

Waka Kotahi COVID-19 transport impact

Fieldwork wave 12 deep dive analysis – continuing self-isolation in levels 2 and 1

23 June 2020

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

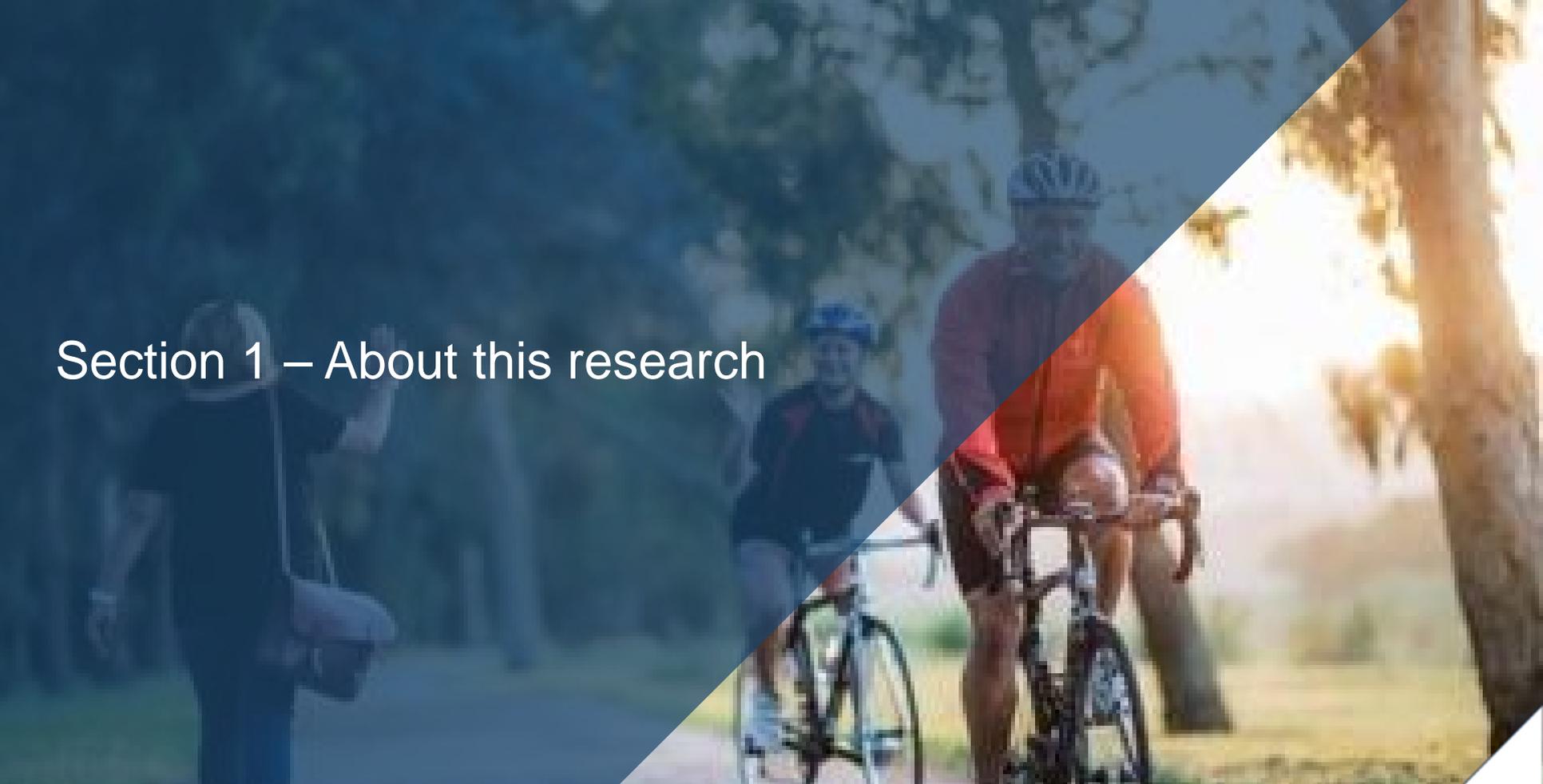
While Waka Kotahi provided investment, the research was undertaken independently, and the resulting findings should not be regarded as being the opinion, responsibility or policy of Waka Kotahi or indeed of any NZ Government agency.

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

Deep dive report content

COVID-19 transport impact

- Section 1 – About this research
- Section 2 – Who is still self-isolating in levels 2 and 1?
- Section 3 – What are the attitudinal drivers of continued self isolation?
- Section 4 – How does this impact on transportation networks?



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:

- 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: Harmoni 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 and domestic travel 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 transport 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 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, domestic tourism intentions, intention to return children to school, e tc.

Report notes (i)

Key information to note for this report

- This report is based on twelve waves of fieldwork, see table ►
- Total sample for this report is presented in a number of ways, including as a combined sum of the first four fieldwork waves, combined sum of waves 5 and 6, combined sum of waves 7, 8 9 and 10, waves 11 and 12, as well as individual waves.
- The focus of this report is tracking 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 12 report is based on a statistically significant shift of results between waves 1 to 12, as well as statistically significant shifts from combined level 4 alert results vs combined level 3 alert results vs. combined level 2 alerts.
- 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 the first four waves of data.

Wave	Dates of fieldwork	Alert level
1	Friday 3 April to Wednesday 8 April	Alert level 4
2	Thursday 9 April to Tuesday 14 April	
3	Thursday 16 April to Monday 20 April	
4	Thursday 23 April to Sunday 26 April	
5	Thursday 30 April to Sunday 3 May	Alert level 3
6	Thursday 7 May to Sunday 10 May	
7	Thursday 14 May to Sunday 17 May	Alert level 2
8	Thursday 21 May to Sunday 24 May	
9	Thursday 28 May to Monday 1 June	
10	Thursday 4 June to Sunday 7 June	Alert level 1
11	Thursday 11 June to Sunday 14 June	
12	Thursday 18 June to Sunday 21 June	

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.

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 the COVID-19 overtime.
- 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.

Sample structure and further definitions

	Definition	Waves 1 - 4		Waves 5 - 6		Waves 7 - 10		Waves 11 – 12	
		Sample	MoE*	Sample	MoE*	Sample	MoE*	Sample	MoE*
Total		n=5,060	1.38	n=2,532	1.95	n=5,043	1.38	n=2,531	1.95
Auckland	All in Auckland Region, including city and surrounding rural areas	n=1,324	2.69	n=662	3.81	n=1,324	2.69	n=662	3.81
Tauranga	All living in the city of Tauranga	n=400	4.9	n=200	6.93	n=400	4.9	n=200	6.93
Hamilton	All living in the city of Hamilton	n=400	4.9	n=200	6.93	n=400	4.9	n=200	6.93
Wellington	All in Wellington Region, including city and surrounding rural areas	n=684	3.75	n=418	4.79	n=799	3.47	n=412	4.83
Christchurch	All living in the city of Christchurch	n=400	4.9	n=200	6.93	n=400	4.9	n=200	6.93
Dunedin	All living in the city of Dunedin	n=398	4.91	n=200	6.93	n=392	4.95	n=206	6.83
Rest of NZ	All living in areas outside of those noted above	n=1,454	2.57	n=652	3.84	n=1,328	2.69	n=651	3.84
Disability, Vulnerability and COVID-19**									
Any Disability	See previous page	n=550	4.18	n=297	5.69	n=611	3.96	n=270	5.96
COVID-19 Vulnerable	See previous page	n=1,230	2.79	n=597	4.01	n=1,139	2.9	n=564	4.13
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=627	3.91	n=309	5.57

*Margin of error is calculated at 95% confidence level based upon an estimated population of 4,978,388 as at Thursday 16 April 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.

Summary

Wave 12 deep dives

The twelfth wave of fieldwork took place between Thursday 18 and Sunday 21 June. Even in level 2 and 1 conditions, there continues to be a core of people who are self-isolating at least in part. This deep dive addresses questions about this population and their impact on the transport network.

In this analysis, those who are completely self isolating or leaving the house only for essentials are compared with those who are leaving their house for other reasons or travelling as normal. This sample is taken from surveys conducted under level 2 and level 1 conditions only.

Who is still self-isolating in level 2 and 1?

Those who are still self-isolating, at least in part, are more likely to have a disability or some form of COVID-19 vulnerability than the general population or those who are not self-isolating.

This group is also more likely to be out of work long-term, but not a great deal more likely to have lost work during the COVID-19 lockdown.

What are the attitudinal drivers of continued self isolation?

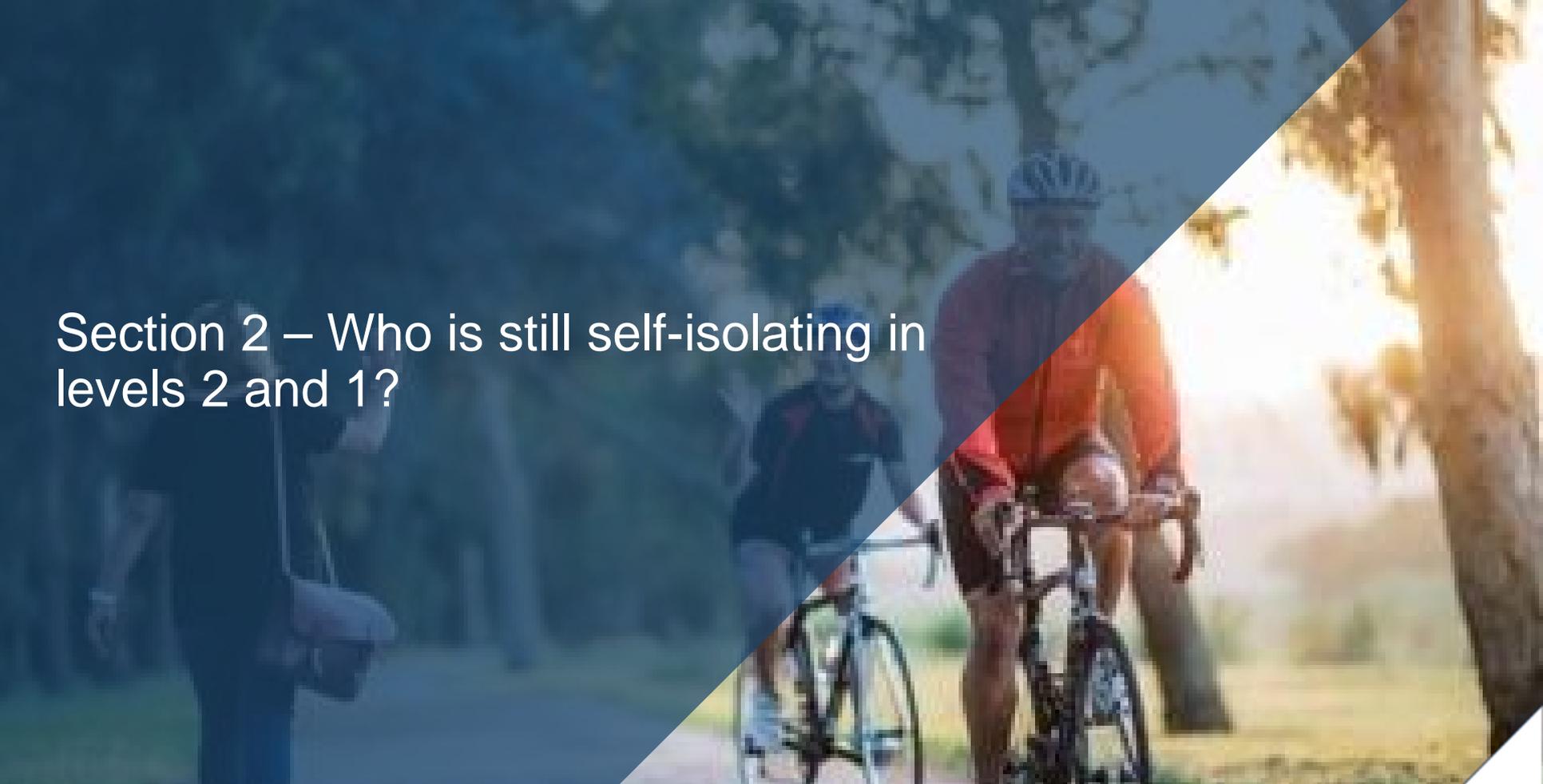
The attitudinal differences between those who are still self-isolating and those are not are more present at the stronger ends of concern, with significantly more who are extremely concerned about infection and transmission than within the general population.

This group also has greater concerns about getting by under lockdown conditions, perhaps because there are more present concerns given the greater amount of isolation they are experiencing.

How does this behaviour impact on transportation networks?

Those who are self isolating are more likely to have been weekly public transport users before lockdown, but their current volume of public transport usage is largely the same as those not self-isolating. In fact, their taxi usage is significantly higher. Both of these factors may be influenced in part by the fact that a large proportion of those self isolating have a disability, and we know from previous deep dives that their usage of these modes is higher, and has maintained a more consistent rate during the lockdown period.

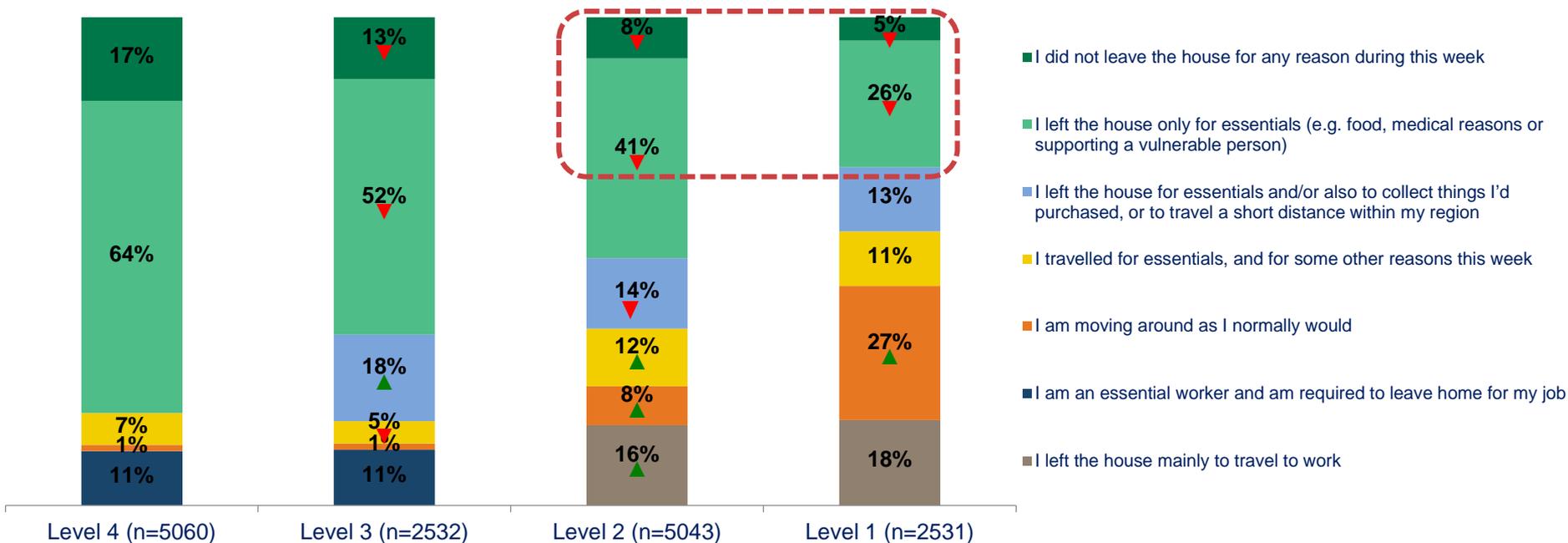
This group has reduced it's usage of all travel modes, although the rate of reduction for buses is greater than the rate of travelling on foot or by car.



Section 2 – Who is still self-isolating in levels 2 and 1?

In level 1, three in 10 are at least partially isolating down from nearly half in level 2, but still a significant minority

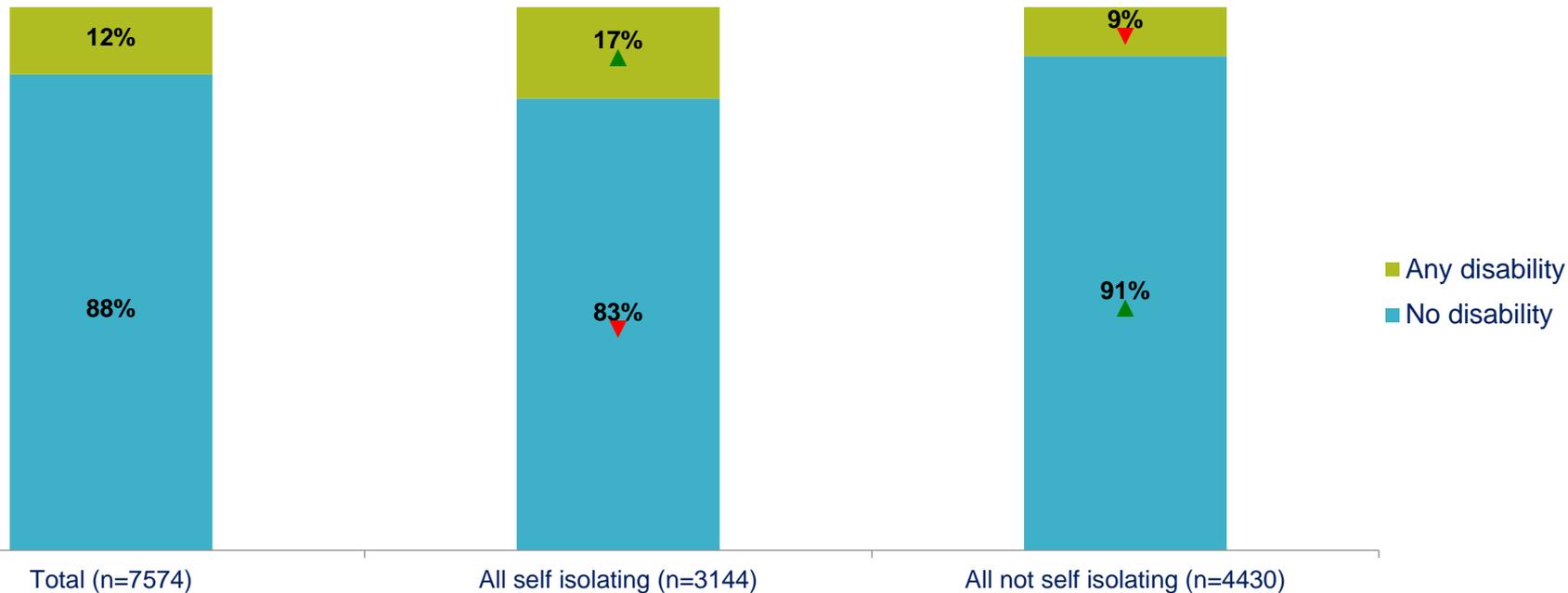
Reported activity and movement during the past seven days by alert level, excludes exercise



ISO_1_TRAVEL. Which, if any of the following best describes your approach to leaving the house over the last week, excluding for exercise?
 Base: all adults 15+ in New Zealand

The proportion of those with disabilities significantly over-indexes among those who are still self-isolating in levels 2 and 1

Disability by self isolation behaviours

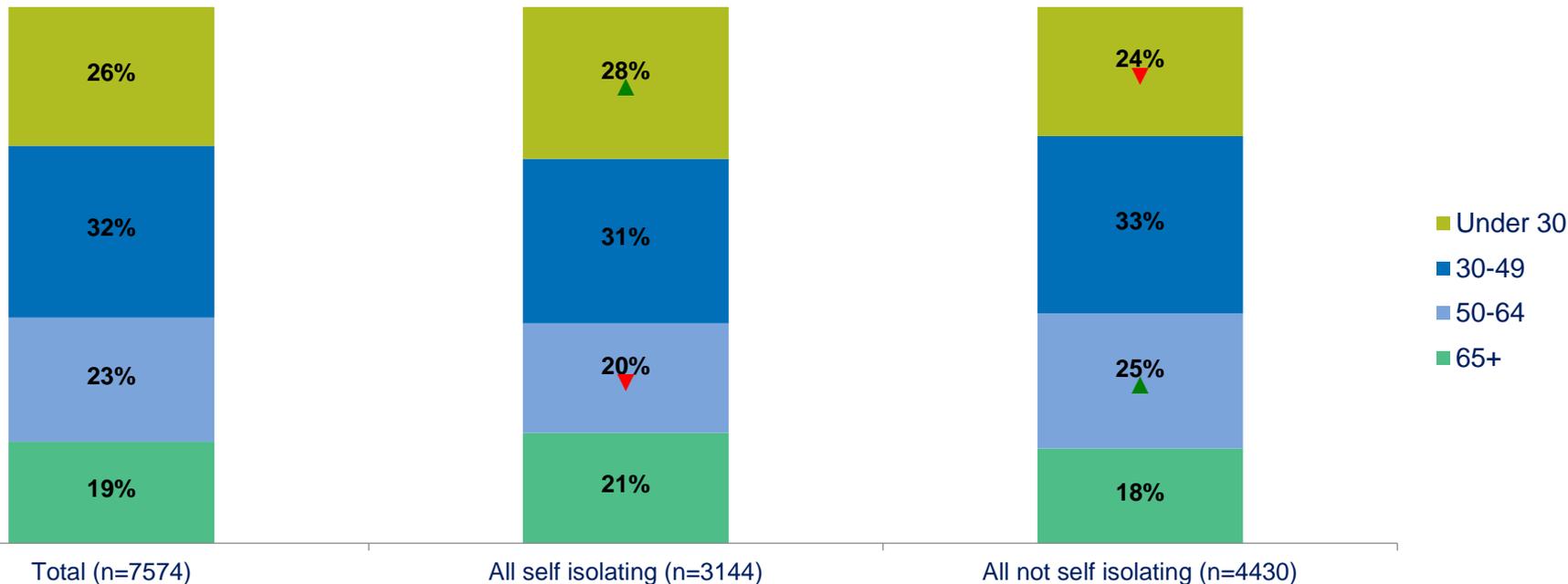


ISO_1_TRAVEL. Which, if any of the following best describes your approach to leaving the house over the last week, excluding for exercise?
Base: all adults 15+ in New Zealand interviewed in level 2 or level 1



Among those still self-isolating, the proportion who are under 30 over-indexes slightly, as does those over 65, but the relationship is not clearly linear

Age by self isolation behaviours

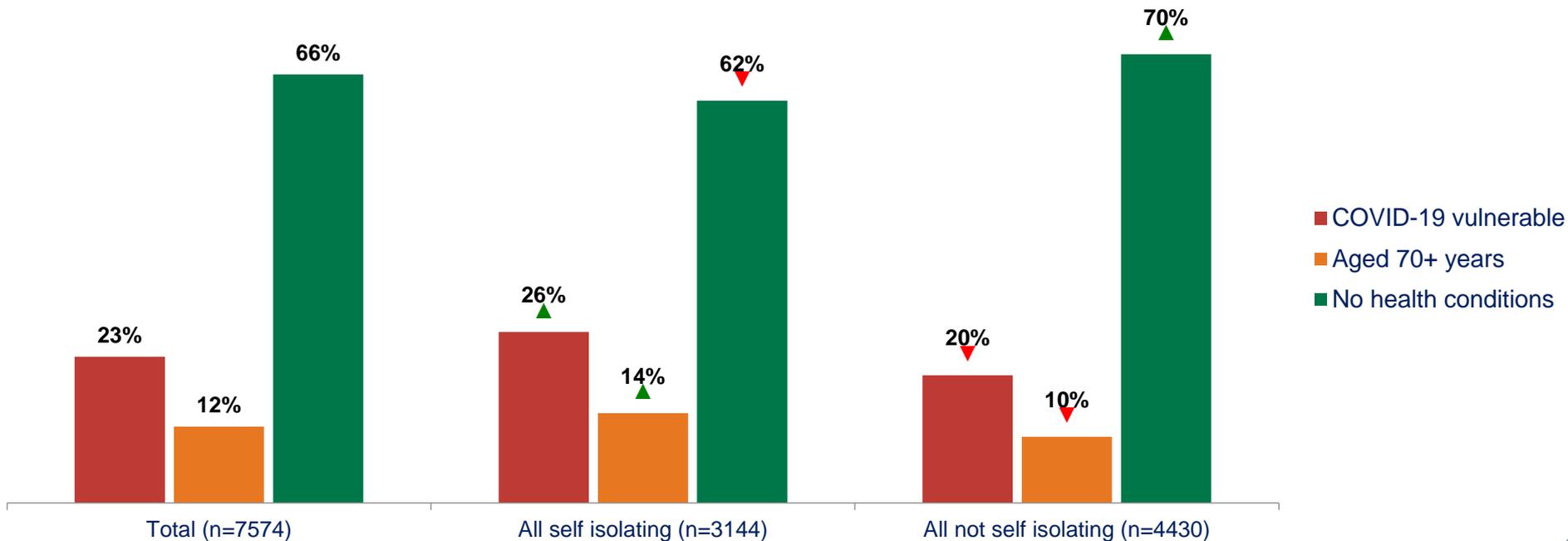


ISO_1_TRAVEL. Which, if any of the following best describes your approach to leaving the house over the last week, excluding for exercise?
Base: all adults 15+ in New Zealand interviewed in level 2 or level 1



Those who are self-isolating are somewhat more likely to be vulnerable to COVID-19 in some way

COVID-19 vulnerability by self isolation behaviours

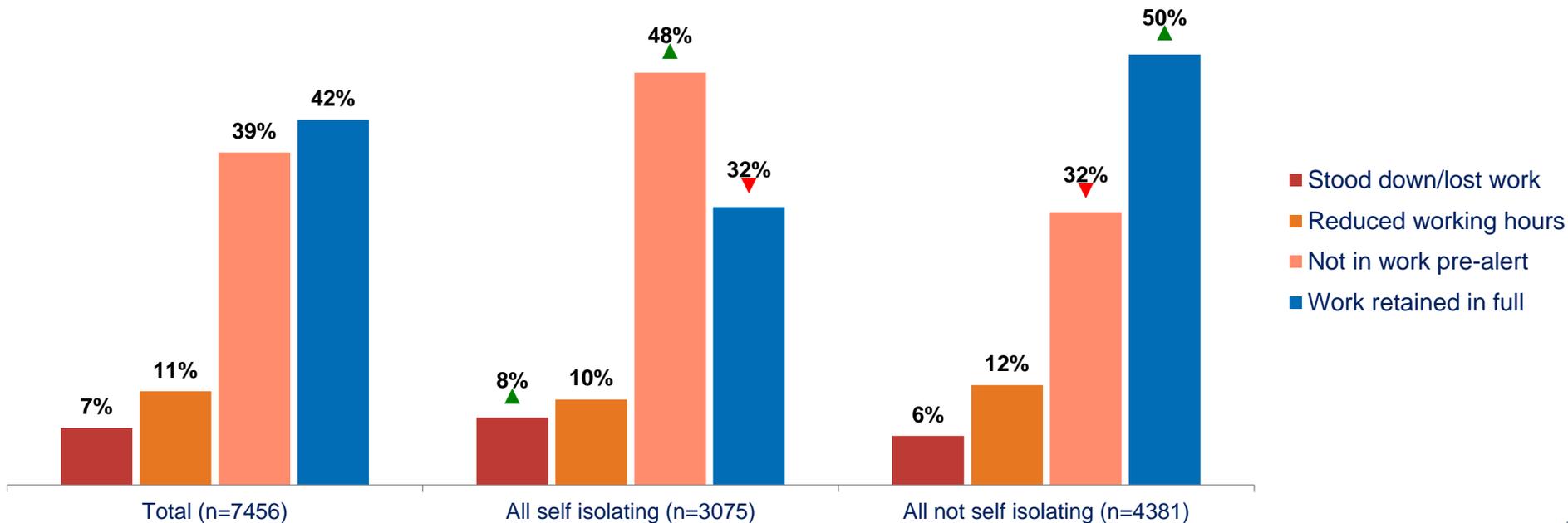


ISO_1_TRAVEL. Which, if any of the following best describes your approach to leaving the house over the last week, excluding for exercise?
Base: all adults 15+ in New Zealand interviewed in level 2 or level 1



Almost half of those still self-isolating were not in work before lockdown, although almost a third are people who have retained employment during lockdown

Economic vulnerability by self isolation behaviours



ISO_1_TRAVEL. Which, if any of the following best describes your approach to leaving the house over the last week, excluding for exercise?

Base: all adults 15+ in New Zealand interviewed in level 2 or level 1

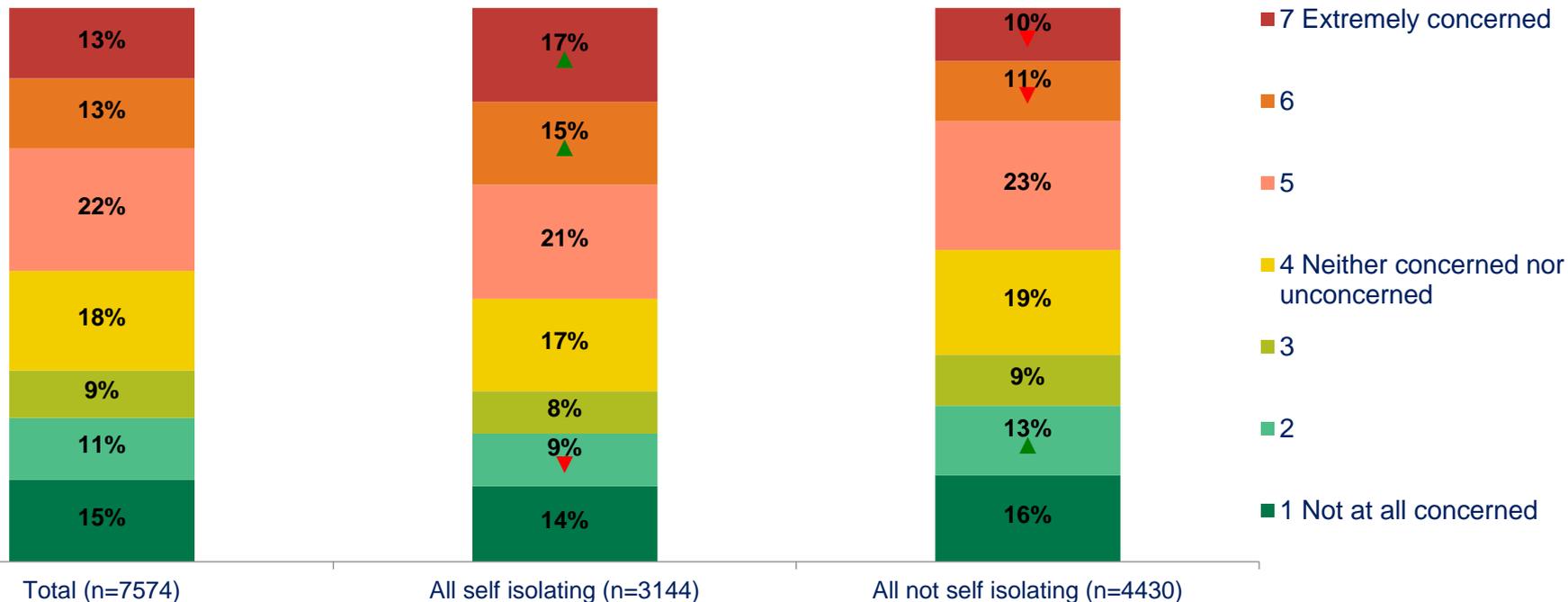




Section 3 – What are the attitudinal drivers of continued self isolation?

Those who are still self isolating are likely to have more pronounced concerns about the risk of COVID-19 infection, perhaps due to many being COVID-19 vulnerable

'The risk of COVID-19 infection to yourself'

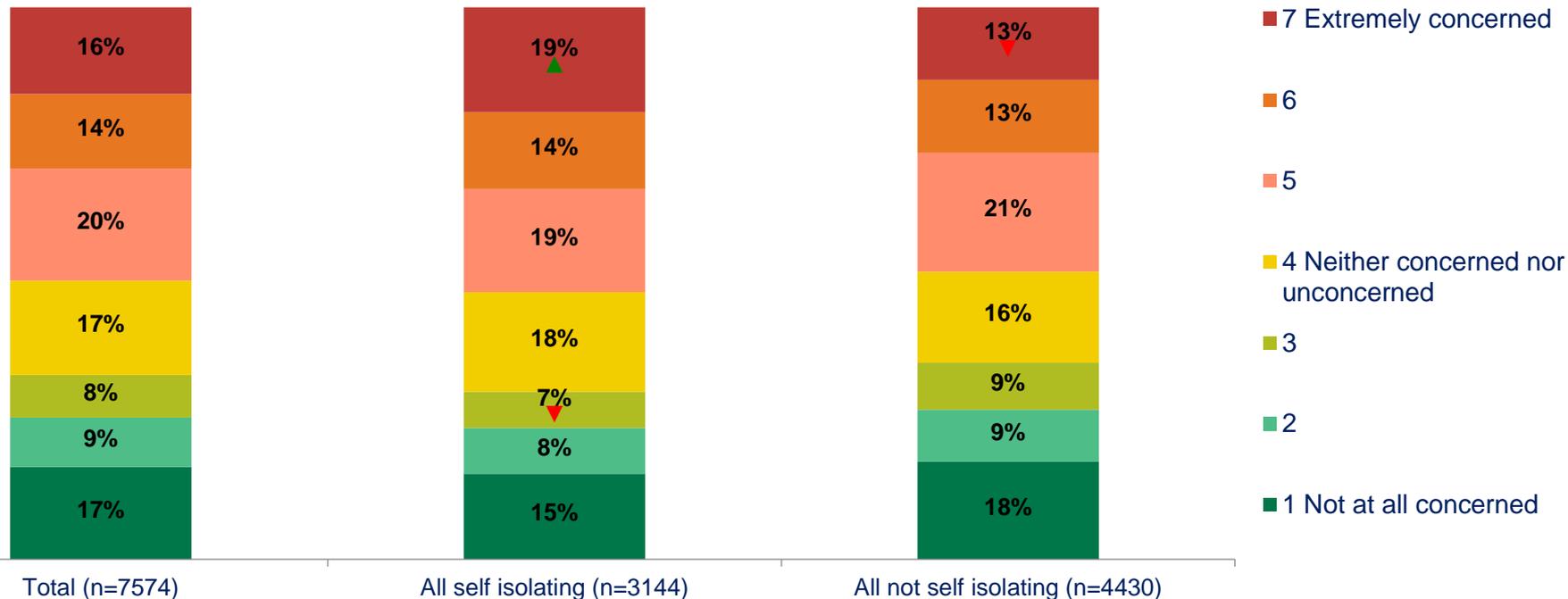


QPTUSE3. How personally concerned are you about each of the following?
 Base: all adults 15+ in New Zealand interviewed in level 2 or level 1



This group has similar concerns about the risk of transmitting COVID-19 to others as those not self-isolating, but their concerns are more extreme

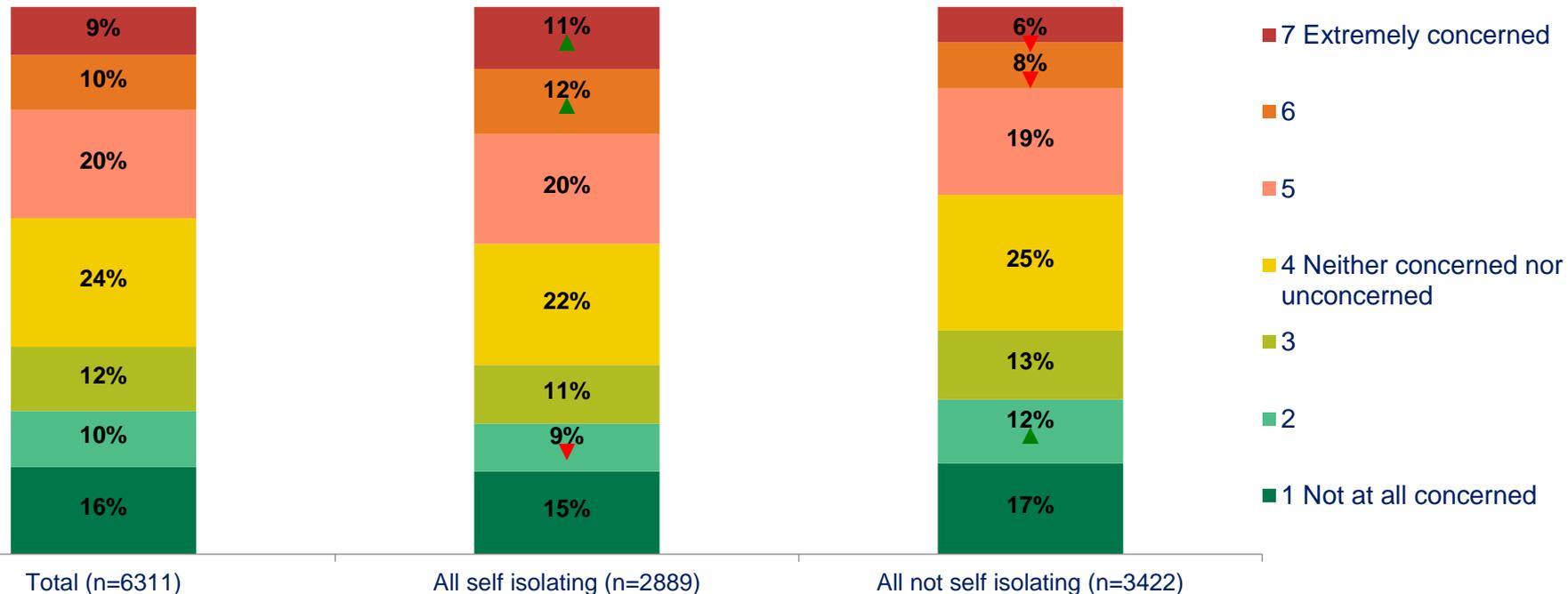
'The risk of transmitting COVID-19 to others'



QPTUSE3. How personally concerned are you about each of the following?
 Base: all adults 15+ in New Zealand interviewed in level 2 or level 1

Concerns about behaviour of those near to them are more prevalent among those who are continuing to self-isolate

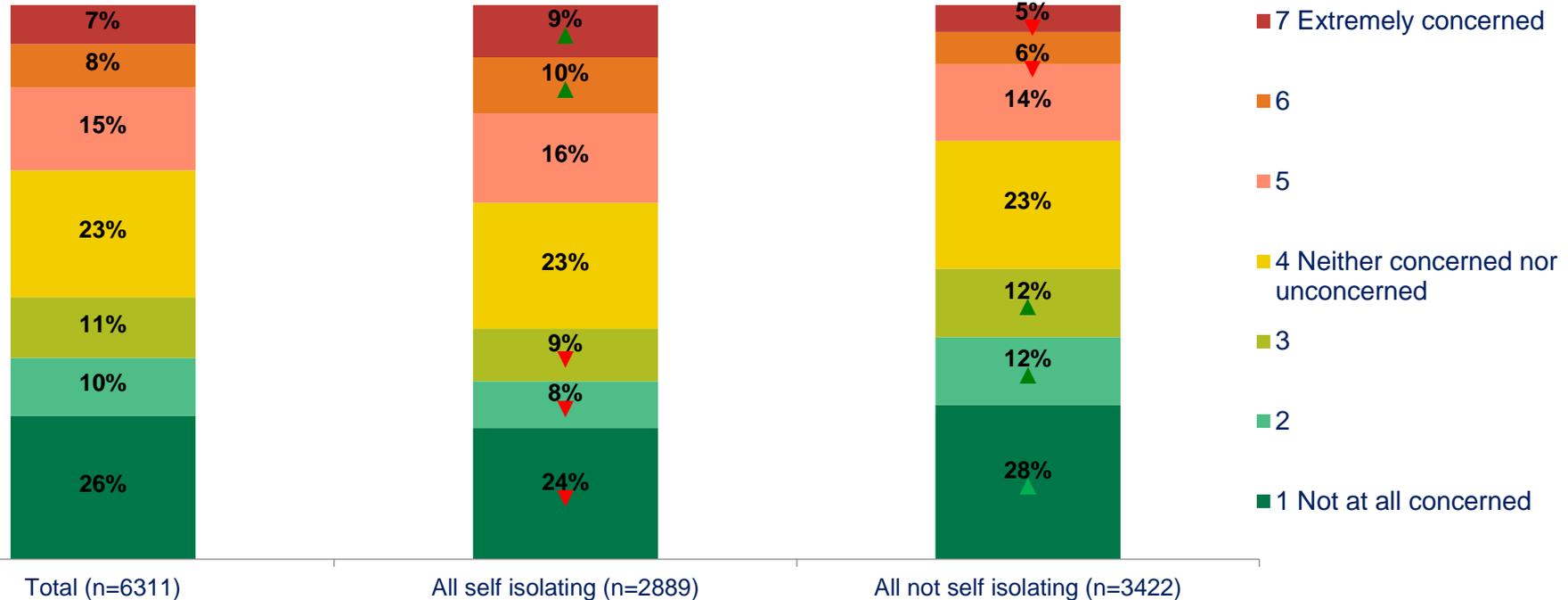
'The behaviour of others in my immediate neighbourhood during the lockdown'



QPTUSE3. How personally concerned are you about each of the following?
 Base: all adults 15+ in New Zealand interviewed in level 2 or level 1 (does not include wave 12)

Although they are doing more 'living at home' those who are still self isolating have more pronounced concerns about doing so

'Managing living at home through the current COVID-19 lockdown period'



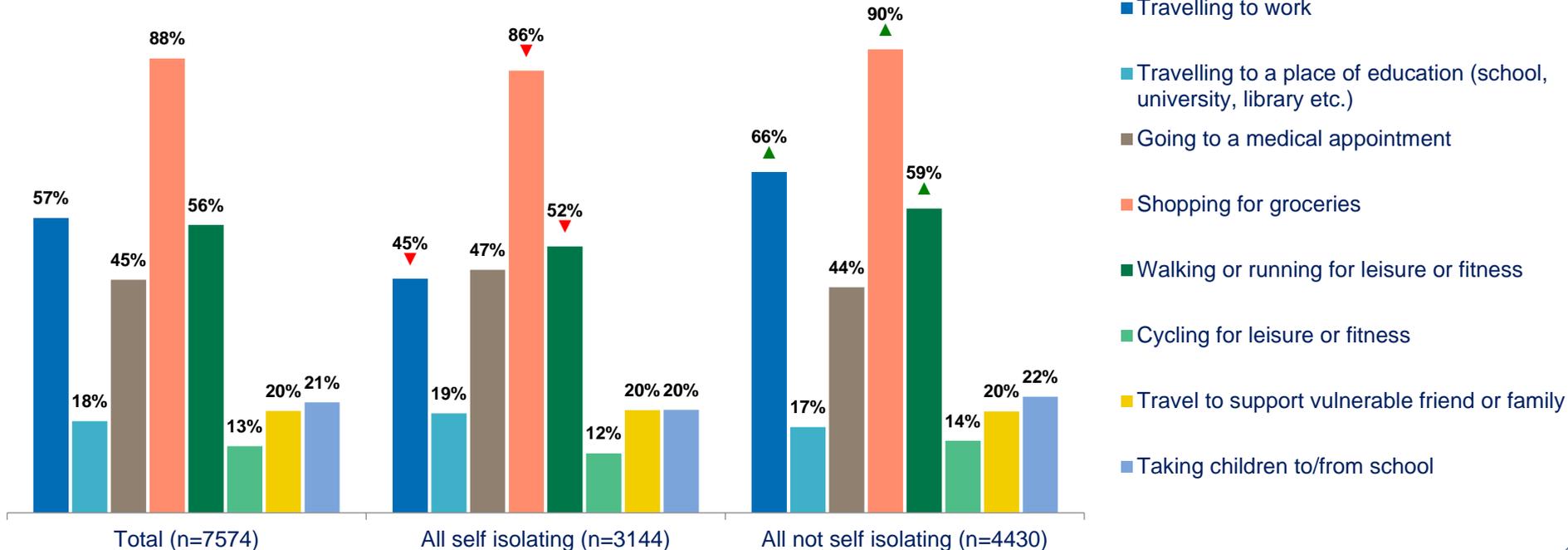
QPTUSE3. How personally concerned are you about each of the following?
 Base: all adults 15+ in New Zealand interviewed in level 2 or level 1 (does not include wave 12)



Section 4 – How does this behaviour impact on transportation networks?

The big difference in essential journeys are in travelling to work, shopping for groceries and walking for leisure and fitness

Normal journeys taken by self-isolation behaviours



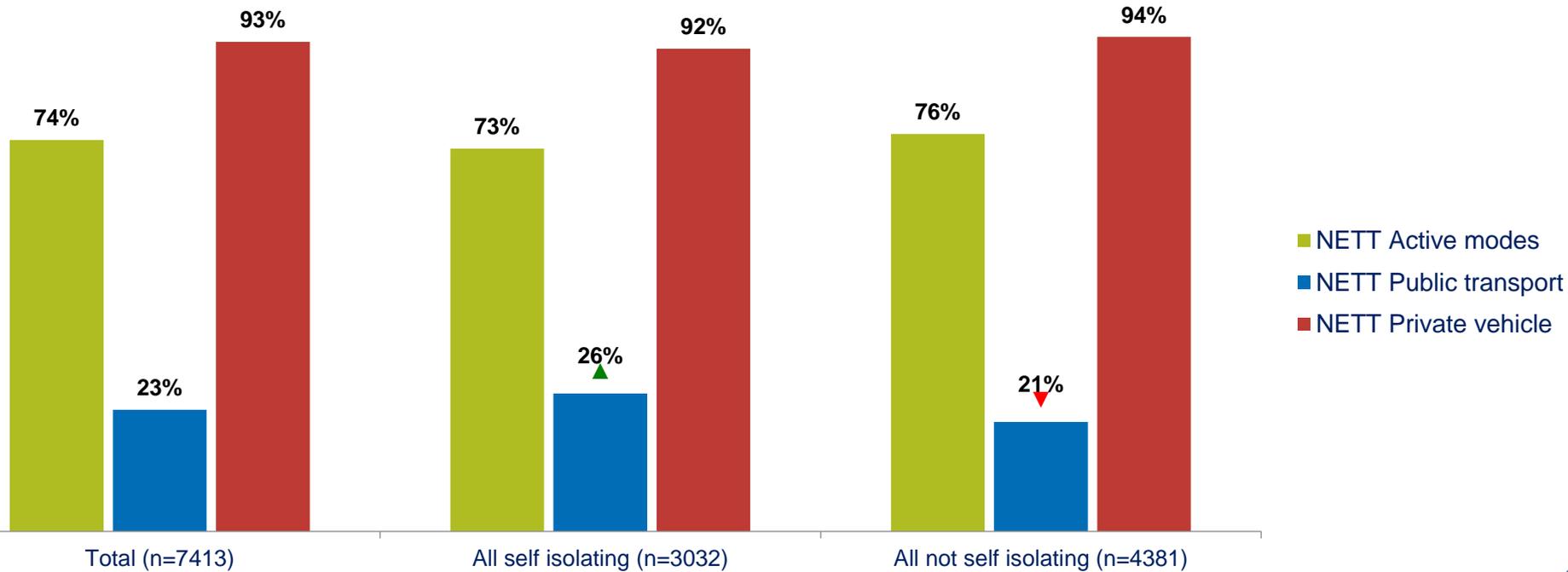
QJOURNEY1. Which, if any of the following types of journeys would you have made in a normal week (e.g. in February this year)?

Base: all adults 15+ in New Zealand who normally travel, interviewed during levels 2 and 1



Those self isolating are more likely to be normal public transport users, which may have some relation to the over-indexing of those with disabilities in this group

Normal mode usage by self isolation behaviours



QFREQ1. And in the course of a normal week, on how many days would you normally travel via each of the methods listed below?

Base: all adults 15+ in New Zealand who normally travel, interviewed during levels 2 and 1



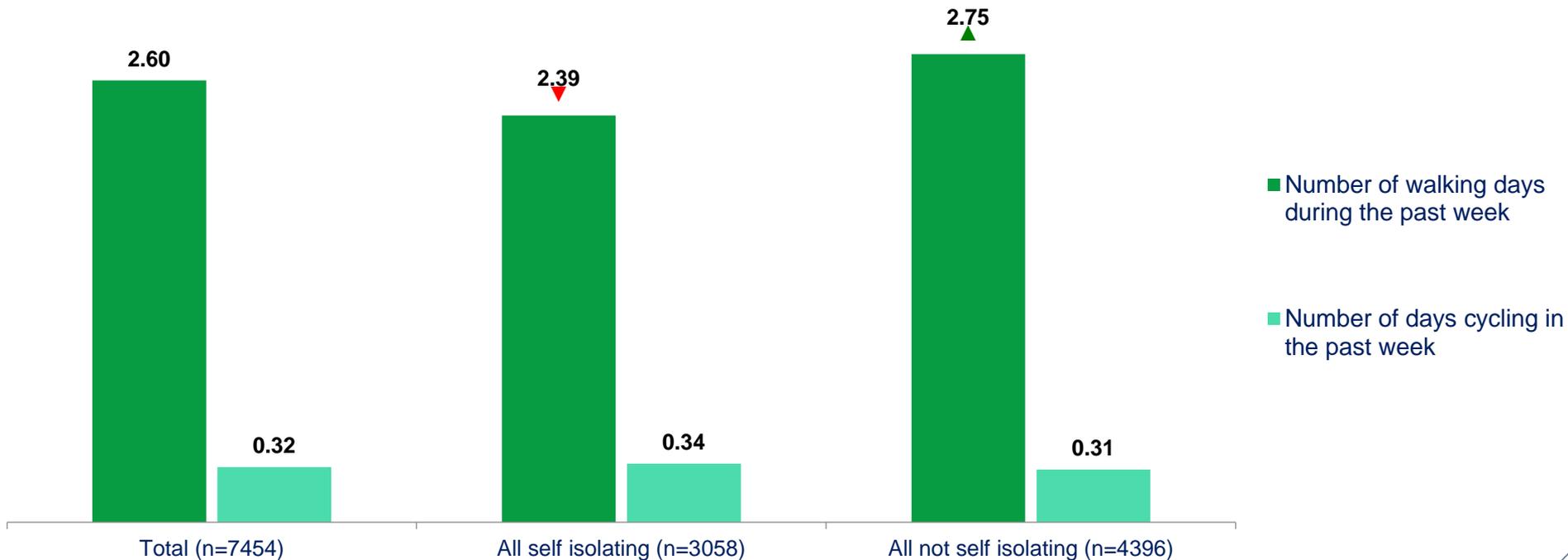
Indicates a statistically significant increase from the total



Indicates a statistically significant decrease from the total

When it comes to volume, those who are self isolating are walking on slightly fewer days than those who are not

Normal mode usage by self isolation behaviours



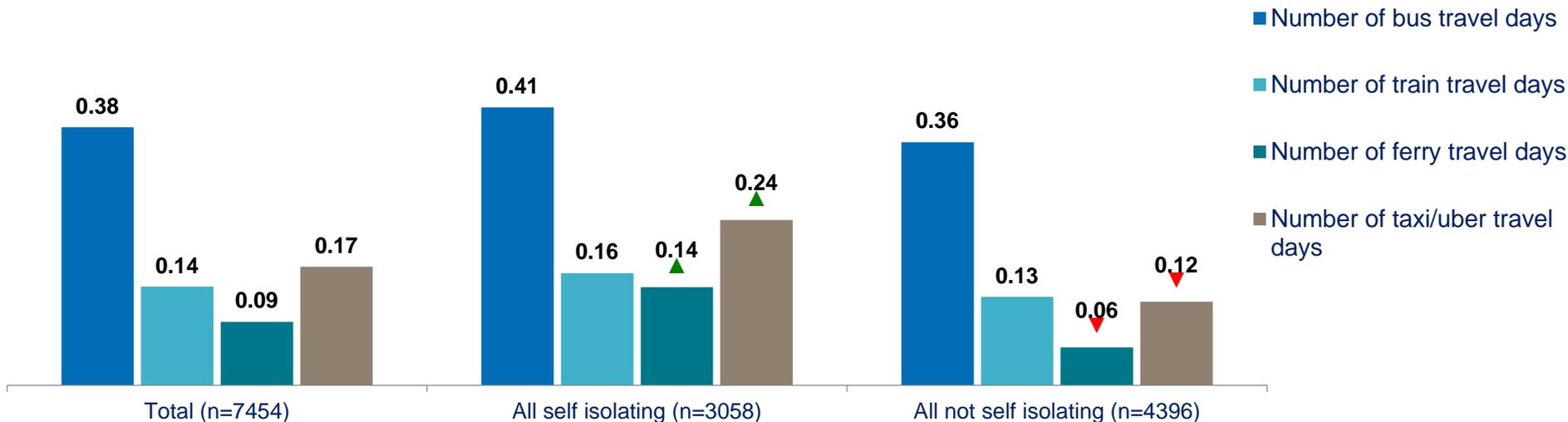
QFREQ2. And during the past seven days, on how many days have you travelled via each of the modes listed below?

Base: all adults 15+ in New Zealand who normally travel, interviewed during levels 2 and 1



There is minimal difference in the rates of usage for public transport modes, although taxi usage is double the rate among those not self isolating

Normal mode usage by self isolation behaviours

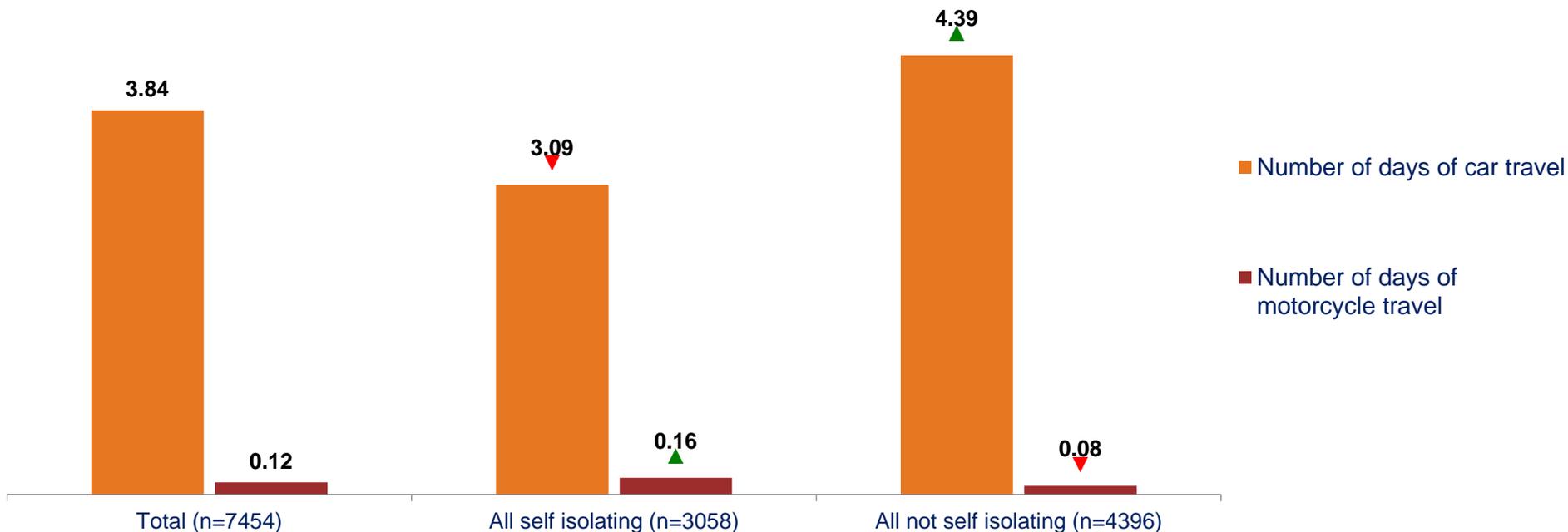


QFREQ2. And during the past seven days, on how many days have you travelled via each of the modes listed below?
Base: all adults 15+ in New Zealand who normally travel, interviewed during levels 2 and 1



In levels 2 and 1, those self isolating are driving more than one day a week less than those who are not self-isolating

Normal mode usage by self isolation behaviours



QFREQ2. 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 who normally travel, interviewed during levels 2 and 1



Indicates a statistically significant increase from the total



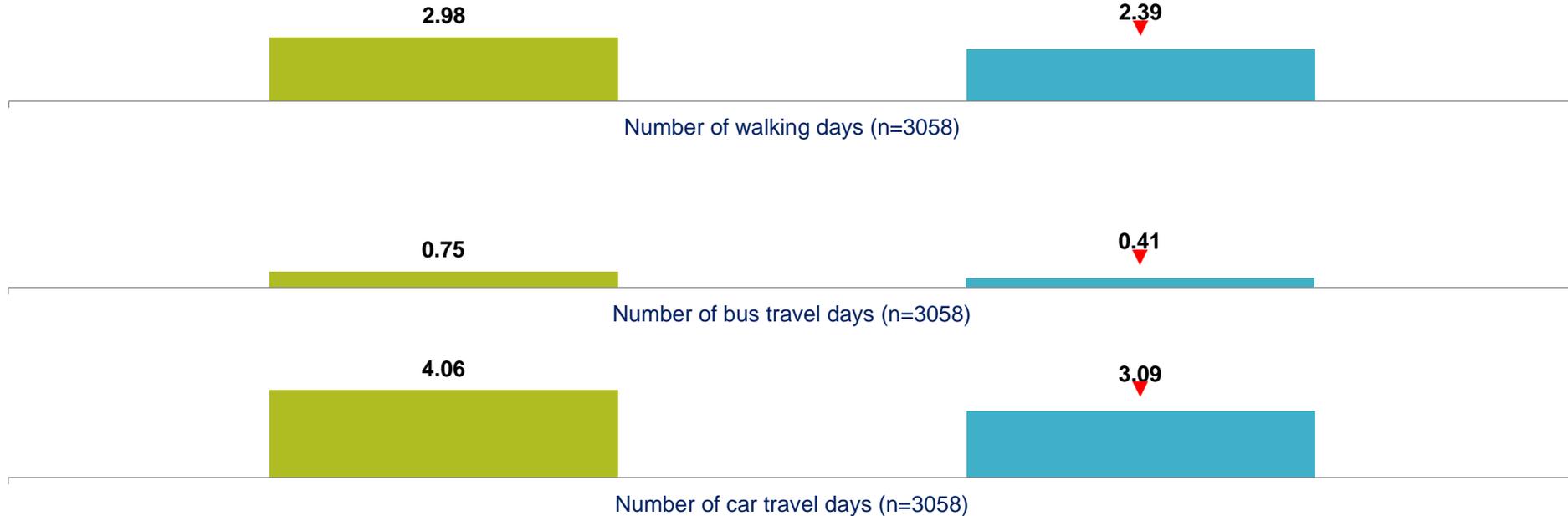
Indicates a statistically significant decrease from the total

Those who are self isolating have significantly decreased their volume of travel by all types of mode, but the proportional decrease for buses is most pronounced

Normal mode usage by self isolation behaviours

Pre-lockdown

Past week



QFREQ2. 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 who normally travel, interviewed during levels 2 and 1



Indicates a statistically significant increase from previous time period



Indicates a statistically significant decrease from previous time period

