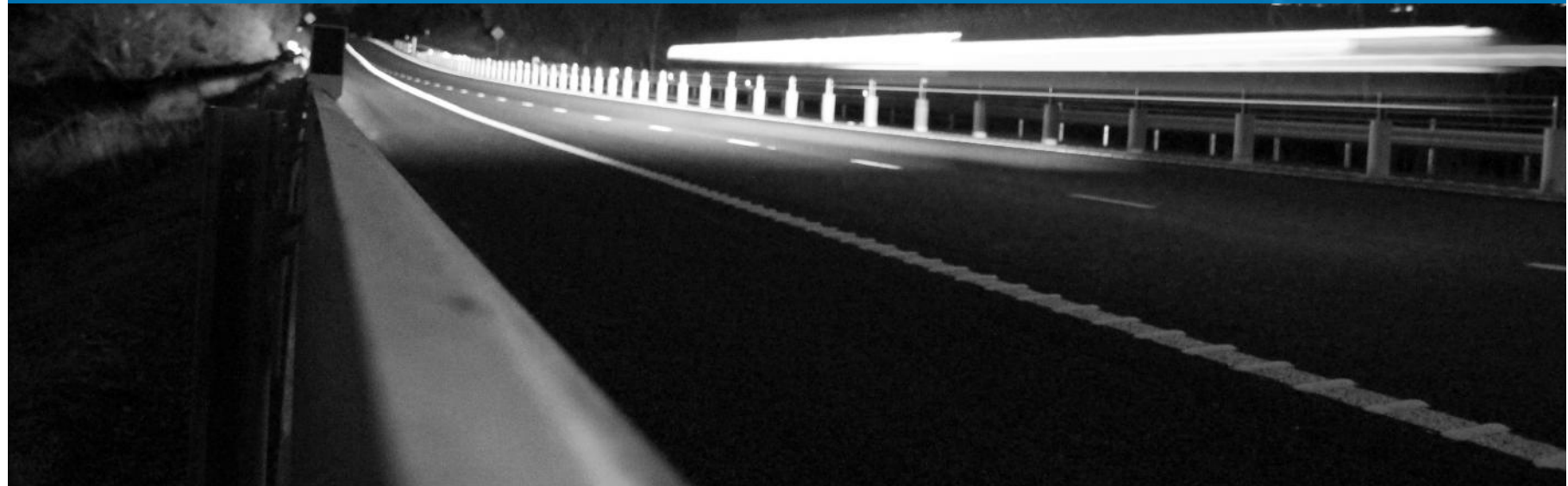
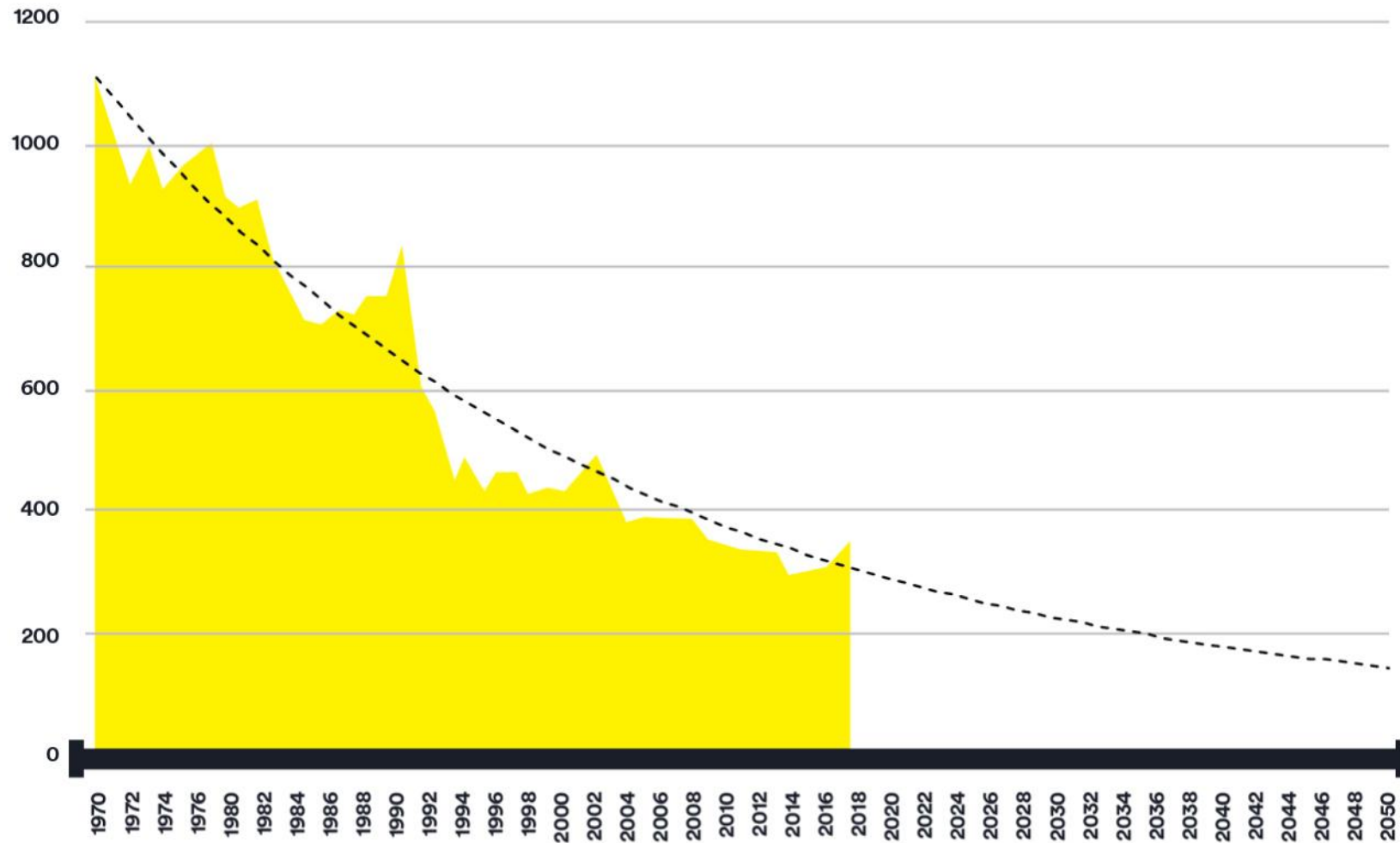


Safe System Road Infrastructure Program



Road Fatalities in Victoria:



Safe System Principles

- A vision of zero deaths and serious injuries on our roads
- Movement should not be produced at the expense of human trauma
- Recognises that people will **always make mistakes** and have crashes, but the road system **should be forgiving** and crashes should not result in **death or serious injury**.
- In addition to road users, system designers have a responsibility to reduce the harm being done



ENERGY MANAGEMENT

Crash Type



head on

Impact speed

70 km/h



side-impact

50 km/h



side impact
with tree

30 km/h



pedestrian

30 km/h



Safety Culture

Pathological
Up to everyone
to protect
themselves the
best they can

Reactive
Solve safety
problems as
they come
along

Calculating
Balancing
safety and
mobility

Proactive
Safety sets the
condition for
mobility

Maintenance
Maintain a
high level of
safety



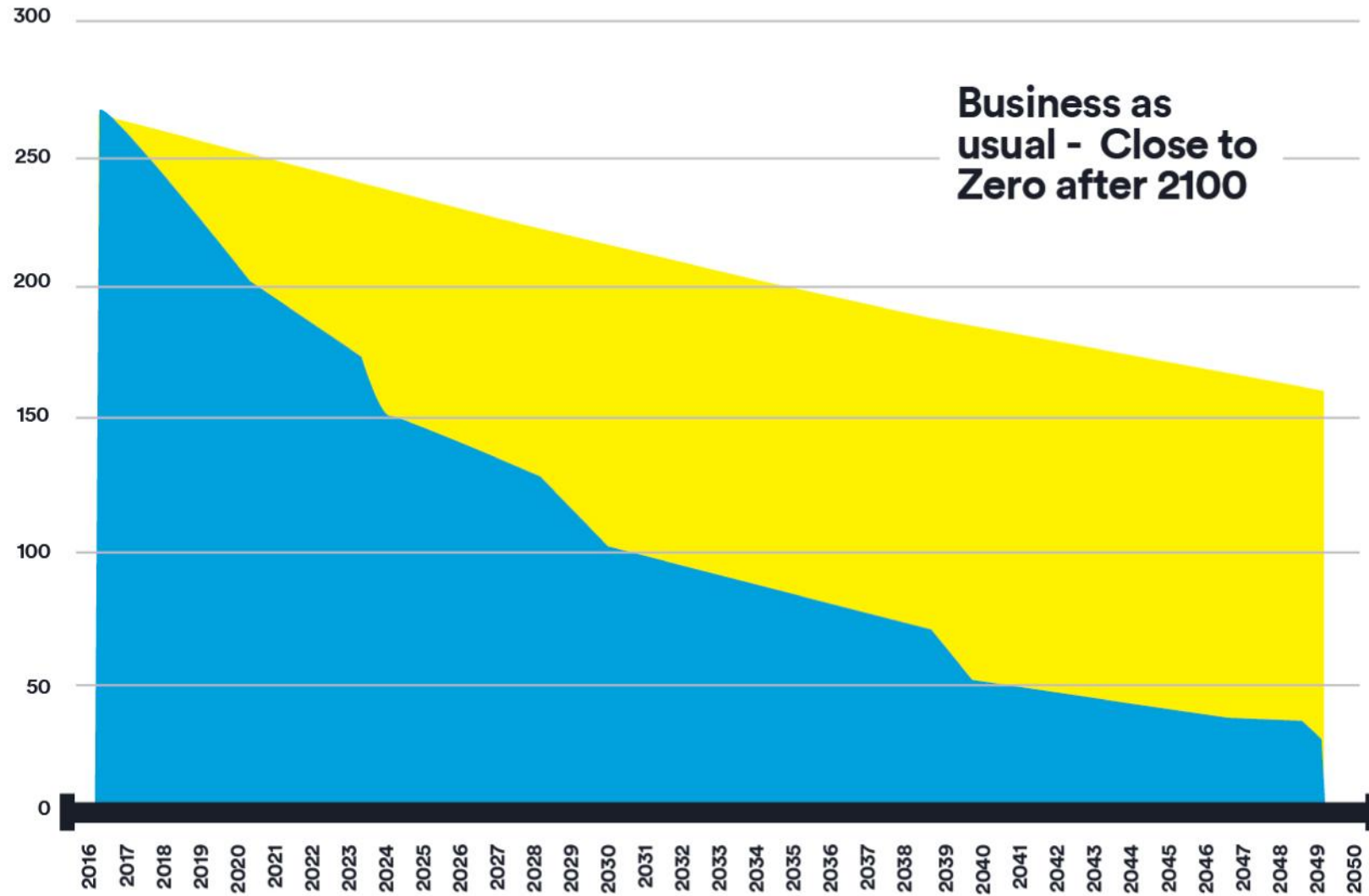


SSRIP Objectives

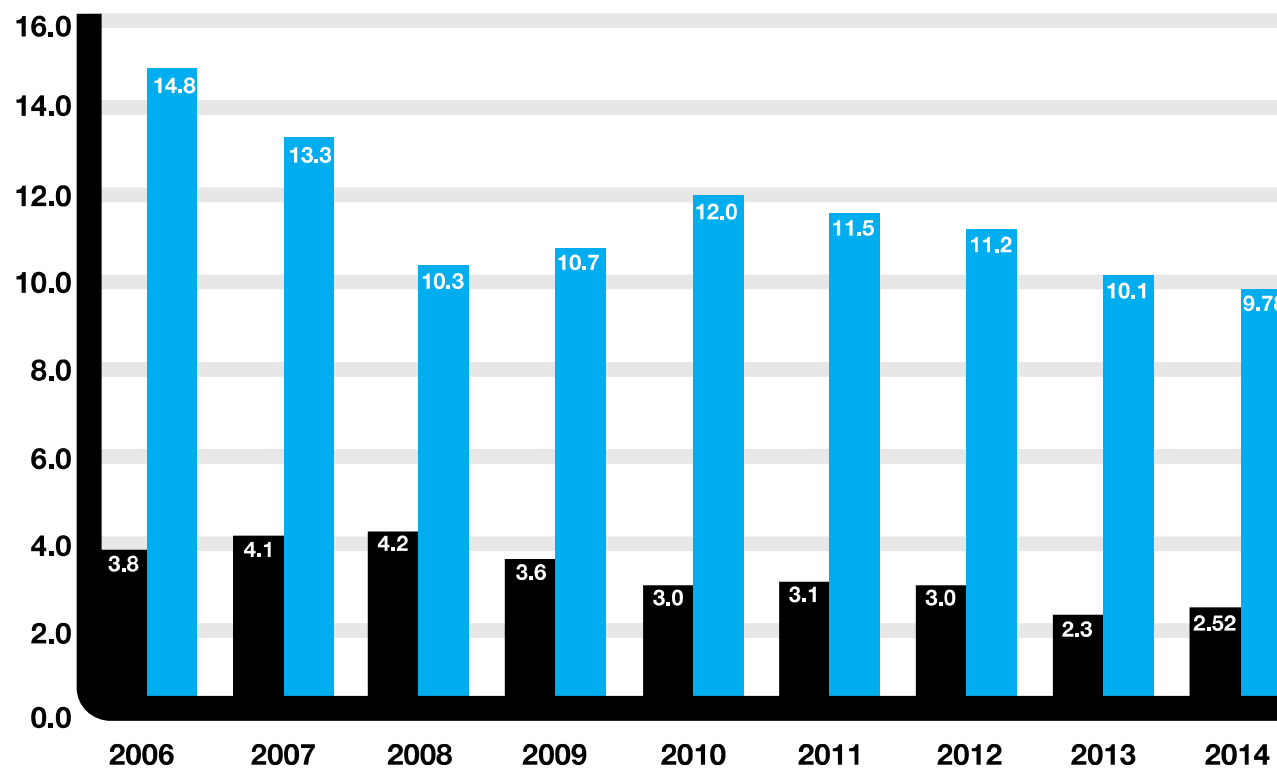
The objective of the SSRIP is to move Victoria towards zero road deaths and serious injury by:

- I. the cost effective implementation of effective road based treatments to the existing road network; and
- II. strategically, systematically and efficiently addressing road and roadside condition, travel speed and their combined effects in accordance with the Safe System philosophy and principals; and
- III. **influencing providers, managers and users of the Victorian transport system to make decision that will align with the Safe System philosophy.**

Towards ZERO



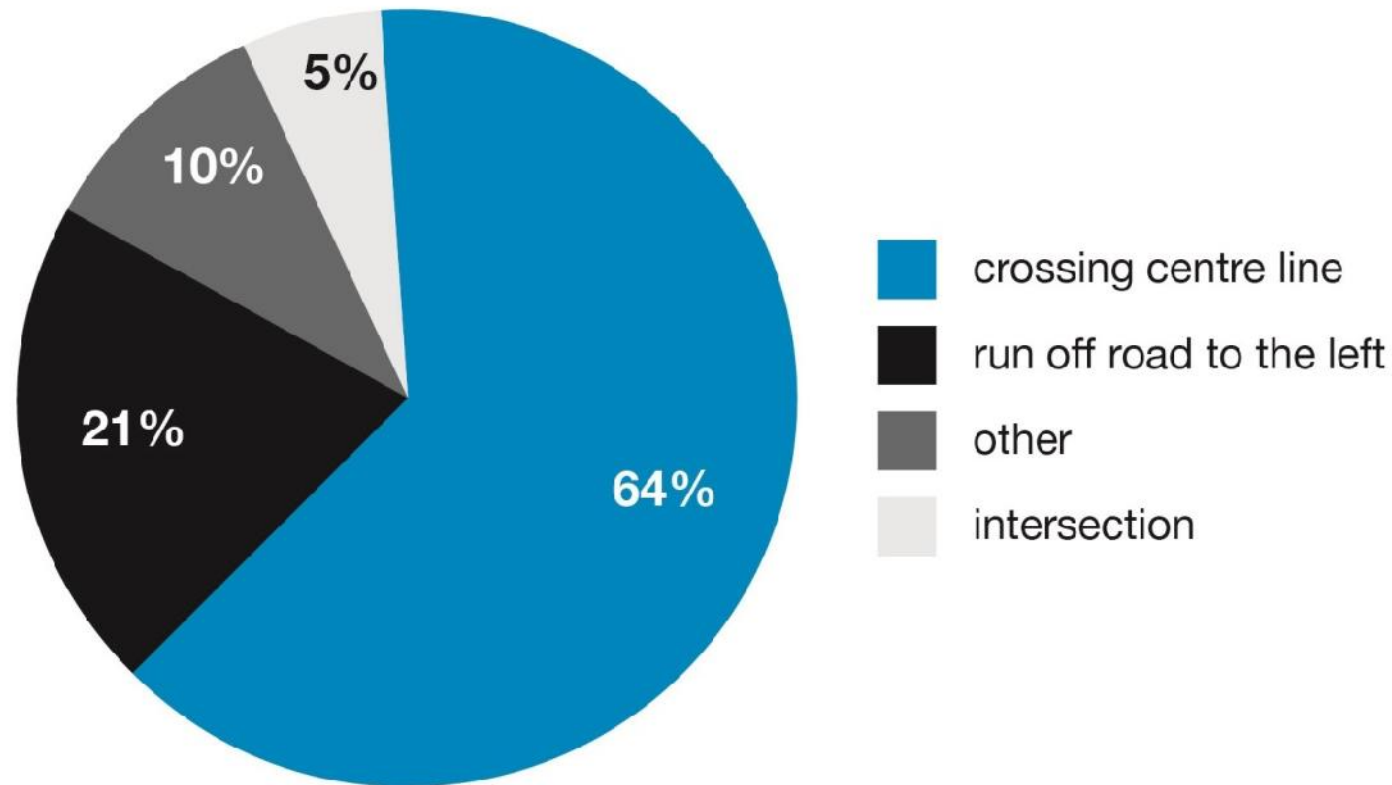
Fatality rates per 100,000 head of population



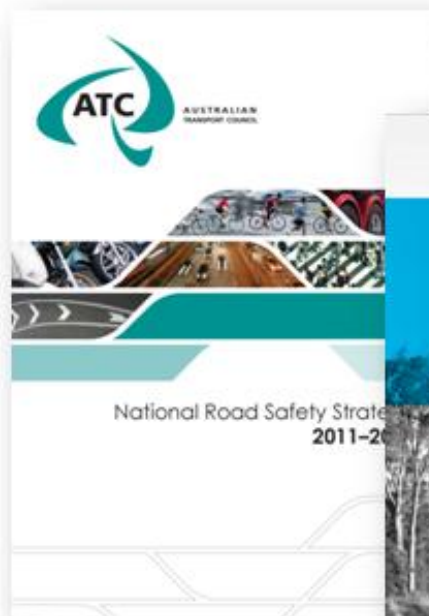
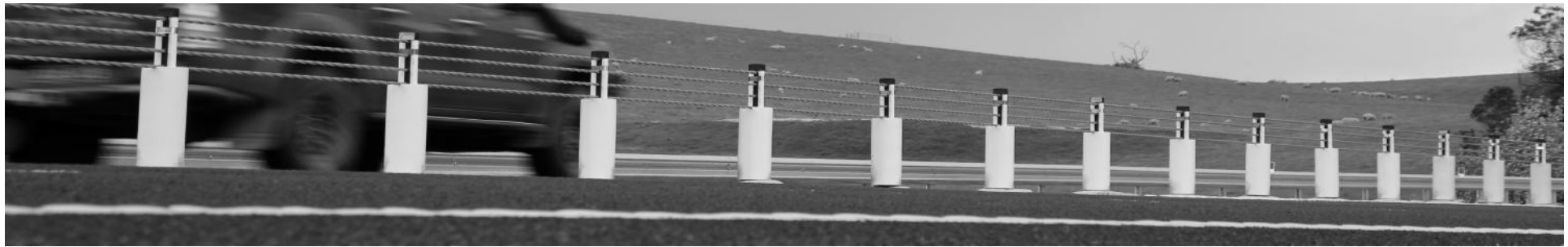
Metropolitan Melbourne

Country Victoria

High Speed Undivided Rural Roads



High standard & primary link roads

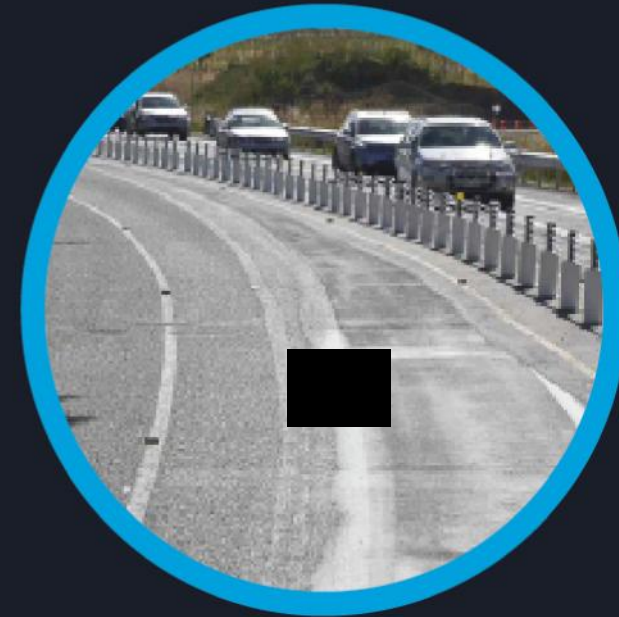


Top 20 High Risk Rural Roads

(SAFER ROADS SAVE LIVES.)

Scope of Program

- **\$450m** total investment allocated to address the issue of run-off-road and head-on casualties.
- Towards Zero 2016-2020 Road Safety Strategy and Action Plan have identified **20 High Risk Rural Roads**.
- Between 2011-2015, **61 people died and 640 people were seriously injured** on these 20 roads.
- **815km** of divided roads treated with continuous left hand side and right hand side barrier.
- **170km** of undivided road treated with centre line flexible safety barrier.
- This investment is expected to **save 85 serious casualties** each year.



Safe System Road
Infrastructure Program













Flexible Guard Fence



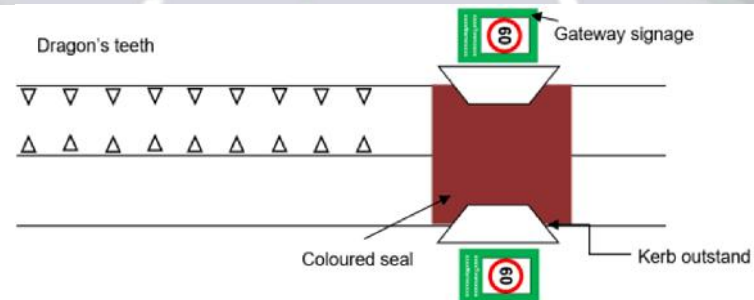
Safety Improvements - Wide Centre Line



Safe Travel Speeds on Low Volume Rural Roads



Gateway treatments
Lowering speed limits

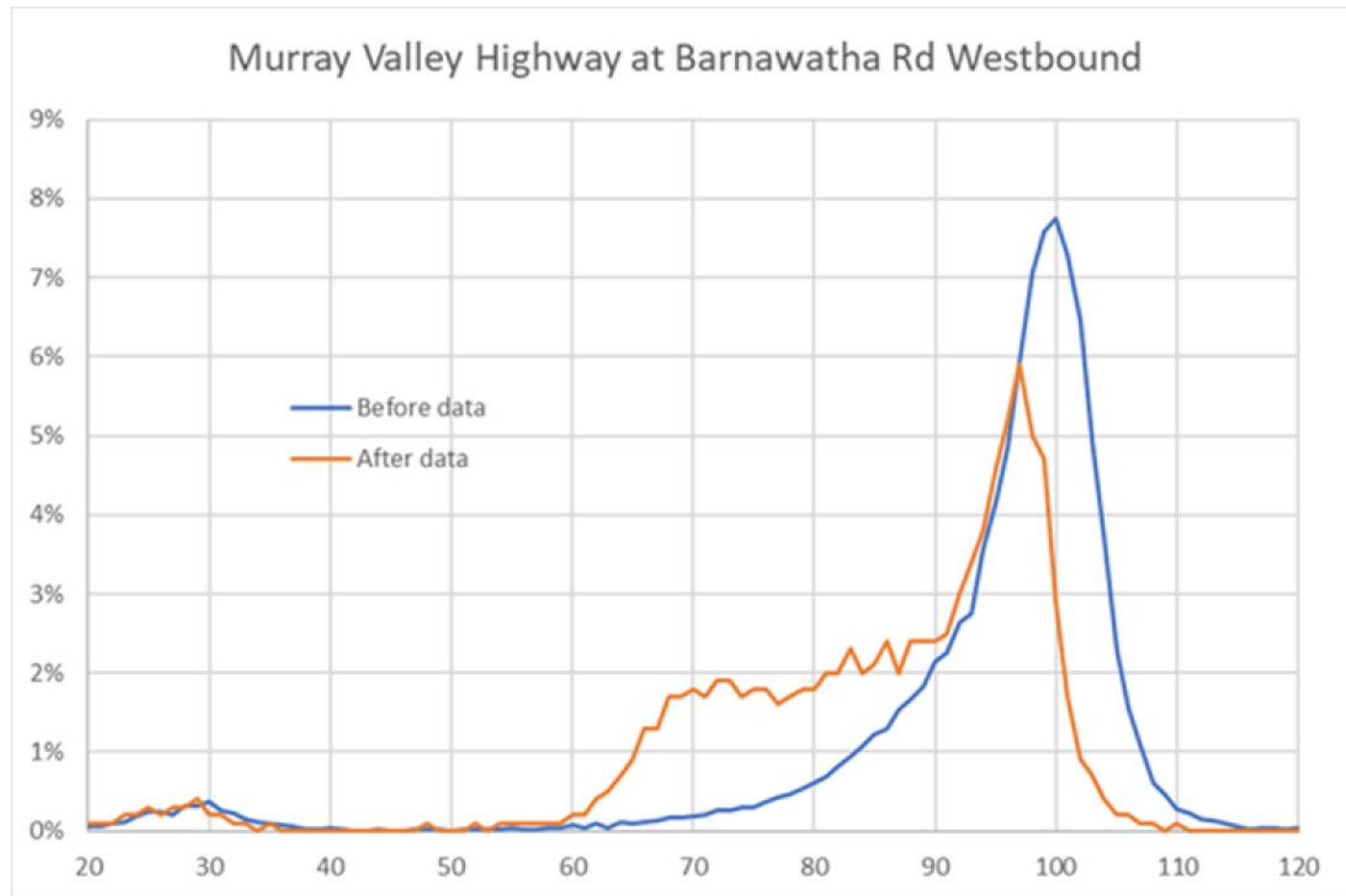


STARS

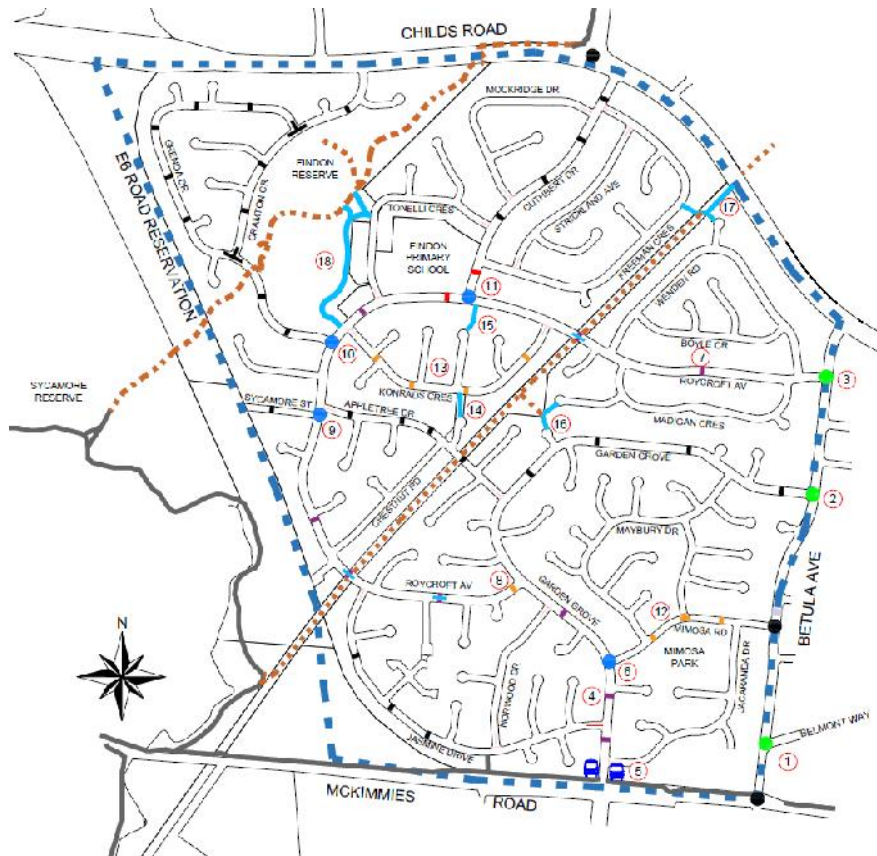


STARS Trial

Speed Distribution



Safe Travel Speeds in Local Streets (Metro)



Pedestrian & Cyclists Fund

1. Program overview:

Bicycle	Pedestrian	Total	Active Transport	Total Ped and Bike Program
\$46.6M – 9 projects	\$27M – 22 projects	\$73.6M – 31 projects	\$22.2M – 14 projects	\$95.8M

2. Projects announced:

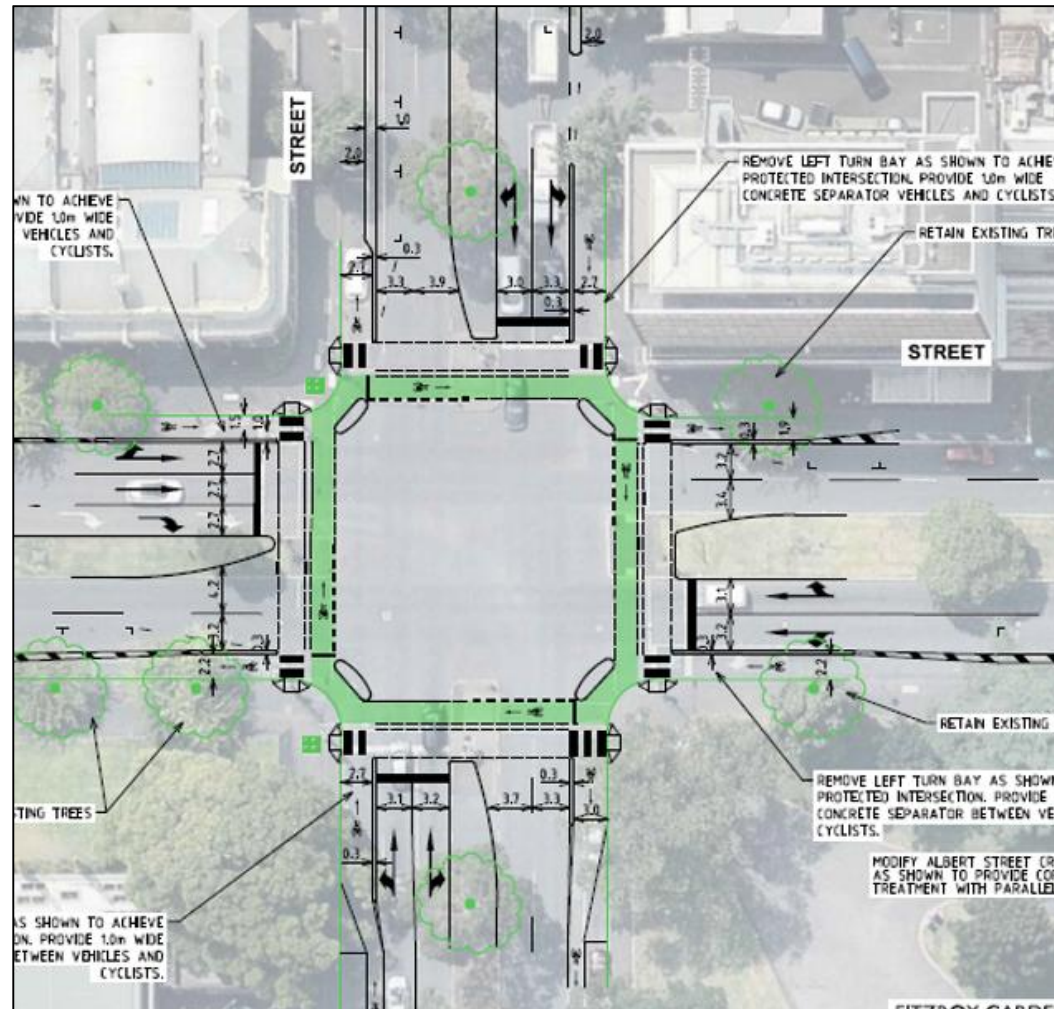
- Pedestrian projects: all projects have been announced by either VicRoads, Local Council or Minister's Office
- Bicycle projects: 3 projects awaiting announcement.

3. Project status:

- Pedestrian projects
 - 18 of 22 projects have begun construction works
 - The Clarendon Street, Pedestrian Improvement Project has reached practical completion (May 2018)
- Bicycle projects
 - 1 project has begun construction works (Morewell to Traralgon Off-Road Bicycle Path)
 - Tender for works for the Geelong to Herne Hill SCC project to be open in late May
 - Tender for works for the Dynon Road Bicycle Improvement Project to be open in late May

Transformation of Popular Cycling Routes

Protected intersection at Albert St and Lansdowne St



\$357m

total investment allocated for 2018-2019



Making intersections safer



Preventing run-off road
and head-on collisions



Improving safety for
pedestrians and bicyclists



Making curvy roads safer



Making local streets safer

Audio Tactile Line Marking (Rumble Strips)

As part of Towards Zero, we're installing over 2,500 km of rumble strips to improve safety on Victoria's major roads.

Towards Zero is a plan to ensure no one is seriously injured or killed on our roads.

The Victorian Government is investing \$1.4 billion to achieve fewer than 200 deaths by 2020 and reduce serious injuries by 15% on Victoria's roads.

What we're doing

We're placing rumble strips on rural roads with speed limits of 80km/h or higher, to alert drivers when they're veering out of their lane.

We've already installed rumble strips across eastern and north-eastern Victoria, with installation in the north and west of the state to follow.

How rumble strips work

Rumble strips, otherwise known as audio-tactile line markings, are small bumps along the edge of the road. They make a 'rumbling' sound and cause a vehicle to vibrate when driven over, alerting drivers that they're moving out of their lane.



Rumble strips can be used on centreline markings to reduce the risk of head-on collisions, or on outer lane markings to help prevent run-off road collisions.

Why we're doing this

One in three people who are seriously injured or killed on Victorian roads have been involved in a crash caused by vehicles leaving their lane.

Drivers and riders can unintentionally leave their lane for a range of reasons, including drowsiness, a lapse in attention, distraction or the effects of drugs and alcohol.

By alerting drivers with the noise and vibrations caused by rumble strips, we can prevent potentially fatal head-on or run-off-road collisions.

There is significant evidence to show rumble strips improve safety for road users. In NSW, rumble strips have halved the number of vehicles accidentally travelling out of their lane and running off the road.

Timing

This project is expected to be completed by June 2020.

More information

To find out more about rumble strips, email: engage.ssrip@roads.vic.gov.au

Audio Tactile Line Marking – Installation Process



Audio Tactile Line Marking – Where and Why

Where it's applied:

-) Speed limit of 80km/h, 90km/h, 100km/h or 110km/h
-) Traffic volume greater than 500 vpd (local roads only)
-) Have limited roadside development
-) Not be a continuous winding section
-) Meet seal width parameters (road design note)
-) Meet seal condition/pavement type parameters (road design note)



Why it's applied (why black):

-) A continuous audio tactile on both broken and unbroken centrelines (no gaps).
-) Reduced material costs where barrier and semi barrier lines used.
-) Reduced material cost (due to high cost white beads in white tactile not used).
-) Ability to offset on edge and centrelines to extend life (due to less hits and to avoid reseals).
-) Ability to reduce noise to nearby residents due to offsets.



(SAFER ROADS SAVE LIVES.)

