



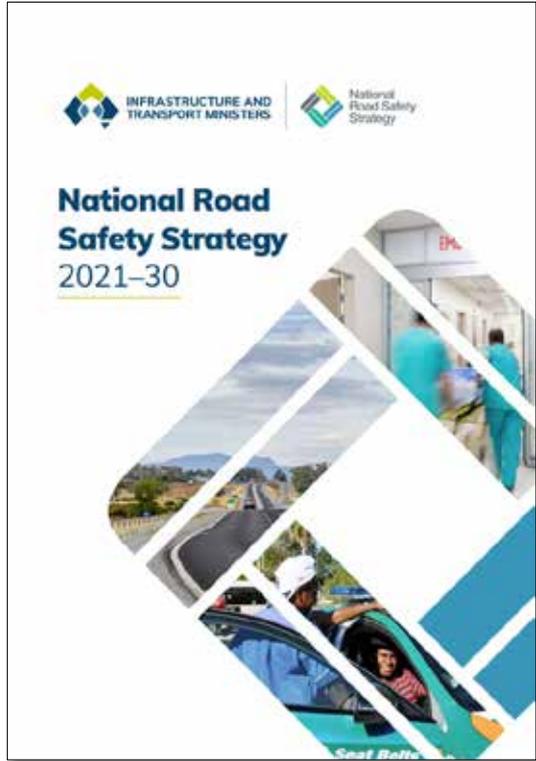
VISION ZERO NETWORK SAFETY PLANS

with Kenn Beer



x





Network Safety Plans are crucial components of this strategy, providing **local governments** with a **framework** to assess and address road safety risks across **their entire road network**

*“Governments will focus on designing a **Safe System** that is **future focused**”*

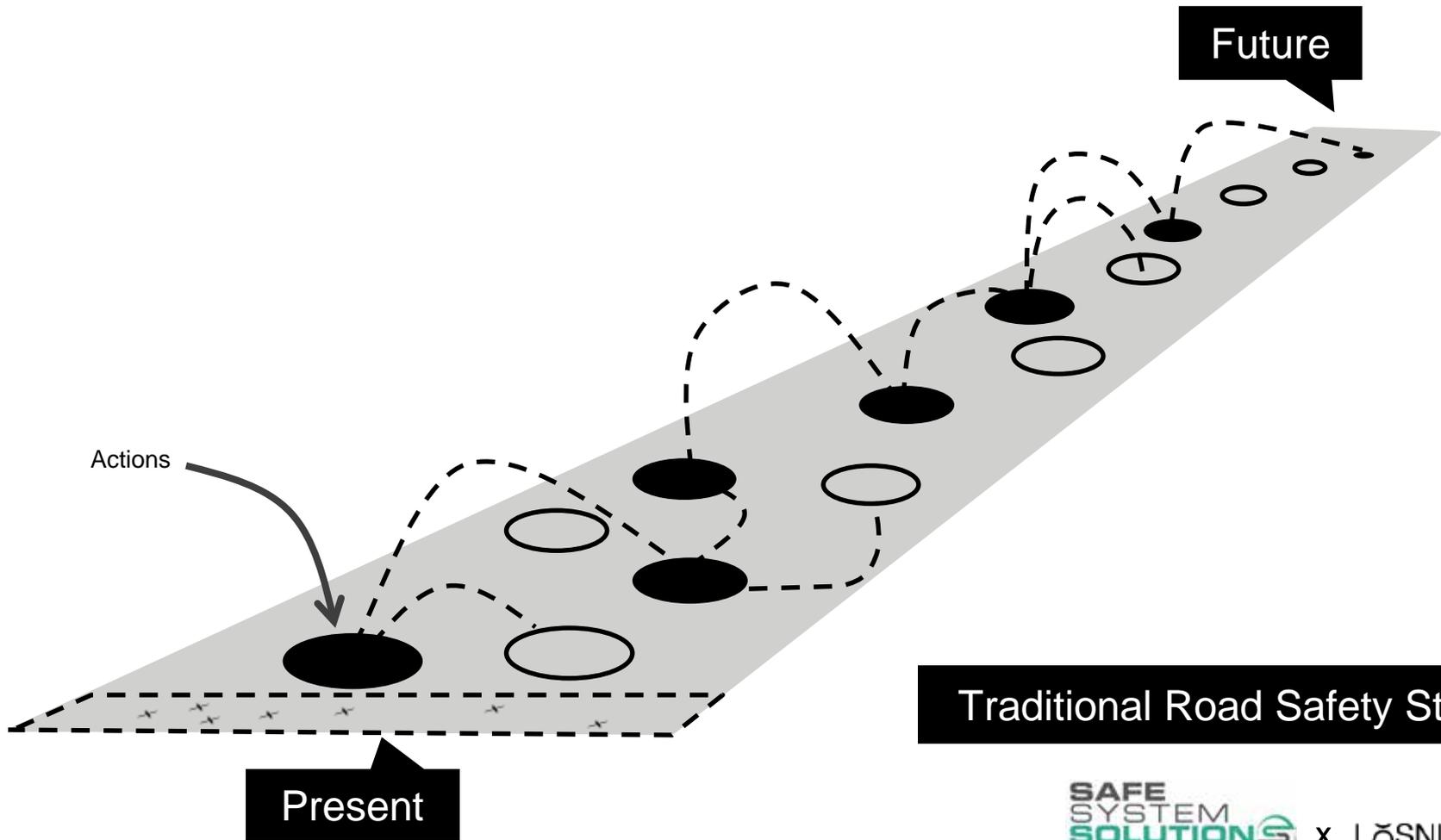
*“Putting Australia on a path to achieve **Vision Zero by 2050**”*

Charting a Path to Eliminating Road Death and Serious Injury

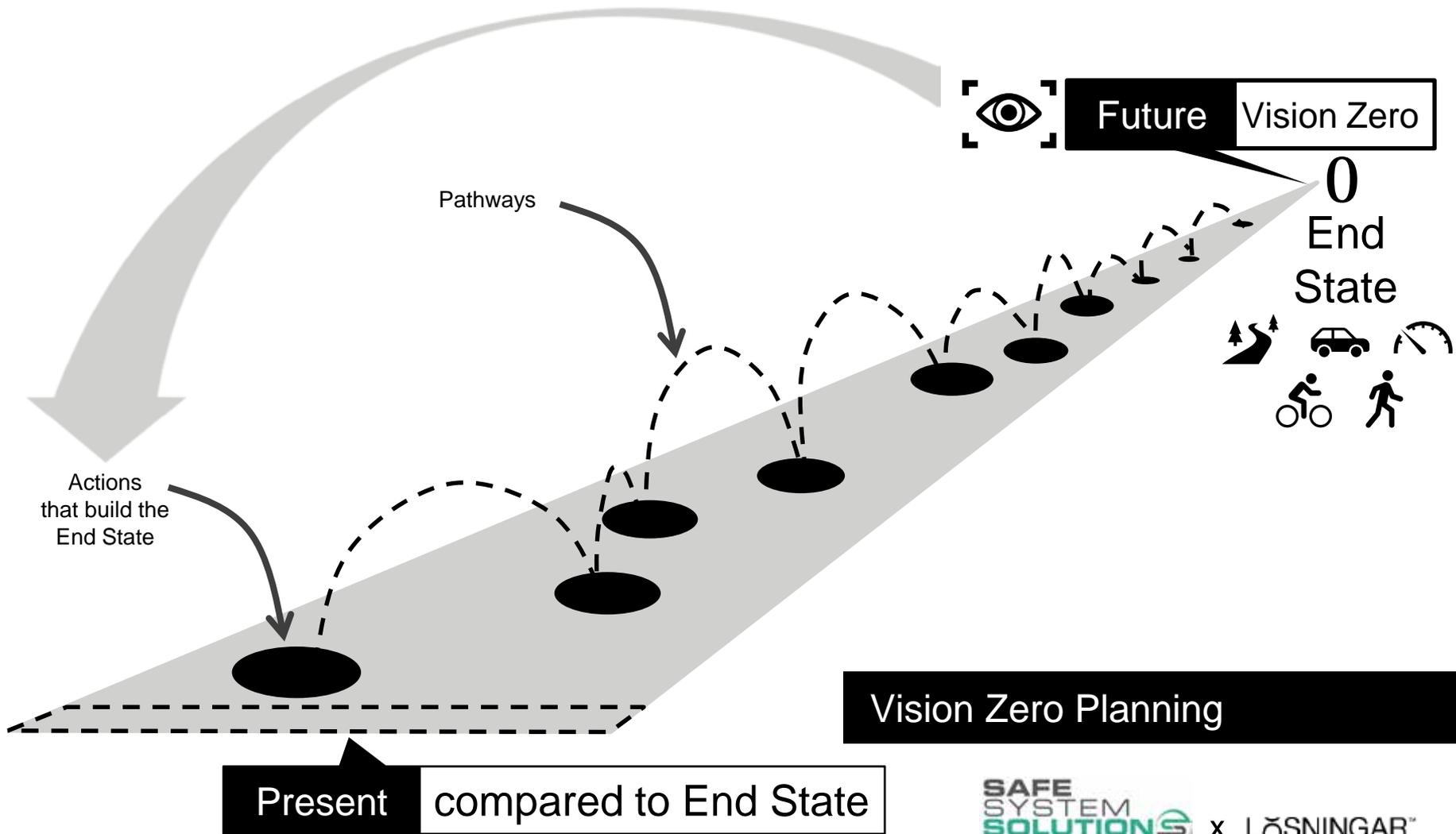
(Austroads Project SAG6365)

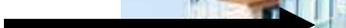
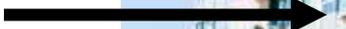
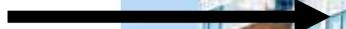
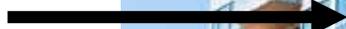


Eliminating
serious road trauma
by **2050**



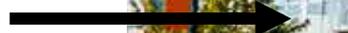
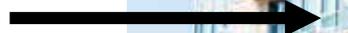
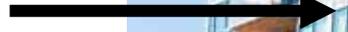
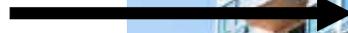
Traditional Road Safety Strategies





km/h



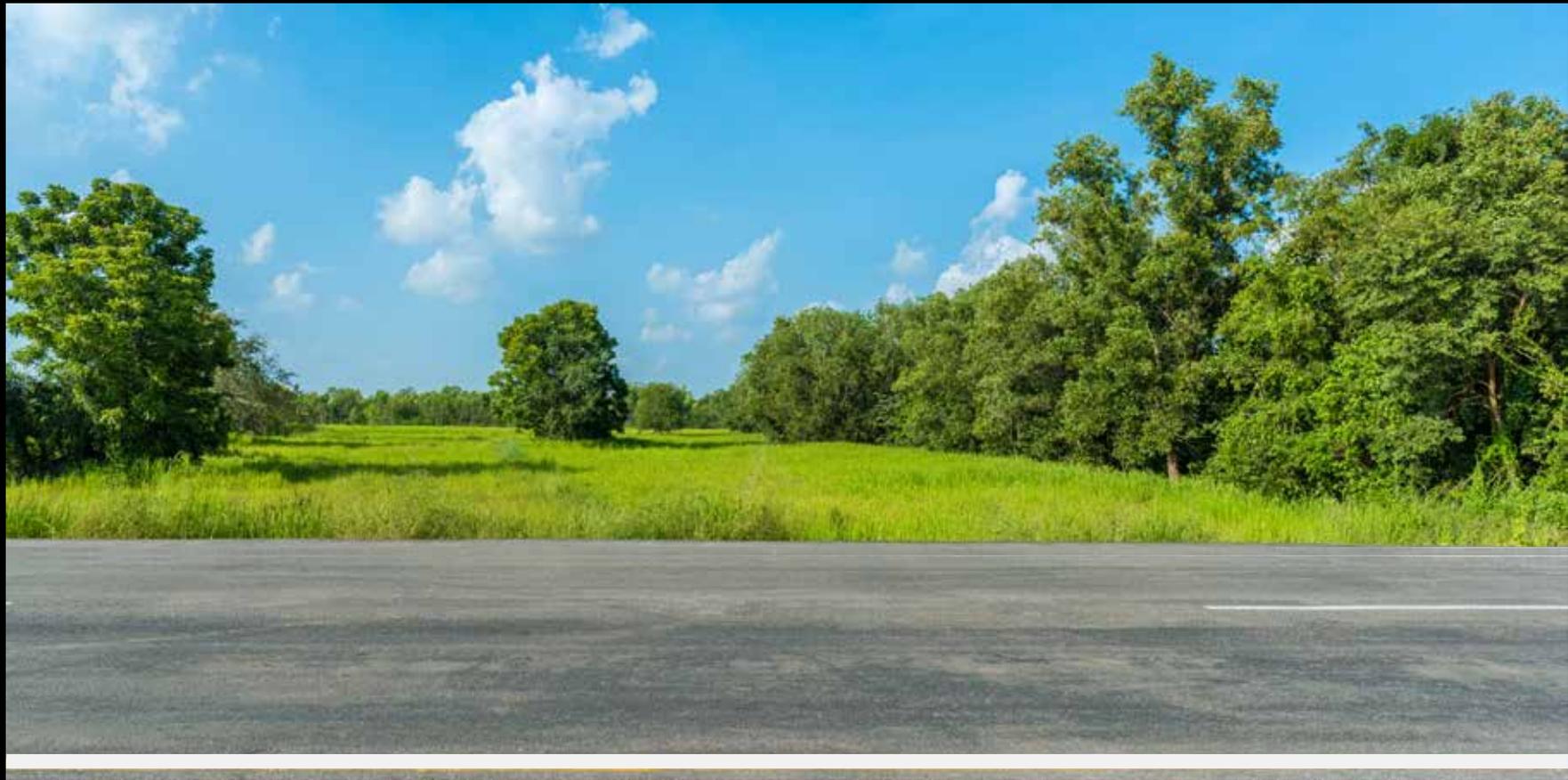


km/h

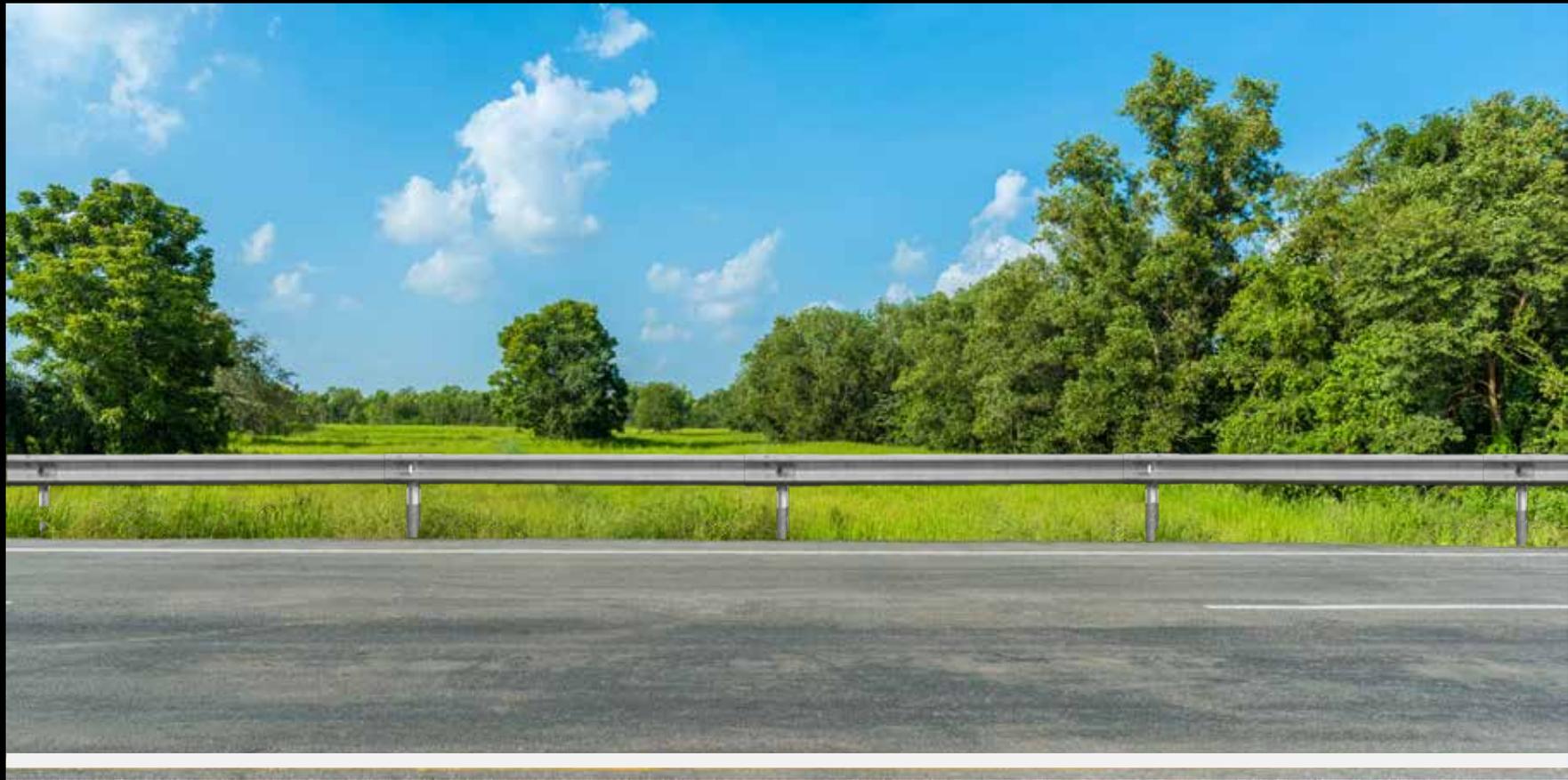














**SAFE
SYSTEM
SOLUTIONS**  x LÖSNINGAR™
ROAD SAFETY. SMART. SENSING. PROTECT. PREVENT.

Vision Zero Planning | Backcasting



Step 1

Specify the vision

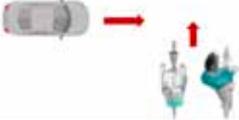
2030 passenger vehicle

- AEB Bicyclist
- AEB Head-On
- AEB Intersection
- AEB Pedestrian
- AEB Rear End
- Alcohol Interlocks
- Electronic Stability Control
- Emergency Lane Keeping
- ISA Limiting
- E-Call
- Lane Keep Assist
- Seatbelt Reminders

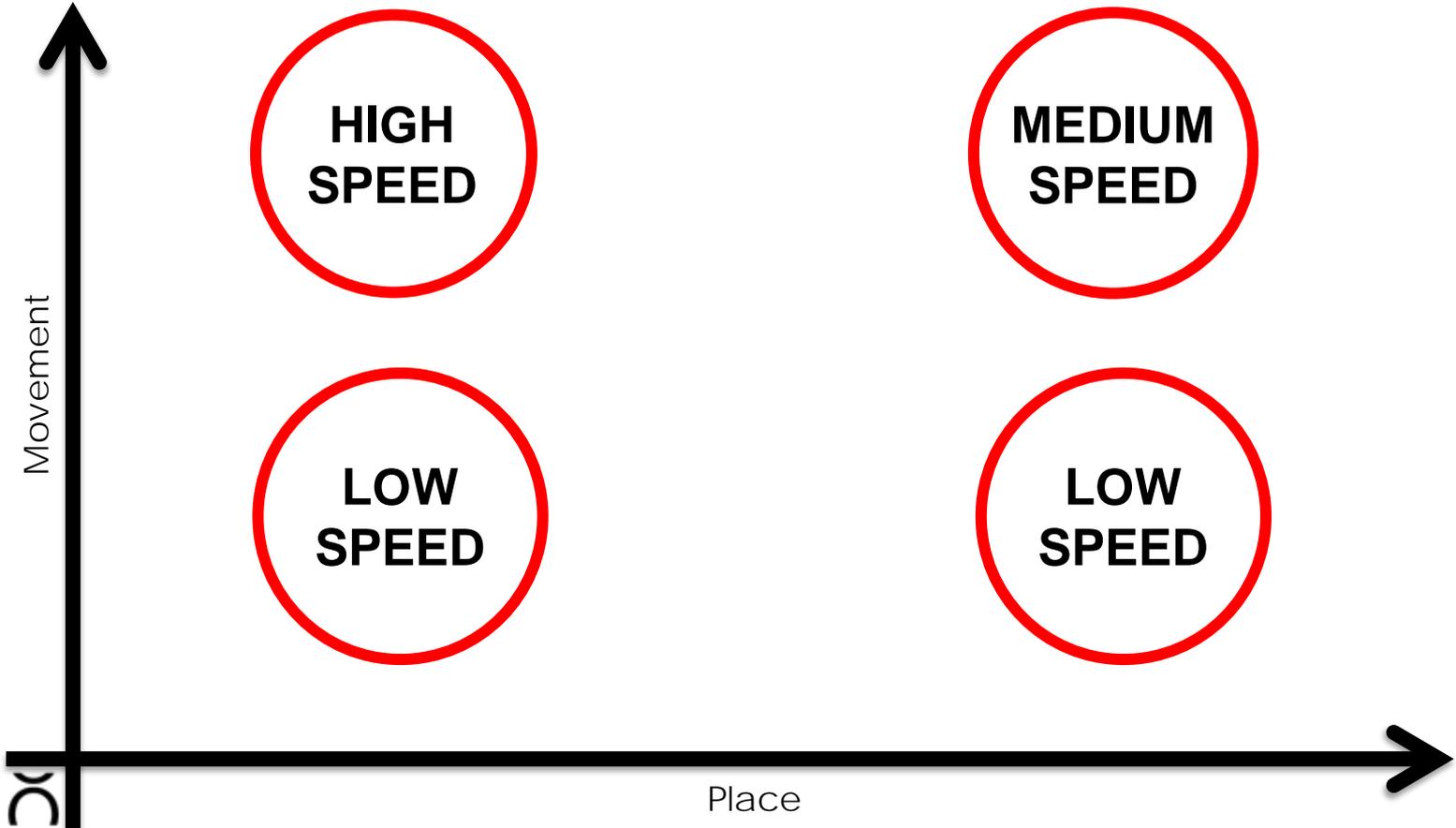


End state principles

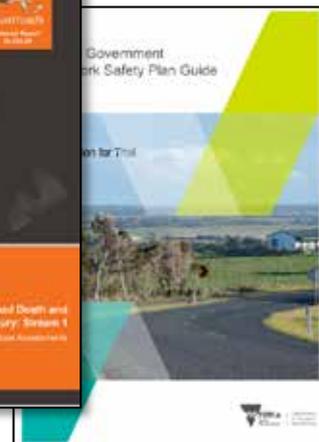
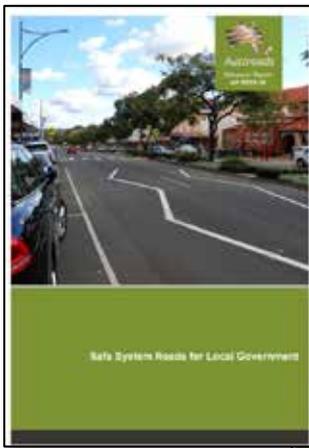
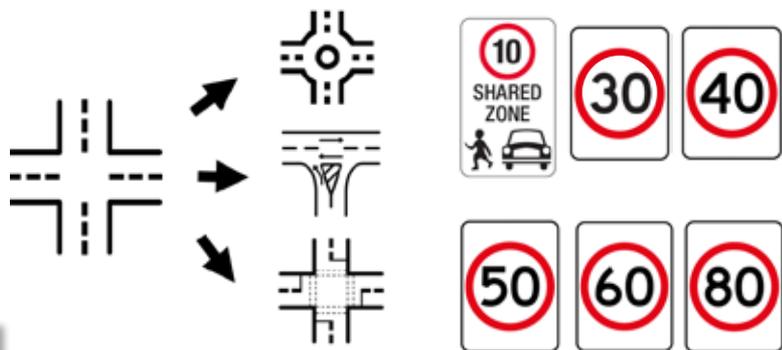
	Maximum acceptable impact speed (km/h)	Maximum safe travelling speed with optimal sight and road friction (km/h)
	dV 15	110
	60	80
	30	50
	40	40
	60	60
	40	40

	Maximum acceptable impact speed (km/h)	Maximum safe travelling speed with optimal sight and road friction (km/h)
	20	40
	30	60
	60	80

Infrastructure/Speed



Select treatment from End State menu











LÖSNINGAR™



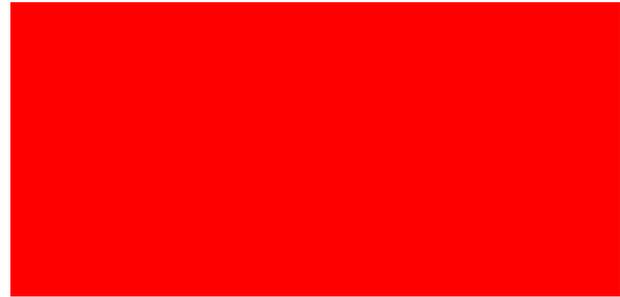
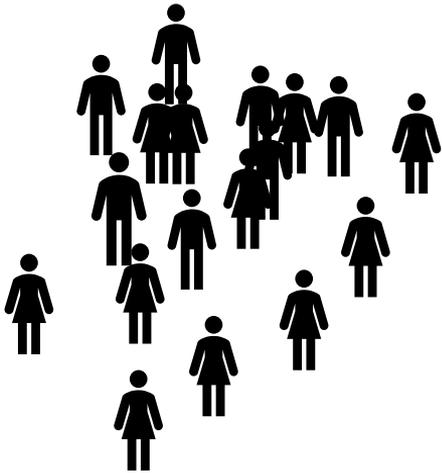




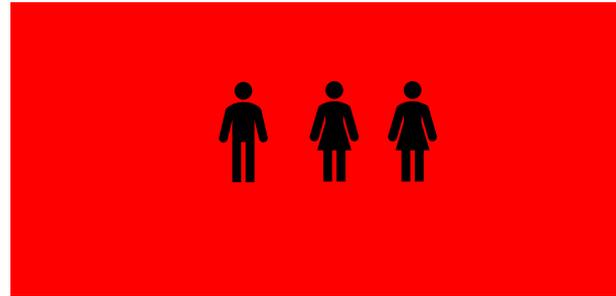
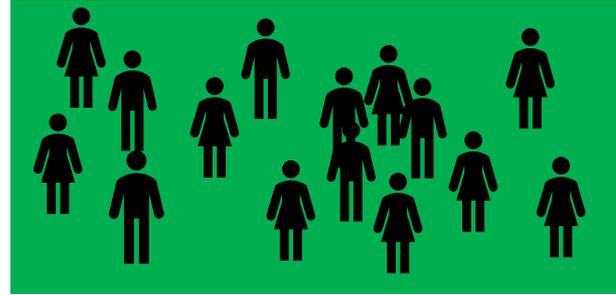


Treatment	1-U	1A-U	2-U	2A-U	2I-U	3-U	3A-U	3I-U	4-U	4A-U	4I-U	1-R	2-R	3-R	4-R
Speed Zone (km/h)															
Shared Zone 10	High	High	Medium	Medium	x	x	x	x	x	x	x	x	x	x	x
Shared Zone 20	High	High	Medium	High	x	x	x	x	x	x	x	x	x	x	x
30	Medium	Medium	High	High	High	High	High	High	medium	High	medium	x	x	x	x
40	Medium	x	High	x	x	x									
50	x	x	Medium	x	x	medium	x	High	High	Medium	High	High	medium	medium	medium
60	x	x	x	x	x	medium	x	medium	medium	x	High	High	High	High	High
70	x	x	x	x	x	x	x	x	x	x	x	medium	medium	medium	High
80	x	x	x	x	x	x	x	x	x	x	x	x	x	x	medium
90	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
100	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
110	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Mid Block															
Road closure (peds cyclists only)	High	High	Medium	Medium	x	x	x	x	x	x	x	medium	x	x	x
LATM	High	High	High	High	Medium	High	High	medium	Medium	Medium	Medium	x	x	x	x
Speed humps	High	High	High	High	Medium	High	High	medium	Medium	Medium	x	x	x	x	x
Speed cushions	High	Medium	Medium	Medium	x	x	x	x							
One way slow points	High	High	High	High	x	High	High	x	x	x	x	x	x	x	x
Chicanes	Medium	Medium	Medium	x	Medium	Medium	x	Medium	x	x	x	x	x	x	x
Median island	x	x	Medium	Medium	High	x	x	x	x						
Wombat Crossing	x	Medium	Medium	Medium	High	x	x	x	x						
Bicycle boulevard	x	x	Medium	Medium	x	High	High	x	x	x	x	x	x	x	x
Copenhagen bike lane (island separator)	x	x	x	x	Medium	medium	medium	medium	High	High	medium	x	x	x	x
Copenhagen bike lane (bollard separator)	x	x	x	x	Medium	medium	medium	medium	High	High	medium	x	x	x	x
Bicycle filter	High	High	High	High	x	Medium	Medium	Medium	x	x	x	x	x	x	x
Footpaths	High	x	x	Medium	Medium										
Roadside barriers	x	x	x	x	x	x	x	x	medium	medium	medium	x	x	Medium	Medium
Median barriers	x	x	x	x	x	x	x	x	x	x	x	x	x	x	medium
High profile barrier kerb	x	Medium	Medium	x	High	x	x	x	x						
One way traffic	Medium	Medium	High	x	Medium	Medium	medium								

Case-by-Case Validation



Case-by-Case Validation



How close to zero do we get?

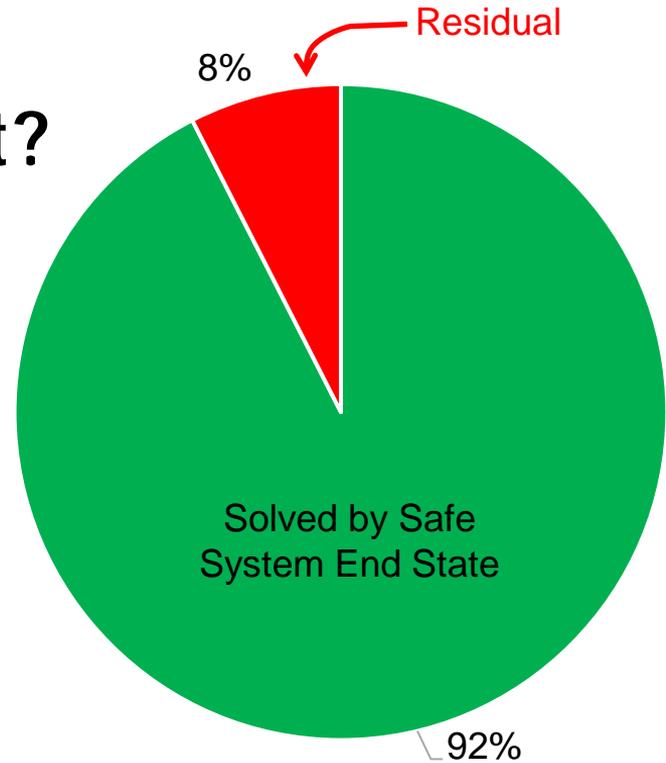
If all these criteria were a reality on our roads today...

Close to zero?

Combination of treatments making up a Safe System End State



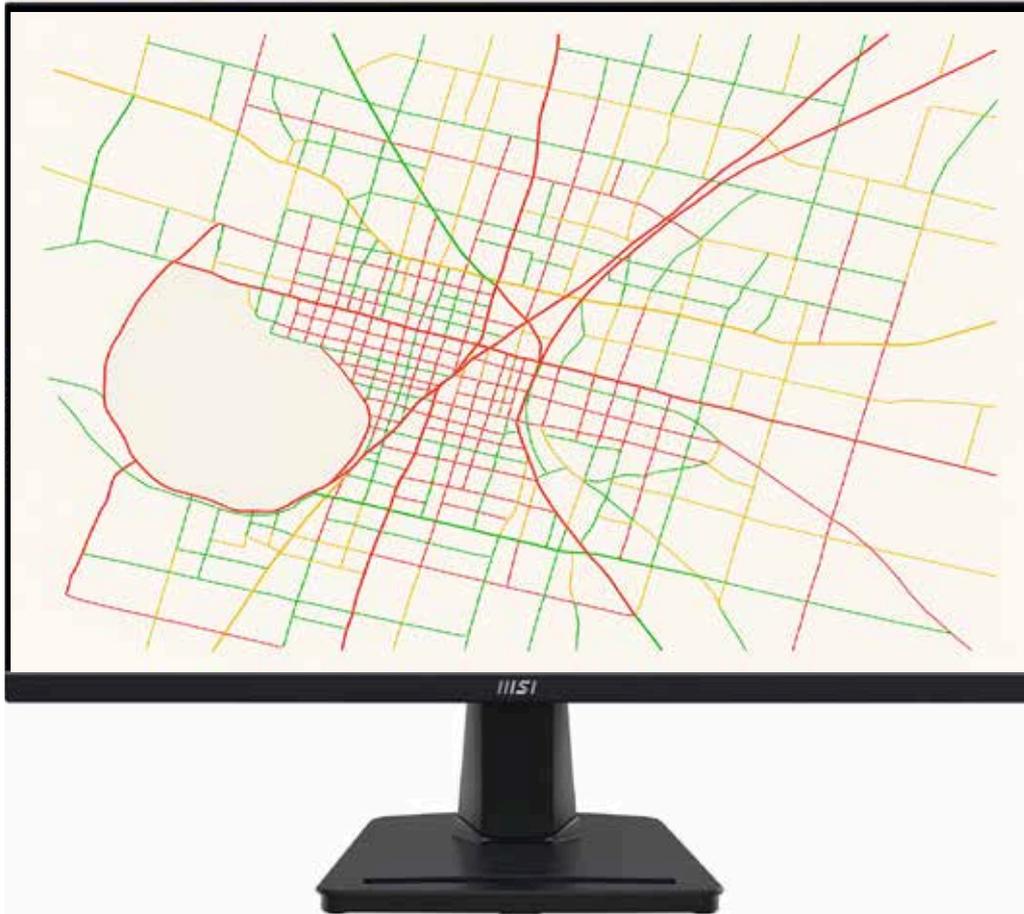
End state validation



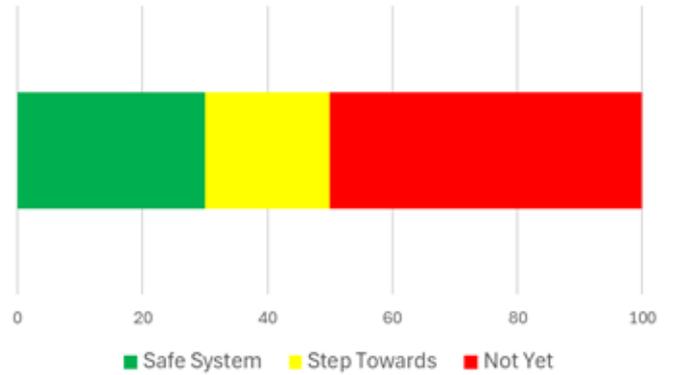
■ Yes ■ No

Step 2 and 3

System assessment and Gap-analysis



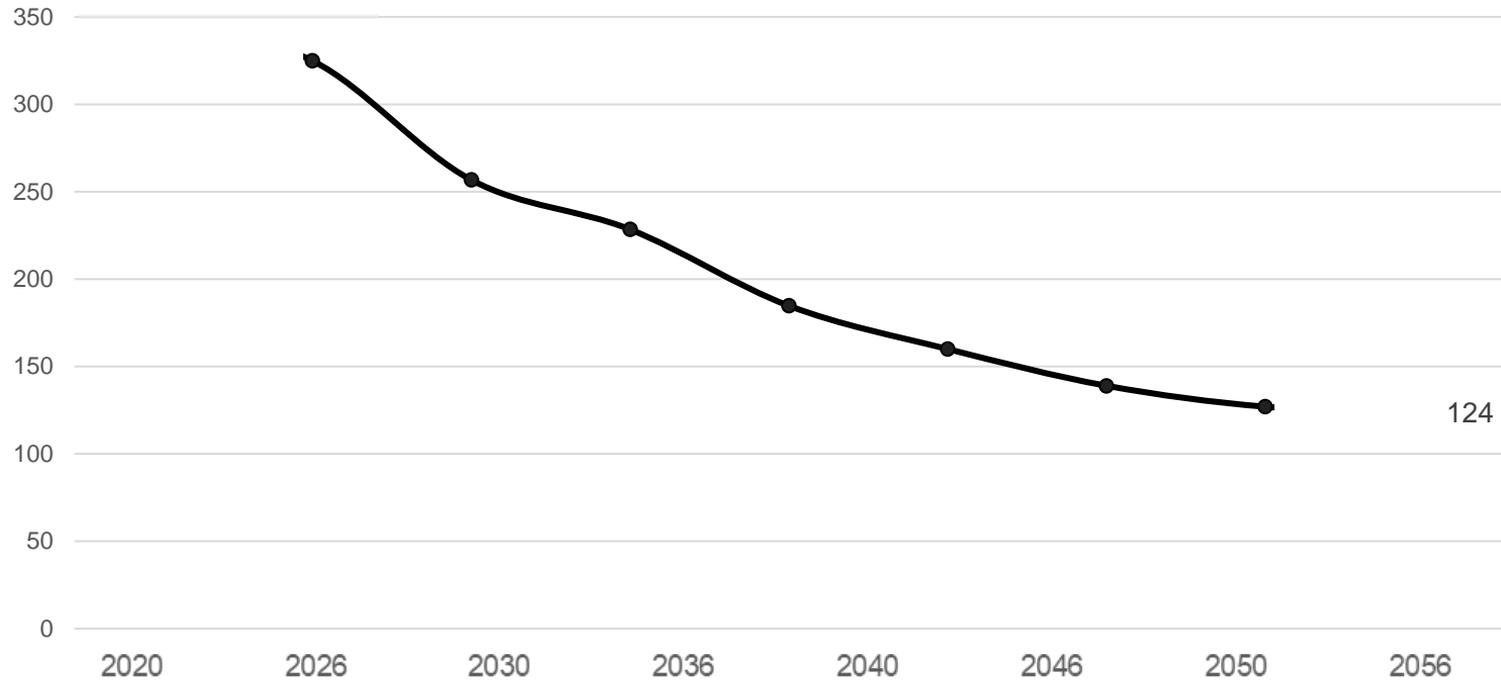
% of roads/streets at Safe System End State



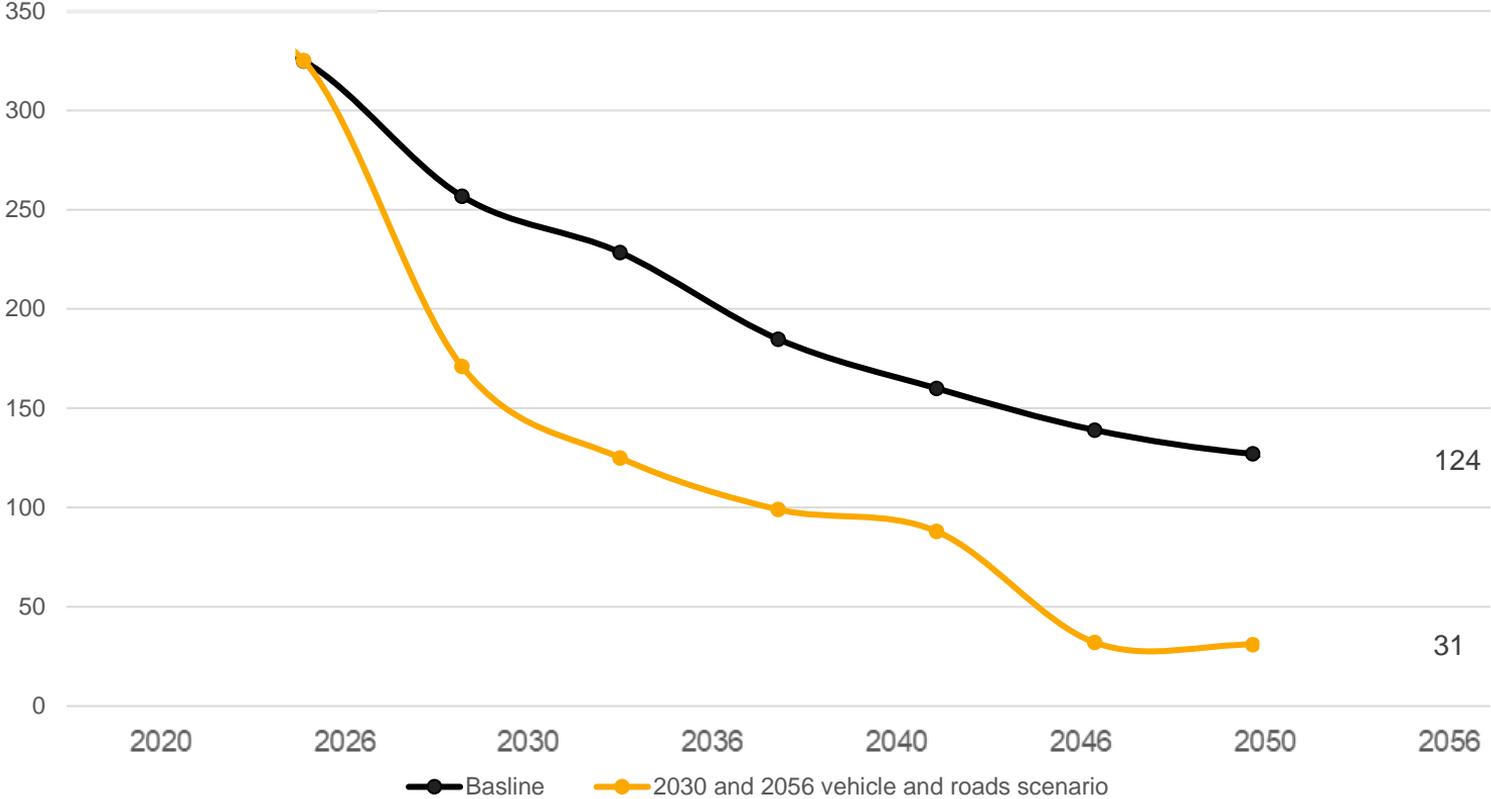


Step 4 – Priority Matrix (Baseline modelling)

Baseline trauma trend

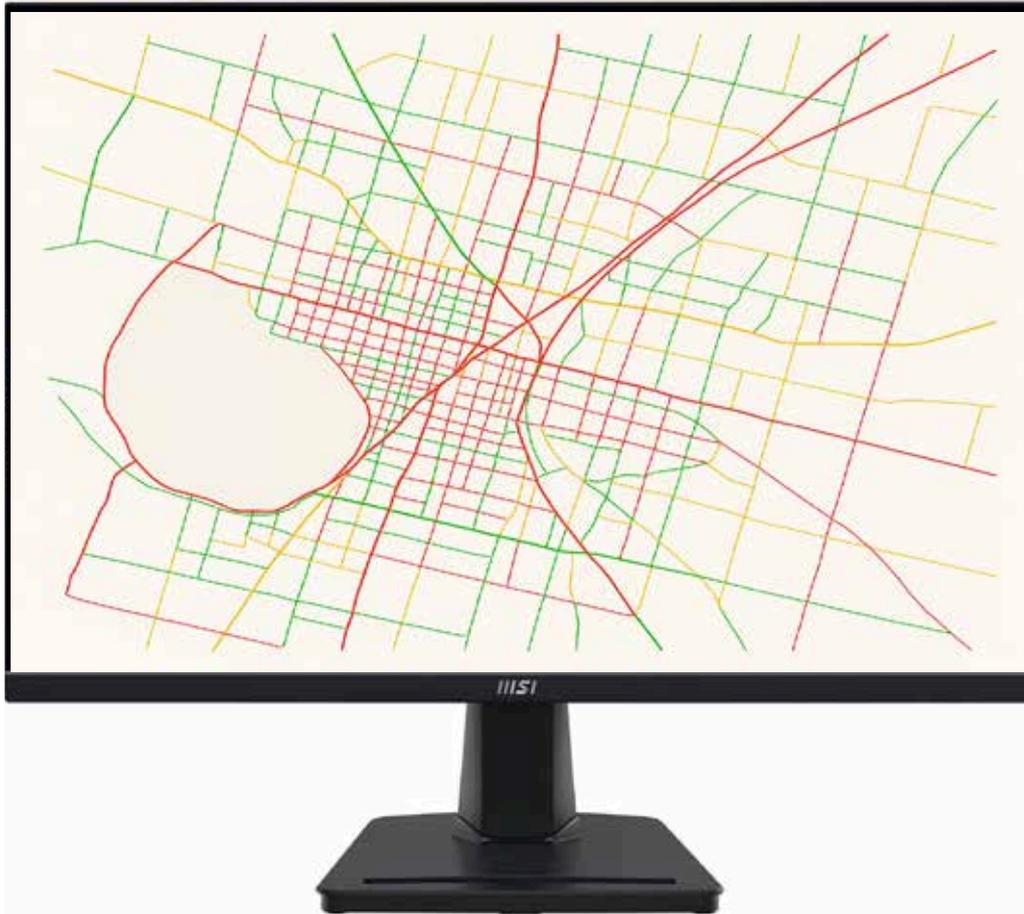


2050 full force scenario & 2030 scenario

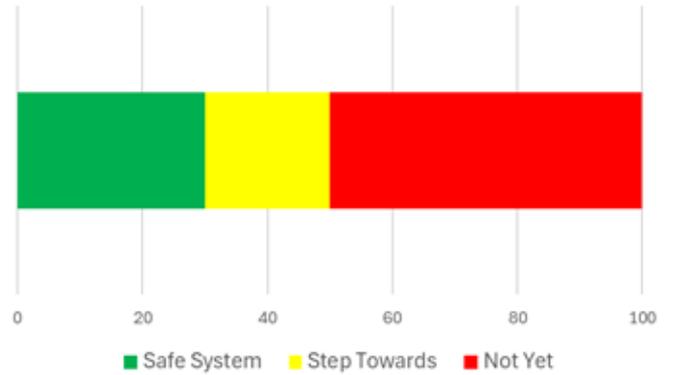


Step 6

Performance Dashboard



% of roads/streets at Safe System End State



From scenarios to Performance Indicators

Interventions
(Targets over time to achieve FSI targets)



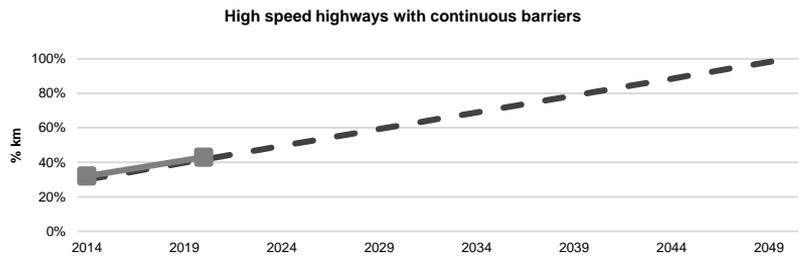
Action Plan
(Project KPI)



System state
(Output SPI)

Intervention	2025	2030	2040
Route treatments	500 km	1,000 km	4,400 km (100%)

Project	Project Targets
Top XX High Risk Rural Road Projects	6 Delivered in 2022-23 9 Delivered in 2023-24 5 Delivered in 2024-2040





Step 7 Capability & Capacity Building

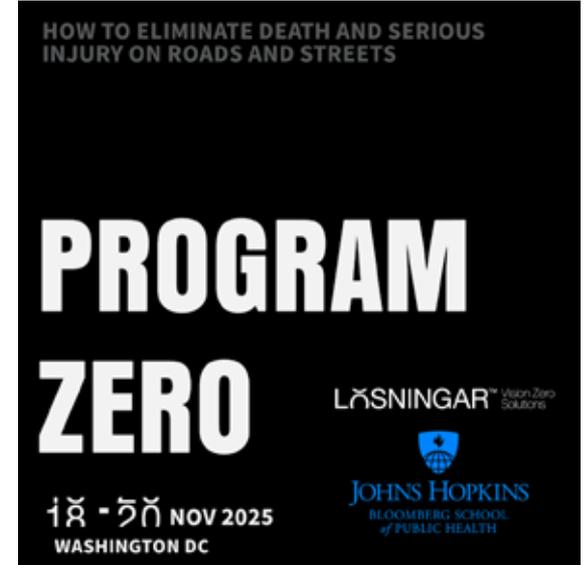




Network Safety Planning for Local Governments



Engineering and Road Safety Auditing



Policy and Strategy

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