

Safe Roads Alliance Breaking the Barriers to Safer Journeys

Andrew Scott, Director



International Loss of Life: New York 9/11 – How many died?

2800

A photograph of the New York City skyline on September 11, 2001. The World Trade Center towers are visible, with thick black smoke billowing from the top of the towers. The number '2800' is overlaid in large, orange, outlined font across the center of the image. The background shows other skyscrapers and a bridge in the foreground.

International Loss of Life : Road Deaths – How many die?



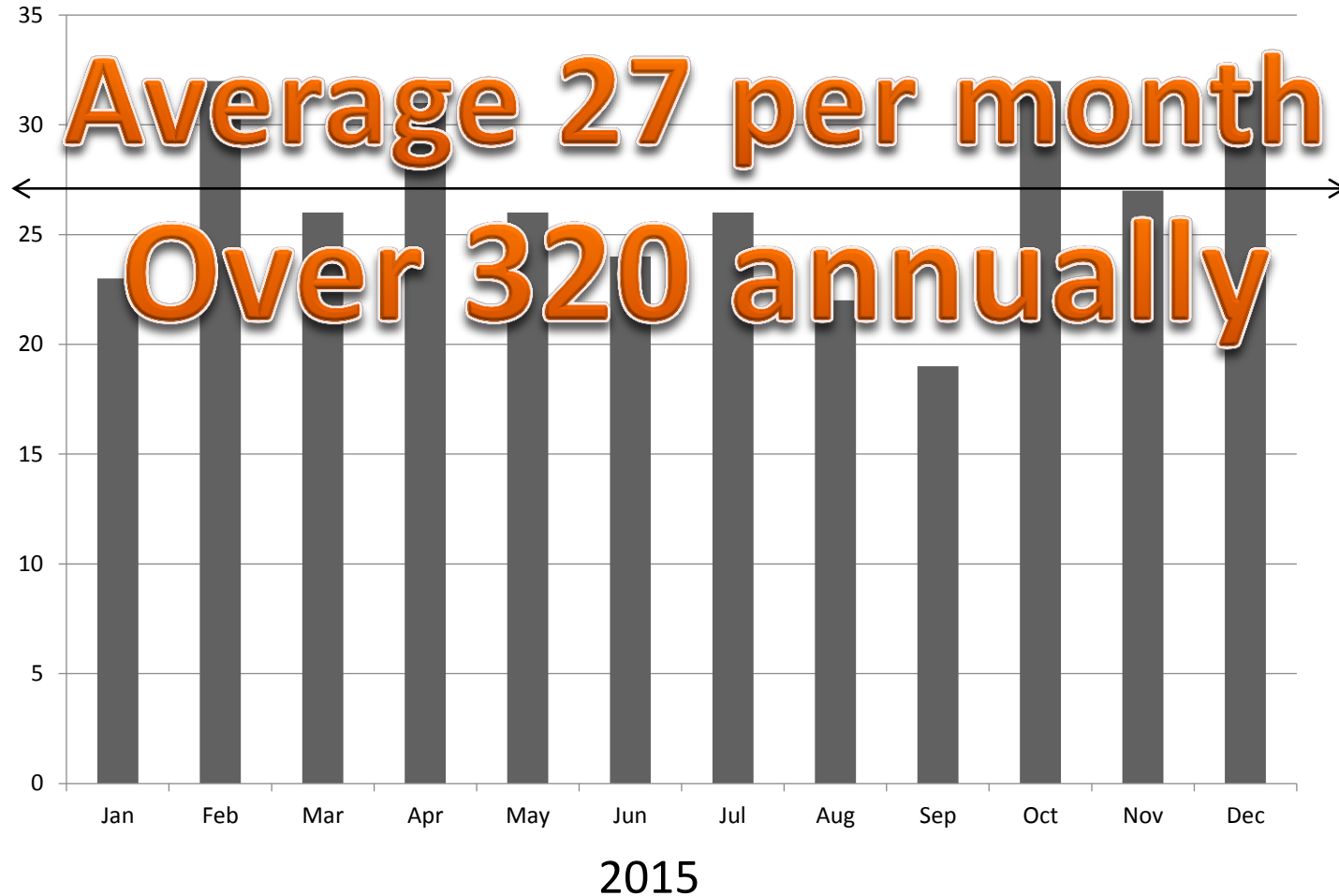
3400 per day
(>1.2 Million Deaths pa)

NZ loss of life: Pike River – how many died?

29 Died



How many people die on NZ roads (monthly/yearly)



What is an “acceptable” Road ‘Toll’

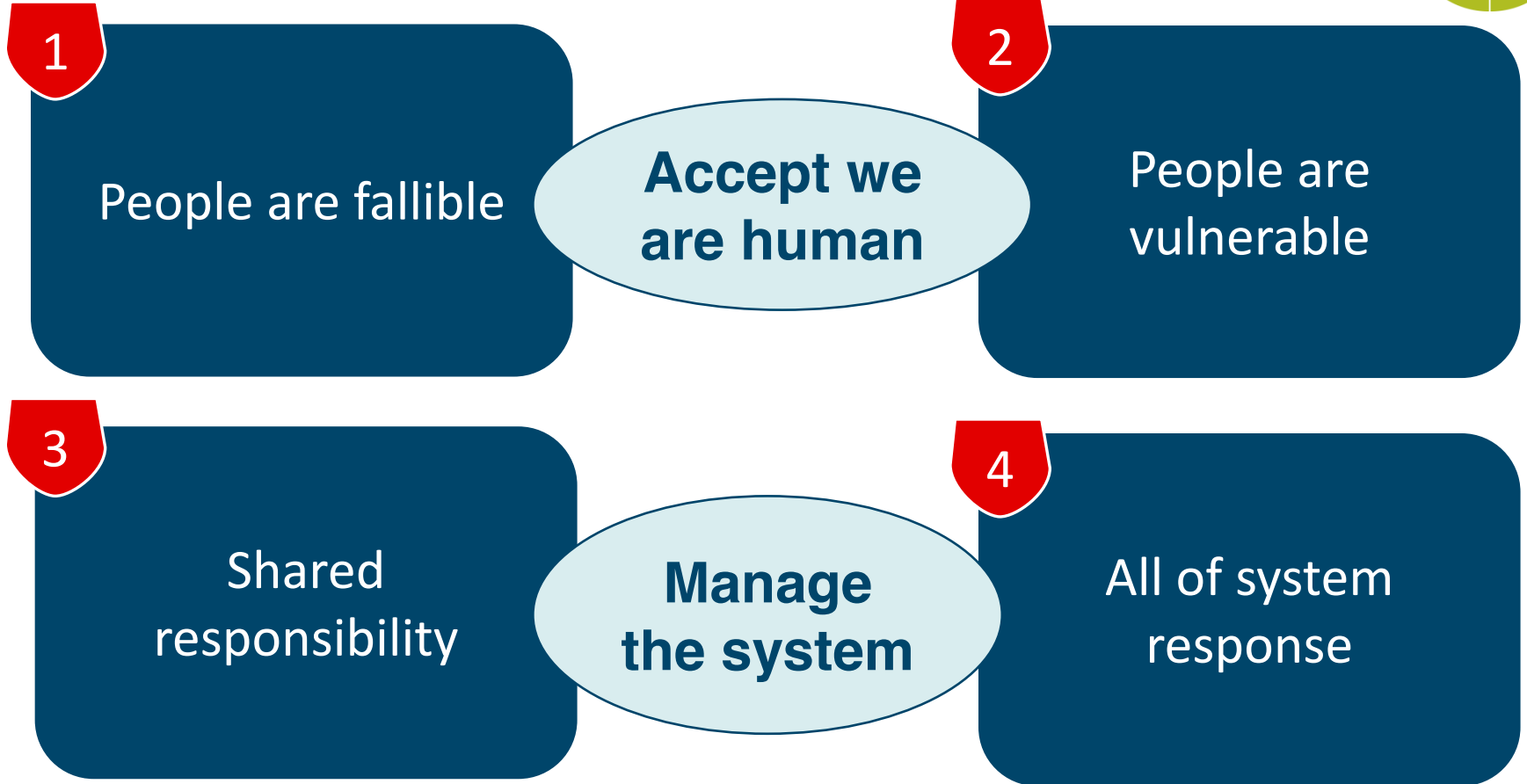




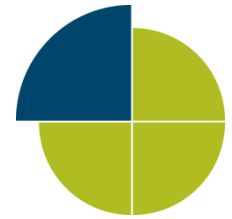
What is the 'Safe System'



A paradigm shift:



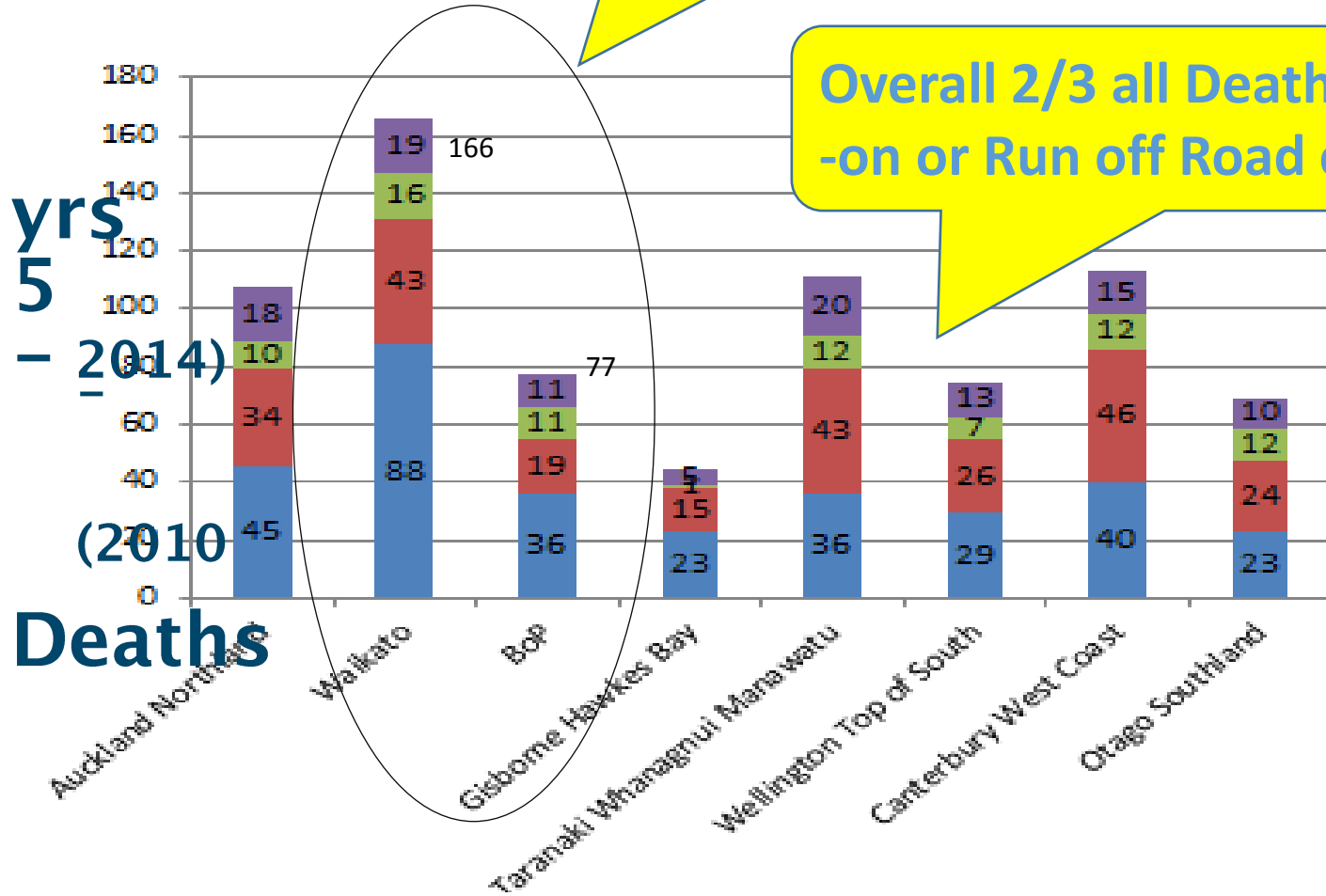
A change in how we do things



Old approach	Safe system approach
Target all crashes	Target deaths and serious injuries to people
Reactive to crashes	Proactively predict and treat risk
Rely on compliant users	It inevitable that people make mistakes.
Driver / rider responsibility	Shared responsibility between road users, planners, engineers, politicians, utilities, etc.
Isolated activities	New partnerships and cross-sector solutions

NZ Deaths

Deaths from Head-on ~ twice number of Run off Road crashes



Overall 2/3 all Deaths from Head-on or Run off Road crashes

Regions - Head On / Run off Road / Int. / Other

The Regional Context

KiwiRAP Star Rating Results - VKT (x10⁸/yr) by Region



Region	VKT (x10 ⁸ VKT/year)	Proportion in each Star Rating				
		1-star	2-stars	3-stars	4-stars	5-stars
Auckland	35.59	0%	9%	3%	88%	0%
Waikato	25.19	0%	38%	55%	7%	0%
Bay of Plenty	10.91	0%	51%	45%	5%	0%
Gisborne	1.42	0%	57%	43%	0%	0%
Hawkes Bay	5.62	0%	33%	67%	0%	0%
Taranaki	6.75	0%	62%	37%	1%	0%
Manawatu-Wanganui	8.77	0%	50%	50%	0%	0%
Wellington	13.24	0%	16%	31%	53%	0%

Safe System

The Safe System has four key elements working together:



We need safer roads that are more forgiving



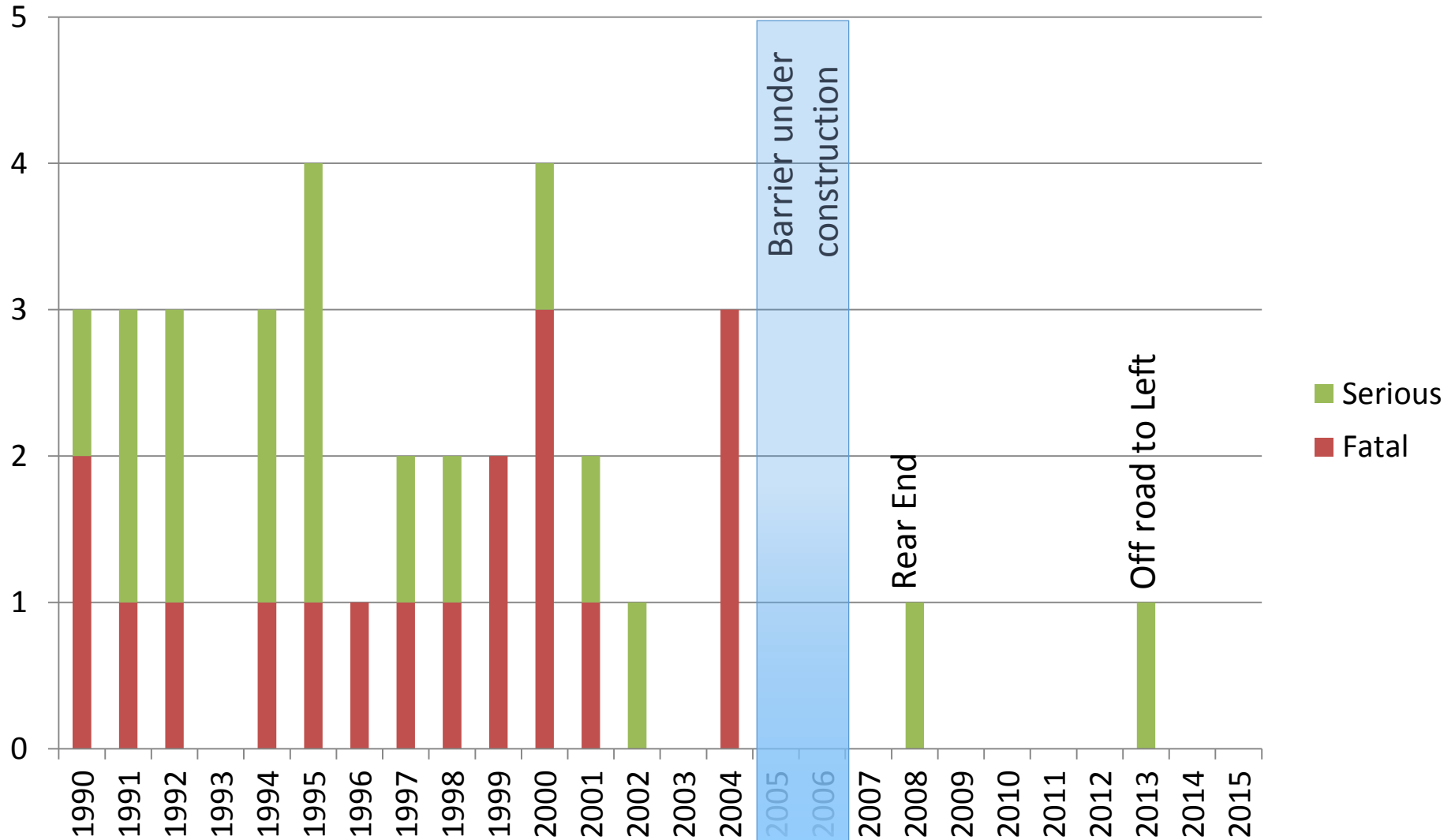
Why Wire Rope Barriers



Why Wire Rope Barriers



Centennial Highway: before and after results



Safe Roads Alliance Charter



Our **purpose** is to:

SAVE LIVES

by making roads safe as part of a safe system

Our **goals** are to:

ENSURE TIMELY DELIVERY



*Of the most **effective solutions** on the ground*

PROVE OUR WORTH



*Through demonstrating **rigour, value and optimisation***

EARN TRUST & CONFIDENCE



*Through common **purpose, collaboration and participation***

CREATE A PROUD LEGACY



*Of **improved people, process and product***

We will work like the next life saved is a close friend's

Our **values** are:

FOCUS

*Everything we do **drives our purpose and goals***

OWNERSHIP

*We **do what we say** we will do and choose to be accountable*

UNITY

*Together we will **share successes, face challenges and enjoy the ride***

RESPECT

*Our conversations are **courageous and constructive***

Challenges



- Accelerated project delivery:
 - reduces input and engagement opportunities
 - greater programme risk
 - Small issues have bigger impact
- Funding model:
 - values getting there quicker over getting there alive
 - solutions favour higher BCR than DSI
- Level of stakeholder input
 - Workshop fatigue (national PBC's etc)
 - Emotive subject
- Lack of community support for safe system solutions



We are here to save lives

P



Together, we can make an impact!

We need to change:

- Focus on intent and outcome
 - Are we aligned on priorities
 - Detail creates distraction
 - Over time will become new norm
- Engage and Involve
 - How do we better engage
 - Identification and Prioritisation
- Awareness and Advocacy
 - Tools, Techniques and Programming,





2014-12-05 15:05:30.127 SPEED 57 Km/h 37.878906S 175.927216E





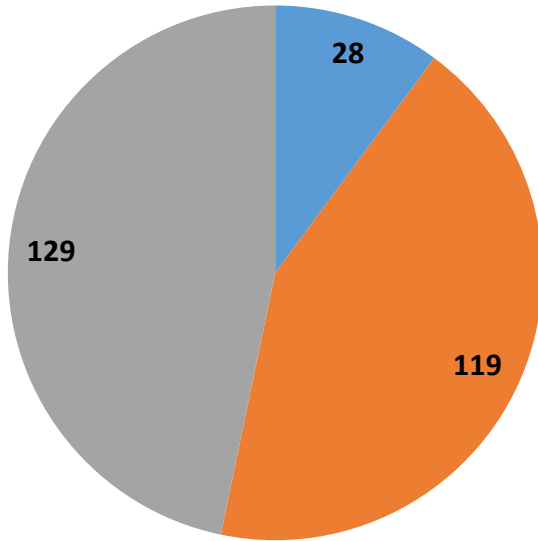
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30 Tonne laden

Bombay Hills



Motorcycle deaths 2006-2015



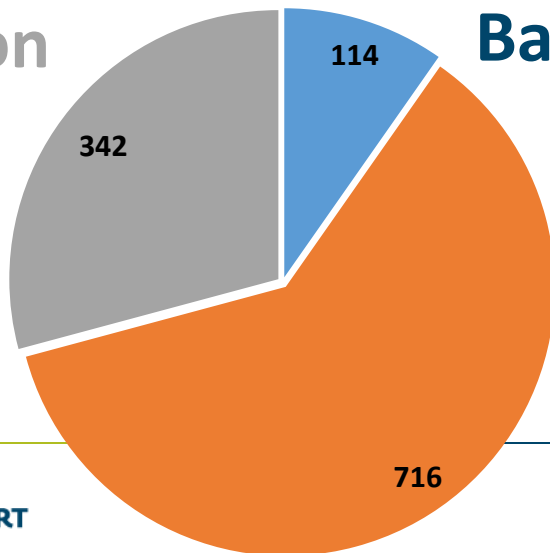
Motorcycle deaths Objects hit-NZ

**WRBs - Typically reduce risk
M/C casualties by 40-50%**

(Swedish report-600 km barrier)

Motorcycle serious injuries 2006-2015

Head-on



Barrier crashes

Other Fixed Objects

*cliff bank; over bank;
fence; house; building;
phone box; post; pole; tree;
ditch*

Daniel Evans – 21yr – WRB Strike

- **148-190km/h** equate to impact speed of jumping from 13 story building

(Prof. Rd Safety, **Raphael Grzebieta**, Transport & Rd Safety Research Unit = NSW Uni)

- Idea of **Cheese cutter is A MYTH**
- “There is no evidence to date anywhere in the world of motorcycle riders travelling at or below the posted speed limit, and who have crashed into a wire rope barrier, being cut by the wire rope in a manner similar to how cheese is cut with wire”
- In **Sweden, 600km flexible barriers** had no record of motorcycles being sliced by the barriers.
- Sweden had **40-50% reduction in risk for motorcyclists** being killed since wire rope safety barriers installed.



The Case for Safety Improvements

SH3 Ohaupo to Te Awamutu

The Case for Safety Improvements

SH3 Ohaupo to Te Awamutu



Traffic Volume (2014)= 11,300 vehicles per day (6% Heavy)

Traffic volumes > 6000, risk of Head-on Crashes Rises Markedly

Crash History (2005–2014)

Reported Crashes = 133

Injury Crashes = 42

Number of Deaths and Serious Injuries = 24 people

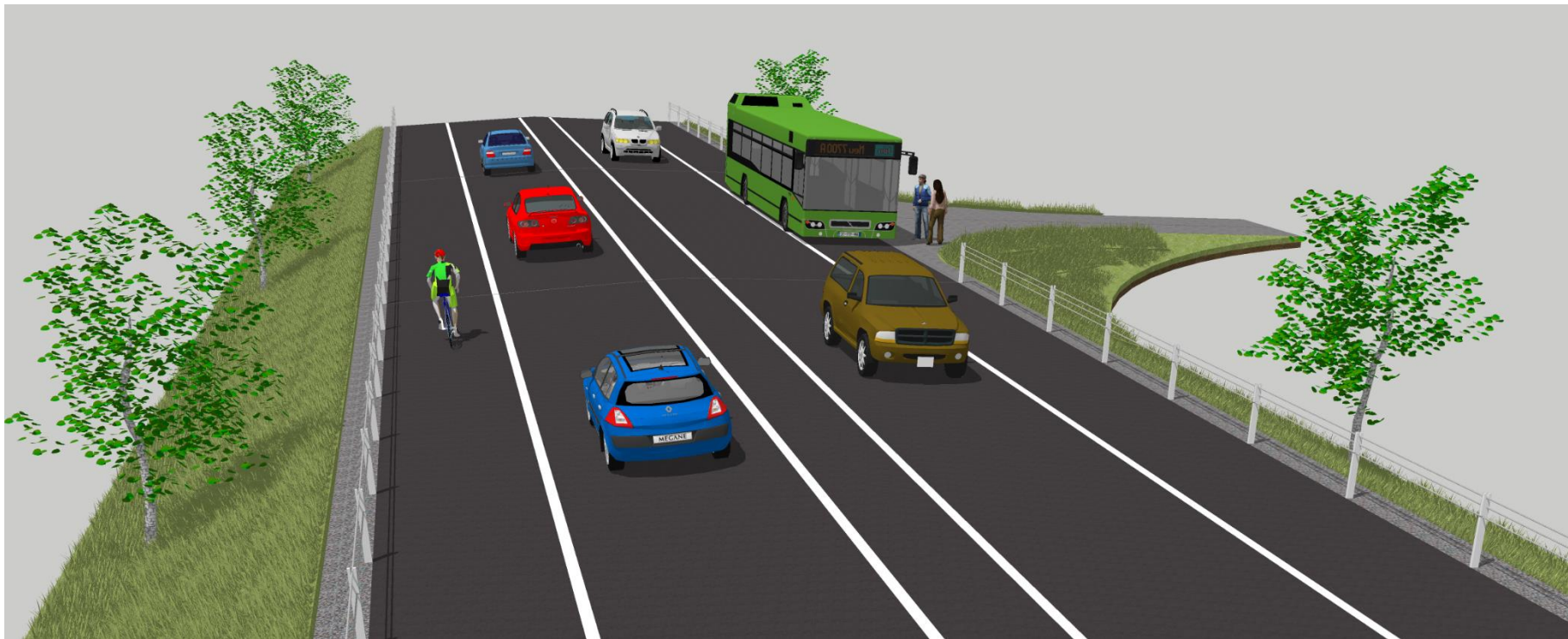
(8 Deaths and 16 Serious Injuries)

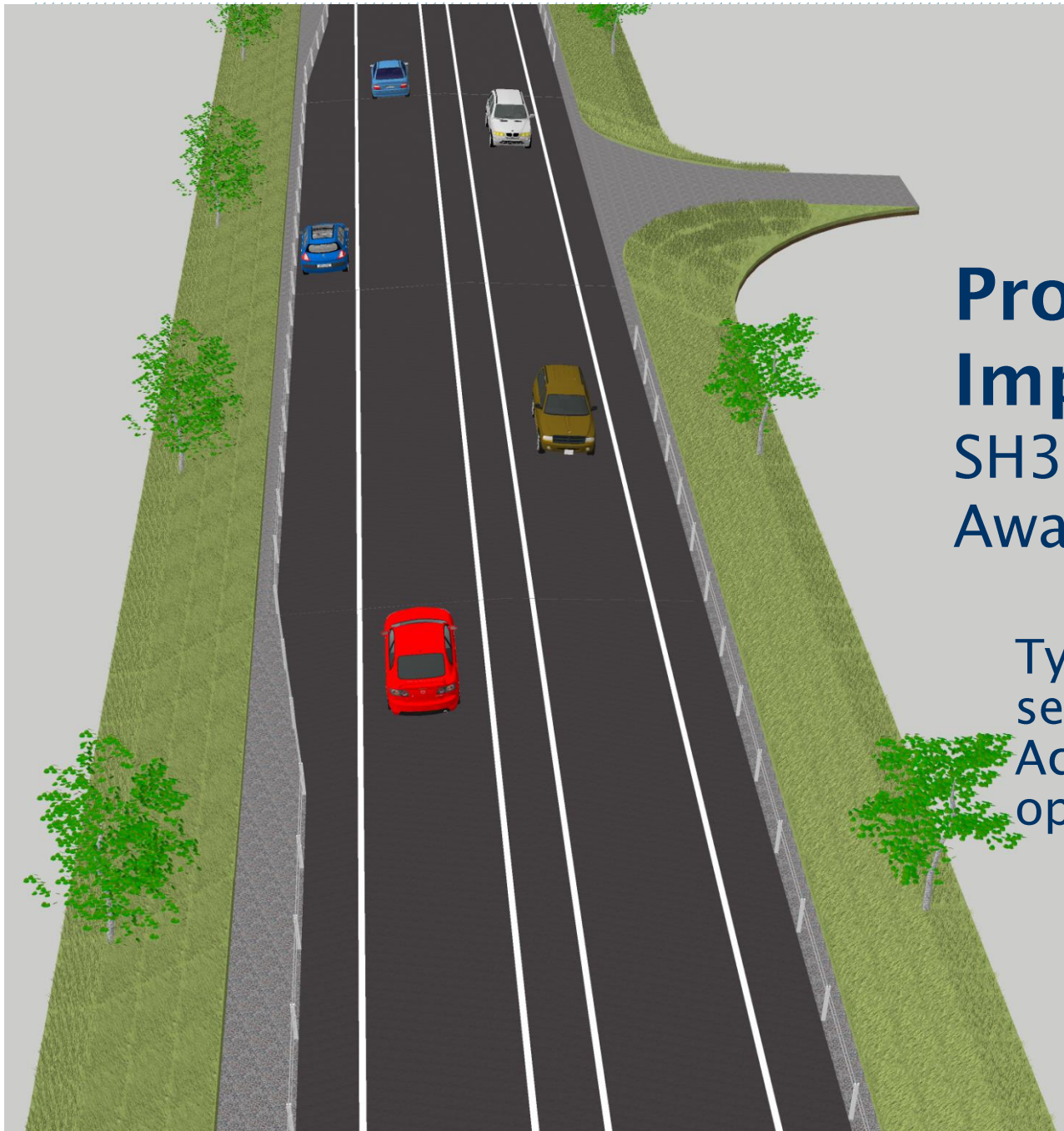
Proposed Safety Improvements

SH3 Ohaupo to Te Awamutu – STAGE 1



Typical Road Cross-section (showing Access with stopped bus)





Proposed Safety Improvements

SH3 Ohaupo to Te Awamutu – STAGE 1

Typical Road Cross-section (showing Access with widening opposite driveway)

Proposed Safety Improvements

SH3 Ohaupo to Te Awamutu –STAGE 2

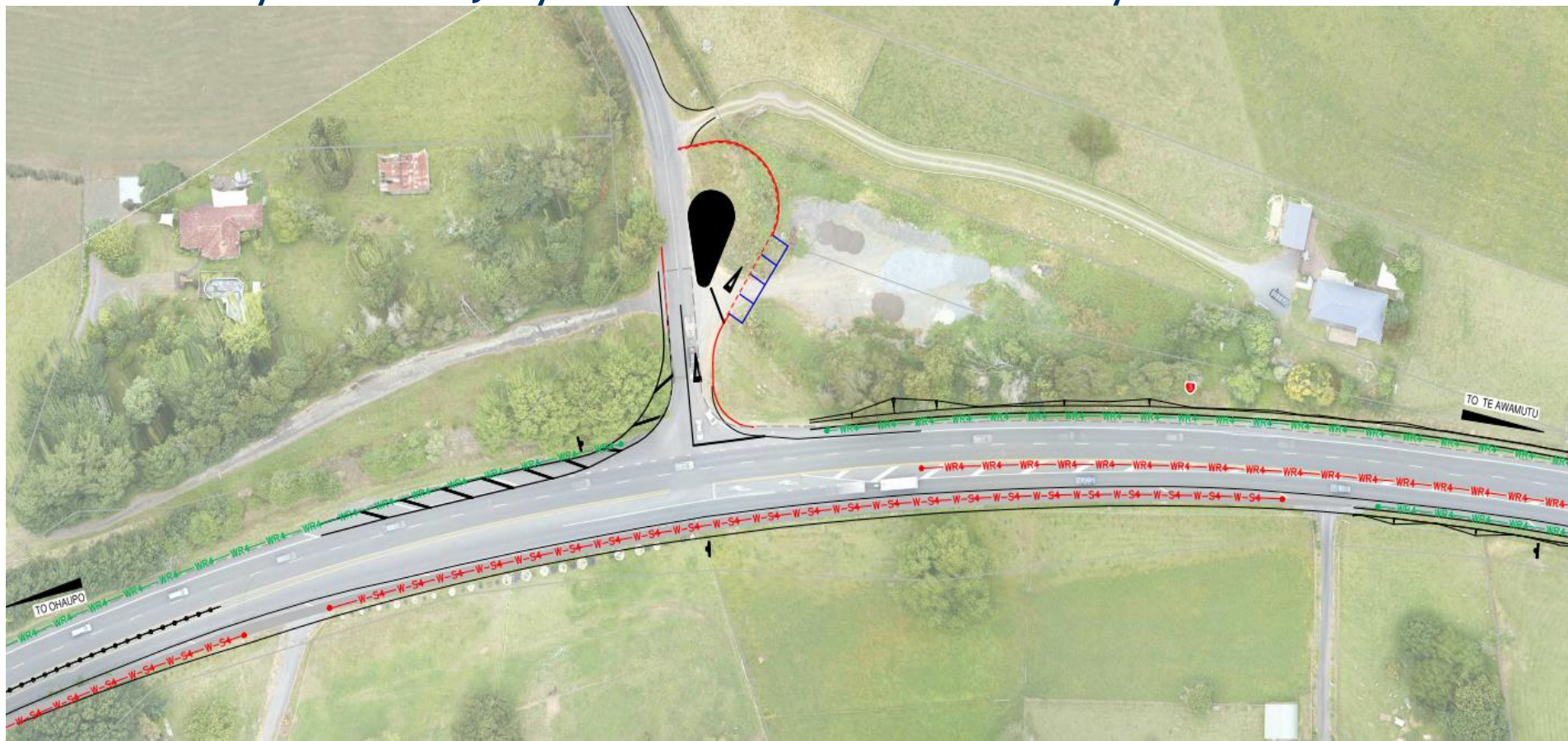
Typical Road Crosssection (with tractor 3.1m wide stopped in entrance way)



Proposed Safety Improvements

SH3 Ohaupo to Te Awamutu – STAGE 2

Draft Layout Plan Jary Road Turnaround Facility





Predicted Benefits

SH3 Ohaupo to Te Awamutu

Predicted Improvement KiwiRAP Star Rating

Stage 1 – From current 2.8 to 3.6

Stage 1 & 2 – From 3.6 to 4.2

Predicted Deaths and Serious Injuries saved over 10 years

Stage 1 = 10 people

Stage 1 & 2 = 18 people

Key Message

SH3 Ohaupo to Te Awamutu

