Waka Kotahi COVID-19 transport impact

Fieldwork wave 6: topic deep dive analysis

12 May 2020

WAKA KOTAHI NZ TRANSPORT AGENCY

New Zealand Government

Disclaimer

This presentation is based on research currently being undertaken by Ipsos on behalf of Waka Kotahi NZ Transport Agency. In order to support an agile response to the unfolding COVID-19 pandemic, we are releasing regular key insights from the preliminary findings prior to this work being finalised. Please note that these deliverables have not yet been through a formal peer review process and the findings should be considered as draft

While Waka Kotahi provided investment, the research was undertaken independently, and the resulting findings should not be regarded as being the opinion, responsibility or policy of Waka Kotahi or indeed of any NZ Government agency.

For more information on the Covid-19 weekly tracker contact: NZTAresearch@nzta.govt.nz.

Report content

COVID–19 transport impact deep dives wave 6

- Section 1 – About this research
- Section 2 – Modal changes pre- and post-lockdown
- Section 3 - Reasons for declining public transport usage
- Section 4 - Journeys taken against preference

Section 1 – About this research

Study purpose and importance

Introducing the Waka Kotahi NZ Transport Agency COVID-19 transport impact tracker

The **purpose of the COVID-19 Tracker** research is:

To understand **how travel is changing** and evolving in response to COVID-19 on a weekly basis

- such as trip frequency and journey type changes.

To understand **why travel is changing** and evolving in response to COVID-19 on a weekly basis

- such as perceptions/attitudes towards COVID-19 and travel options.

To include sufficient respondent numbers to understand how this varies across region and cohorts of interest

- such as different employment types (work from home, essential workers, etc.), vulnerable groups (elderly, immune compromised, etc), DHB, etc.

To provide weekly updates in a timely fashion so actions and planning can respond to the evolving situation.

The **importance of this research** cannot be understated:

There has been a major disruption to travel habits that will have long-lasting impacts on society:

- Where and how people choose to work, and how they choose to travel will change.
- Where people choose to travel domestically will change.
- How these changes will play out in the medium to long-term is unknown.

Without regularly updated knowledge on **what people are thinking and feeling,** and **why they are choosing** to travel the way they do, we won't be able to quantify how people are responding to COVID-19, and without this we won't know how best to respond and how we are able to influence travel habits.

- With regularly updated knowledge on COVID-19's impact, we can quantify how road usage and modal choice is changing, and we will know how to respond and influence future travel habits.

Overview of research (i)

Research design and outputs

The **design of the tracker** ensures we can undertake analysis at various levels for different purposes, and for different stakeholders.

The study is an online quantitative survey that is a nationally representative sample of New Zealanders 15+ years old, with a weekly sample of n=1259 per week, using quotas and data weighting.

- With sample boosts to ensure sufficient numbers to analyse key cities of interest, such as Tauranga, Dunedin and Hamilton.
- Sample numbers allow longitudinal view on cohorts and regions of interest.
- Sample is sourced from a blend of online panels, including Pure Profile, Ipsos iSay, Dynata and Consumer Link.

Average survey duration of between 12-15 mins

- Outside core measures, flexibility to change questions every week

Fast turnaround of results to allow a weekly view on how behaviours and attitudes are changing.

- Design will pivot according to alert level changes that may occur at nationwide and regional levels.

There will be **three types of outputs** available on a weekly basis:

1) Online dashboard results delivered through Harmoni
   - with the ability to manipulate, interrogate and export the data according to your areas of interest.
2) This weekly overview power point report
   - benchmark and longitudinal summary of key data points
   - including extra analysis based on topical questions.
3) An infographic of key data points
   - visual representative of results for ease of access.

Example: Harmony Dashboard Page

Overview of research (ii)

Question topics in the survey

Question areas covered in the research:

Level of personal concern of the impact of COVID-19

- to themselves, their families, their work, the country, etc.

Current essential journeys undertaken and changes

- change is measured since February 2020.

Modal shift patterns and perceptual shifts

- including perceptions of Public Transport among users
- perceptions of various transports modes with regards to safety, hygiene, convenience, etc
- perceptions of potential shifts in work flexibility.

Measuring attitudinal shifts towards COVID-19

- using a Behavioural Science framework to understand current people's current state to facilitate potential interventions.

Questions to classify into a variety of segments of interest

- including journey profile, vulnerability, COVID-19 attitudes, economic, etc.

Ad hoc questions of interest

- including perceptions of future workplace flexibility, enjoyment of 'quiet streets', intention to return children to school, etc.

Report notes (i)

Key information to note for this report

- This report is based on six waves of fieldwork:
  - wave 1 data collected Friday 3 April to Wednesday 8 April;
  - wave 2 data collected Thursday 9 April to Tuesday 14 April;
  - wave 3 data collected Thursday 16 April to Monday 20 April;
  - wave 4 data collected Thursday 23 April to Sunday 26 April;
  - wave 5 data collected Thursday 30 April to Sunday 3 May;
  - wave 6 data collected Thursday 7 May to Sunday 10 May.
- Total sample for this report is presented in a number of ways, including as a combined sum of the first four fieldwork waves (all conducted under level 4 alert), combined sum of waves 5 and 6 (under level 3 alert), as well as individual waves where appropriate.
- Waves 1–4 of fieldwork were completed under a level 4 alert in New Zealand, while waves 5 and 6 were under a level 3 alert.
- The focus of this report is tracking the trends and changes over time and how New Zealanders have adjusted their use of transport and travel behaviour. As this study was not conducted prior to level 4 restrictions, respondents were asked to recall their transport and travel behaviour prior to level 4 restrictions based on a *'normal week'* i.e. in February this year.
- At a total population level, significance testing indicated in this wave 6 report is based on a statistically significant shift of results between waves 1 to 6, as well as statistically significant shifts from combined level 4 alert results vs combined level 3 alert results.
- At a sub-population level, significance testing indicates a statistically significant difference between the sub-population and the base or total population. The total population benchmark is based on the total sample base collected across all four waves.

Report notes (ii)

Key transport terms and demographic groupings

There are a number of transport terms used in this report. Below are key terms with definitions:

Public transport (PT): refers to bus, train and ferry and does not include taxi/uber services and private hirer vehicles (these will be treated separately in the analysis).

Private vehicle (PVT): refers to car, van, motorcycle or scooter, and does not include e-bikes.

Active modes: refers to walking (of at least 10 mins) and cycling, including e-bikes.

There are a number of demographic subgroup terms used in this report. Below are key groups with definitions:

Any disability: All respondents indicating that they have a great deal of difficulty or cannot do the following: seeing, even when wearing glasses; hearing, even with a hearing aid; walking or climbing steps; remembering or concentrating; washing or dressing; communicating in their usual language.

COVID-19 vulnerable: All respondents indicating that they personally have a medical condition that makes them acutely vulnerable to COVID-19, such as heart disease, hypertension, chronic respiratory disease or cancer.

Essential worker: All respondents indicating that they are classified as an Essential Worker at the current alert level.

Travelling essential worker: All respondents indicating that they are classified as an essential worker at the current alert level and that they are required to leave their home for their job**.**

Sample structure and further definitions

	Definition	Waves 1 - 4		Waves 5 - 6		Wave 6	
		Sample	MoE*	Sample	MoE*	Sample	MoE*
Total		n=5,060	1.38	n=2,532	1.95	n=1,265	2.76
Auckland	All in Auckland Region, including city and surrounding rural areas	n=1,324	2.69	n=662	3.81	n=331	5.39
Tauranga	All living in the city of Tauranga	n=400	4.9	n=200	6.93	n=100	9.8
Hamilton	All living in the city of Hamilton	n=400	4.9	n=200	6.93	n=100	9.8
Wellington	All in Wellington Region, including city and surrounding rural areas	n=684	3.75	n=418	4.79	n=195	7.02
Christchurch	All living in the city of Christchurch	n=400	4.9	n=200	6.93	n=100	9.8
Dunedin	All living in the city of Dunedin	n=398	4.91	n=200	6.93	n=100	9.8
Rest of NZ	All living in areas outside of those noted above	n=1,454	2.57	n=652	3.84	n=339	5.32
Any** Disability	See previous page	n=550	4.18	n=297	5.69	n=140	8.28
COVID-19** Vulnerable	See previous page	n=1,230	2.79	n=597	4.01	n=300	5.66
Aged 70 + years**	All indicating that they are considered higher risk for COVID-19 as they are aged 70 or over	n=618	3.94	n=315	5.52	n=147	8.08

*Margin of error is calculated at 95% confidence level based upon an estimated population of 4,978,388 as at Thursday 16 Apri l 12:44pm.

**Sub-groups are *not mutually exclusive* as individuals may fit into more than one category (for example, some may be aged over 70 and also have a chronic respiratory condition that makes them more vulnerable to COVID-19) any such respondents within the sample would be counted in *both* applicable groups.

Deep dive analysis

Emergent stories and trends

- It is expected that with the constantly evolving nature of the COVID-19 pandemic, the changing alert levels governing public behaviour and emergent narratives impacting civil society discourse, the environment in which this research takes place will also be ever evolving.
- Deep dive analysis delivered as part of this research will enable questions to be answered outside of the core remit, and to periodically check in on societal variables and trends that may not be of interest every single week, but will speak to contextual changes and important landmarks in New Zealand's response to COVID-19 over time.
- Content included in the deep dive is generated from steering group requests.
- The emerging narratives in this deck are in places more complex than would warrant inclusion in the core report, included also are other narratives that may take on greater prominence later on when more responses are accumulated or when alert levels are changed.

Summary

Wave 6 deep dives

The sixth wave of fieldwork took place between Thursday 7 and Sunday 10 May, with New Zealand still under level 3 alert conditions but anticipating a downgrade to level 2 in the coming week.

Modal changes pre and post lockdown

For much of this research, modal changes have been viewed through the prism of the changing number of weekly users, but due to the way that transport usage is collected, we are also able to view mode usage by volume in terms of the *number of travel days* that New Zealanders are taking each week.

- Viewing these as a distribution, we can see a statistically significant change in usage of some modes in recent weeks, as New Zealand adjusts to greater freedom of movement under level 3.
- However, this is largely focused on car usage, with more than one in five using their car at least five days in the past week, compared to less than one in six at the start of lockdown. Comparatively, the number of days travelling by walking peaked earlier in lockdown and has remained steady, while bus usage has yet to see a notable increase in travel days after the initial decline in usage.

Reasons for declining public transport usage

Those using public transport less than normal have been asked about their reasons for this in each wave since this research began.

- In level 3, they have been less likely to choose options associated with transport accessibility and just as likely to cite reduced need. All aspects of accessibility have declined at similar rates.
- Looking at current commuting modes among those travelling to work, it appears that modal shift is not a significant contributing factor at this stage for lower public transport usage.
- However, it *is* clear from looking at the usual modes of those who have stopped commuting that public transport is disproportionately impacted by a decreasing number of travellers, as those who normally travel by public transport are significantly more likely to be currently working from home.

Journeys taken against preference

Throughout the research, a sizable minority of people have told us that they have been making essential journeys that they would prefer not to have made.

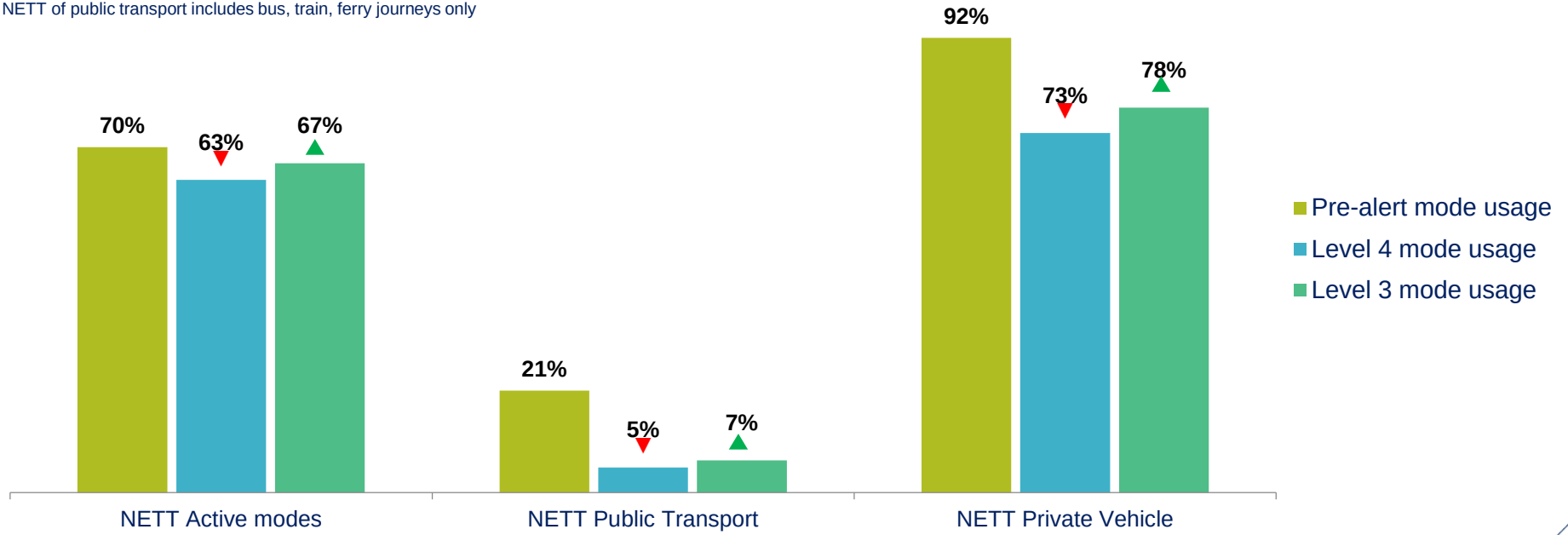
- This is concentrated in certain vulnerable groups, but not necessarily among those who are vulnerable to COVID19. People with disabilities have been much more likely than others to say they made journeys against preference, whereas those with health conditions that would make them vulnerable are no more likely to say they've done so. Those aged 70+ are actually less likely than the average New Zealander to say they've made a journey they'd rather not have made at this time.
- Over time, people have been less likely to say that they made a grocery shopping journey they'd prefer not to have made, but even with more work travel taking place during alert level 3, the proportion saying they've made work journeys against preference has not increased.

Section 2 – Modal changes pre- and post-lockdown

We can see a small level 3 increase in the proportion travelling by each mode, but this is an expression of the proportion travelling at all, not volume

Proportion using each type of transportation mode

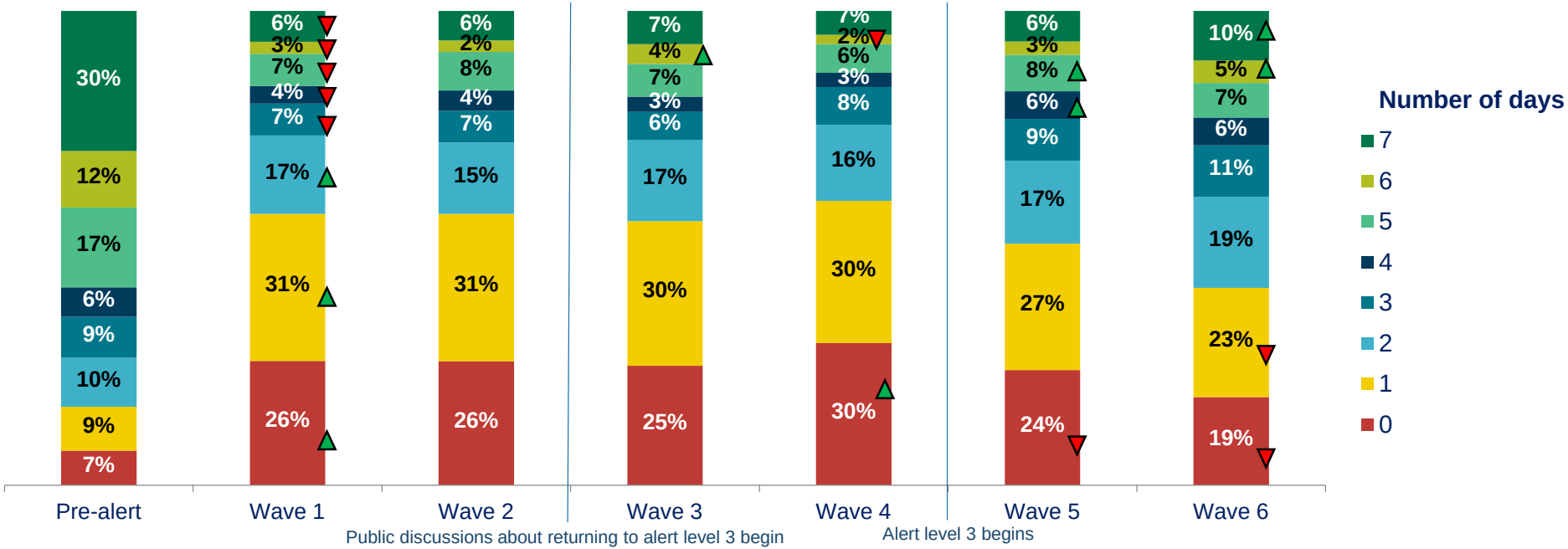
NB: respondents were asked to indicate how many days per week they usually used each transport mode, and how many days they had used in the past seven days, the below indicates the proportion who indicated any days of travel in a normal week and in the past week.
NETT of public transport includes bus, train, ferry journeys only



QFREQ1/QFREQ2 –And in the course of a normal week, **on how many days** would you normally travel via each of the methods listed below? And during the past seven days, **on how many days** have you travelled via each of the modes listed below?
Base: all adults 15+ in New Zealand in Pre-alert level: (n=3,759); level 4 (n=5,060); level 3 (n=2,352);

When observed as a distribution, we can see a tangible recent increase in the number of days travelled by car users, with one in 10 now using their car every day

Number of days driving in typical week / past seven days

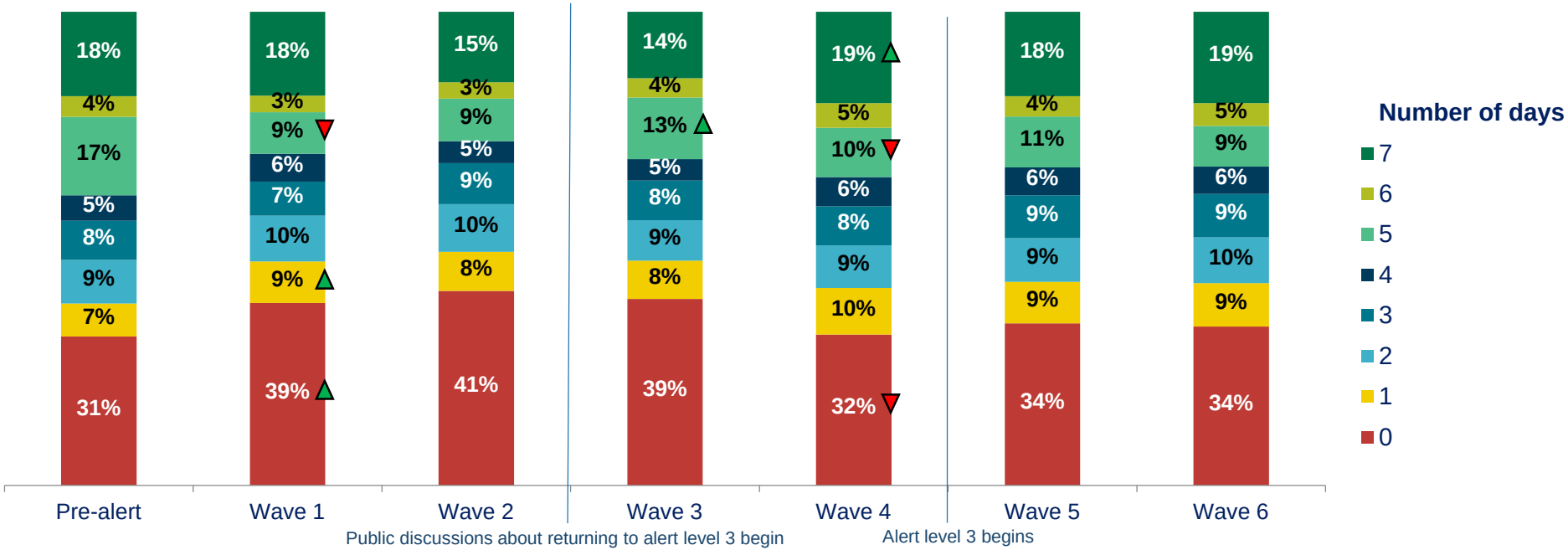


QFREQ1/QFREQ2 –And in the course of a normal week, **on how many days** would you normally travel via each of the methods listed below? And during the past seven days, **on how many days** have you travelled via each of the modes listed below?

Base: all adults 15+ normally making journeys in New Zealand in Benchmark (n=3,759); wave 1 (n=1,249); wave 2 (n=1,247); wave 3 (n=1,217); wave 4 (n=1,286); wave 5 (n=1,244); wave 6 (n=1,255)

Comparatively, the proportion doing a higher volume of walking has not changed substantially since peaking just before level 3 began

Number of days walked in typical week / past seven days

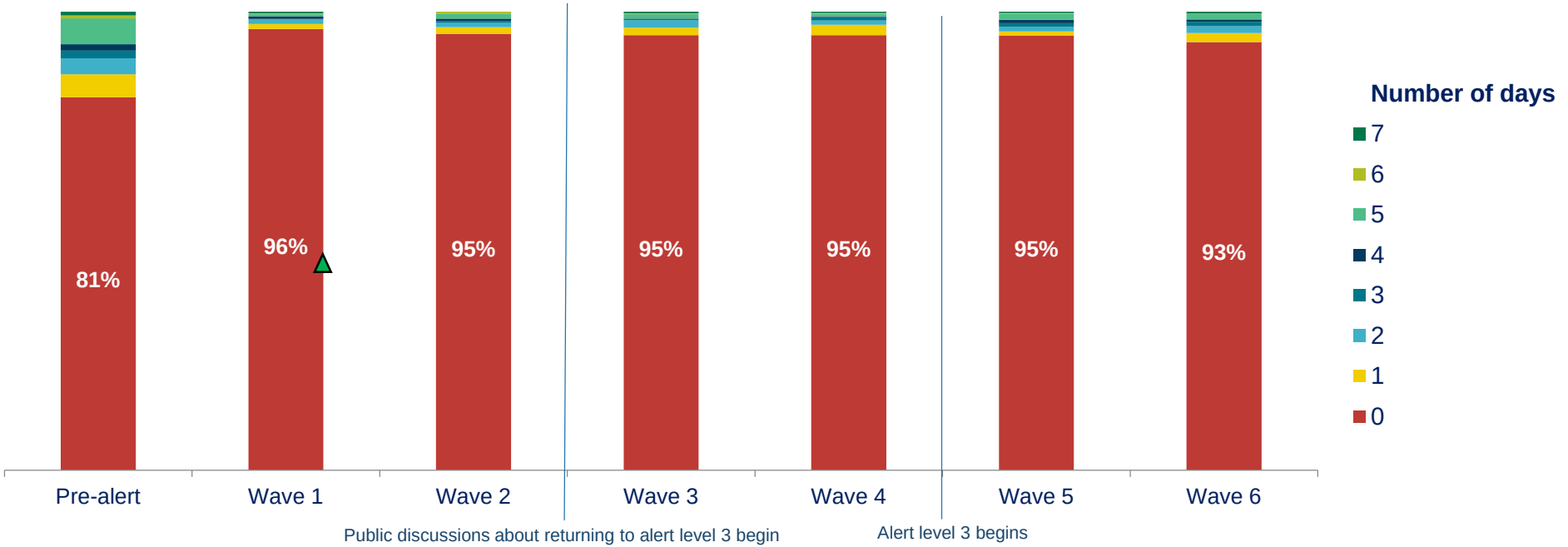


QFREQ1/QFREQ2 –And in the course of a normal week, **on how many days** would you normally travel via each of the methods listed below? And during the past seven days, **on how many days** have you travelled via each of the modes listed below?

Base: all adults 15+ in New Zealand in Benchmark (n=3,759); wave 1 (n=1,264); wave 2 (n=1,263); wave 3 (n=1,232); wave 4 (n=1,301); wave 5 (n=1,267); wave 6 (n=1,265)

Even before lockdown conditions, bus travel (and public transport in general) was at too low an incidence to infer much about the volume of days travelled

Number of days taking bus in typical week / past seven days



QFREQ1/QFREQ2 –And in the course of a normal week, **on how many days** would you normally travel via each of the methods listed below? And during the past seven days, **on how many days** have you travelled via each of the modes listed below?

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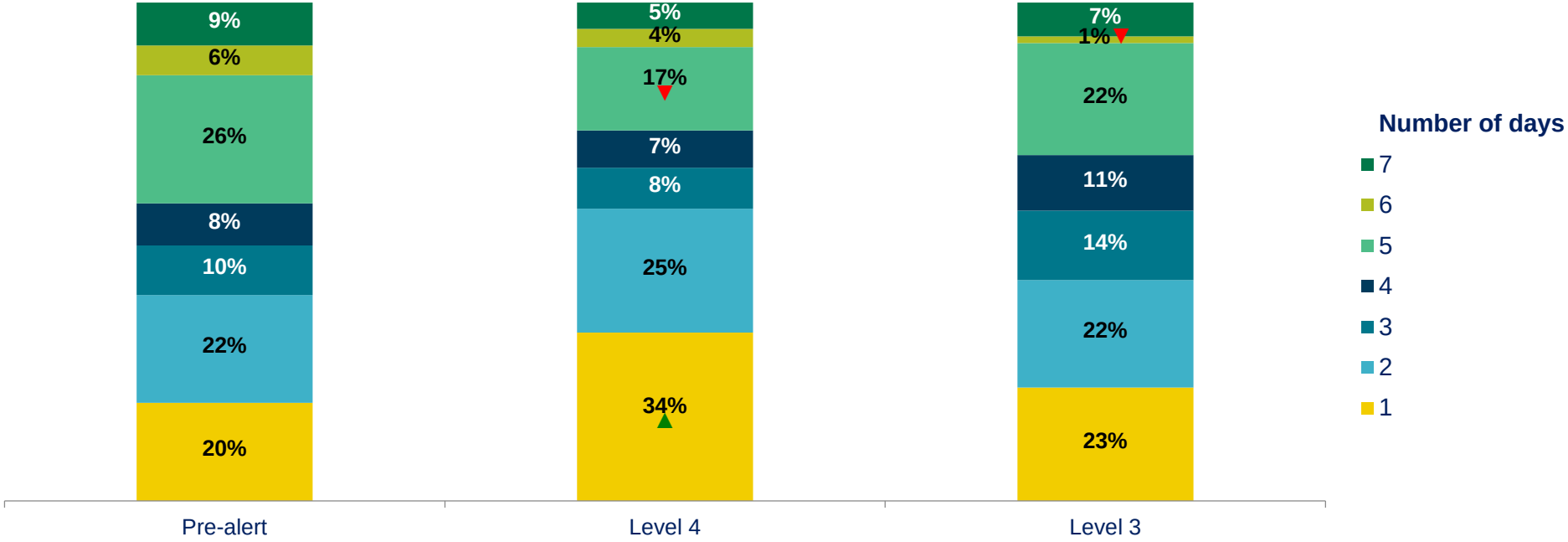
Looking at travel by level within users, the impact of commuting can be seen in level 4, as the number travelling on five days drops off and the number travelling once rises

Number of days taking bus in typical week / past seven days among bus users



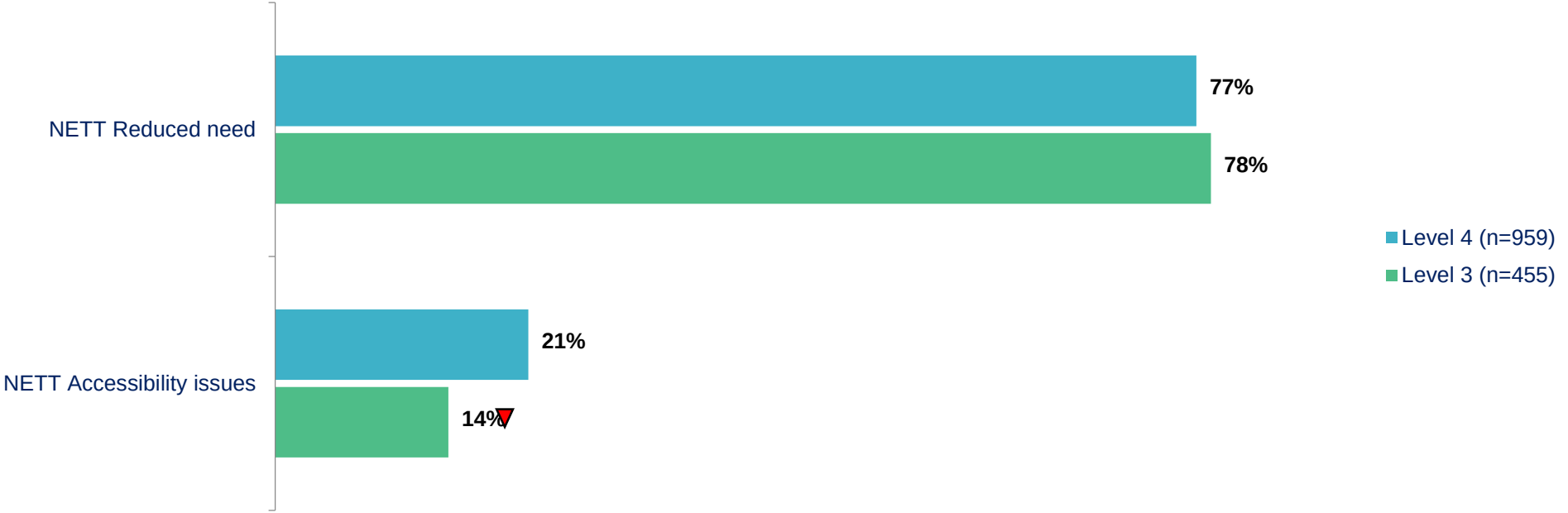
QFREQ1/QFREQ2 –And in the course of a normal week, **on how many days** would you normally travel via each of the methods listed below? And during the past seven days, **on how many days** have you travelled via each of the modes listed below?

Base: all bus users 15+ in New Zealand: Benchmark: (n=253); Level 4 (n=314); Level 3 (n=126)

Section 3 – Reasons for declining public transport usage

We know that accessibility issues in level 3 are less frequently cited than they were in level 4

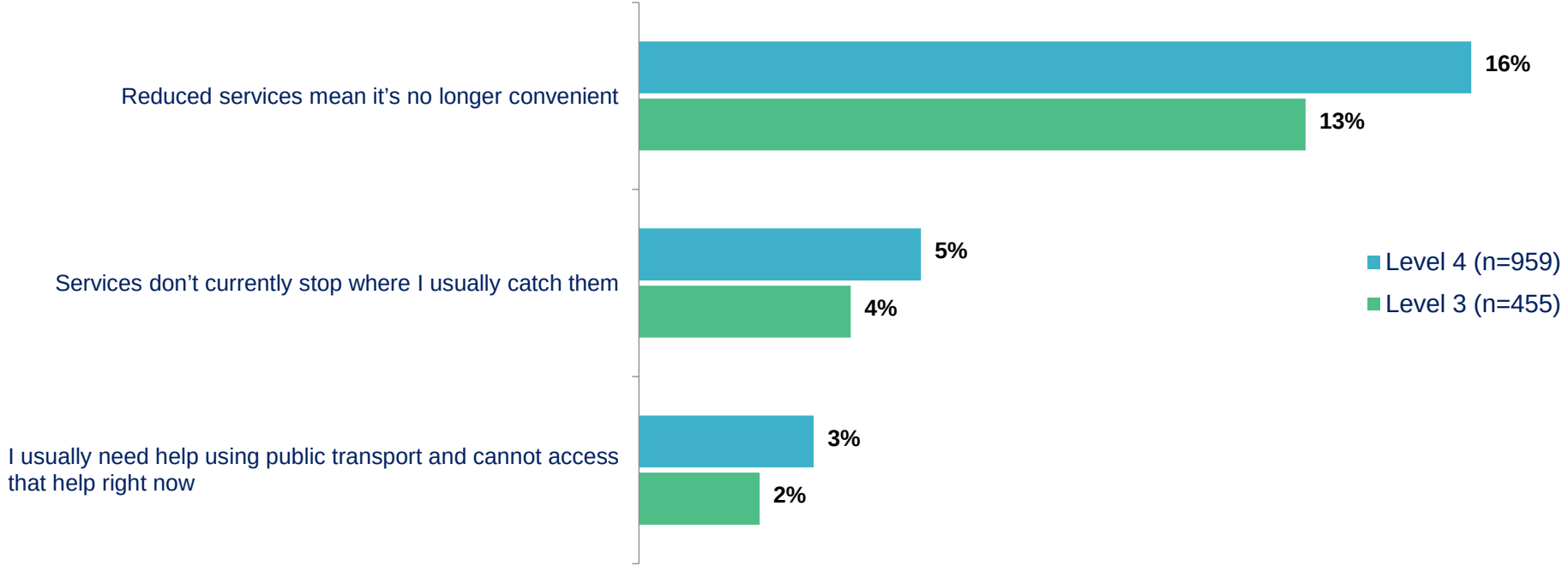
Reasons for reduced reported public transport usage in past seven days



QDEC. Reasons for decrease in PT activity - For which, if any of the following reasons, has your use of public transport decreased?
Base: all decreasing PT usage in past week

However, when we look at individual accessibility issues, it's clear that this effect is cumulative, rather than these barriers being individually significant in their differences

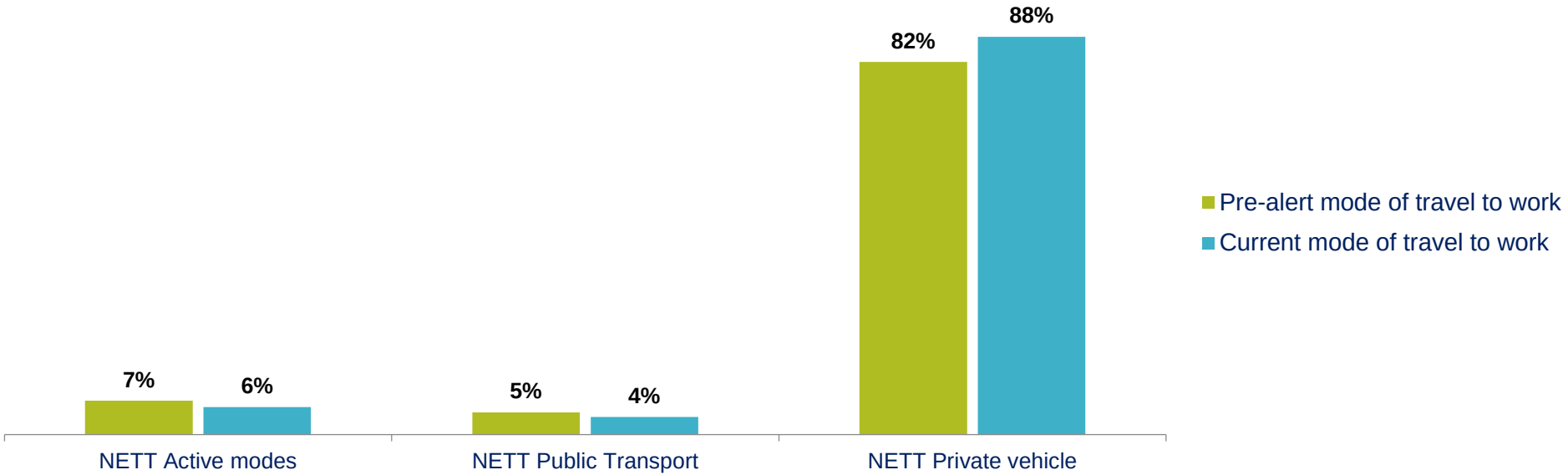
Changes in individual accessibility issues between alert level



QDEC. Reasons for decrease in PT activity - For which, if any of the following reasons, has your use of public transport decreased?
Base: all decreasing PT usage in past week

There is still no indication that modal shift is a key driver of decreasing public transport usage

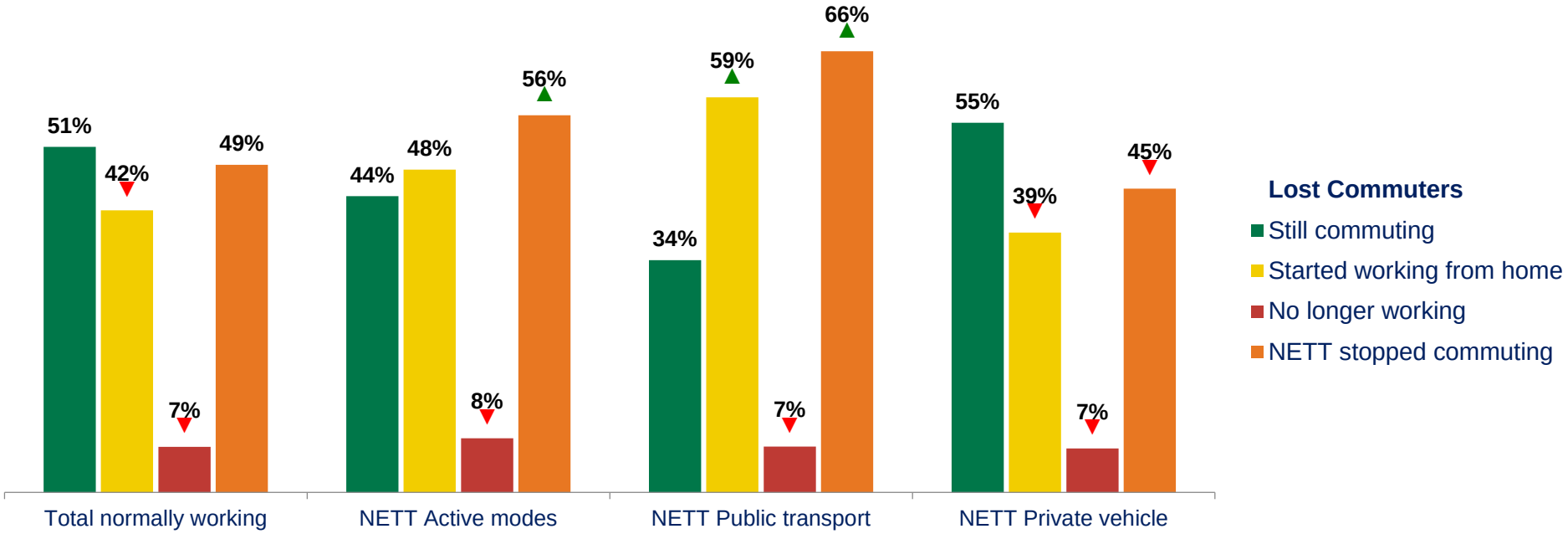
Reported mode used for work travel amongst those currently travelling to work (excludes wave 5)



QMODE1_1 Travelling to work: How would you normally make each of the following types of journeys listed below? For each journey, please select the method of transport that makes up the majority of the journey
Base: all adults 15+ in New Zealand still travelling to work (n=953)

However, the loss of commuting activity more keenly affects public transport than any other mode of commuting, with two thirds no longer travelling for work

Commuting activity by normal commuting transport

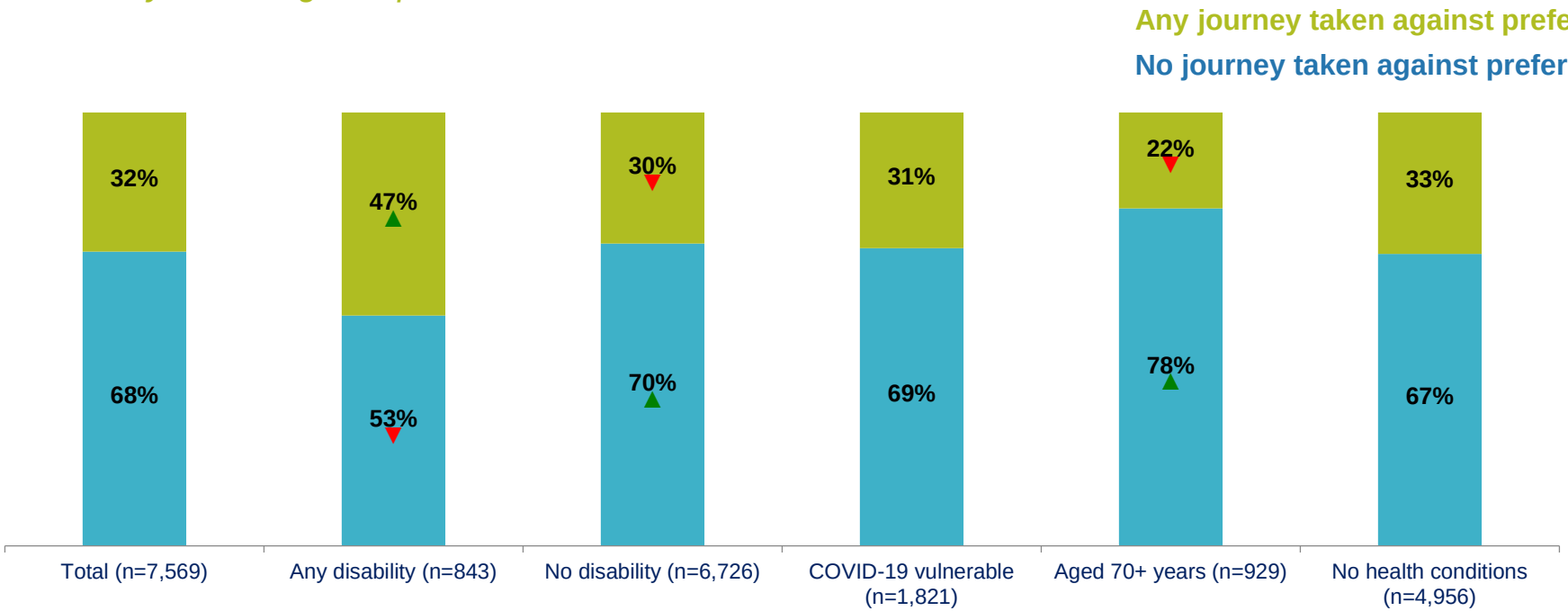


QMODE1_1 Travelling to work: How would you normally make each of the following types of journeys listed below? For each journey, please select the method of transport that makes up the majority of the journey
Base: all adults 15+ in New Zealand normally commuting (n=2,613); by active modes (n=291); by public transport (n=321); by private vehicle (n=1,978) (excludes wave 5)

Section 4 – Journeys taken against preference

Throughout lockdown, those with disabilities were more likely to say they had to take essential journeys they'd rather not take, not those at higher risk from COVID-19

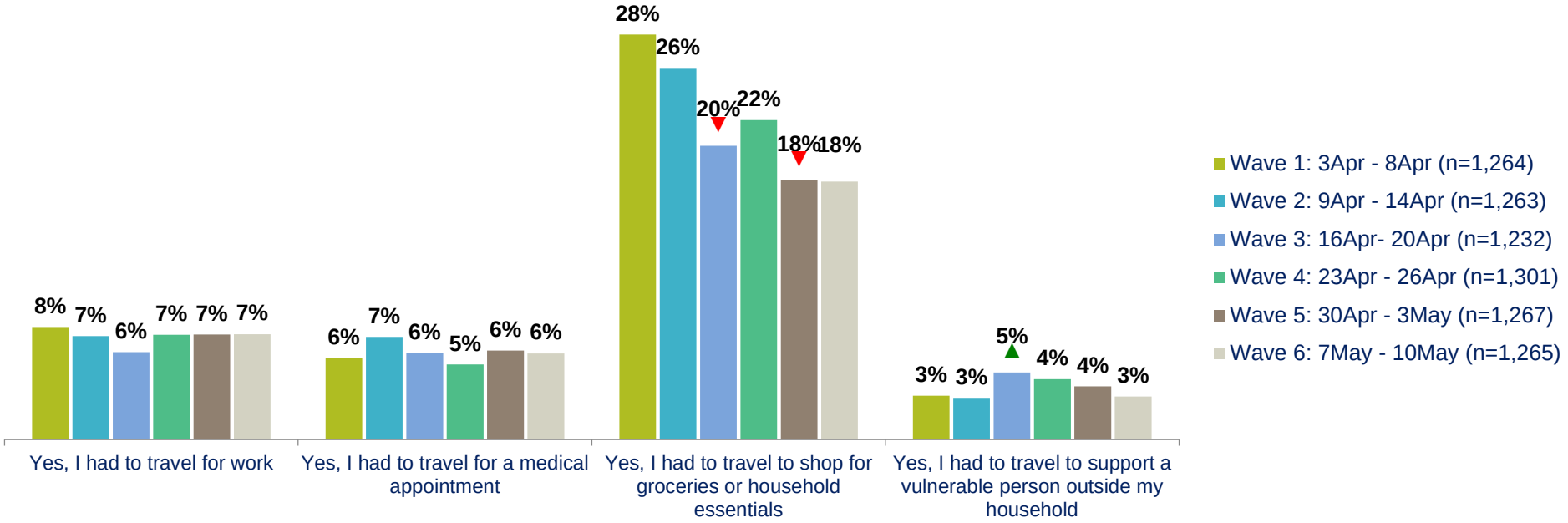
Journeys taken against preference



QCH1. Journeys taken against preference - And during the past week, did you have to make any journeys that you would prefer not to have made during this time?
Base: all adults 15+ in New Zealand who normally travel in a typical week

Even with more people travelling to work, the proportion saying that this has occurred against their preference hasn't increased

Journeys taken against preference



QCH1. Journeys taken against preference - And during the past week, did you have to make any journeys that you would prefer not to have made during this time?
Base: all adults 15+ in New Zealand



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