding from Foundations and development agencies.

There is no charge to use the iRAP star rating standard.

Partners are required to meet their own costs in undertaking star rating assessments.

To donate to iRAP please email donate@irap.org

October 2015, © International Road Assessment Programme (iRAP) 2015.