



# Trends in and insight into road crashes resulting in death or serious injury to cyclists in New Zealand

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# Introduction

## A popular, efficient, healthy mode & activity

- Cyclist road deaths 2017 were some two and a half times higher than 2016
- *18* cyclists died on our roads last year, the highest since *19* died in 2000
- Cyclist casualties are a low percentage of New Zealand's road trauma (6% per annum)
- Cycling has a number of risk factors unique to the mode

# Purpose & method

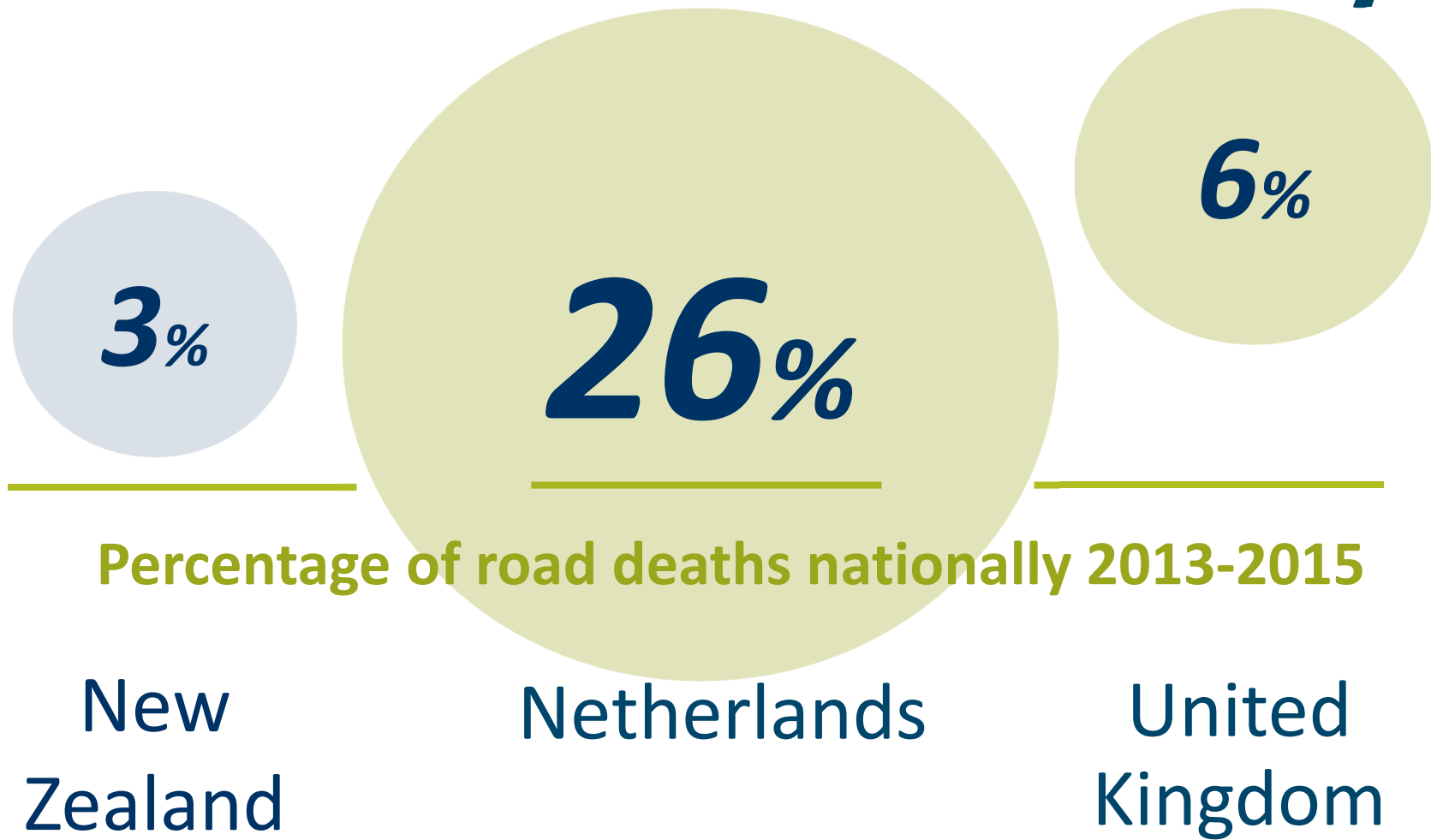
We consider risk factors of cycling including:

- stability and agility
- vulnerability due to low level of protection
- visibility to other road users
- behaviours that contribute to crashes
- what is happening overseas
- interventions, infrastructure and the future

Methodology:

- A review of police reported traffic crashes in  
New Zealand

# Fatalities internationally



Percentage of road deaths nationally 2013-2015

New  
Zealand

Netherlands

United  
Kingdom

# Data sources

Cycle use in New Zealand is not well recorded



## User survey

New Zealand Household Travel Survey (HHTS)

## Traffic crashes

NZ Police, Serious Crash Unit and Coroner

## Injury data

Ministry of Health and ACC

# Crash analysis

18

194

121

Fatally or seriously injured cyclists in 2017

Deaths

5% road deaths

Seriously  
injured

7% all serious

Hospitalised  
[admitted]

# Road environment

62

Rural  
roads

723

Urban  
roads

59%

Three out of five  
urban fatal &  
serious crashes  
were at an  
intersection

2013-2017

# Crash scenarios

Fatal & serious crashes 2013-2017

151

116

77

31

24

Urban

Urban

Urban

Rural

Rural

Right  
turn  
against

Crossing  
no turns

Crossing  
vehicle  
turning

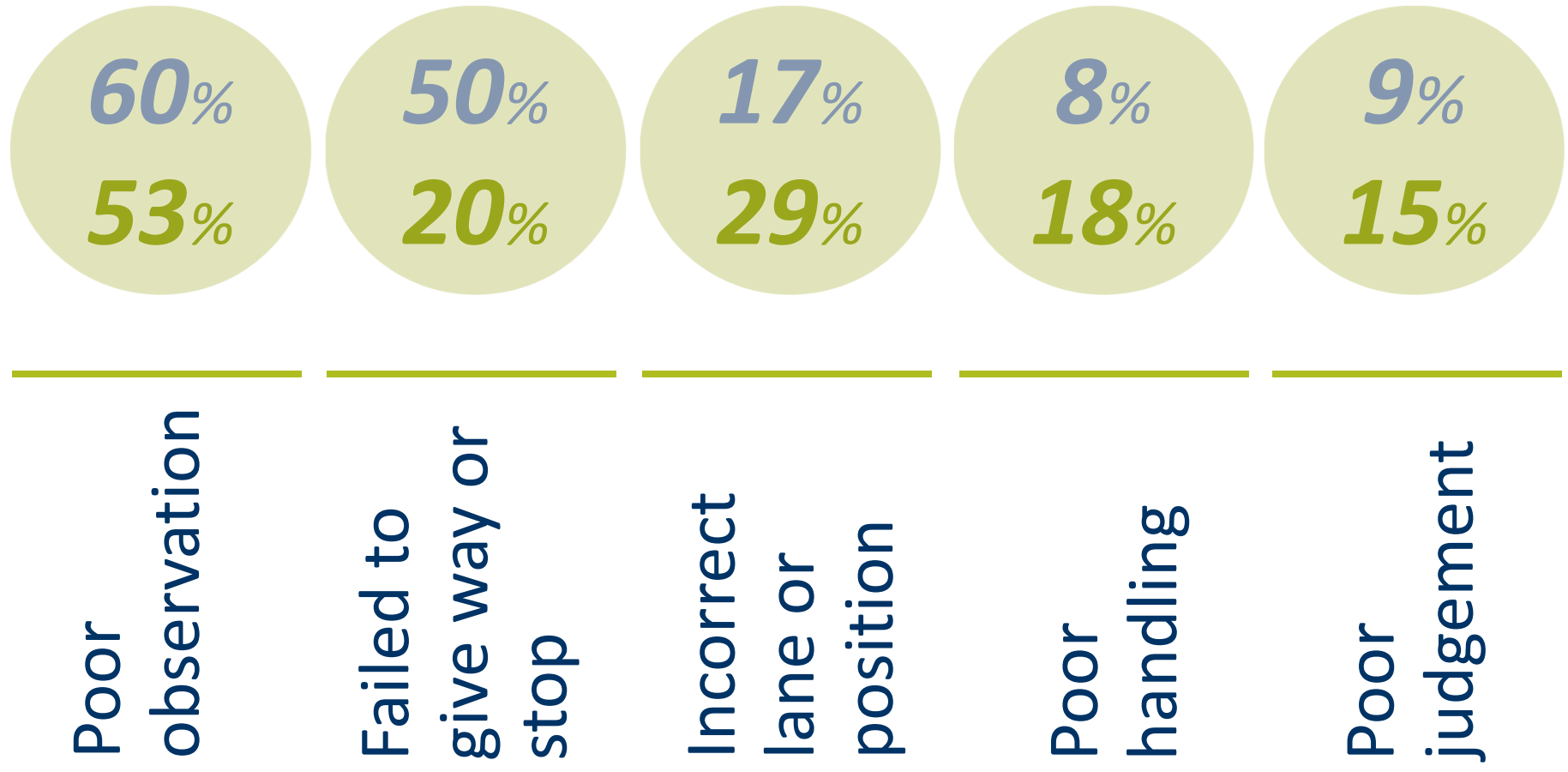
Overtaking  
or lane  
change

Rear-end



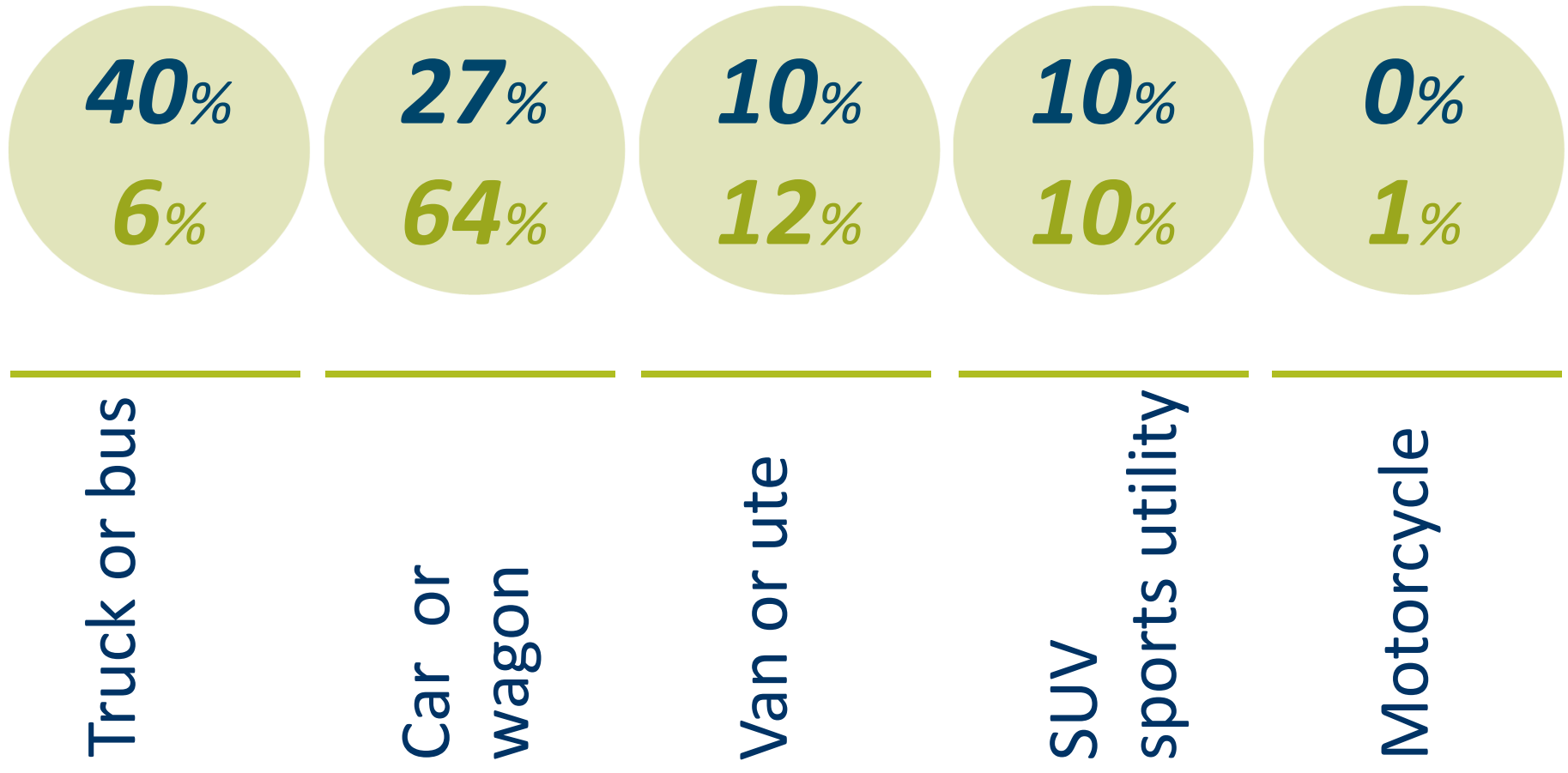
# Contributing factors

Urban % Rural



# Motor vehicles

Fatal crash %% Serious crash



# Infrastructure

Increased infrastructure for the purposes of walking and cycling

- Urban Cycleway Fund (UCF)



# Personal risk

195

Motorcyclists

32  
Cyclists

6

Pedestrians

8

Occupants of cars

Death or injury per million hours spent travelling

# Conclusion

## Immediate concerns & opportunities

- Busy urban roads
- Risk of injury is high
- Increase a blip or trend?
- Fatalities involving trucks
- Information gaps

# Looking ahead

**Maximise opportunity presented by the current climate & future technology**

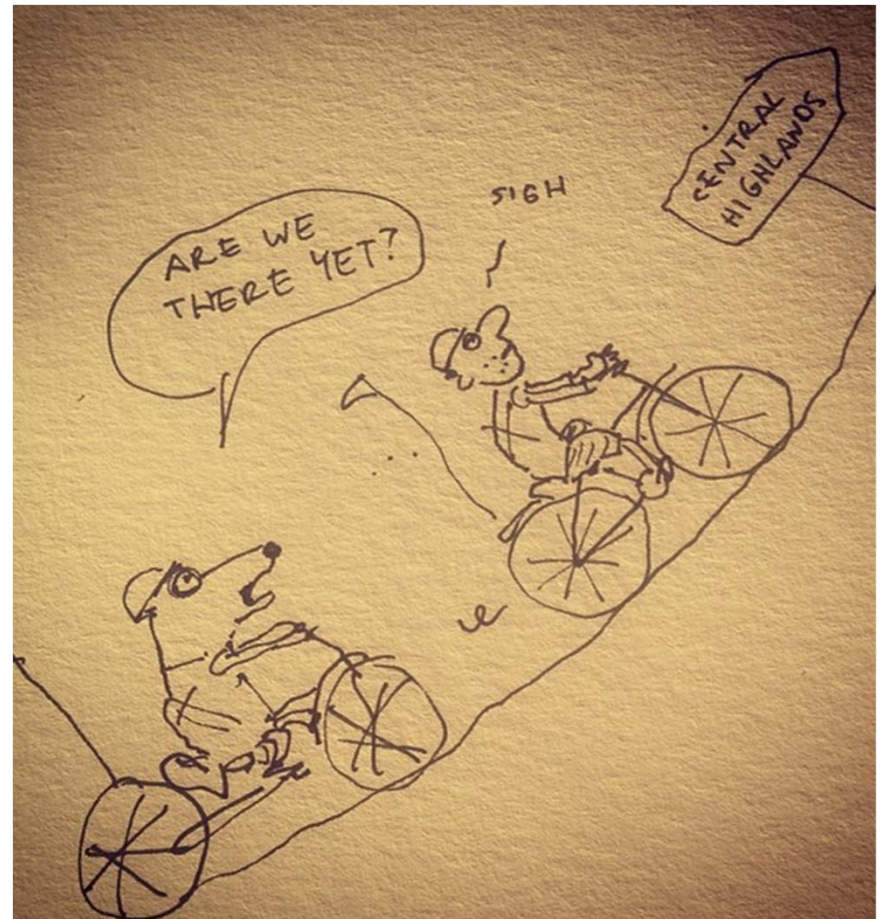
- Understanding pedestrian crashes in addressing urban cycle crashes
- Active road users, common needs
- The current policy environment
- Technology will bring change
- Electric powered cycles

# Thank you

## Acknowledgement

The authors would like to acknowledge the assistance of our colleagues, with a special mention to **Tim Hughes** for reviewing the paper.

Tim is National Safety Engineer in System Design & Delivery at the NZ Transport Agency.



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