

CASE STUDY

RAP PARTNERSHIPS SAVING LIVES

IndiaRAP



In collaboration with:



Sponsored by **FedEx**

US\$5.5
billion
locked in
for road

3,000+kms
upgraded
or under
construction

Target for
4-star roads by
2025 in Andhra
Pradesh

23,000kms
assessed
with 5,000km
on the Golden
Quadrilateral

2,000kms
safer road
designs across
7 states

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 of World Bank Global Road Safety Facility (GRSF) and Bloomberg Philanthropies, IndiaRAP is shaping government investment in safer road infrastructure across the country.

Targeted improvements to just 10% of India's roads would prevent more than 1,000 deaths and serious injuries daily.

ROADS & ROAD TRAUMA IN INDIA

The World Health Organisation (WHO) reports 150,785 road deaths occur each year in India (WHO, 2018). Road deaths have an estimated economic cost of \$US75 billion per year or 4% GDP (WHO, 2015). Road trauma represents an enormous public health challenge. IndiaRAP partners assessed 17,600km of high-risk roads and found:

- 95% of roads above 40km/h have no footpath
- 99% of roads above 40km/h have no bicycle facilities
- 99% of roads with high motorcycle flows have no motorcycle facilities
- 55% of roads carrying traffic at 80km/hr or more are undivided single carriageways
- 89% of curves where traffic flows at 80km/hr or more have hazardous roadsides
- 87% of intersections where traffic flows at 60km/hr or more have no roundabout, turn lanes or interchanges

OBJECTIVES

Improving 10% of India's highest risk roads (332,041km) to a 3-star or better standard would save over 7.6 million lives and serious injuries over the next 20 years. IndiaRAP aims to do this by:

- Eliminating 1 and 2-star unsafe roads
- Targeting investment for upgraded roads and the implementation of life-saving countermeasures

- Supporting the design and construction of brand new 5-star safe and smart motorways in the country
- Working with local partners to undertake targeted assessments
- Ensuring risk assessment is placed at the heart of strategic decision making and road design practice.

KEY ACHIEVEMENTS

Since 2010, IndiaRAP has driven major policy, road upgrade and public health outcomes including:

- 23,000kms of roads have been Star Rated across India including 2,000kms of safer road designs.
- 5,000kms are under assessment on the Golden Quadrilateral highways, linking Delhi, Mumbai, Bangalore and Chennai.
- IndiaRAP Star Ratings are informing safe road design by state Public Works Departments of Assam, Gujarat, Karnataka, Kerala, Rajasthan, Tamil Nadu and Uttar Pradesh. Measuring the impact on crash risk of road design options ensures new roads are built to minimum 3-star standard that save lives.
- IndiaRAP Star Ratings and Safer Road Investment Plans are used in World Bank, National Highways Authority of India (NHAI) and State Government supported projects across 12 states (Andhra Pradesh, Kerala, Assam, Punjab, Gujarat, Rajasthan, Telangana, Tamil Nadu, Karnataka, Uttar Pradesh and Haryana). Investments to improve many of India's roads are locked into ongoing and planned upgrades and construction worth more than US\$5.5 billion.
- 800km of roads have been upgraded influenced by iRAP assessments, with an additional 2,200kms under construction.
- Post-construction assessments have been undertaken on roads upgraded with World Bank finance, including road safety demonstration corridors in Karnataka and Gujarat.
- The Government of Andhra Pradesh has set a target for 4-star roads by 2025.
- 2,500 engineers and road safety stakeholders have received RAP training in local capacity building events.

SH20 Belgaum-Yaragatti Highway upgrades in Karnataka have reduced fatalities by 50%.



SAVING LIVES

With local leadership, research expertise and energy, IndiaRAP will share experience and success across the country. As a Road Safety Centre of Excellence, AITD will guide policy and action across all 5 pillars of the UN Decade of Action. It is anticipated the IndiaRAP/ AusRAP twinning agreement will continue to build capacity and connect road safety experts between India and Australia.



iRAP/AITD MOU signing, August 2017. Left to right: Prof Amirthalingam Veeraragavan (IIT Madras), Samir Raval (Government of Gujarat), Secretary-General Sanjay Nirmal (IRC), Jigesh Bhavsar (IndiaRAP), Prof Pradip Sarkar (AITD), Rob McInerney (iRAP), Alison Leeson (IndiaRAP)



IndiaRAP Media Launch, Delhi, November 2017: Hemant Pimplikar, (FedEx Express, India), Rob McInerney (iRAP), Shane O'Connor (FedEx, USA) and Jigesh Bhavsar (IndiaRAP)

TIMELINE FOR SUCCESS

- 2010 World Bank GRSF invites iRAP to work with MoRTH, public works departments, research institutes, local engineering firms and automobile associations to assess the safety of Indian Roads

First project: Assessment of 'Safer Greener Highway Pilot' NH-1 Delhi to Panipat, with NHA1
- 2011 World Bank GRSF and Bloomberg Philanthropic support for India '4 states' project assessing 3,000km of state highway and building local capacity in Andhra Pradesh, Assam, Gujarat and Karnataka
- 2012 Star Rating of road designs used for first time: Karnataka, Assam and Gujarat
- 2013 Assessments in Kerala and Rajasthan plus additional surveys in Andhra Pradesh, Gujarat and Karnataka
- 2013 Local road safety engineer joins team
- 2015 Bloomberg Initiative for Global Road Safety support leads to urban assessment in Mumbai

IndiaRAP Workshop hosted and builds local road safety capacity
- 2016 Partnership with WB and NHA1 to assess safety on Golden Quadrilateral. Agreement with NHA1 to assess Panipat-Chandigarh national highway
- 2017 VicRoads twinning agreement and secondment of Australian engineer to develop IndiaRAP

iRAP & AITD sign MOU

FedEx Express-sponsored IndiaRAP launched

IndiaRAP's Jigesh Bhavsar becomes H7 committee member for the Indian Roads Congress

FOR MORE INFORMATION



A world free of high risk roads: #3StarorBetter

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The International Road Assessment Programme is a global registered charity. iRAP partners with automobile associations, governments, funding agencies, research institutes and other non-government organisations in more than 85 countries to provide the tools and training to make roads safe. Registered Charity Number: 1140357 Registered Office: 60 Trafalgar Square, London, WC2N 5DS, United Kingdom Updated: June 2019