

**Zero Road Deaths and Serious Injuries:
Leading a Paradigm Shift to a Safe System.**

Safe System Interventions

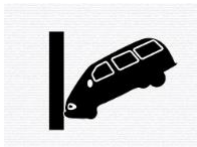
Rob McInerney

CEO

International Road Assessment Programme

Primary Crash Types

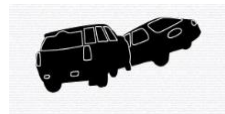
Motor Vehicles



30% +



20% +



20% +

Vulnerable Road Users



23% +



5% +



22% +



A Safe System for Vulnerable Road Users



83% of roads where pedestrians are present and speed flows at 40km/h or more have no formal footpaths.



95% of road with high motorcycle flows ($\geq 20\%$ of total) and where traffic flows at 60km/h or more have no motorcycle facilities.



89% of roads where bicyclists are present and traffic flows at 40km/h or more have no bicycle facilities.



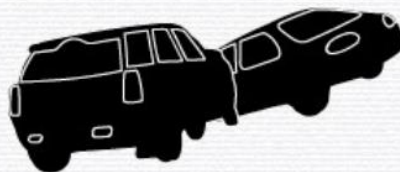
A Safe System for Vehicle Occupants



61% of roads where traffic flows at 80km/h or more are undivided single carriageways.



47% of curves where traffic flows at 80km/h or more have hazardous roadsides.



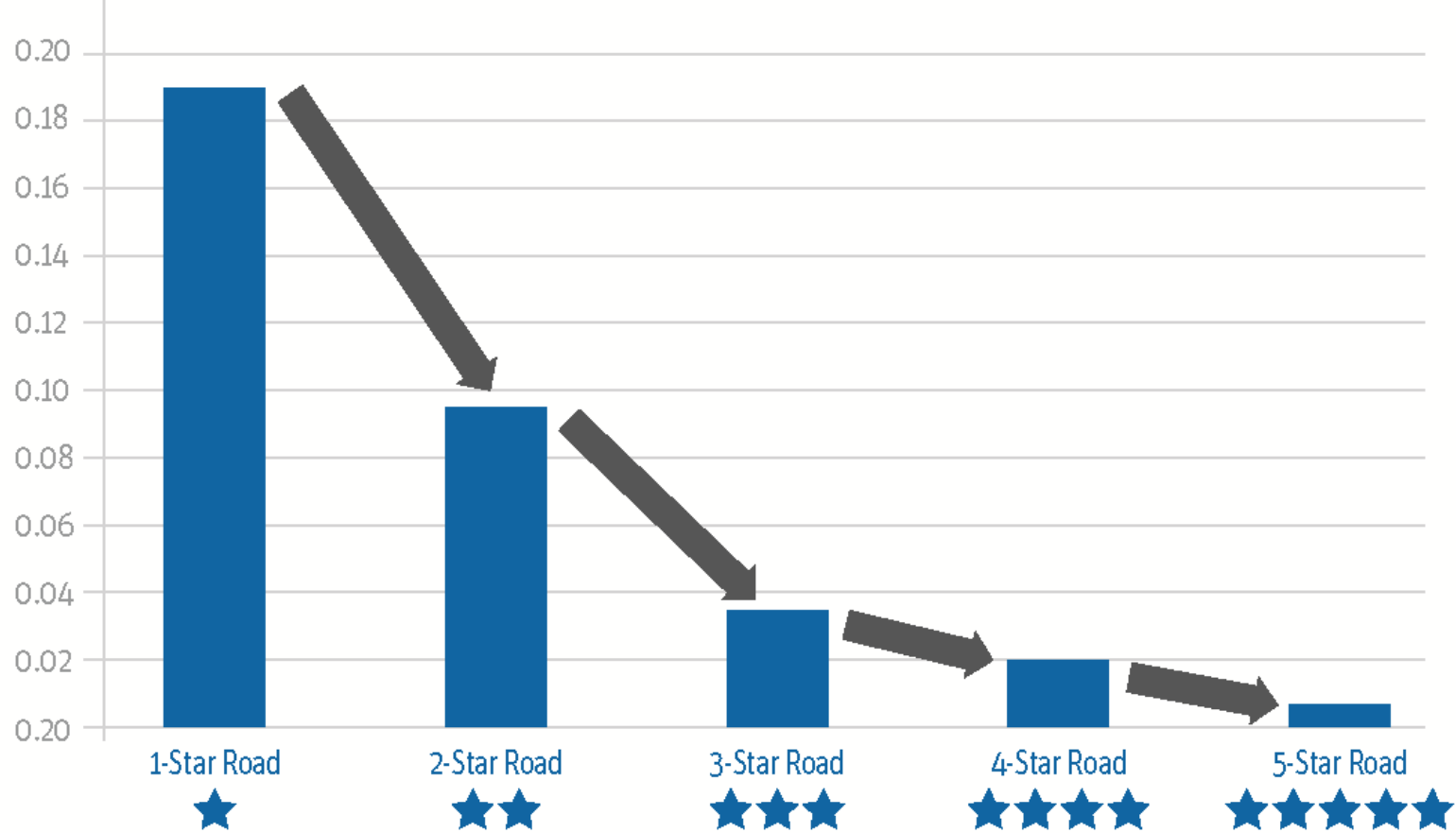
57% of intersections where traffic flows at 60km/h or more have no roundabout, protected turn lane or interchange.



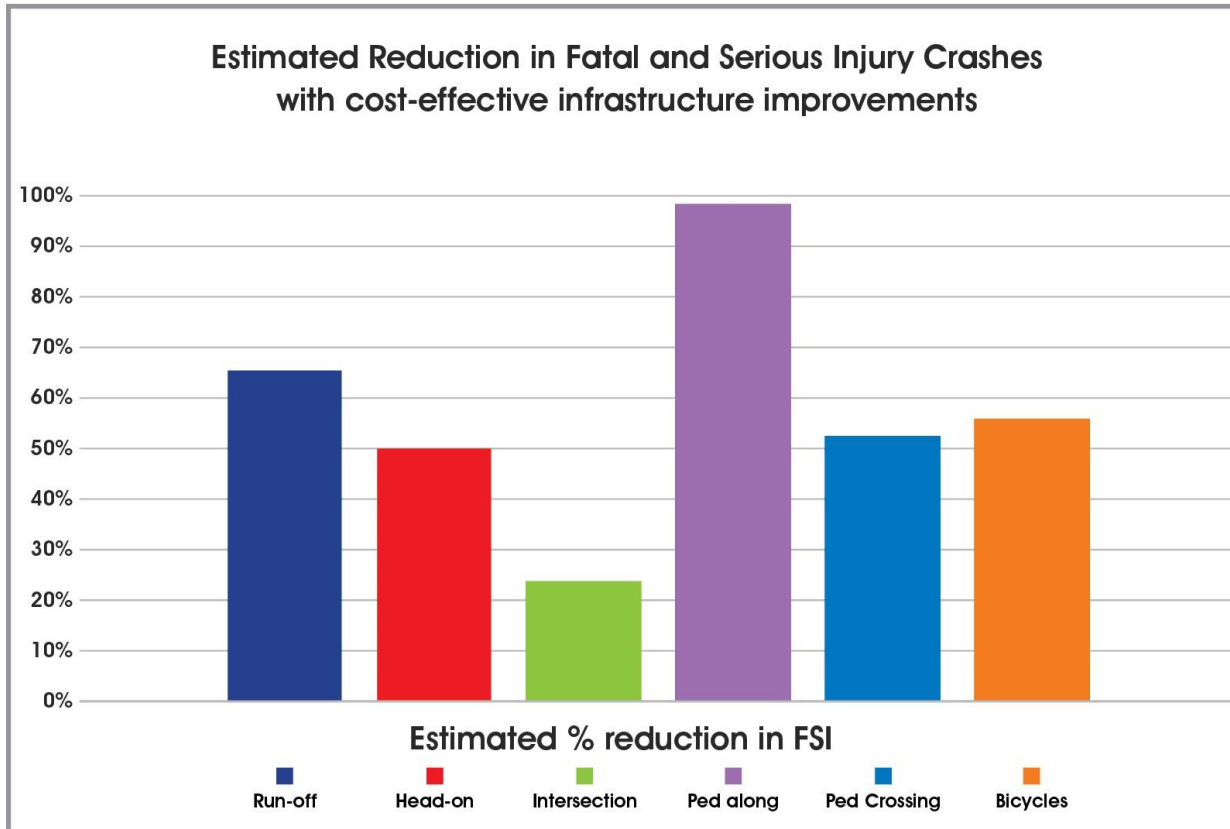
The Star Rating of Roads



Cost of killed and seriously injured
per vehicle-km travelled (in USD)



The Economics of the Safe System

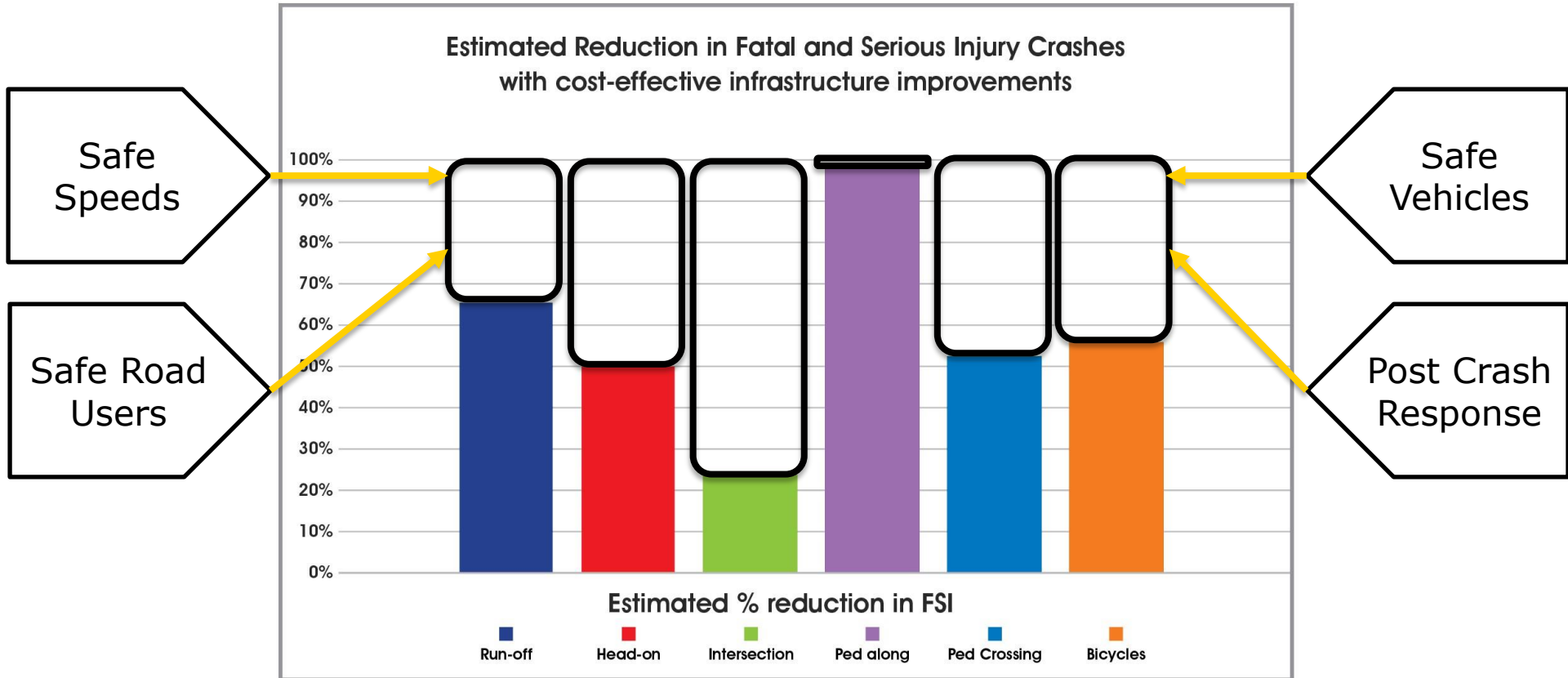


Business case for infrastructure interventions

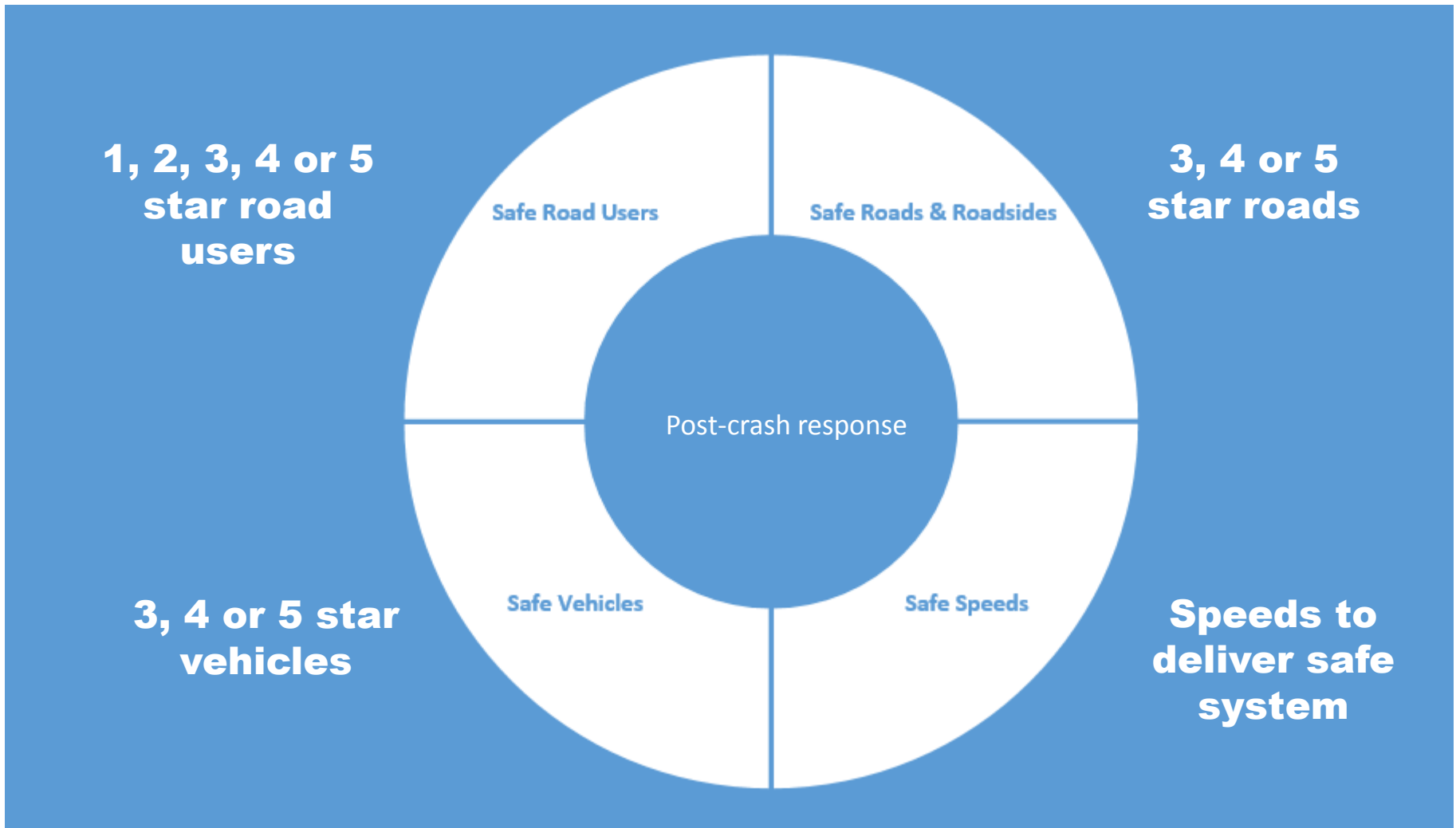
What could be achieved	Low-income countries	Lower-middle income countries	Upper-middle income countries	High-income countries	All
Improve 10% of highest risk roads	108 000 km	610 000 km	992 000 km	1 546 000 km	3 255 000 km
Build viable countermeasures (USD)	8 billion	61 billion	149 billion	464 billion	681 billion
Reduction in fatalities over 20 years	384 000	1 483 000	1 528 000	283 000	3 678 000
Reduction in fatalities and serious injuries over 20 years	4 224 000	16 313 000	16 808 000	3 113 000	40 458 000
Economic benefit over 20 years (USD)	83 billion	663 billion	2 766 billion	2 202 billion	5 715 billion
Benefit cost ratio	11	11	19	5	8

Source: iRAP (2014): Business Case for Safer Roads.

The Economics of the Safe System



Safe System Optimisation



Safe System Financing for the Future



SERIOUS INJURY OUTCOMES	Reduction in incidence	Savings
Severe Brain Injury	70	\$ 13,003,462
Head Injury	37	\$ 6,872,000
Quadriplegia	33	\$ 6,092,458
Paraplegia	14	\$ 2,578,686

- Safe System Corridor Project
- Footpaths for Africa Development Impact Bond
- PPP to deliver 5-star roads and Smart Motorways

Merci, Thank you

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