

# Vision Zero and 5-Star Roads

Partnerships to Save LIVES

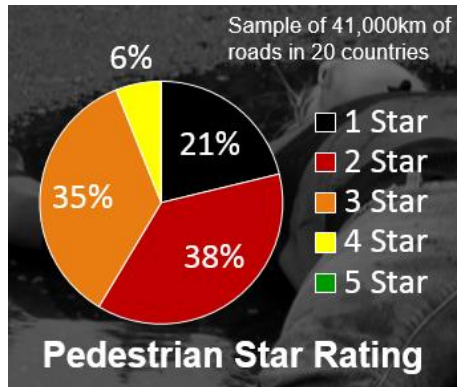


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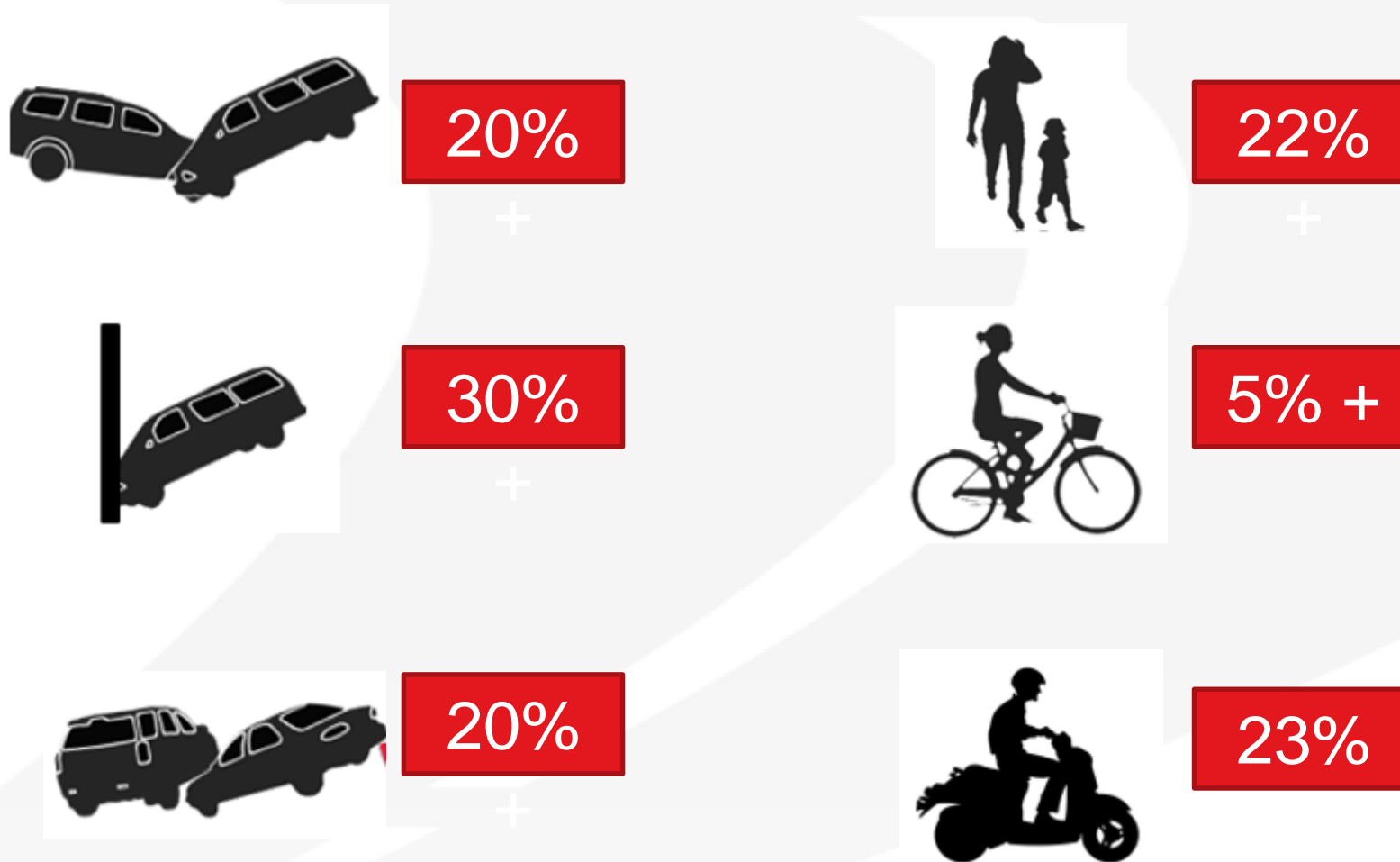
# Vision Zero and 5-Star Roads



- How people die
- The Role of Infrastructure
- Global Partnerships to Save LIVES
- Global Case Studies
- The business case for scale



# Predictable Death & Injury



Solutions exist for all crash types





# Pedestrians

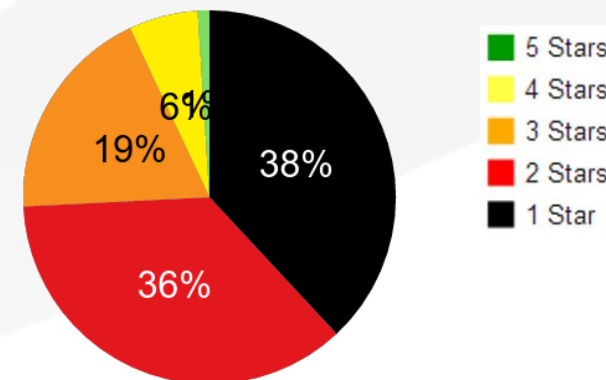


## 83%

of roads where pedestrians are present  
and speeds are 40km/h or more have no footpath



## Pedestrians



Based on a 250,000km sample of iRAP  
assessments from 60 countries



# Head-on Crashes



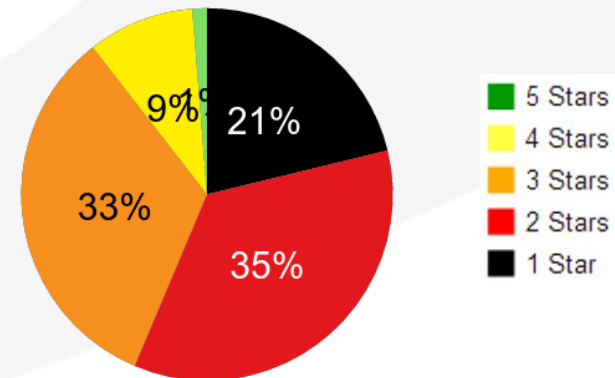
# 61%



of roads where vehicles travel at 80km/h or more  
are undivided single carriageways



## Vehicle Occupants



Based on a 250,000km sample of iRAP  
assessments from 60 countries



# Star Ratings & Saving Lives

**How 3-star or better roads can cut death and trauma**



**WHAT IS THE TARGET?**

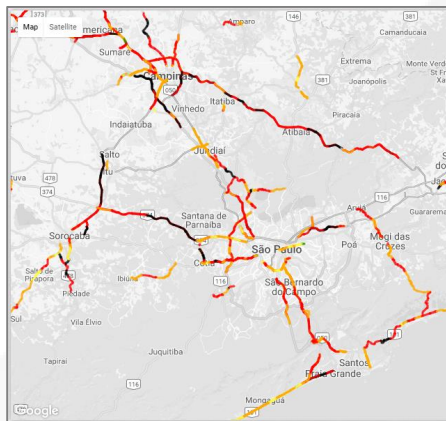
For the first time the United Nations has included road deaths and injuries in its Sustainable Development Goals.

The SDG 3.6 target is to halve road deaths and injuries by 2020.

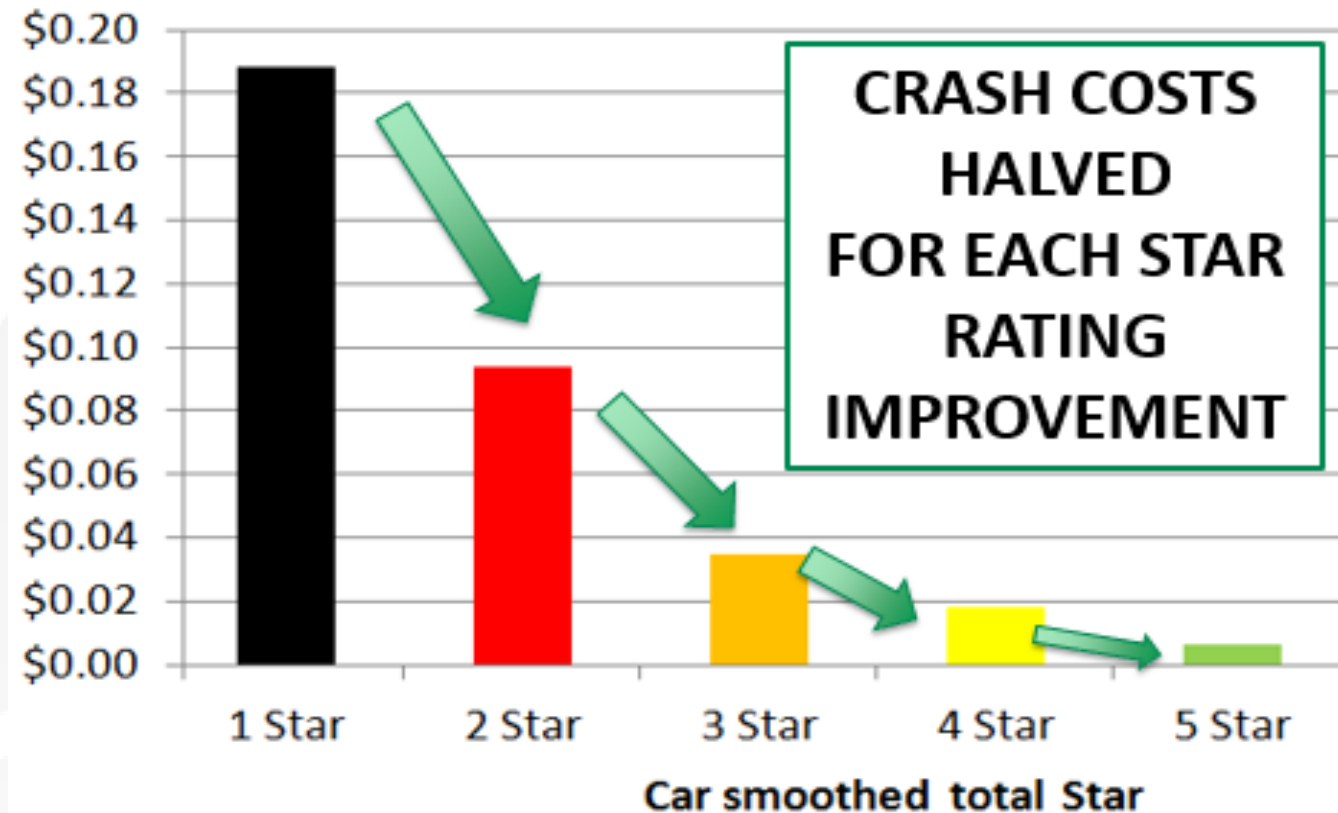
Improving the world's roads to a 3-star or better rating is a cost-effective contribution to efforts to meet the SDG 3.6 target.

**But we need to ACT NOW!**

**iRAP**

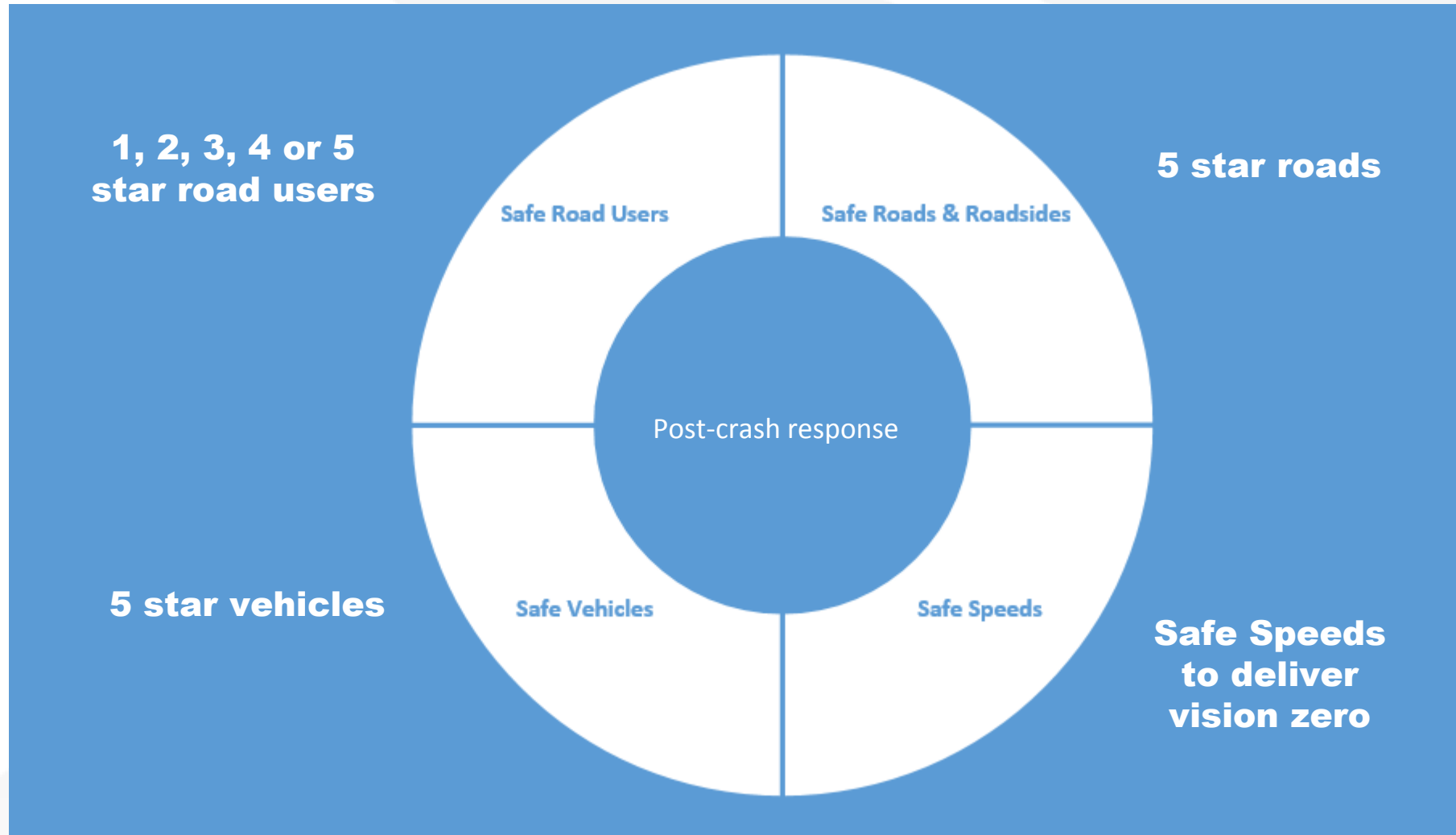


## Cost of crashes per distance travelled





# Vision Zero Leadership

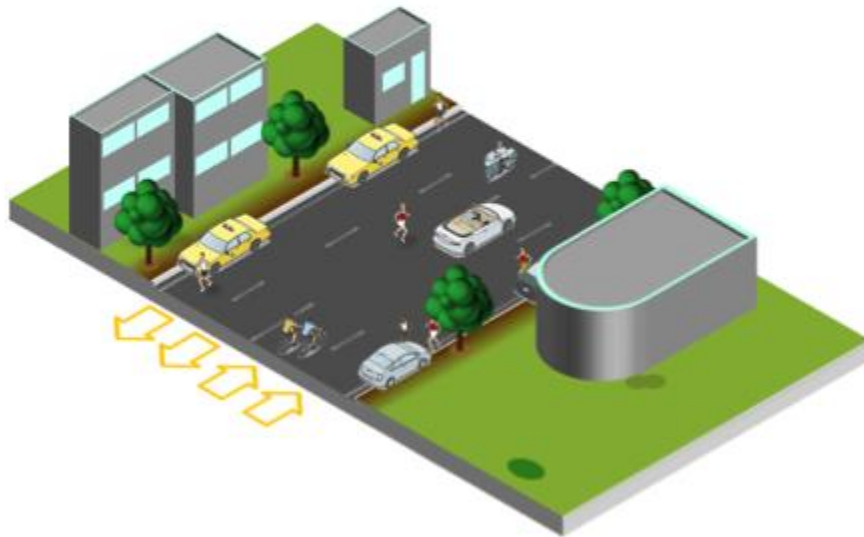




# Safe Speeds and Road Design

## #SlowDown more on low-standard urban roads to be #3StarOrBetter for pedestrians\*

When footpaths are ineffective or non-existent and crossings are absent or do not effectively slow traffic the risk to pedestrians is hard to manage. Speeds must be 40 km/h or less to provide a 3-star or better experience for pedestrians.



<https://www.unroadsafetyweek.org/en/solutions/safe-roads>



# The Origins and Evolution of iRAP





# Global Inspiration

## Existing Roads



**New Zealand:** Target for 4-star roads of national significance, Safety Alliance to upgrade existing roads to 3-star or better standards.



**United Kingdom:** 90% of travel on 3-star or better roads by 2020, and related targets for 4 and 5-star motorways



**USA:** FHWA supported roll-out of usRAP. Statewide assessments in Utah, Alabama. County investments prioritised. Integrated data management (UPLAN).



**Malaysia:** 75% of travel on 3-star or better high volume roads by 2020 (Malaysia MoT)



**Sweden:** 75% of network at 3-star or better by 2020 and near 100% by 2025



**Chile:** Autopista Centrale toll roads assessed and immediately upgraded to minimum 3 -star standard



**Netherlands:** No 1 or 2-star roads by 2020





# *3-star or better upgrades* **UK Local Roads**

**£ 175**  
million for  
local roads

Target  
**50**  
persistently high-  
risk local roads

Invest to  
**3-star**  
or better



Roads Investment  
The roads  
funding package

Moving Britain Ahead



November 2016



Department  
for Transport







# *upgraded roads saving lives*

## ChinaRAP

### State Council endorsed Highway Safety to Cherish Life initiative

Large scale road upgrades: 30,000km of high-risk roads already, additional 65,000km by end 2017

Star rating & investment plans: 150,000km existing roads, 12 provinces

5-year investment of CNY12 billion (US\$1.8 billion) in safety countermeasures

Production of national guidelines for safety countermeasures and design standards.

Design training of 2000+ engineers in 12 provinces.

Mobilisation and training of 100+ people in road surveys and 300 people in road attribute coding.

**Population:**  
1.38 billion

**Annual road deaths:**  
261,367

Already saving  
**10,000\***  
deaths & injuries  
every year  
\*estimated



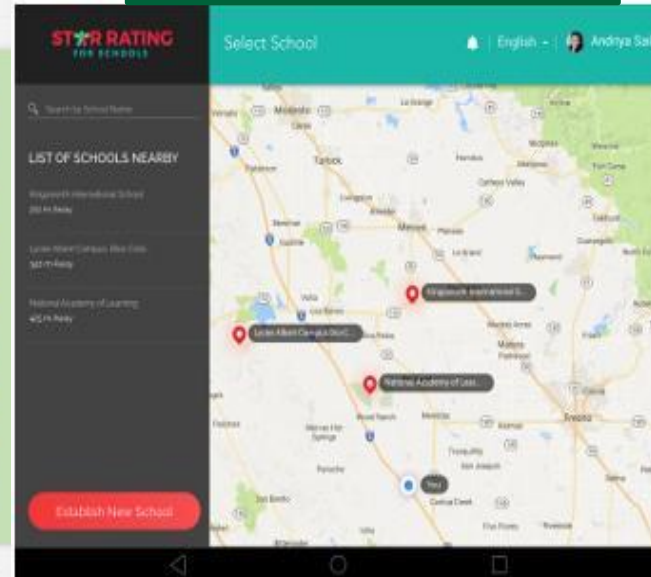


# Global Innovation

## iRAP<sub>URBAN</sub> & CycleRAP



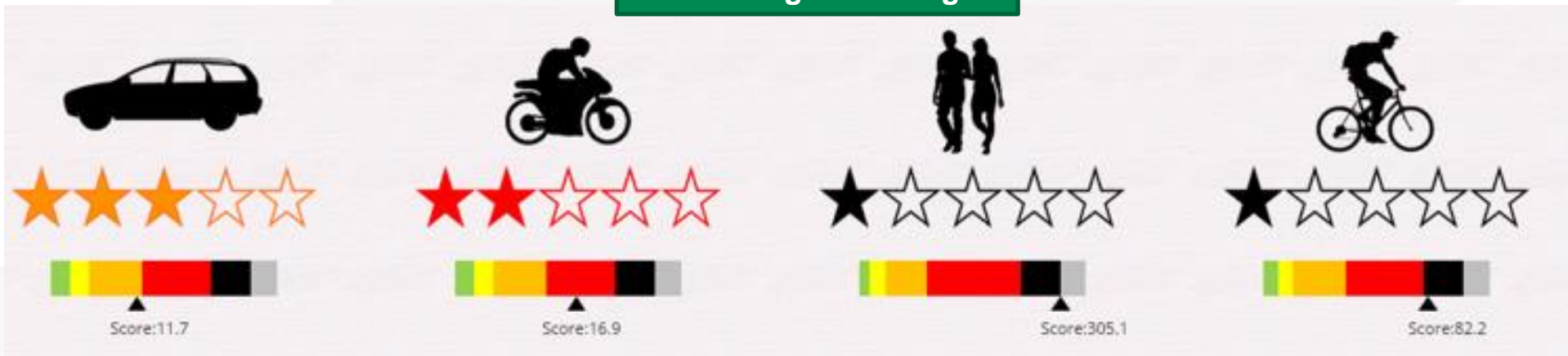
## Star Ratings for Schools



## Smart Motorways



## Star Ratings for Designs





# If we were all as good as Sweden!

**1,009,778**

Lives saved every year

**US\$ 1,615 billion**

Economic benefits every year

**2.1%**

of global GDP

iRAP Analysis completed for Economist Magazine



# Just the tip of the Vision Zero iceberg



**3,500+**  
killed every day

**100,000+**  
injured every day

**US\$ 2 trillion**  
of crash costs per year



# Further Details

How 3-star or better roads  
can cut death and trauma



WHAT IS THE TARGET?

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Development Goals.

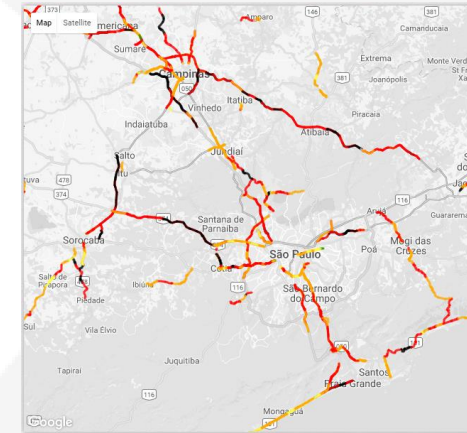
The SDG 3.6 target  
is to halve road  
deaths and injuries  
by 2020.

Improving the world's  
roads to a 3-star or better  
rating is a collective  
contribution to efforts to  
meet the SDG 3.6 target.

But we need to ACT NOW!



[www.irap.org](http://www.irap.org)



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