



# Waka Kotahi COVID-19 transport impact

Fieldwork wave 13 deep dive analysis – impact of returning fares on public transport usage

30 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](mailto:NZTAresearch@nzta.govt.nz).

# Deep dive report content

## COVID-19 transport impact

- Section 1 – About this research
- Section 2 – Public transport usage at a council level
- Section 3 – Perceived affordability at a council level
- Section 4 – Perceived reliability and accessibility at a council level
- Section 5 – How does image respond to local circumstances?



# 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: 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 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 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, 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 thirteen waves of fieldwork, see table ►
- The 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, and combined waves 11, 12, and 13 as well as individual waves where appropriate.
- 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 13 report is based on a statistically significant shift of results between waves 1 to 13, as well as statistically significant shifts from combined level 4 alert results vs combined level 3 alert results vs. combined level 2 alert results vs. combined level 1 alert results to date.
- 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	
13	Thursday 25 June to Sunday 28 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, also included 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 – 13	
		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=3,794	1.59
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=854	3.35
Tauranga	All living in the city of Tauranga	n=400	4.9	n=200	6.93	n=400	4.9	n=300	5.66
Hamilton	All living in the city of Hamilton	n=400	4.9	n=200	6.93	n=400	4.9	n=300	5.66
Wellington	All in Wellington Region, including city and surrounding rural areas	n=684	3.75	n=418	4.79	n=799	3.47	n=602	3.99
Christchurch	All living in the city of Christchurch	n=400	4.9	n=200	6.93	n=400	4.9	n=301	5.65
Dunedin	All living in the city of Dunedin	n=398	4.91	n=200	6.93	n=392	4.95	n=307	5.59
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=1,130	2.91
<b>Disability, Vulnerability and COVID-19**</b>									
Any Disability	See previous page	n=550	4.18	n=297	5.69	n=611	3.96	n=433	4.71
COVID-19 Vulnerable	See previous page	n=1,230	2.79	n=597	4.01	n=1,139	2.9	n=824	3.41
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=443	4.66

\*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 13 deep dives

The thirteenth wave of fieldwork took place between Thursday 25 and Sunday 28 June. Public transport usage has been trending steadily upward nationwide, as have positive perceptions of many public transport modes.

This deep dive is designed to investigate how usage and perceptions vary across regions and how this may react and respond to local stimulus, particularly the suspension and re-introduction of fares on services. To do so, analysis has been applied at a national level with two pairs of comparative council areas: Auckland and Environment Canterbury, where fares have already been reintroduced and Wellington and the Waikato, where fare reintroduction is scheduled after this wave of fieldwork has taken place.

### **Public transport usage at council level**

Stated weekly public transport usage has generally been trending upwards in all councils, although this stalled in Canterbury *before* the introduction of fares. As yet, there isn't evidence the introduction of fares has any tendency to arrest growth in usage, with directional shifts correlating more with the greater freedoms of relaxed alert-level restrictions.

### **Perceived affordability at a council level**

While there is variation week to week, the perception that public transport is affordable is trending upwards, directionally, in all council regions. In Auckland, there has been a drop in this perception, occurring some three weeks after fares were reintroduced and recovering in the most recent wave. More data from Canterbury, Wellington and the Waikato in the coming weeks will give us greater tools to test this relationship once fares are more widely introduced and exposure to them expanded.

### **Perceived reliability and accessibility at a council level**

In both pairs of council areas, we have a more urban, higher density council with greater levels of public transport usage, and a council incorporating more sparsely populated rural areas where reported public transport usage is lower. In the former of each pair, perceptions of reliability and accessibility (the latter expressed as that public transport can 'get me where I need to go') tend to track above average, with more rural areas tracking below average.

Wellington has seen a sharp decline in perceived reliability and accessibility, dropping from a peak on each metric during level 1, coinciding with some disruptions on local rail networks.

### **How does image respond to local circumstances?**

By observing the measures of reliability, accessibility and affordability in Wellington, we can see that these image perceptions tend to move together, particularly in recent weeks where disruptions have occurred on returning services. This is indicative of a more holistic relationship between changes in service provision and the way that public transport services are perceived by users.



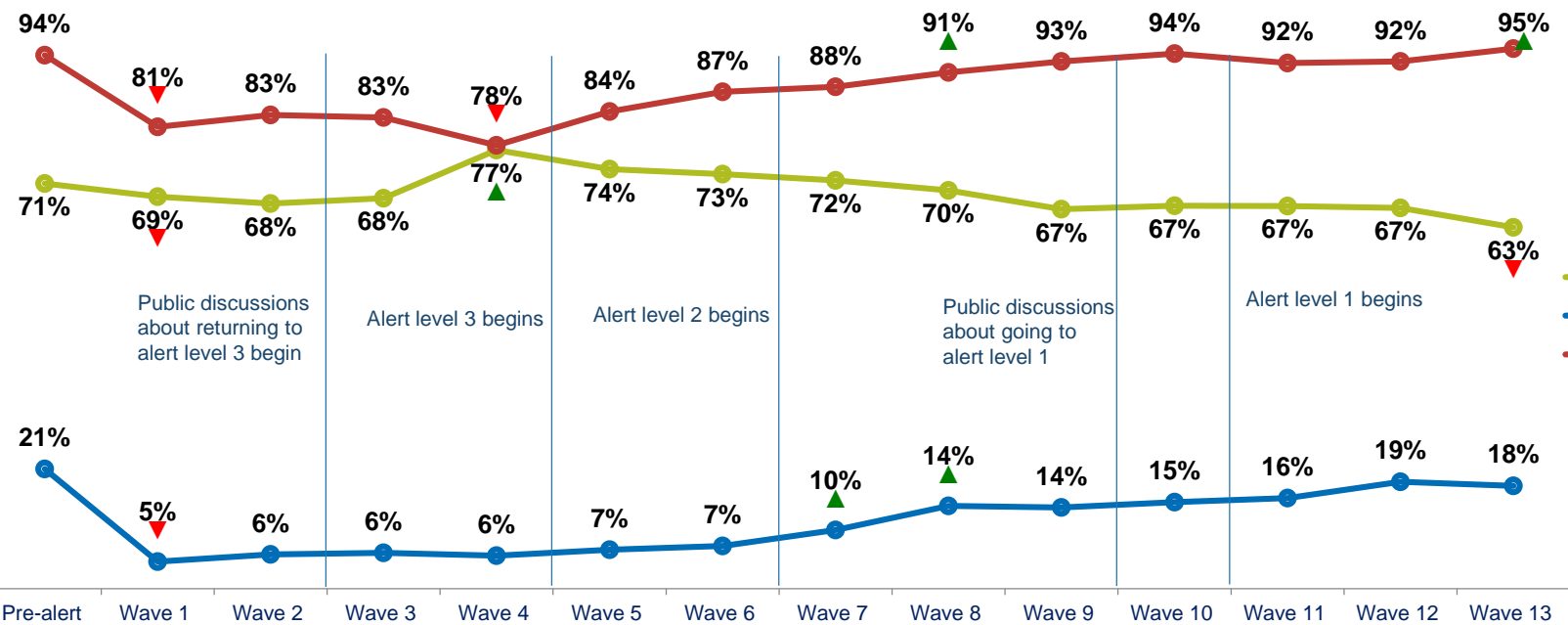
## Section 2 – Public transport usage at council level

# Weekly public transport usage has trended upward steadily across the country

## Changes in mode usage by wave

**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 Active modes  
● NETT Public Transport  
● NETT Private Vehicle

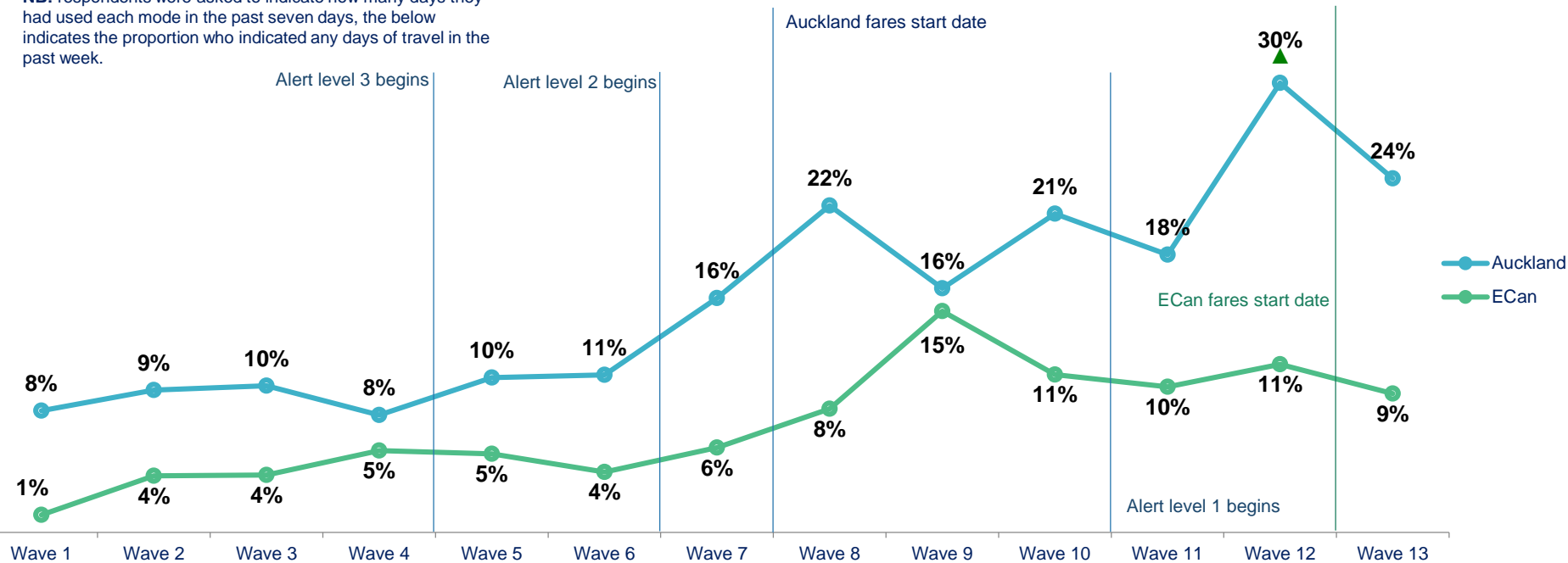


QFREQ1/QFREQ2 –And in the course of a normal week, **on how many days** would you normally travel via each of the methods listed below? And during the past seven days, **on how many days** have you travelled via each of the modes listed below? QJOURNEY1-2. Which, if any of the following types of journeys would you have made in a *normal* week (e.g. in February this year)?/ And which, if any of the following types of journeys did you make *during the last seven days*? 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), wave 7 (n=1,263), wave 8 (n=1,264), wave 9 (n=1,255), wave 10 (n=1,261), wave 11 (n=1,268), wave 12 (n=1,263); wave 13 (n=1,263)

# Overall, weekly public transport usage in Auckland has continued to trend upwards since the introduction of fares, stated usage in Canterbury peaked during level 2

## Public transport usage by council over time – councils that have reintroduced fares

**NB:** respondents were asked to indicate how many days they had used each mode in the past seven days, the below indicates the proportion who indicated any days of travel in the 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 in local council region



Indicates a statistically significant increase from previous time period

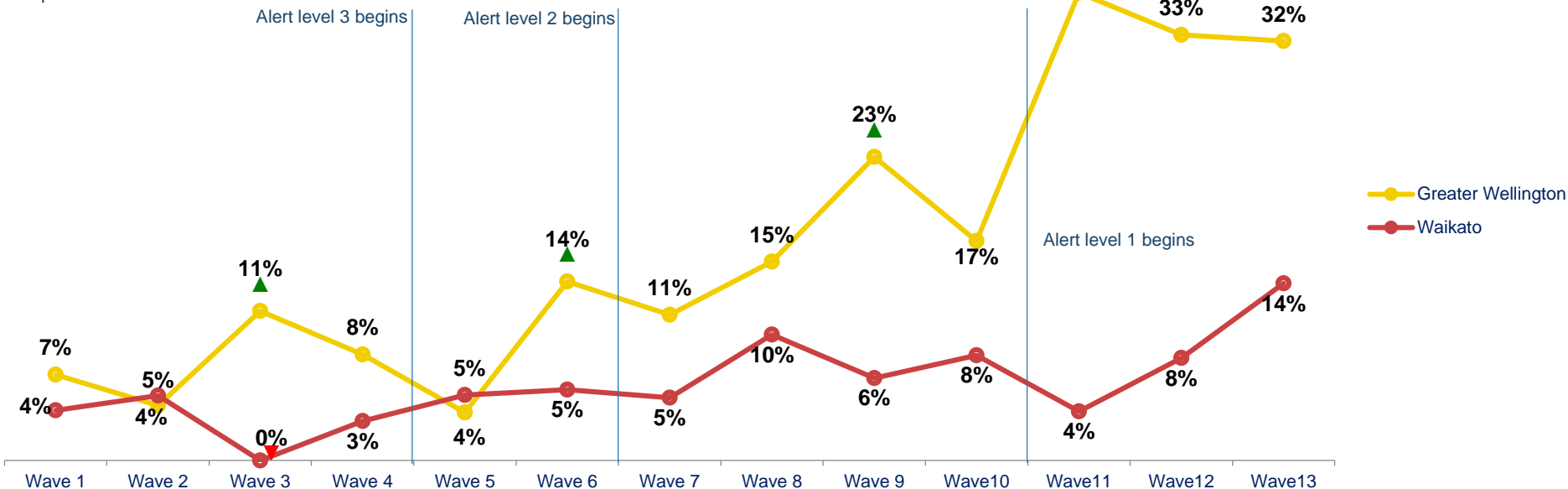


Indicates a statistically significant decrease from previous time period

# Public transport usage in Wellington has generally been higher than the national average, with usage in the Waikato lower

## Public transport usage by council over time – councils that have not reintroduced fares

**NB:** respondents were asked to indicate how many days they had used each mode in the past seven days, the below indicates the proportion who indicated any days of travel in the 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 in local council region



Indicates a statistically significant increase from previous time period



Indicates a statistically significant decrease from previous time period

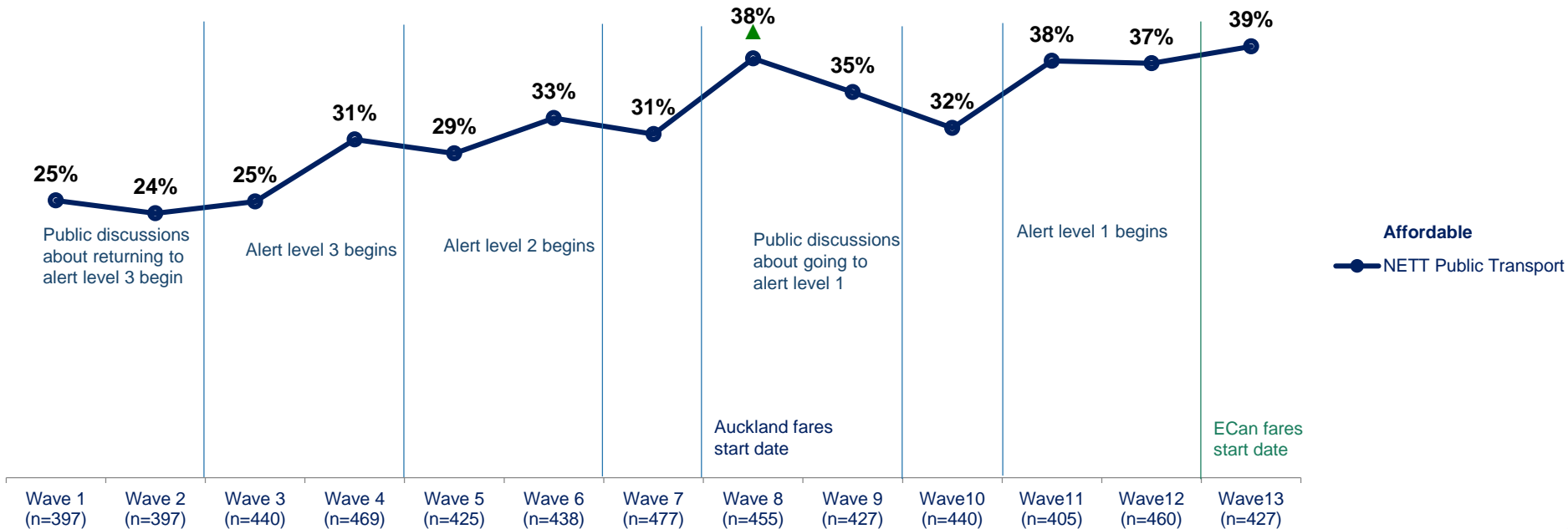




## Section 3 – Perceived affordability at a council level

# Generally, perceptions of public transport affordability at a national level have been gradually improving

## Perceived affordability of public transport, national

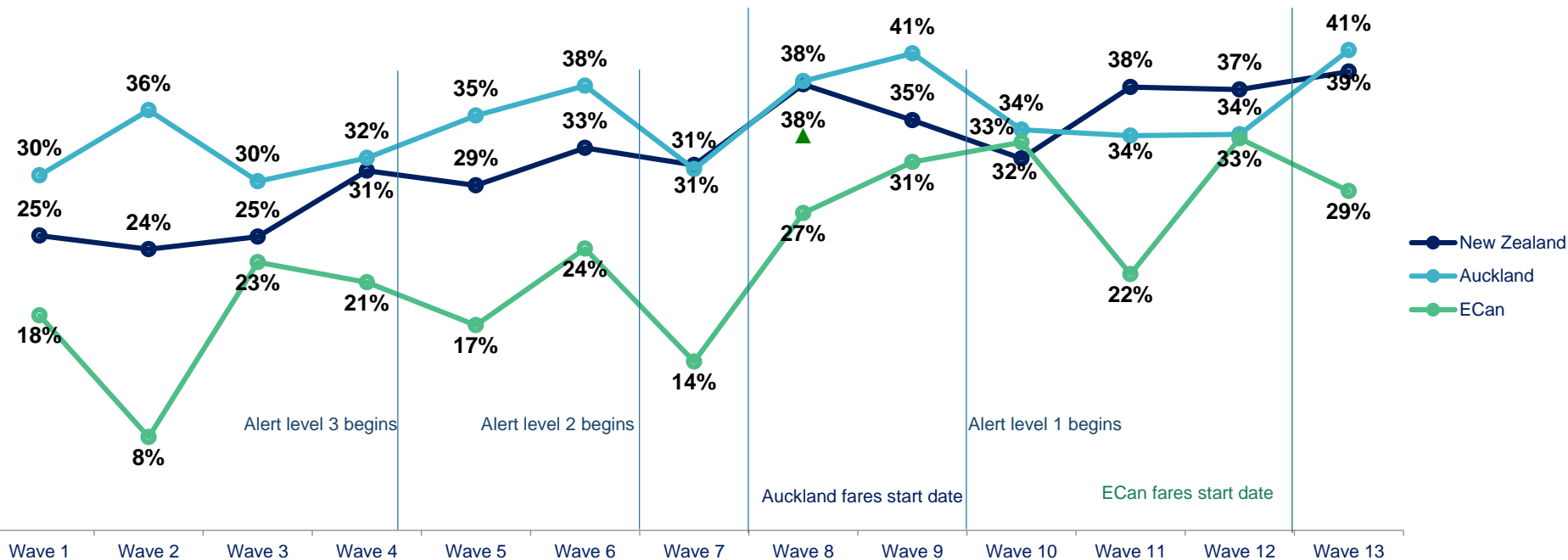


QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in New Zealand who would normally use public transport

# A few weeks after the introduction of fares in Auckland, perceived affordability did decline, but has recovered in the most recent wave

## Perceived affordability of public transport, by council region

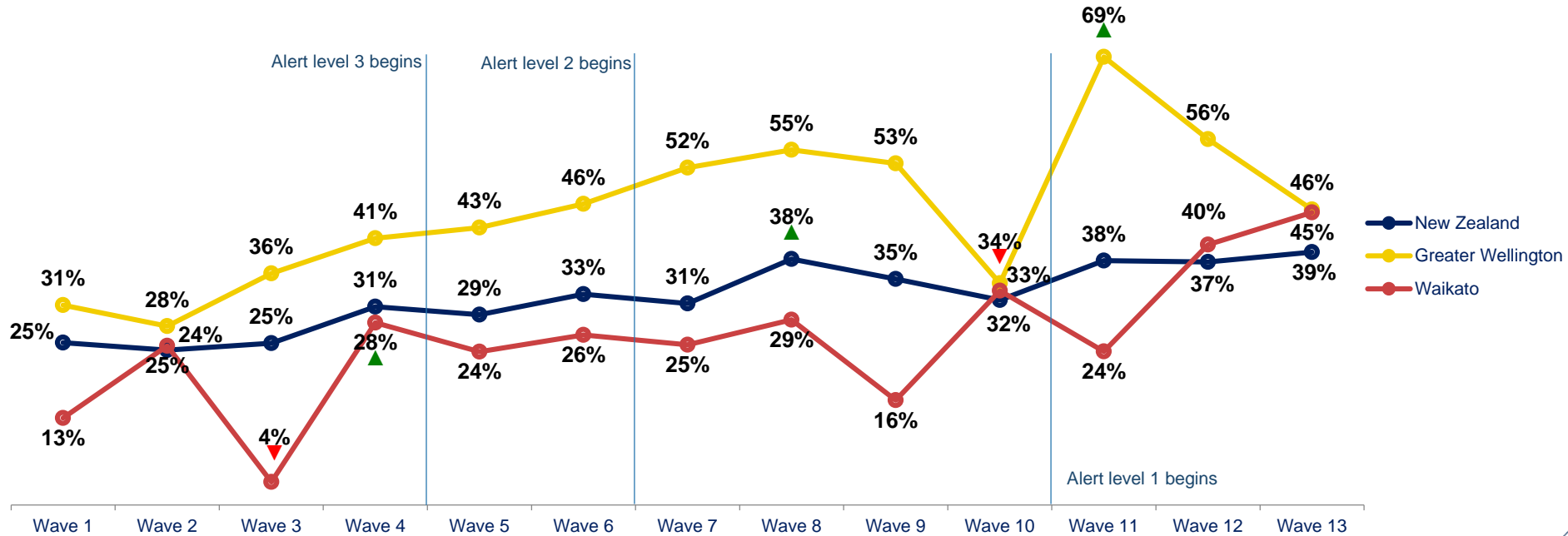


QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in each local council region who would normally use public transport

# Fares in Wellington and the Waikato have not been re-introduced, but affordability has always had a stronger association in Wellington

*Perceived affordability of public transport, by council region*



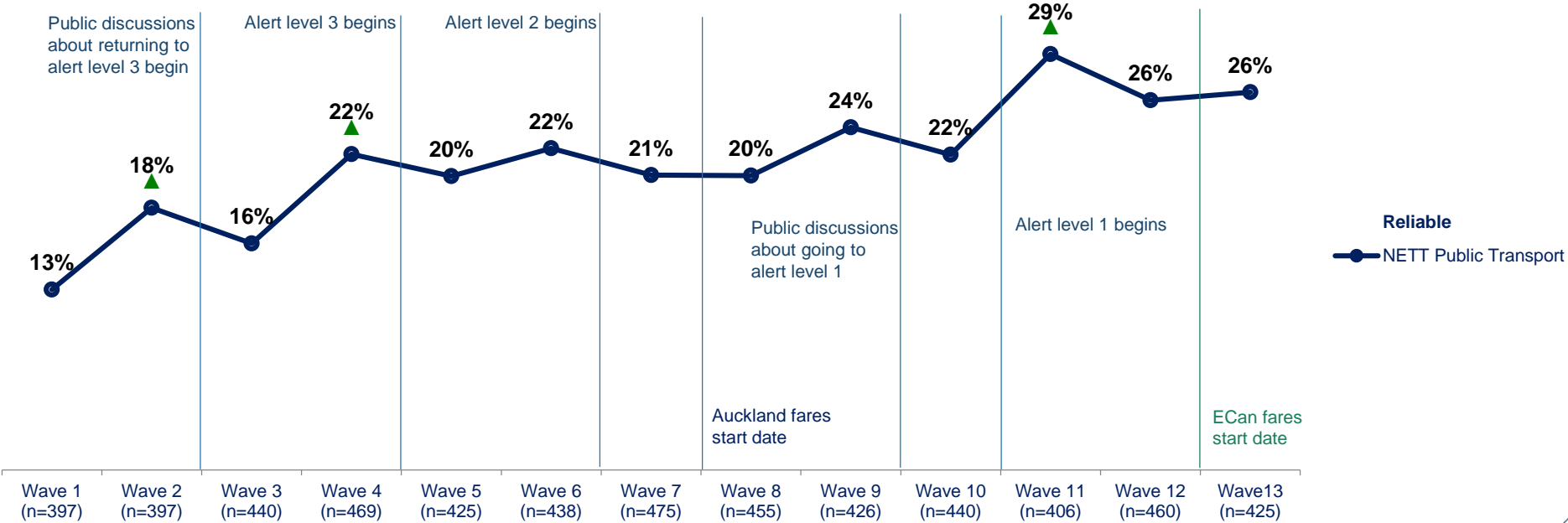
QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?  
 Base: all adults 15+ in each local council region who would normally use public transport



## Section 4 – Perceived reliability and accessibility at a council level

# At a national level, perceived reliability is now double what it was at the start of lock down

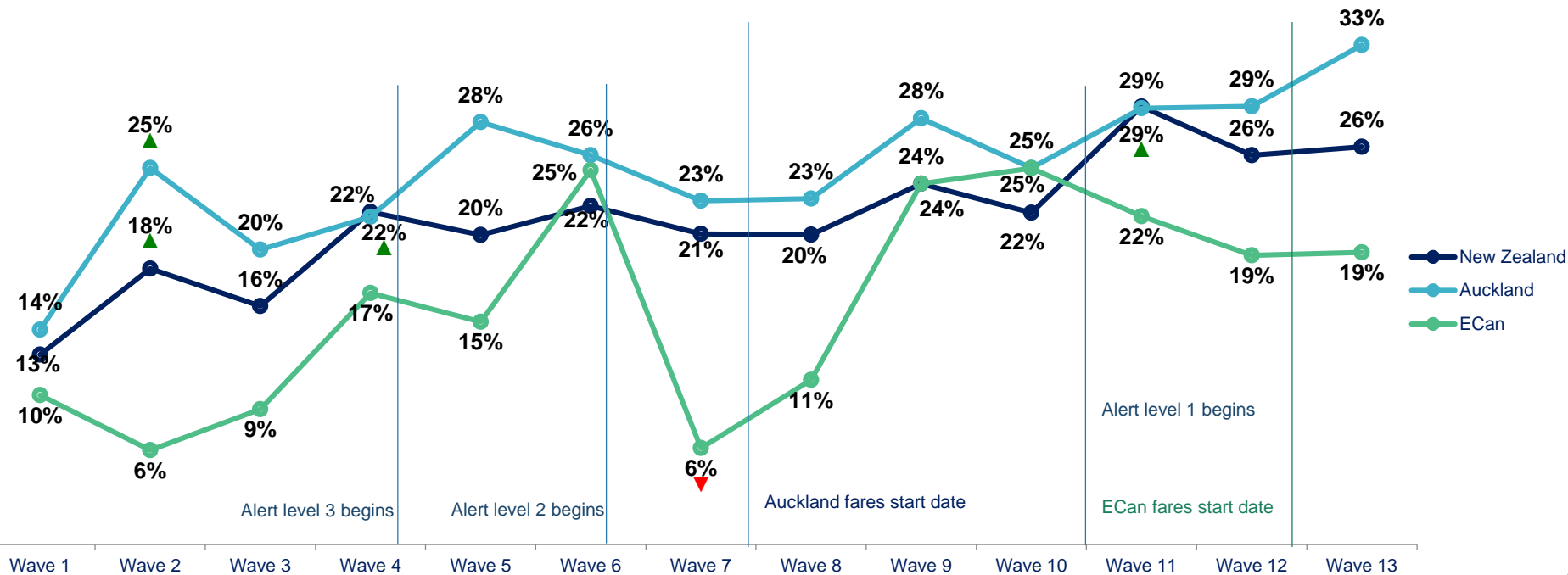
## Perceived reliability of public transport, national



QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?  
 Base: all adults 15+ in New Zealand who would normally use public transport

# Perceptions of public transport reliability have been more variable at a local level, but in Canterbury it is generally below the national average

*Perceived reliability of public transport, by council region*

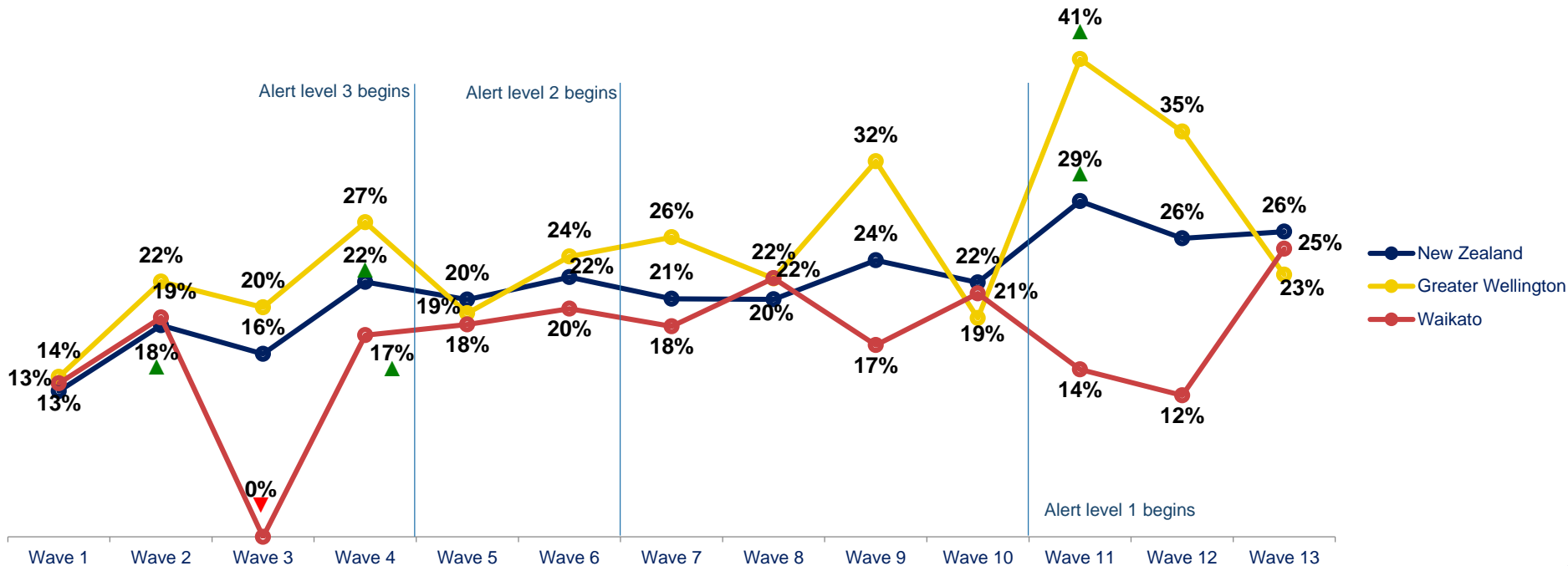


QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in each local council region who would normally use public transport

# Perceived reliability peaked in Wellington in wave 11, before dropping to a below average level in the most recent wave

## Perceived reliability of public transport, by council region



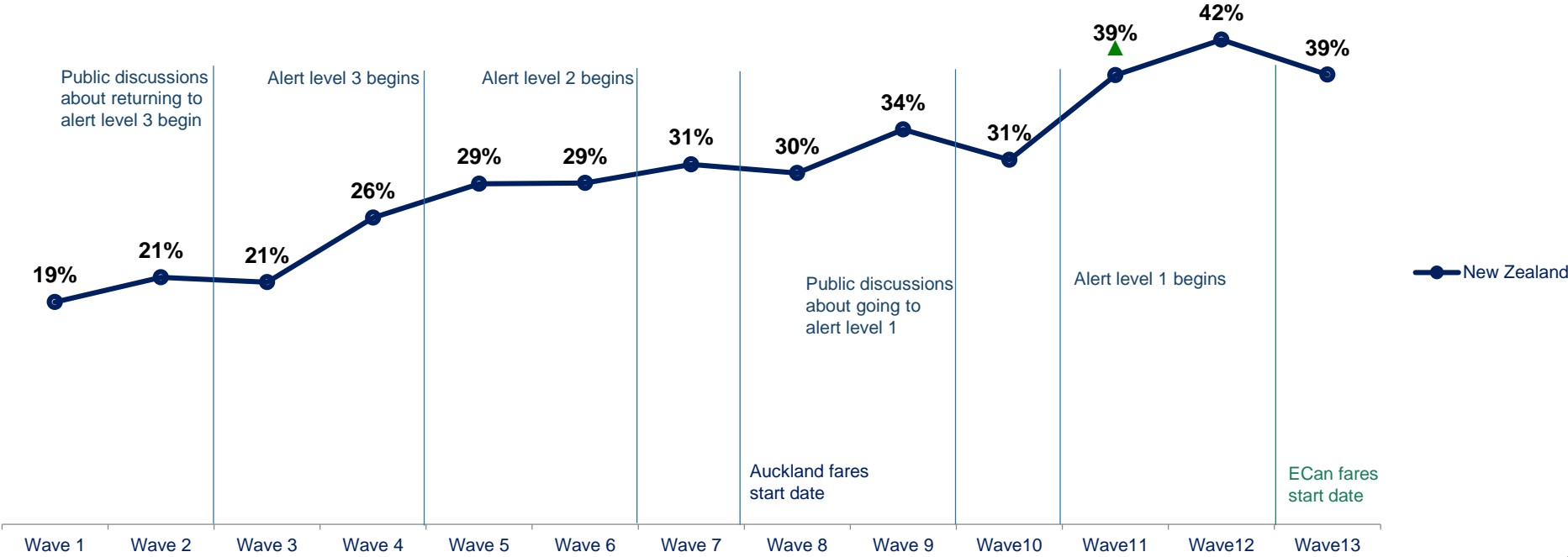
QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in each local council region who would normally use public transport



# Accessibility, as expressed in the perception that public transport can get you where you need to go, is another metric that has doubled since wave 1

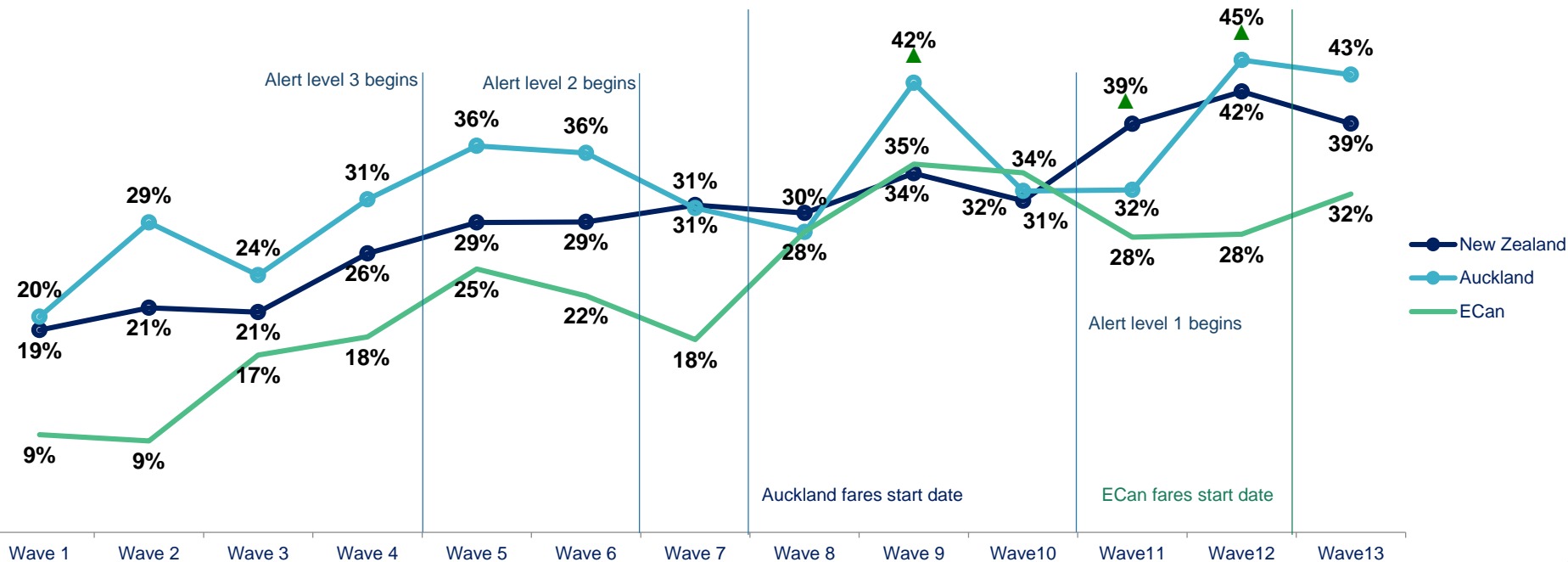
*Perception that public transport can get you where you need to go, national*



QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?  
Base: all adults 15+ in New Zealand who would normally use public transport

This perception was largely above average in Auckland before level 2, but has become much more variable since

*Perception that public transport can get you where you need to go, by council region*

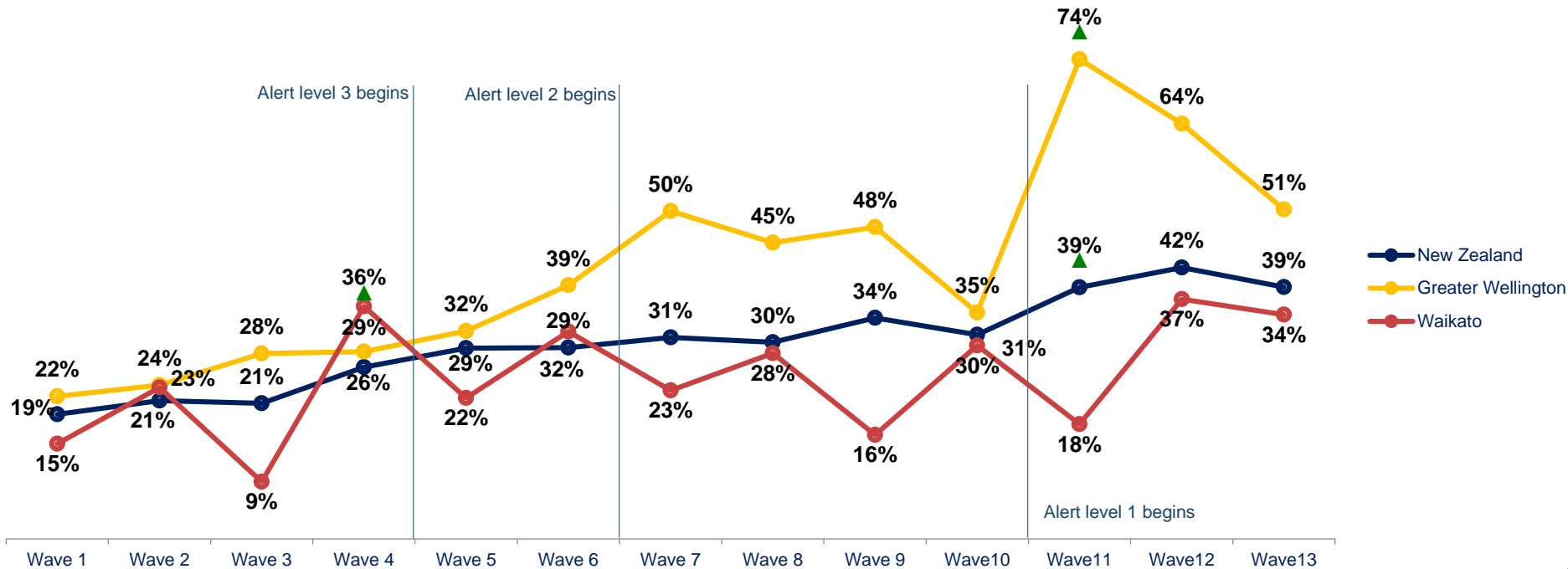


QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in each local council region who would normally use public transport

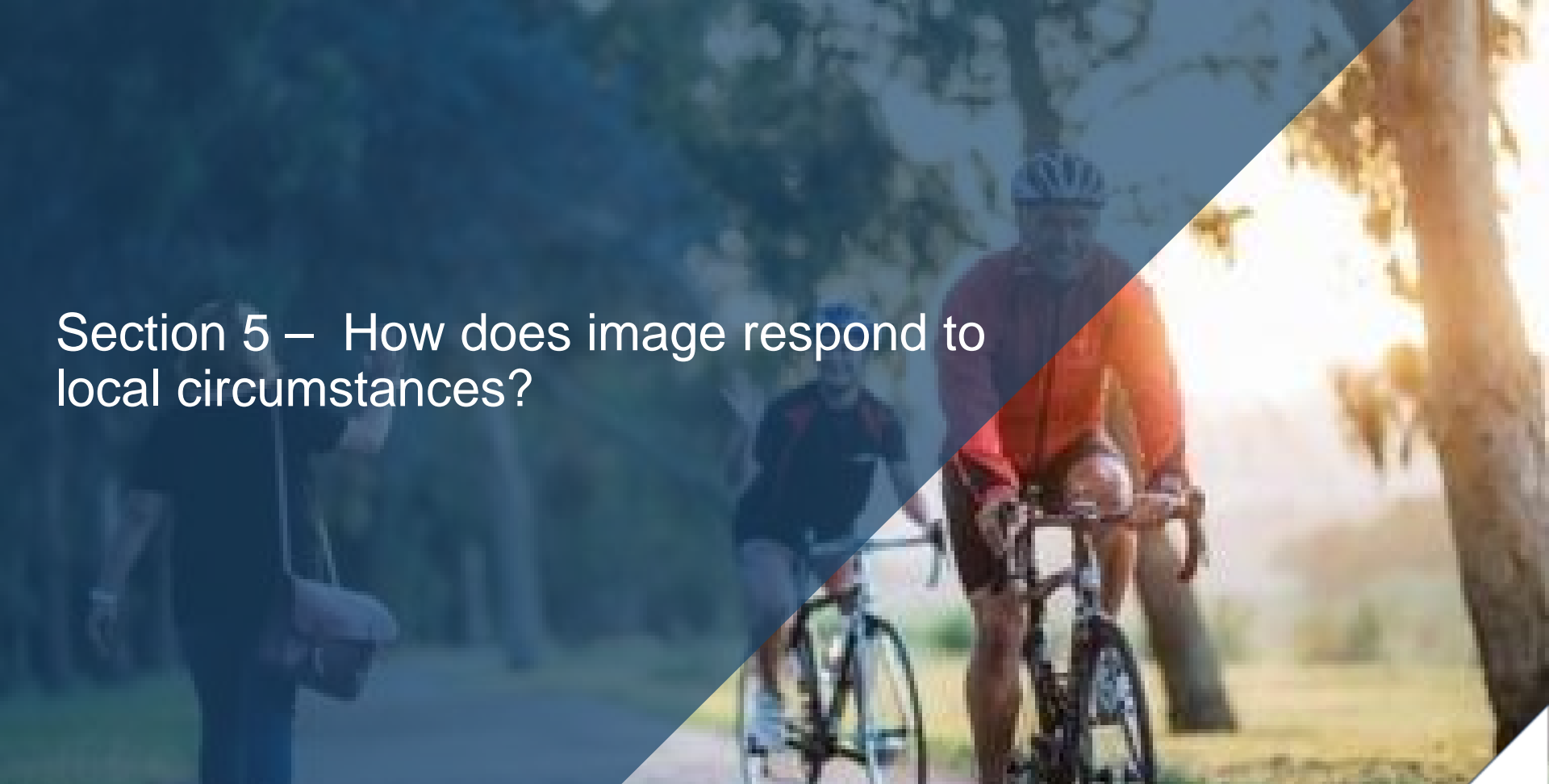
# The perception in Wellington that public transport can get you where you need has consistently been above average, but has steeply declined after a peak recently

*Perception that public transport can get you where you need to go, by council region*



QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

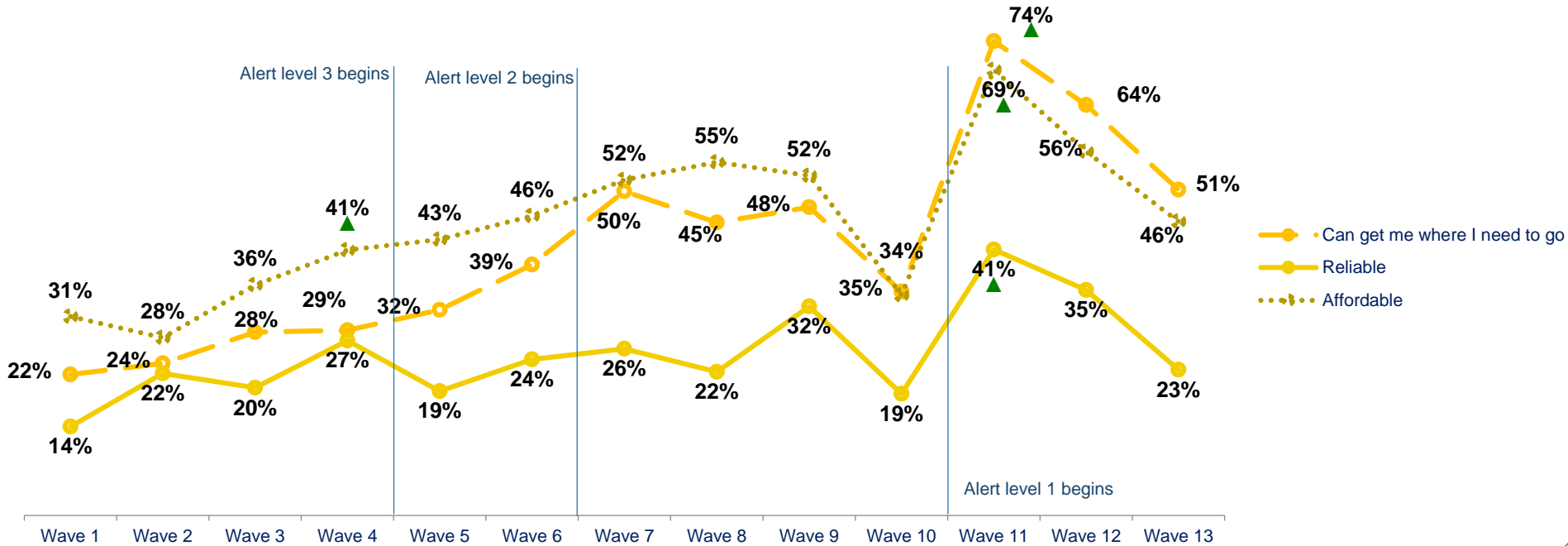
Base: all adults 15+ in each local council region who would normally use public transport



## Section 5 – How does image respond to local circumstances?

When looking at Wellington in isolation, there's an indication that if perceptions are reactive, they relate closely to one another, trending generally in the same direction

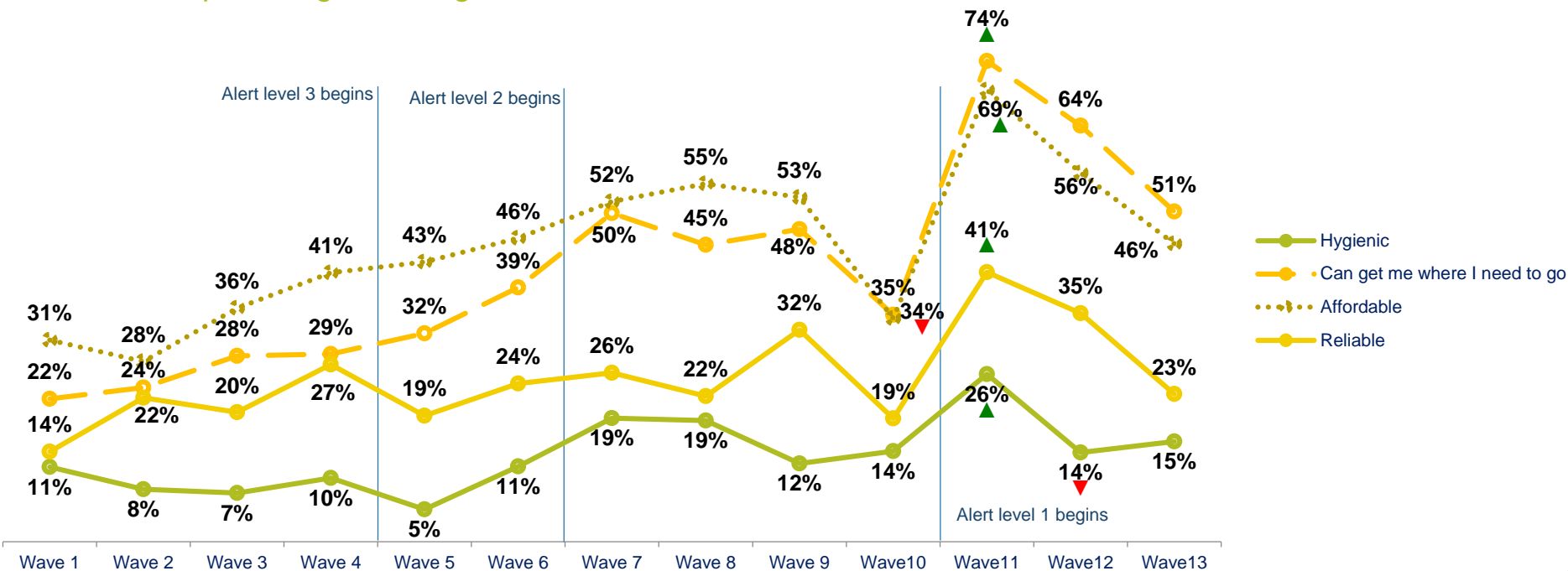
*Public transport image, Wellington*



QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?  
 Base: all adults 15+ in Greater Wellington council area who would normally use public transport

When we introduce the additional, less related quality of hygiene, we see that this too follows a similar pattern in level 1 image association, but less closely

*Public transport image, Wellington*

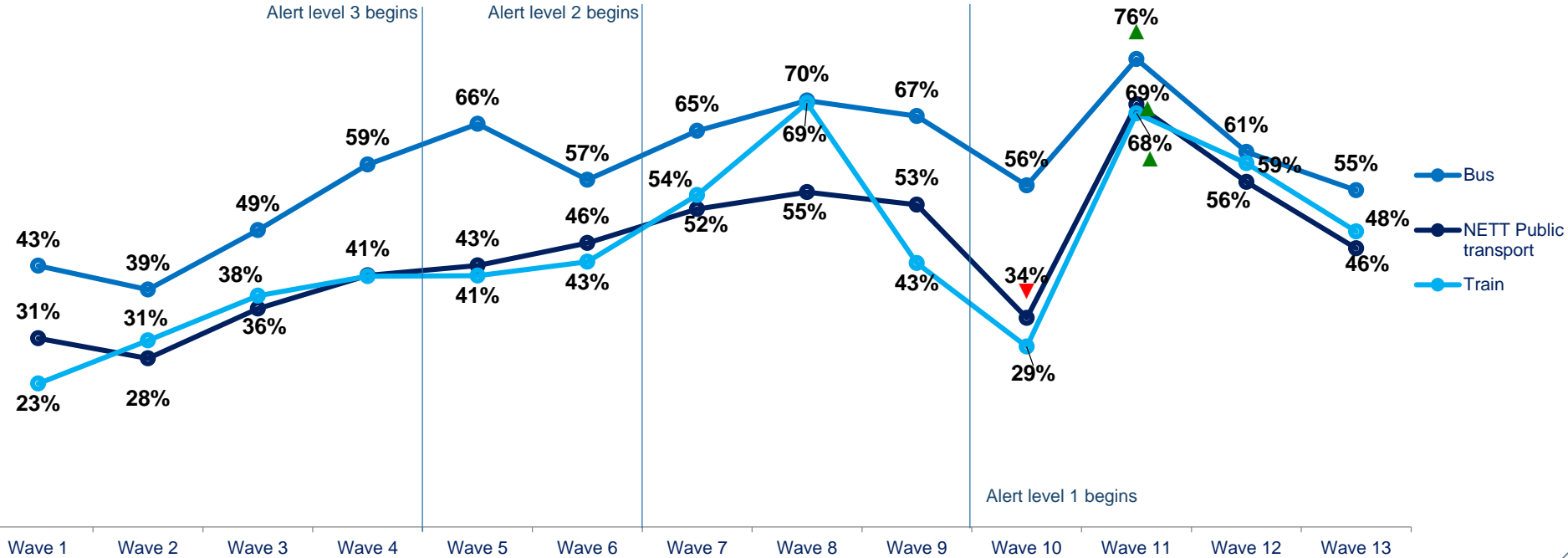


QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in Greater Wellington council area who would normally use public transport

# Within Wellington, both trains and buses follow a similar pattern of affordability perceptions

## Affordability of trains, buses and public transport in Wellington

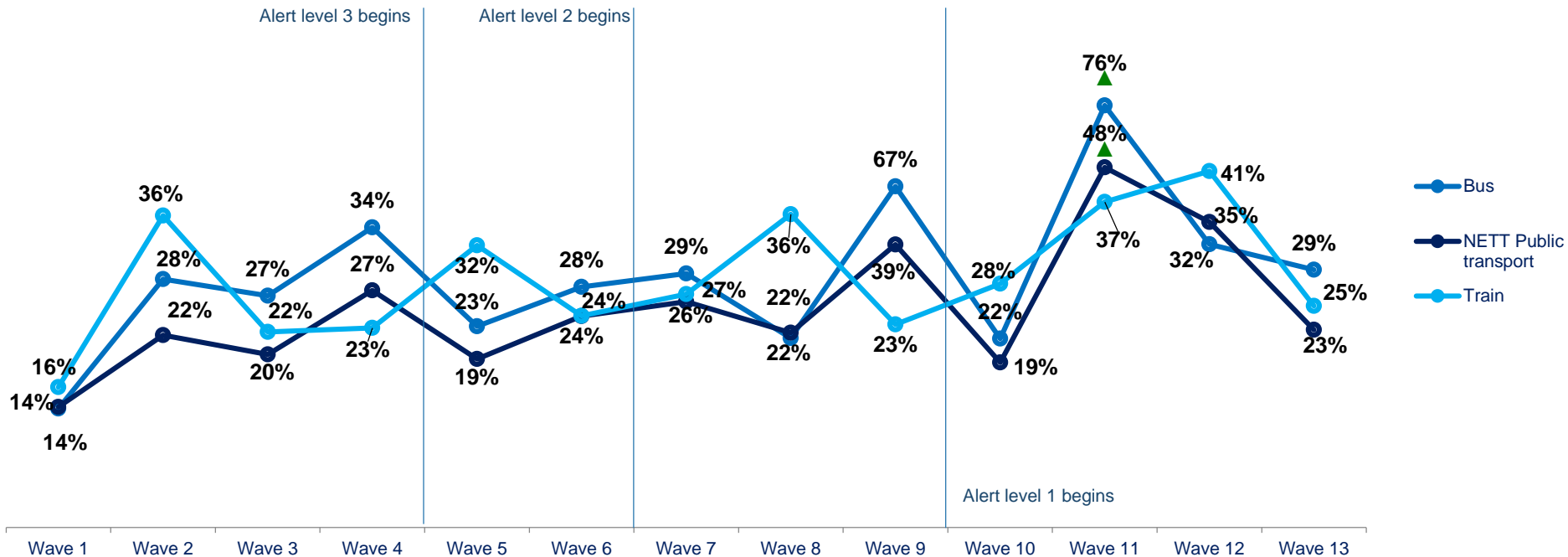


QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in Greater Wellington council area who would normally travel by train or bus (\*base for ferry users in Wellington too small for analysis)

# Perceived reliability of trains peaked a little later than that of buses, but both modes are subject to greater variation than public transport is in general

## Reliability of trains, buses and public transport in Wellington



QPTIMAGE. And, which transportation methods would you currently associate with each of the following qualities?

Base: all adults 15+ in Greater Wellington council area who would normally travel by train or bus (\*base for ferry users in Wellington too small for analysis)



