

3-star or better roads to save lives

Achieving UN Target 3 stands to save 9 lakh lives and serious injuries every year in India.

IndiaRAP is a locally led, globally supported road assessment programme for India. It is a collaboration between iRAP and the Asian Institute of Transport Development (AITD), generously supported by FedEx.

With the help from World Bank Global Road Safety Facility, national, state and local governments and the Bloomberg Initiative for Global Road Safety (BIGRS), 17,600km of roads have been assessed, opportunities to save thousands of lives have been identified and thousands of engineers have been trained.



TARGET 3
2030

Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.



TARGET 4
2030

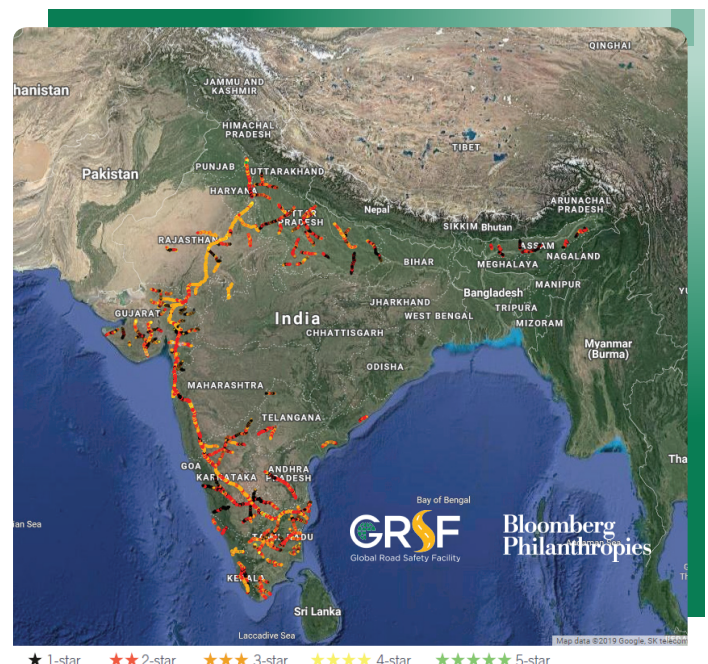
Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.

UN Target 3 can be achieved by:

- A shared commitment by stakeholders including the IRC, MoRTH, NHAI, IIT, CRRI, IAHE, state and local governments, industry and development banks to put risk assessments at the heart of strategic decision making, design, construction and management.
- Building local capability to perform IndiaRAP assessments and build 3-star or better roads.
- Performing IndiaRAP network assessments to identify the highest-risk road stretches.
- Implementing proven, affordable safety treatments on a large-scale and institutionalising 3-star or better roads.
- Working with IRC to review National Road Design Standards.
- Ensuring no new 1 or 2-star roads are built.

IndiaRAP Snapshot Since 2010

- 17,600km Star Rated across 13 states.
- 2,000km of designs Star Rated.
- 5,000km of the Golden Quadrilateral Highway Star Rated.
- Safety demonstration corridor achieving 3-stars or better and a reported 50% reduction in deaths.
- 3,000km upgraded or being constructed with improved safety facilities.
- 2,000 engineers have been trained.
- Growing community of iRAP accredited suppliers.



★ 1-star ★★ 2-star ★★★ 3-star ★★★★ 4-star ★★★★★ 5-star

IndiaRAP safety assessments

What is Star Rating?

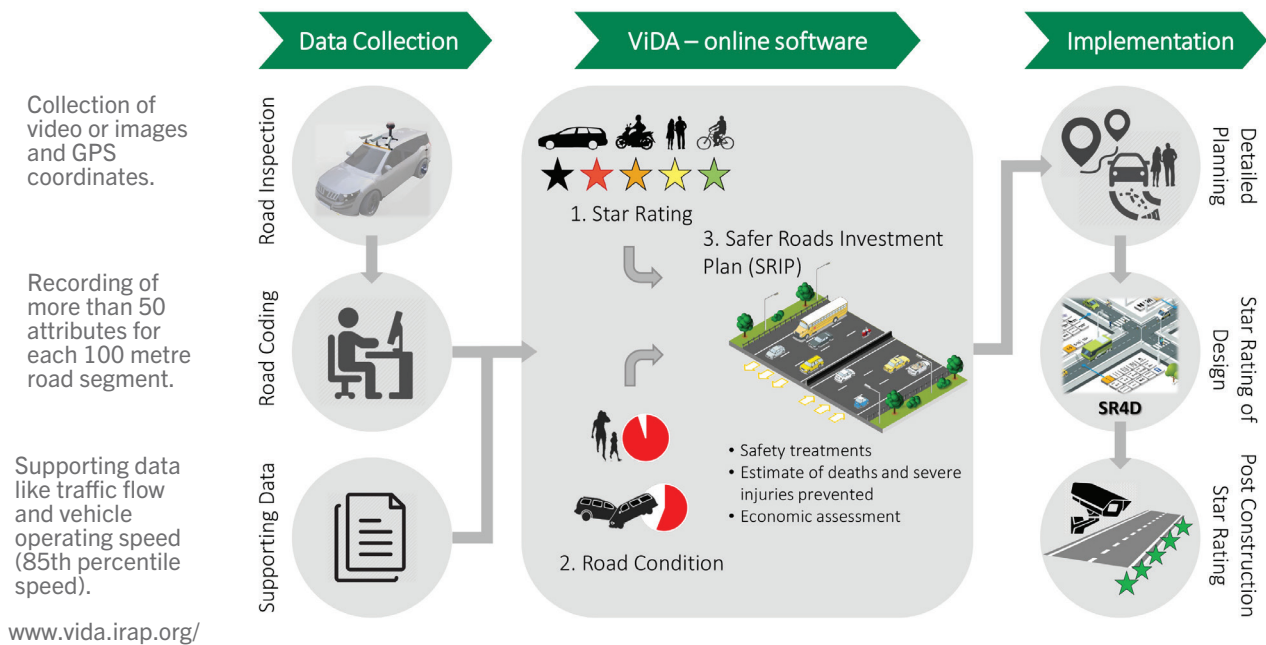
Star Ratings are based on road inspection data and provide a simple and objective measure of the level of safety which is 'built-in' to the road for vehicle occupants, motorcyclists, bicyclists and pedestrians.

Five-star roads are the safest while one-star roads are the least safe. Star Ratings can be completed worldwide, in urban and rural areas and without reference to detailed crash data, which is often unavailable in low-income and middle-income countries. The safest roads (4- and 5-star) have road safety attributes that are appropriate for the prevailing traffic speeds. These might include separation of opposing traffic by a wide median, pedestrian crossings and sidewalks, forgiving roadsides and safe intersections such as roundabouts.

A Safer Road Investment Plan (SRIP) is a prioritised list of countermeasures that can cost-effectively improve Star Ratings and reduce infrastructure-related risk. The plans are based on an economic analysis of a range of countermeasures, which is undertaken by comparing the cost of implementing the countermeasure with the reduction in crash costs that would result from its implementation. The plans contain extensive planning and engineering information such as road attribute records, countermeasure proposals and economic assessments for 100-metre segments of a road network.

The plan also provides an estimate of how many lives and serious injuries are likely to be saved along with an economic analysis, if the suggested treatments are implemented.

Star Rating and Safer Roads Investment Plan Process



Road Attributes we Record and Measure

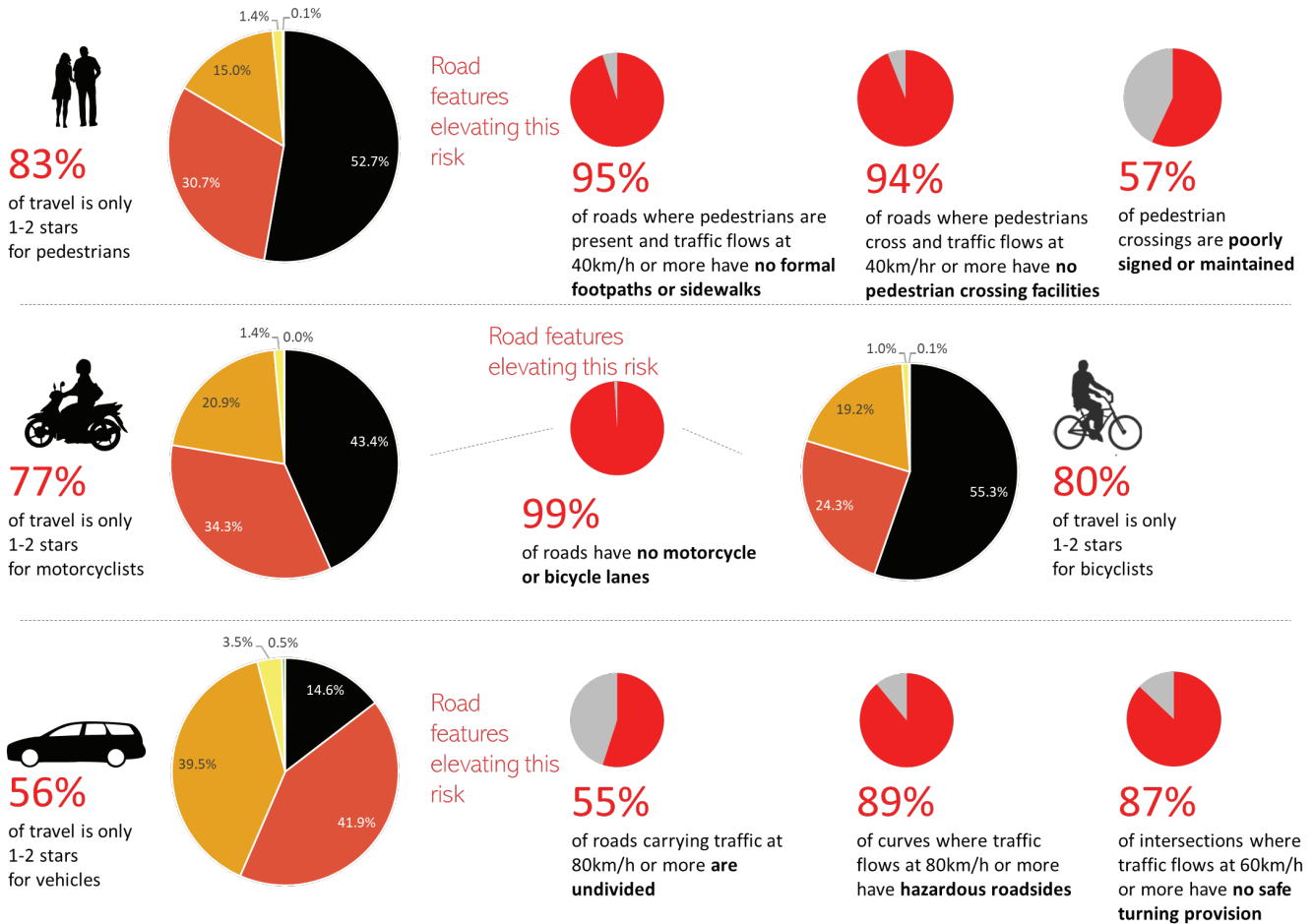


Safety Performance

The IndiaRAP safety assessment of 17,600km of roads provides an insight into why road trauma remains one of the country's leading public health challenges. The majority of roads assessed in India rate 1- and 2-star for safety, indicating a significant level of risk. It is estimated that more than 80,000

deaths and serious injuries occur each year on this road network and there is a potential of halving this by implementing affordable safety treatments. The following risk factors play a significant role in the Star Rating results and provide a basis for planning life-saving treatments.

Based on 17,600km of National Highways and State Highways assessed in India



Life Saving Treatments

Across the 17,600km assessed, an investment of INR 32,000 crores would prevent 10 lakh deaths and serious injuries over 20 years. Extending this success to the major roads across India will ensure the achievement of UN Target 4 for >75% of travel to be on the equivalent of 3-star or better roads for all road users by 2030.



Roadside crash barrier	Intersection improvement	Road delineation	Pedestrian crossing
(includes both sides)			
Length: 14,000km	Sites: 29,000	Length: 8,700km	Sites: 21,000
FSI prevented: 1,34,000	FSI prevented: 1,56,000	FSI prevented: 52,000	FSI prevented: 38,000
BCR: 3.4	BCR: 2.4	BCR: 11	BCR: 2

FSI: Fatal and seriously injured (over 20 year analysis period)
BCR: Benefit-cost ratio

How Can You Get Involved?

- Work with IndiaRAP to establish a road assessment programme in your State and set policies to maximize travel on 3-star or better roads.
- Develop a partnership of local stakeholders to actively contribute to programme leadership, technical, communication and road upgrade activities in your area.
- Build a knowledge of the existing work and safer roads investment completed or underway across India and add your expertise to ensure roads are upgraded and made safer.
- Undertake iRAP training to build globally recognised skills and knowledge.
- Develop local research programmes to build an evidence base on the impact of road features on crash outcomes across India.
- Become an advocate for safer roads, support the need for 3-star or better roads and help celebrate road investment that saves lives.
- Sign up to receive iRAP newsletters at irap.org to hear more about IndiaRAP and global safer roads activities.
- Contact us to discuss how we can work together to support your initiatives to improve road safety.

Let's make India
free of high-risk roads

TAKE ACTION NOW

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The International Road Assessment Programme is a global registered charity with a vision for a world free of high-risk roads. iRAP partners with mobility clubs, governments, funding agencies, research institutes and other non-government organisations in more than 100 countries to provide the tools and training to make roads safe.

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