

TRAVEL BEHAVIOUR AND MOBILITY IMPACTS OF COVID-19 IN NEW ZEALAND



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OUTLINE

INTRODUCTION

SURVEY & ANALYSIS

- JOURNEY TYPES
- MODE USAGE

TRAFFIC VOLUMES

SPEED

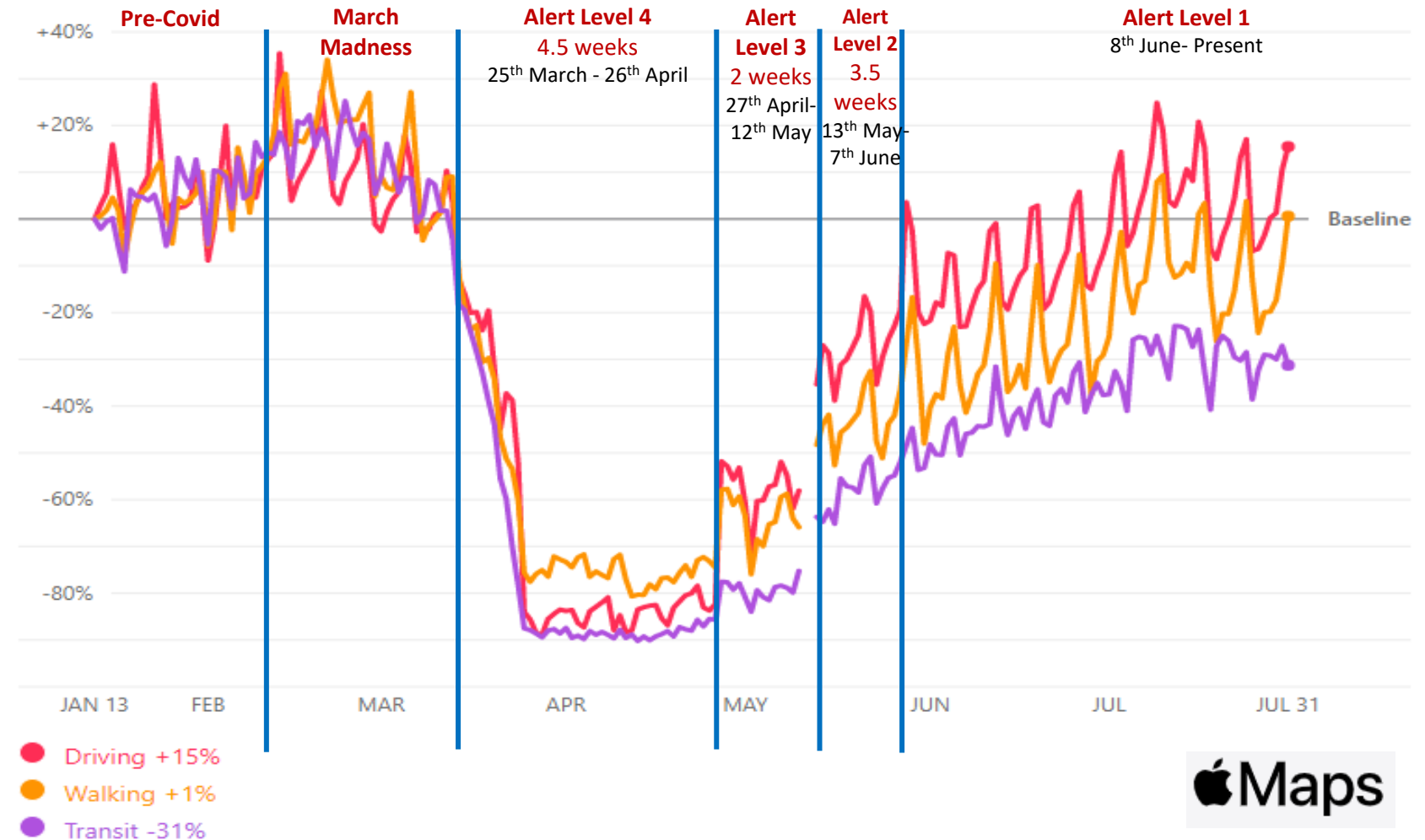
ROAD SAFETY IMPLICATIONS

FUTURE INSIGHTS

SUMMARY & KEY FINDINGS

INTRODUCTION

- On March 11, 2020 the World Health Organisation (WHO) recognized Covid-19 as a global pandemic
- Covid-19 Alert Level execution in NZ
 - Alert Level 4 - 25 March 2020
 - Alert Level 3 - 27 April 2020
 - Alert Level 2 - 13 May 2020
 - Alert Level 1 - 8 June 2020



SURVEY & ANALYSIS

And in the course of a normal week, on **how many days** would you normally travel via each of the methods listed below?

If you did not travel at all via these methods, please click the slider on zero and the slider mark will change to blue indicating you have answered

Days Per Week

0 1 2 3 4 5 6 7

Walk of more than 10 minutes (includes wheelchair, mobility scooter)

Bicycle including E bike, E-Scooter

Bus

Train

Ferry

Taxi/ Uber

Car, van

Motorcycle, motor scooter etc.

How many VEHICLES do members of your household have access to?

What is your view on the **PERFORMANCE** of the following **BEFORE** the Covid-19 outbreak?

PERFORMANCE in this instance relates to improved reliability (punctuality of service), quality of service, or delivery timescales compared to what was expected.

Road network congestion and journey times

Bus

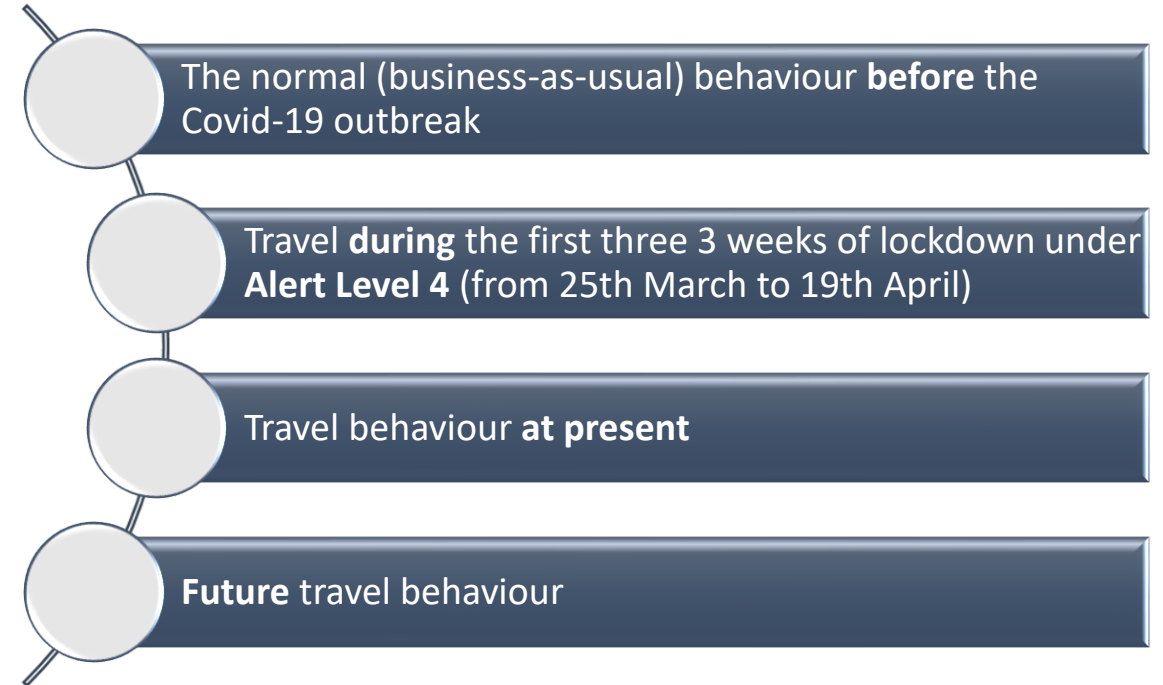
Train

SURVEY & ANALYSIS

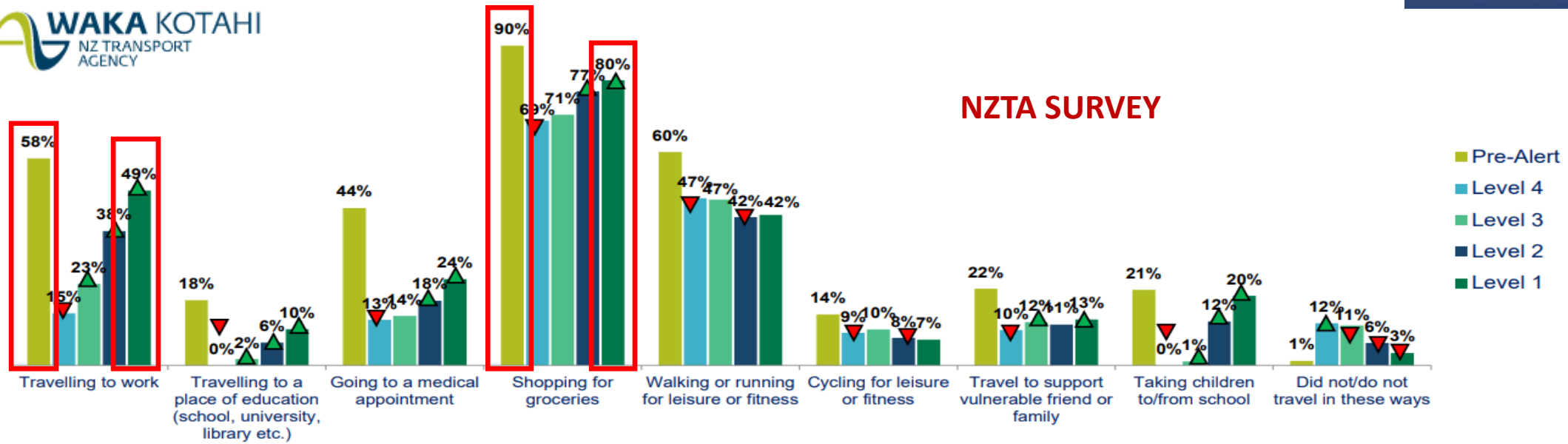


- Online Survey (Qualtrics)
- Surveyed area: All of New Zealand
- Conducted in conjunction with New Zealand Automobile Association (AA)
- Survey Duration: 22nd of June to 22nd of July
- Sample Size: 1376 responses
- Survey link sent to:
 - all members of AA
 - staff and students of University of Auckland
 - Transportation Group (TG) of Engineering New Zealand

- The survey included four different periods to be assessed



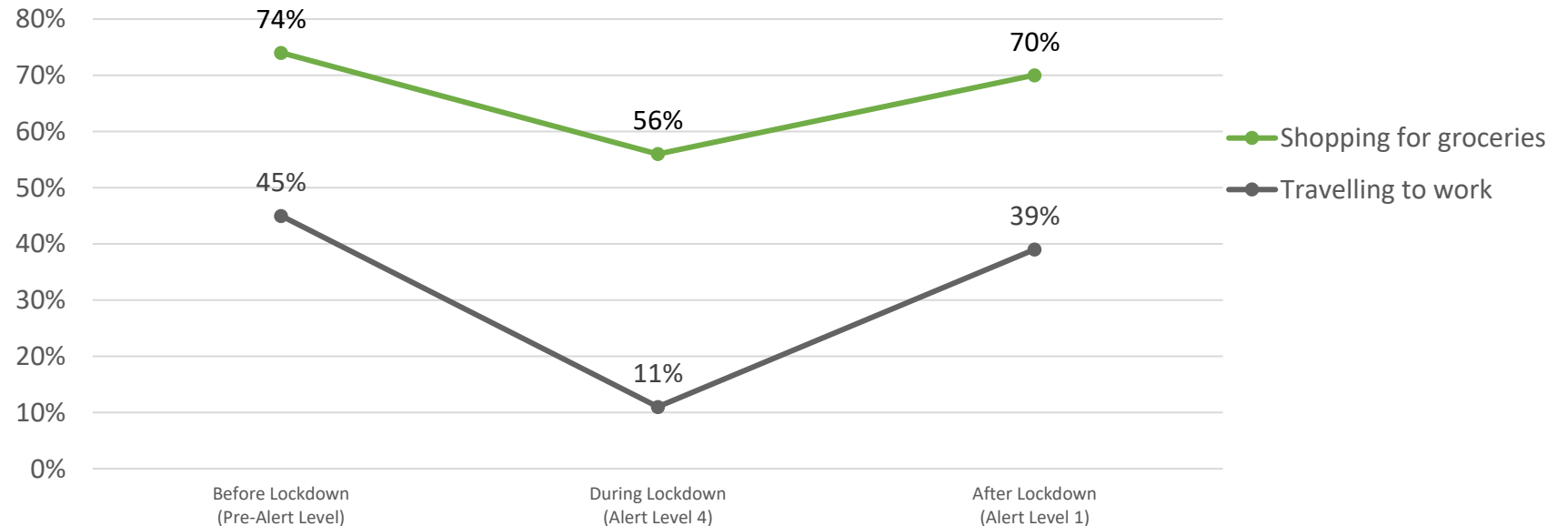
JOURNEY TYPES



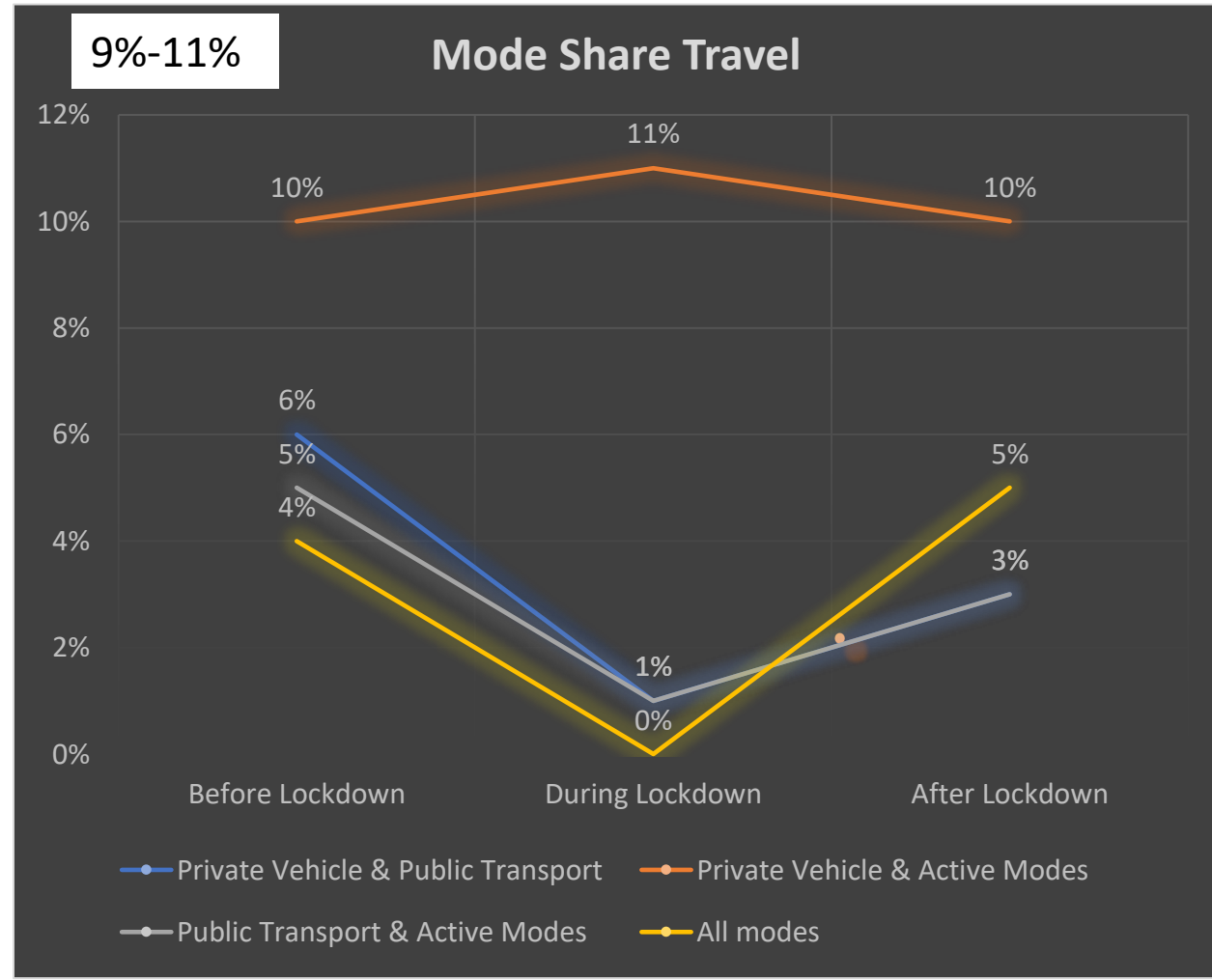
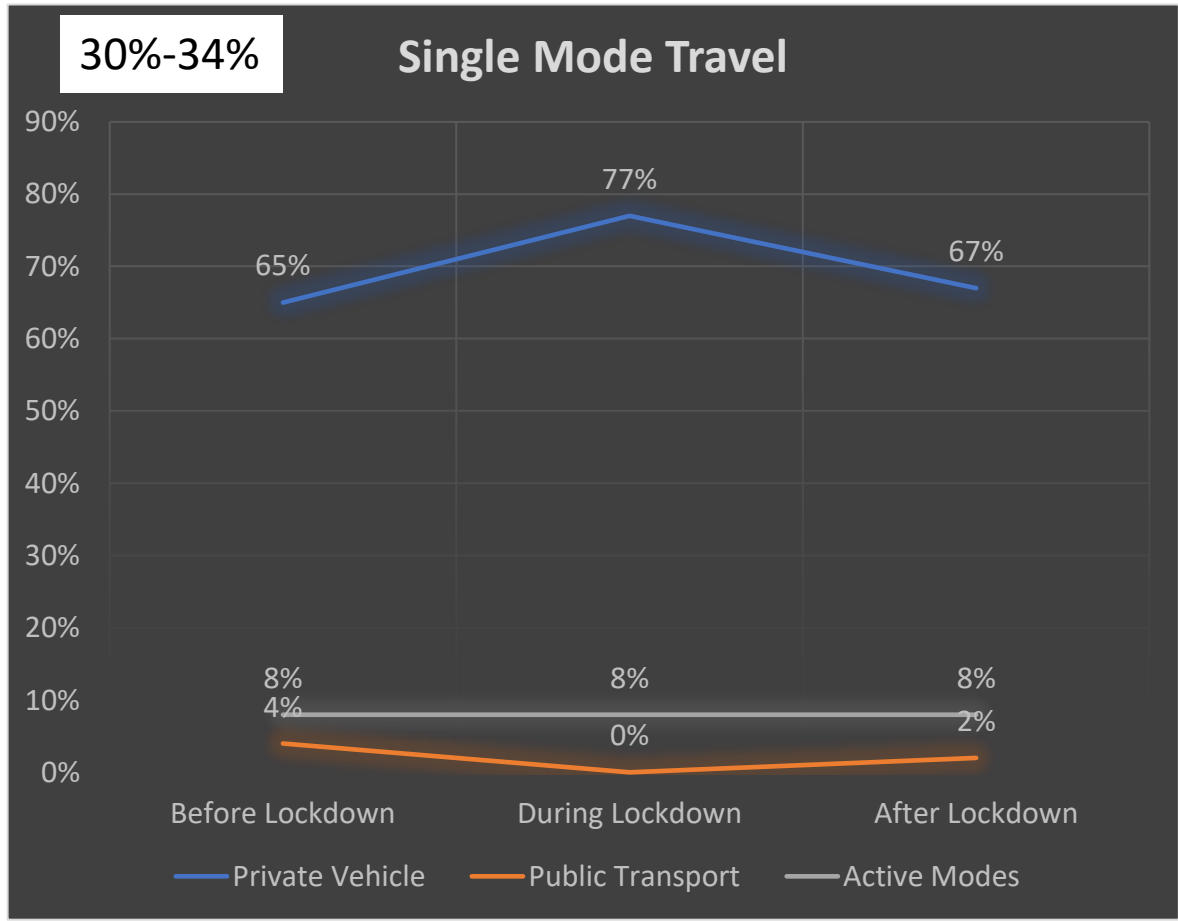
❖ Sourced from <https://www.nzta.govt.nz/resources/covid-19-impacts-on-transport>

OUR SURVEY

NB: Respondents were asked to indicate their usual journeys taken in a normal week

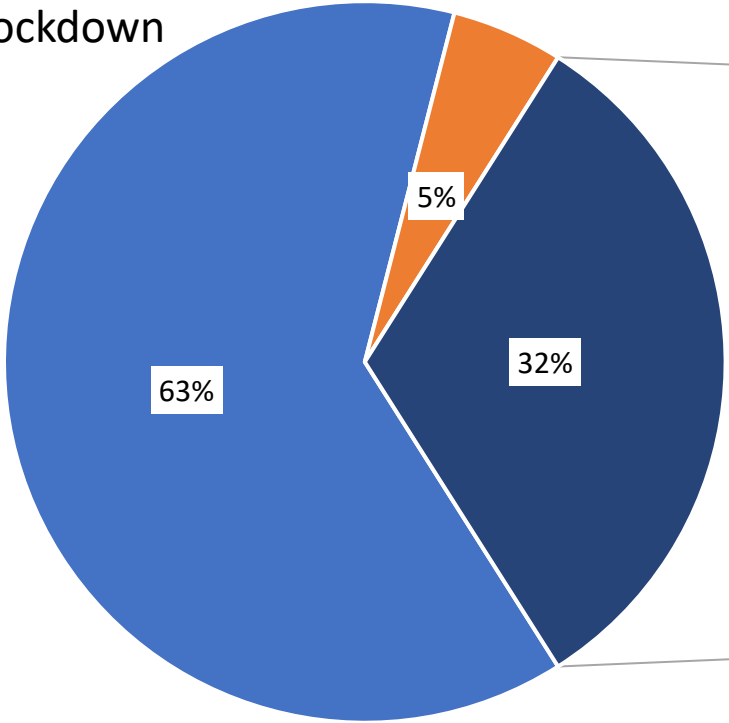


MODE USAGE FOR TRAVELLING TO WORK



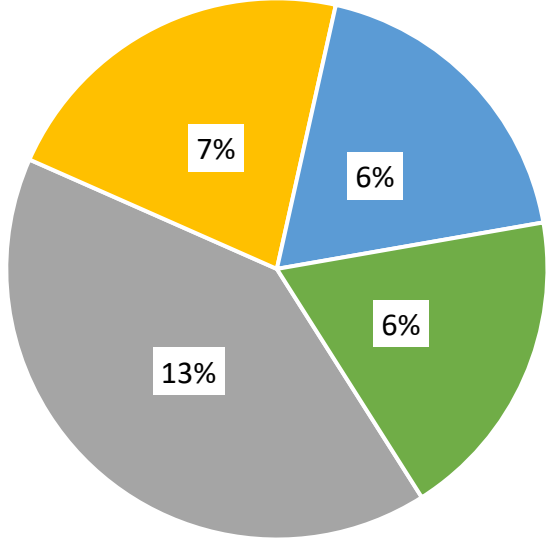
PUBLIC TRANSPORT (PT) USAGE

Changes in PT usage after lockdown



- Did not use PT before lockdown- no change
- PT use increased after lockdown
- PT use decreased after lockdown

Reasons for decrease in PT use after lockdown



- I am just travelling less in general as I have less reason to do so
- Worried about catching Covid-19 from surfaces or people
- I don't need to travel to the places that I used to use public transport for (e.g. work)
- I've decided to use private transport options instead

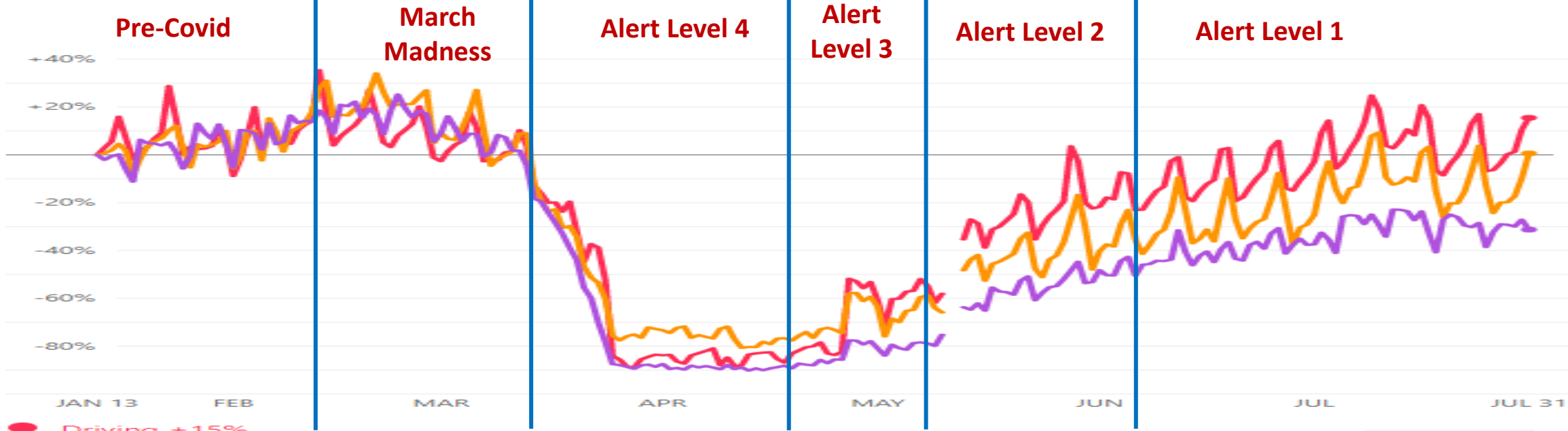
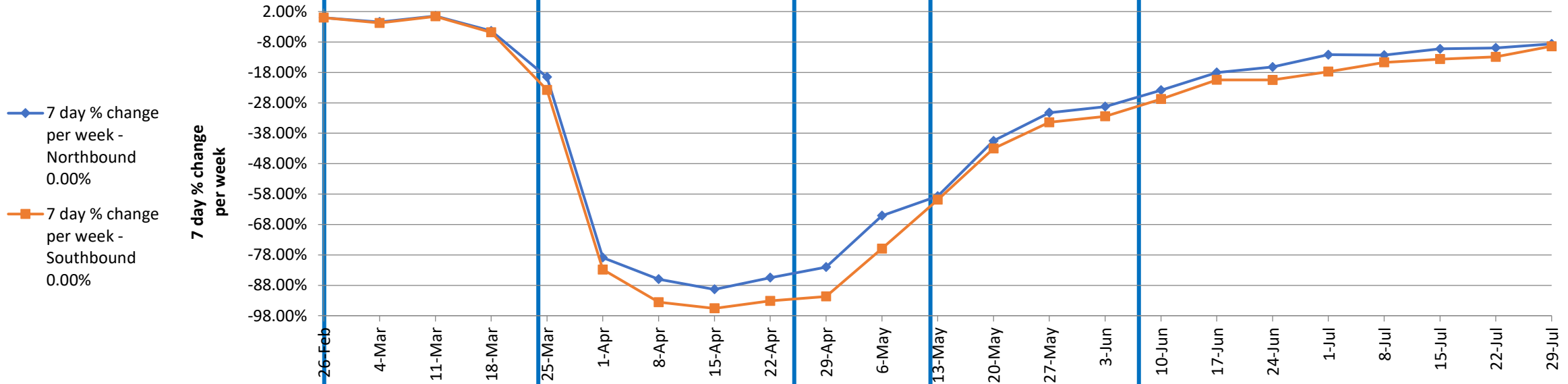


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TRAFFIC VOLUMES & TRAVEL SPEEDS

Mobility Trends

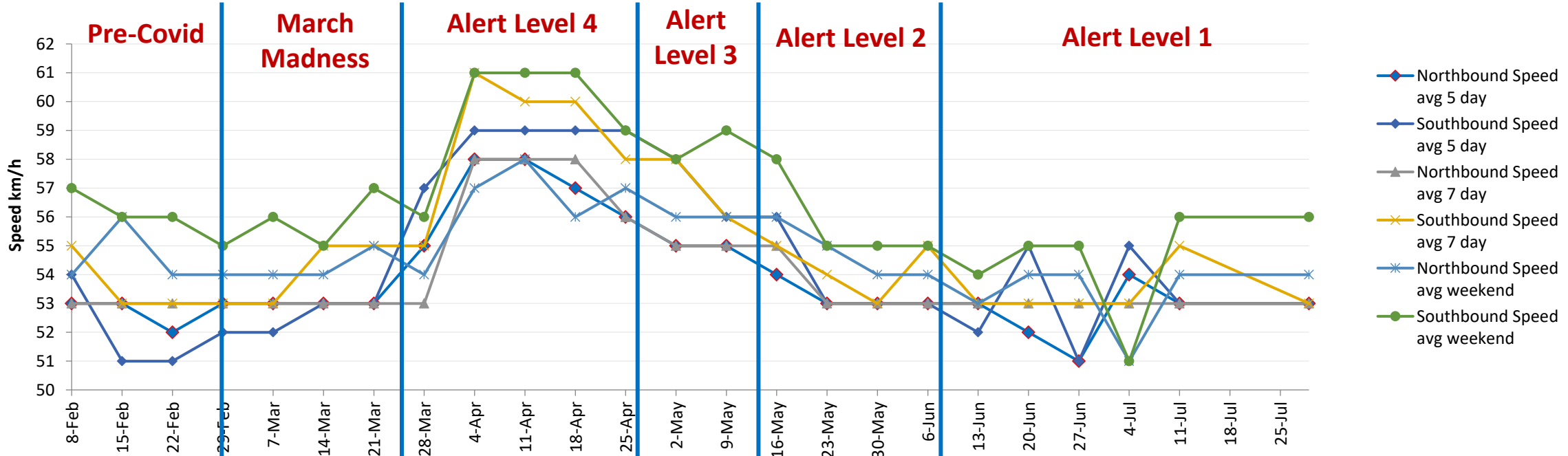
Traffic Volume Aotea Quay Permanent Count Site (Wellington)



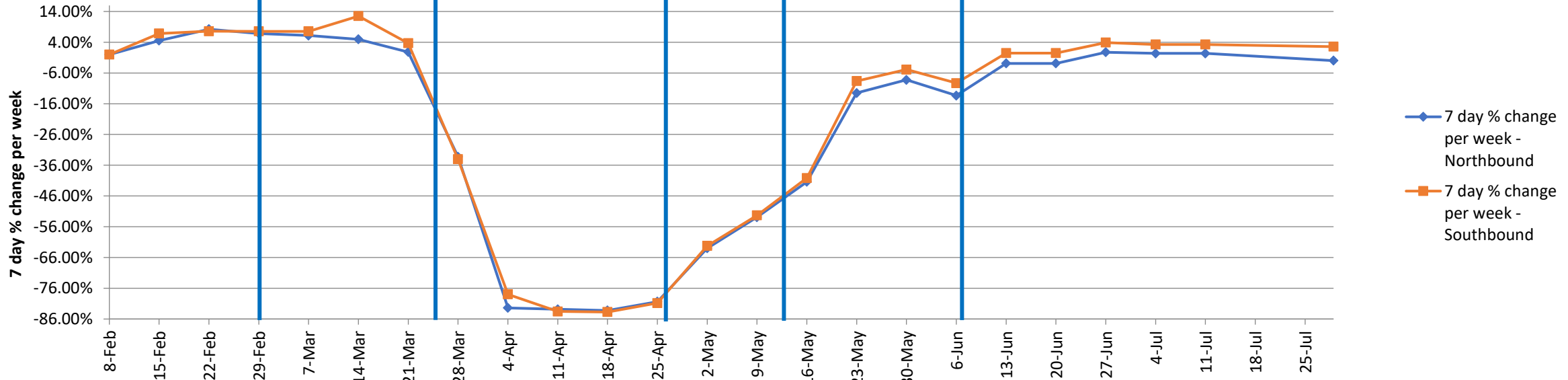
Mobility Trends Across New Zealand



Speed Data Hutt Road Permanent Count Site (Wellington)- Posted Speed Limit 50km/h



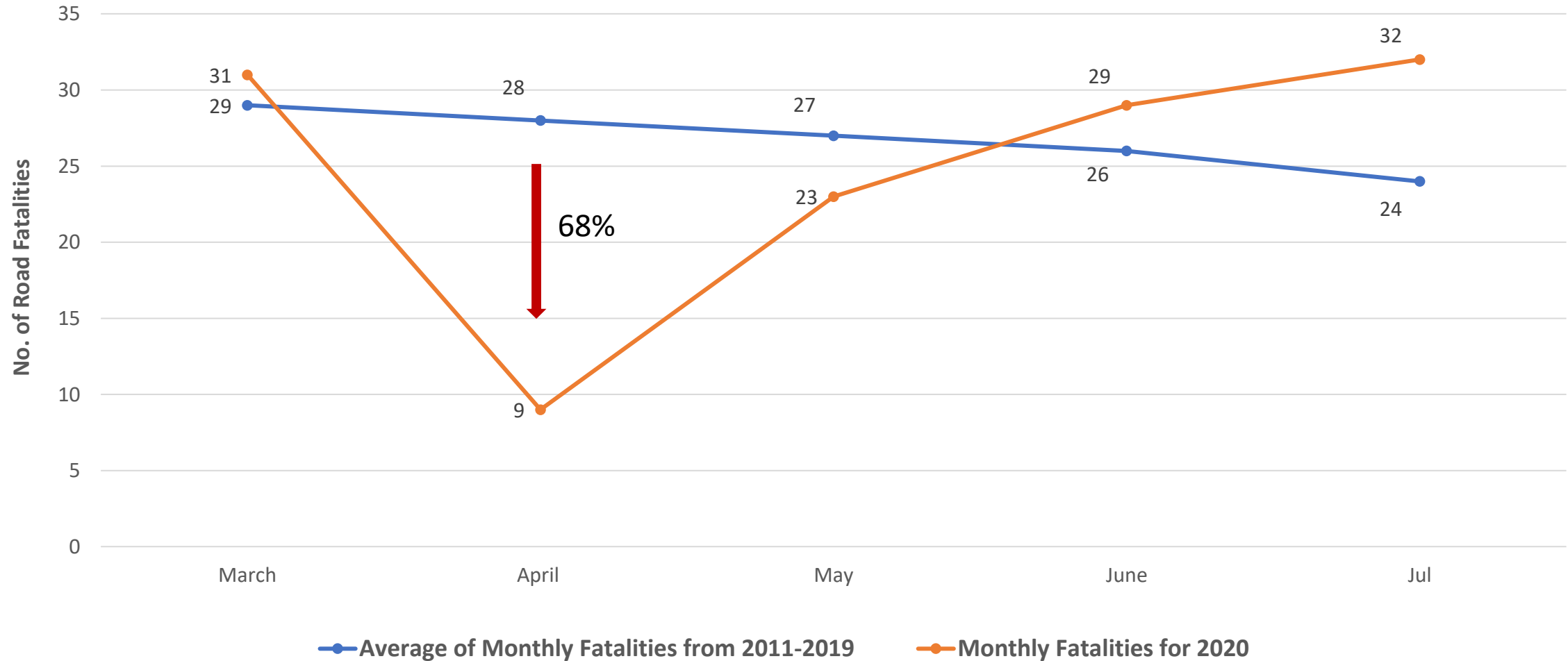
Traffic Volume Hutt Road Permanent Count Site



Travel Speeds

ROAD SAFETY IMPLICATIONS

Monthly Road Fatalities

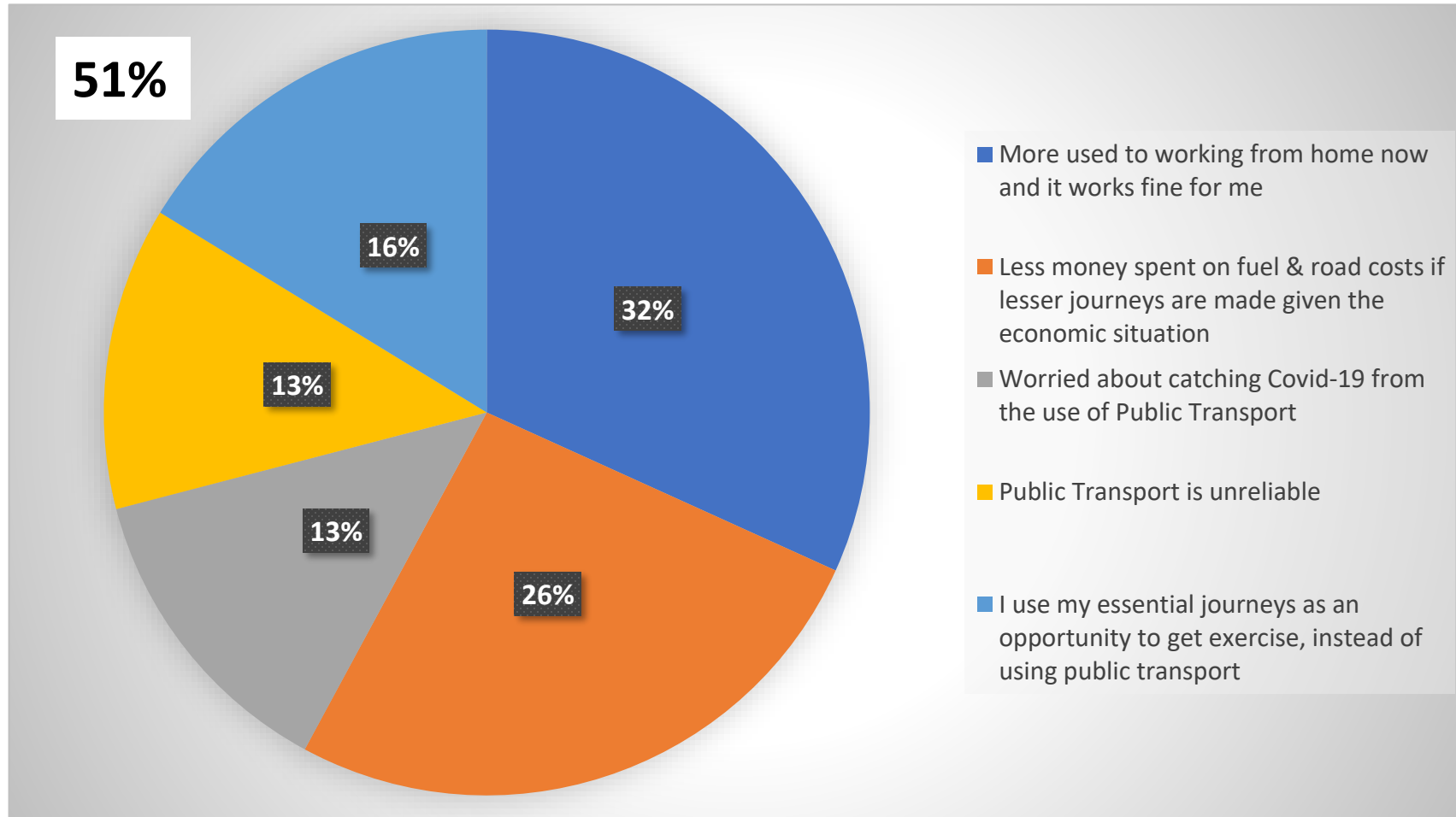




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FUTURE INSIGHTS

- Reasons for changing the travel behaviour in the next 6 months



SUMMARY & KEY FINDINGS

SUMMARY

After lockdown;

- Almost all journeys increased significantly
- The proportion of travelling to work now is 6 points short of normal levels
- Private vehicle usage ↑ Public transport usage ↓
- Active mode usage has remained fairly steady throughout the levels
- Traffic Volumes ↑ Travel Speeds ↓
- Monthly Road Fatalities ↑



KEY FINDINGS

- NZ had strict regulations but for a shorter period of time- travel behaviours are returning back to normal rapidly
- Although many have expressed their interest in working from home, data suggests otherwise
- Growth in private vehicle usage despite the reduction in travelling to work post lockdown
- It is possible the reduction in public transport use has been compensated for by the increased private vehicle use
- However, reduction in the usage of public transport post lockdown may only be a temporary lag
- At present Covid-19 lockdown has favoured individual trips- not a good outcome for the transport network
- Highlights the need for reliable rapid transit networks
- Also, as per the crash data, negative user behaviour is on the rise adversely affecting road safety



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THANK YOU