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NZ Automobile Association submission on:
Draft Emissions Reduction Plan



SUBMISSION TO: Climate Change Commission
REGARDING: Second Draft Emissions Reduction Plan
DATE: 20 June 2023

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NOTE TO REQUESTOR:

The AA is happy to respond to requests for clarifications or expansions.

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Executive Summary

The New Zealand Automobile Association (NZAA or AA) welcomes the opportunity to provide comment on the Climate Change Commissions Second Draft Emissions Reduction Plan

This submission is largely for information and consists of:

An AA Member Survey conducted in May 2023 relating to attitudes to climate change, the third in a series carried out each election year

Matters arising from AA Research Foundation Research carried out by NZIER scoping possible research into the benefits and costs of working from home, which was commenced before the Covid-19 Pandemic. Further data from other sources suggest this is likely to be the most productive avoidance strategy for reducing emissions.

Research references of interest relating to non-AA research which the Commission may not be aware of which potentially challenge some assumptions in the current draft.

A desktop research exercise which suggests that while attention may be focused on alternatives to the car, policies or actions which lead to a reduction in motorised transport's fuel efficiency will lead to increases in emissions. It finds that Auckland and Wellington car emissions are already high by world standards. While the AA supports alternate modes and engine types it must be recognised that the use of fossil fuel powered private car transport is likely to remain high for a considerable time and it would not be helpful to the cause of emissions reduction if emissions per car were to increase.

1. AA Member Survey

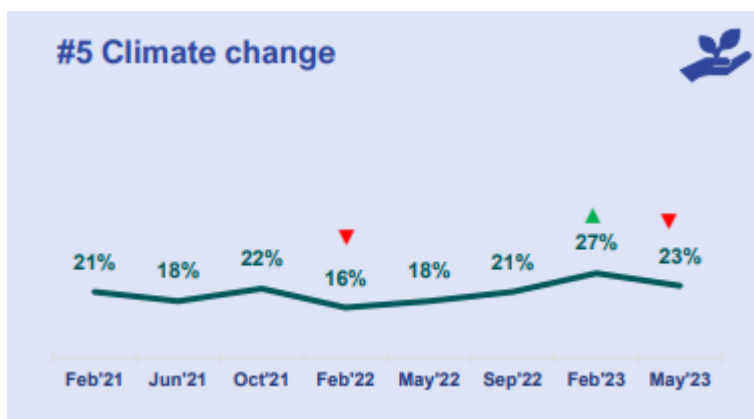
1.0 Context

The AA carries out regular research into Member attitudes and concerns in order to inform its transport advocacy. The Association’s remit is to represent its Members’ views. It should be recognised with over 1.8 million Members these views are practically as diverse as those of the New Zealand population. This means that there are often conflicting views within the AA’s Membership. The AA studies this conflict as it illuminates the scale and degree of conflict within our wider society.

The AA has assembled a demographically representative panel of 7,500 Members who are incentivised by random prizes to respond to surveys on advocacy topics. In other surveys the diversity of opinion in this group has often matched samples drawn from commercial services such as Dynata. The AA has high confidence that the panel is representative of its Member population, and is a good indicator of wider public opinion.

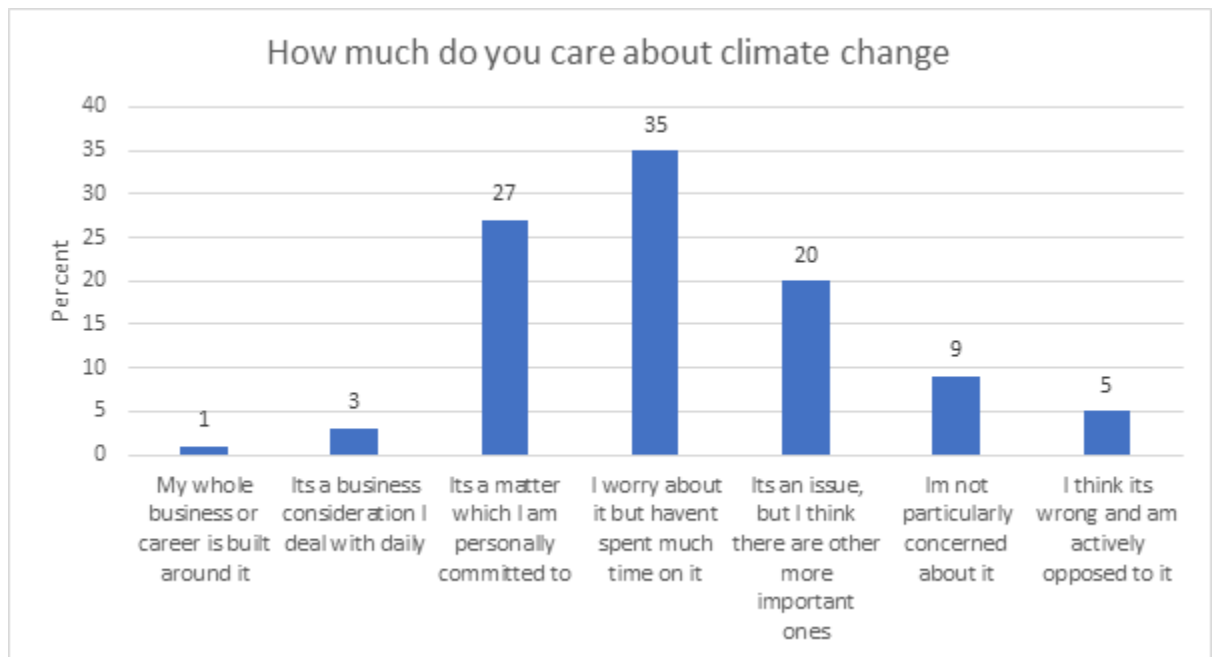
For the third election year in a row the AA surveyed its members on climate change. The survey was emailed to the representative panel of over 7,500 in late May 2023 and attracted 2578 responses. Responses were re-weighted to match the age and gender distribution of the AA population.

The IPSOS New Zealand Issues Monitor public opinion survey ran at the same time as the AA survey. The 1002 respondents collectively ranked climate change the fifth most important issue facing New Zealand today.

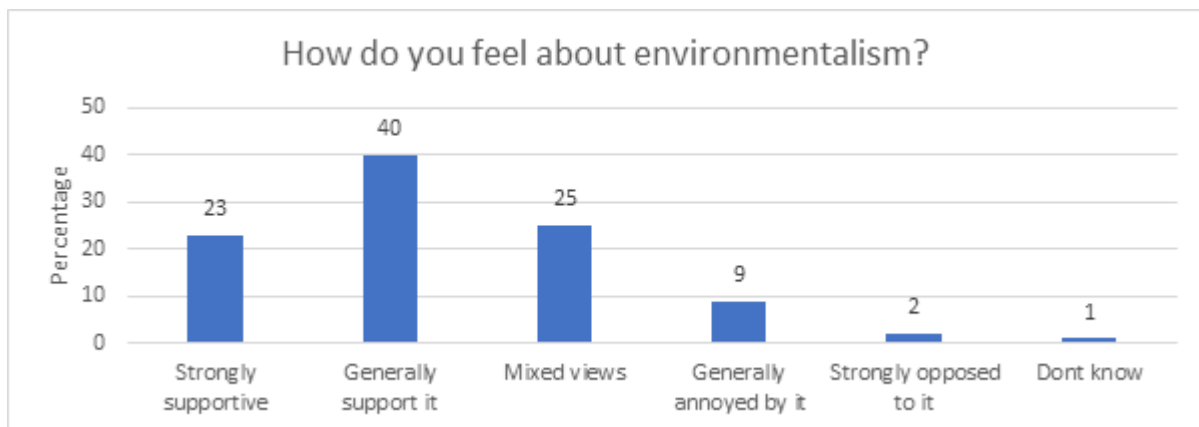


The AA survey provides considerably more detail about the thoughts of New Zealanders relating to climate change and transport.

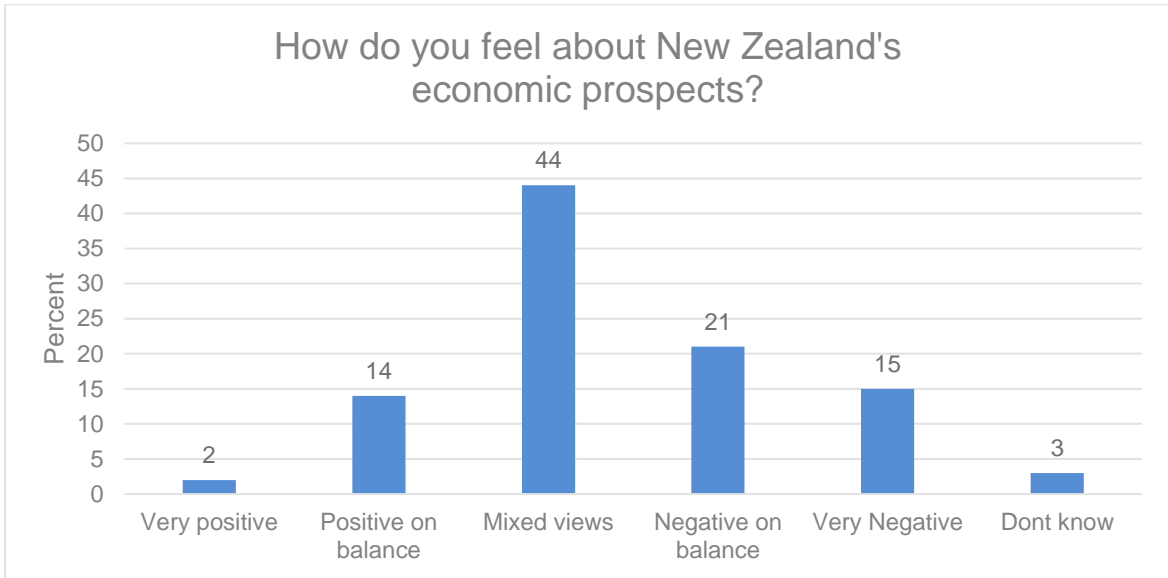
1.1 Concern about Climate Change in Context



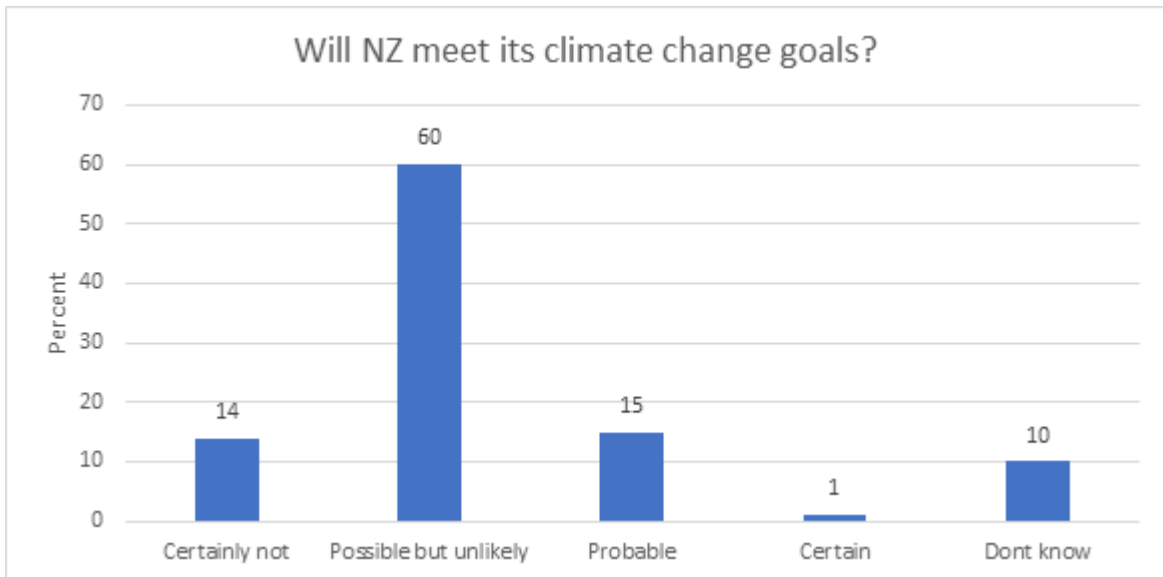
The responses to this questions approximates a normal distribution. Whereas the question on environmentalism was more obviously skewed.



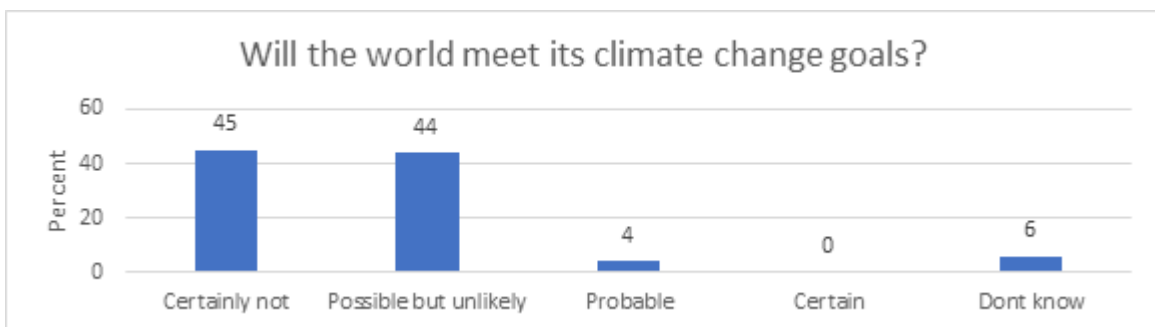
Holding a university degree had a small positive influence on the environmentalism question. The 73% support was a significant drop from the 81% support in the 2020 survey.

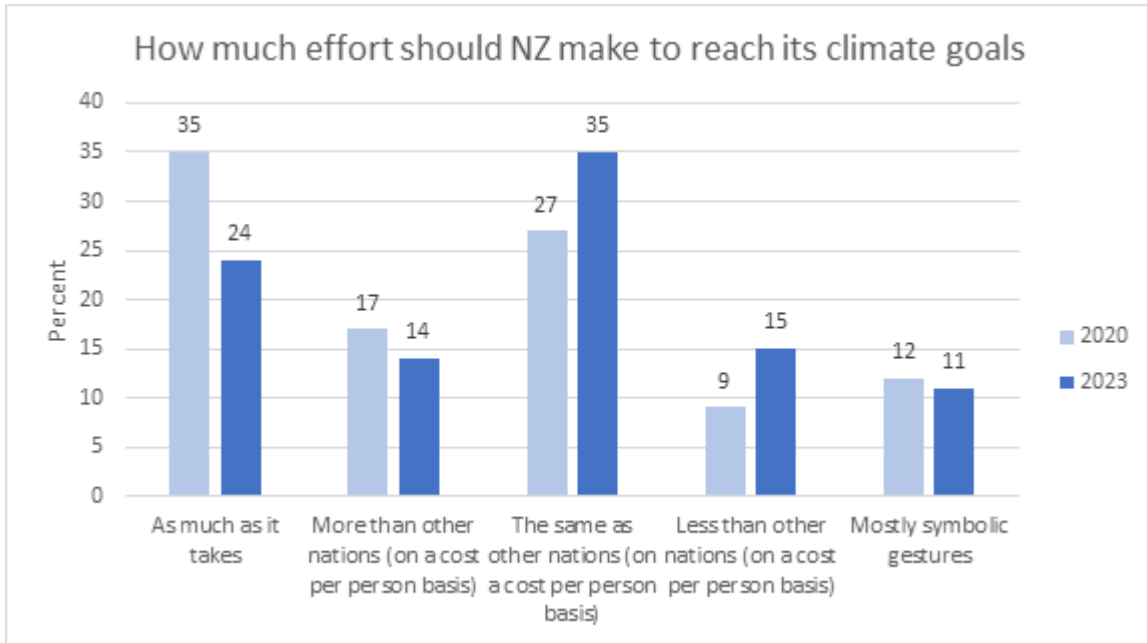


At a time of inflation and rising interest rates a skew to the negative is not surprising



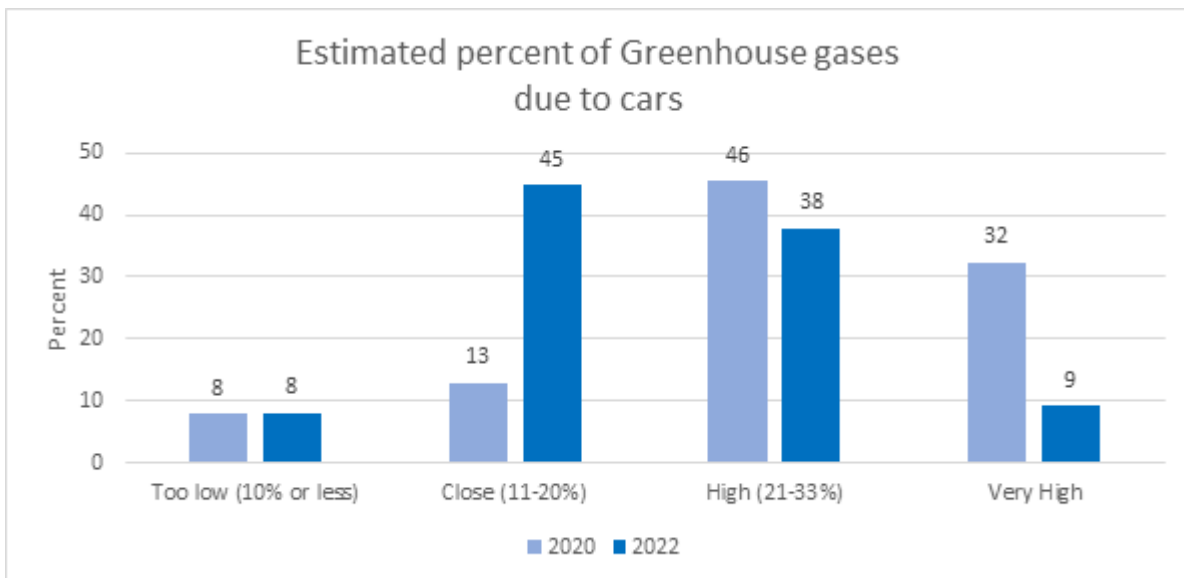
The degree of cynicism has rebounded to 2017 levels when 72% felt it was at best, unlikely. By contrast in 2020 during the pandemic it had dropped to 66%. Cynicism about the world wide effort is unchanged from 2017 and 2020.





In the lead up to the 2020 election (September) there was considerably more enthusiasm for climate change action than there is in 2023.

Because cars are ubiquitous it is always easy for reporters to link climate change to images of car exhausts. While transport is 20% of greenhouse gas emissions, land transport is 16% but light land transport around 12.5%. As in previous election years we asked people to guess this proportion based on their perceptions.

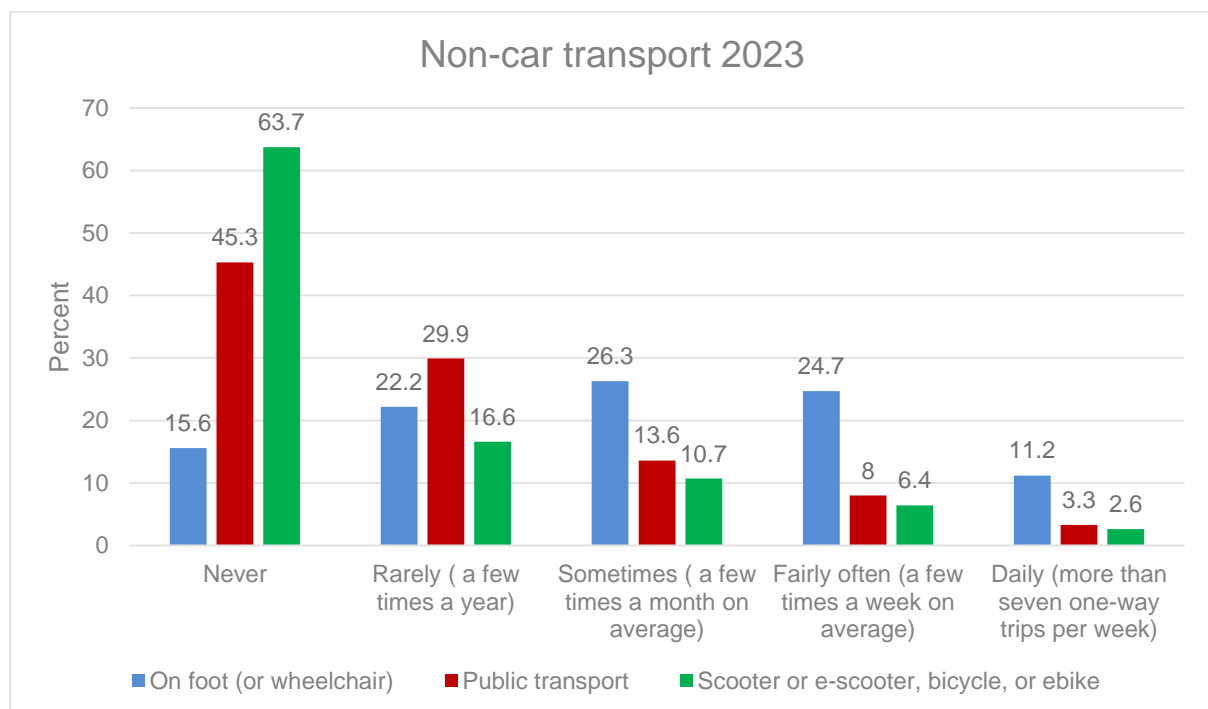
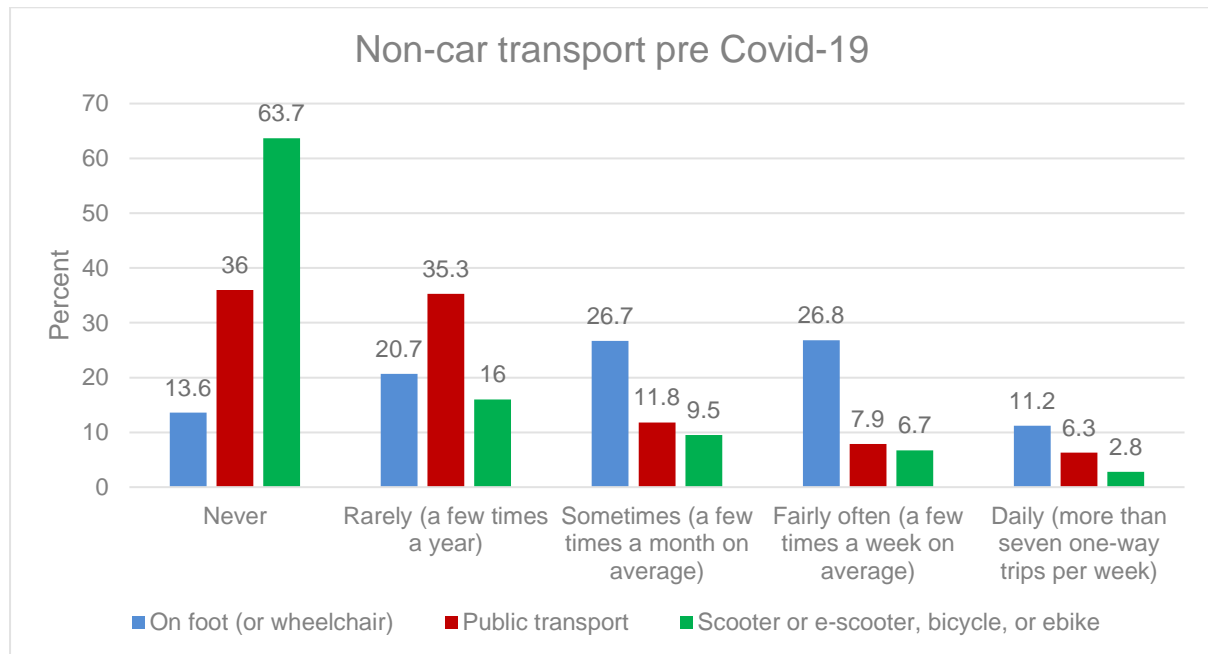


While it appears that respondents have become more educated a more important factor is the question was changed so that the absolute limit was 50% compared to previous years when options ranged up to 100%. This still means that 48% of respondents equate solving climate change with cars, when in fact even if cars emitted no greenhouse gases 87% of New Zealand's emissions would remain.

As in previous years we explored mode shift as a reality in people’s lives. However, following up on Waka Kotahi research during the pandemic we also explored the level of working from home.

1.2 Effects of Covid-19 On Travel Mode Choice And Lifestyle

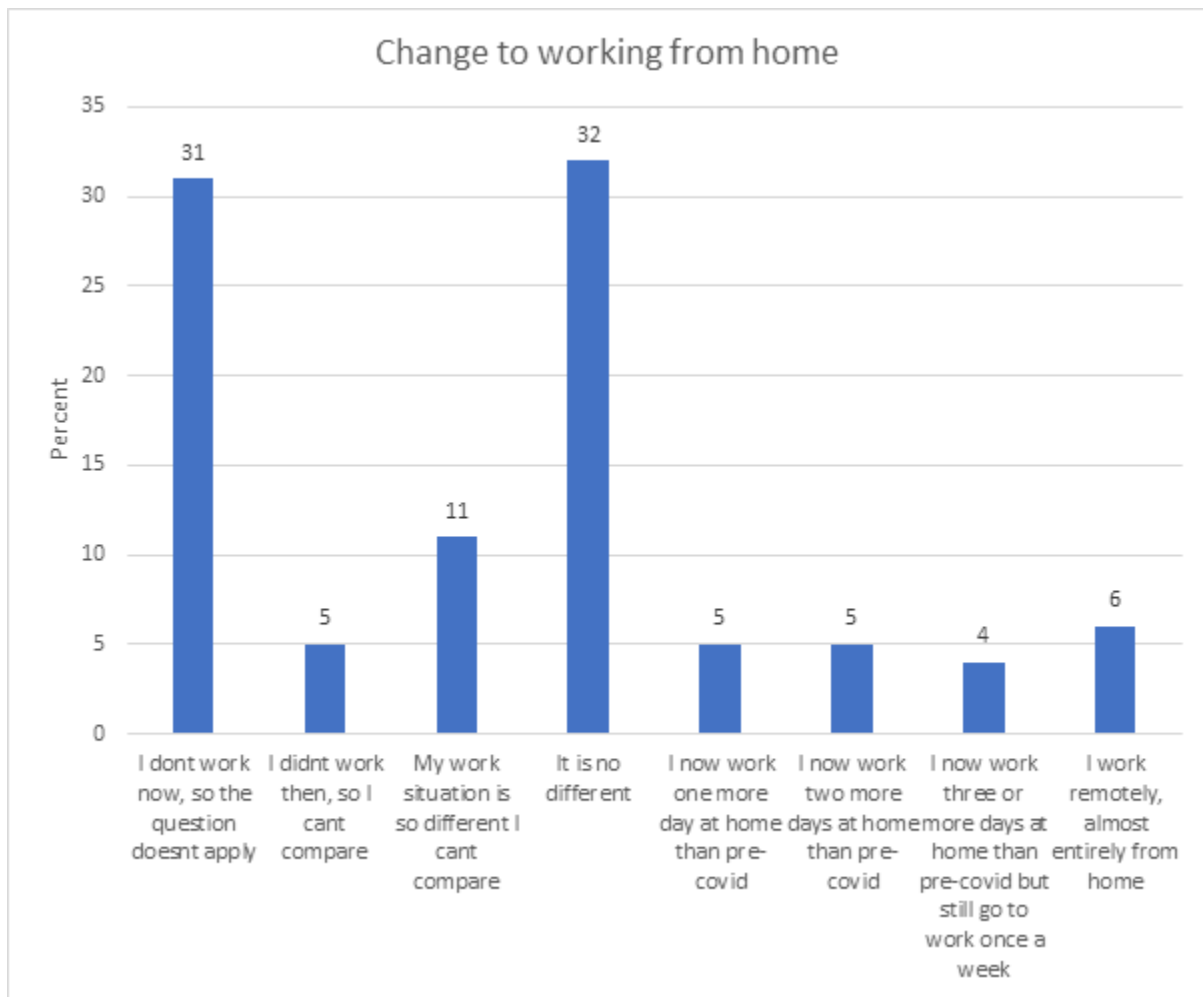
We asked: Thinking back a few years before covid-19, how often did you typically use the following methods to travel for more than ten minutes to a specific destination (but not just for exercise or recreation)?



The main difference is a slight decline in public transport usage. This is verified by a general reduction in PT boardings.

The figures here are completely in line with Ministry of Transport Household Travel Survey results including the recent sample boost in the 2019-2022 period. This suggests that the AA survey panel is indeed representative of the general population when it comes to mode share.

Of the 43 who had increased PT usage the main reasons were to save money and avoid parking costs. Of the 41 respondents who had increased cycling the main reason was to improve fitness and health and to use better cycling facilities. The biggest mode shift was to walking (87 respondents) for fitness and health and to save money.



By far the biggest mode shift was working from home which affected 529 people (14-20% depending on the inclusion of remote workers) of the total.

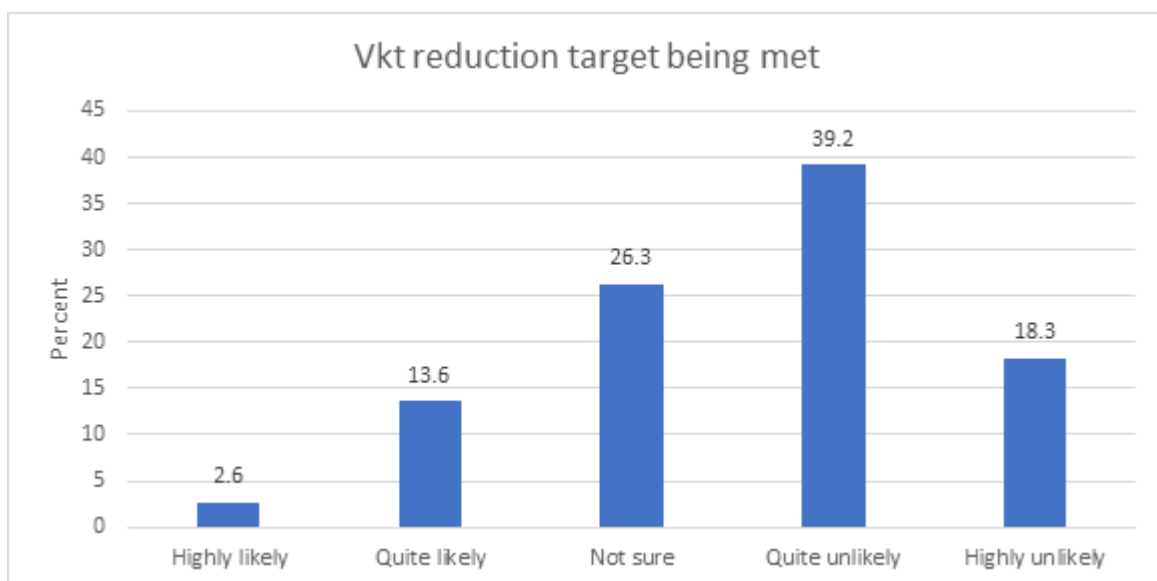
Of the 2578 respondents 119 (5%) had changed to a battery electric vehicle in the past six years, 32 (1%) had changed to a Plug-In Electric Hybrid vehicle, 167 (6%) to a Hybrid vehicle and 18 had switched from a petrol or diesel vehicle to a cycle or e-bike, while 11 had switched to a fossil fuel powered vehicle from no vehicle or using public transport.

A surprising 978 (38%) had shifted home over the past six years, 93 into New Zealand from overseas. Of these 453 (17.6%) had shifted from an urban suburb to a lifestyle block, rural township, or “space less concentrated than suburbs”. Another 299 had shifted to an apartment block, retirement village, camping ground, or similar concentrated living space.

The effect on kilometres driven was, however, claimed to be largely the same. This, of course, cannot be verified but is the perception.

1.3 Emissions Reductions Targets for Transport

We asked: How likely do you think it will be that by 2035 (12 years) there will be a reduction in the average annual mileage of all (4 million) cars, utes and vans by a fifth (20%) by New Zealanders as a whole?

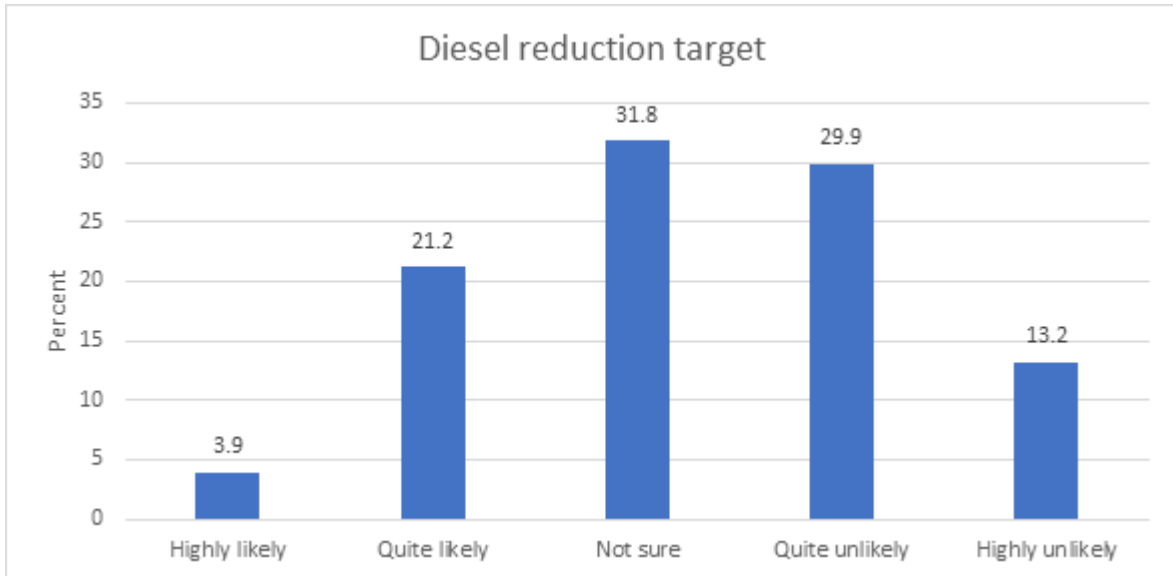


There does not seem to be much belief that New Zealanders will reduce their driving by 20% in the next 12 years with 57.6% thinking it unlikely and only 16.2% thinking it likely. Given that this reduction depends entirely on public cooperation the lack of belief in the target is likely to act as a self-fulfilling prophecy to some extent.

Generally, people can only conceive of things they have experienced. Given that 20% are now working from home or remotely, while very few have changed mode, it is likely that those who are not sure or who consider achieving the target unlikely simply cannot conceive of a solution which will reduce their need for transport.

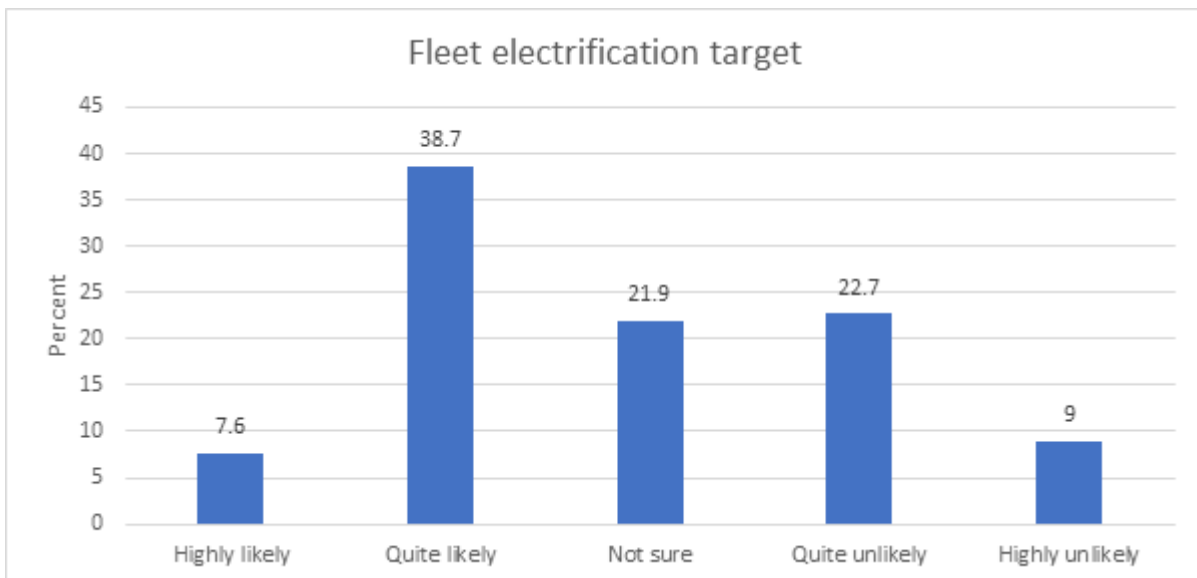
Our question about the freight target was

How likely do you think it will be that by 2035 (12 years) a reduction in the amount of diesel used to haul all our freight by over a third (35%) will be achieved by New Zealanders as a whole?



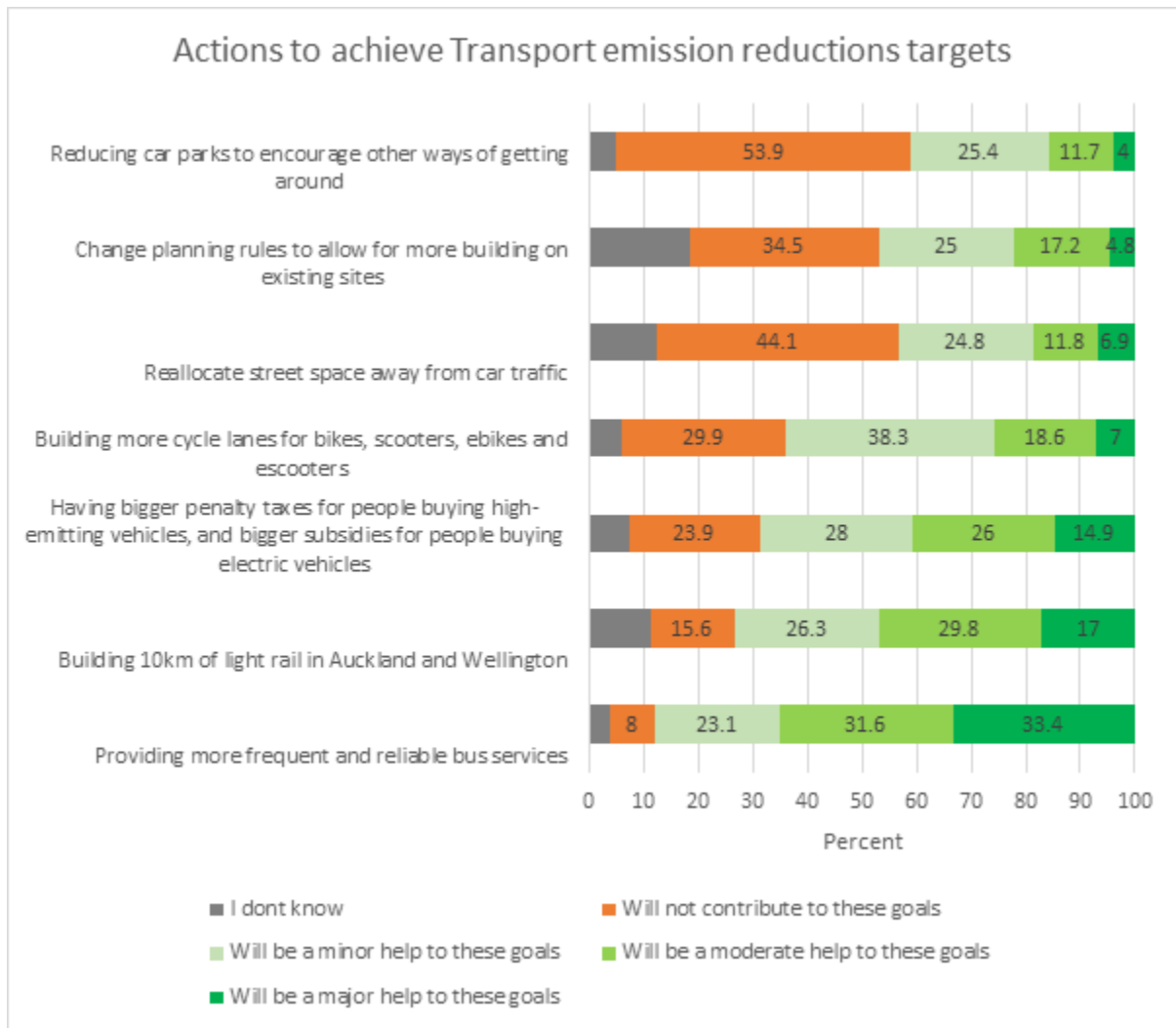
There is slightly more belief in the viability of this target although it is also likely there is a good deal less direct experience of freight or New Zealand’s reliance on freight for their overall wellbeing.

Our question about the electrification of the fleet is more one about personal expectations
 How likely do you think it will be that by 2035 (12 years) replacing 30% of petrol vehicles (1.3 million) on the roads now, with battery electric vehicles will be achieved by New Zealanders as a whole?



Which is interesting considering that of the 540 who had changed their vehicle 151 (27%) had switched to a BEV or PHEV, which is double the national rate of 13%.

We next asked how much the following actions will help achieve these targets.



The interesting (but unsurprising) thing about this graph is that the impact actions could have on their lives individually certainly seems to colour how much impact they believe it would have.

Members were highly certain removing car parking would not contribute to these goals whereas evidence from research shows removing car parks reduces trips to destinations.

By contrast, light rail in Auckland and Wellington was seen by respondents as likely to have more impact on emissions reduction targets, when in fact the Auckland Light rail project itself claims to remove only 12,000 vehicles per day (roughly 10,000 tonnes of CO₂), which is not actually very significant in the context of Auckland’s vehicle growth.

The popularity of the bus services option is also questionable. The increase in public transport use claimed by the respondents over the period before and after Covid-19 was negligible. At the time of the survey the 50% fare subsidy still applied. There is often a gap between what people say they prefer and what they actually do.

This strongly suggests that the scale should be interpreted as evidence of popularity, not effectiveness.

1.4 Willingness to Pay for Carbon

In previous surveys in this series, we have sought to determine pain thresholds for price increases due to the emissions trading scheme. Those surveys were conducted at times of price stability when a change in prices of 5% or 25% for petrol or groceries due to the ETS would be readily discernible by consumers.

Unfortunately, with background inflation of 6.7 percent for the first quarter of 2023 and 7.2% for the last quarter of 2022 these questions were redundant. With consumers putting up with rapid price increases anyway it would be difficult for respondents to distinguish an ETS price signal from the overwhelming noise of global inflation. Instead, we simply looked at willingness to pay for passed on costs from the ETS.

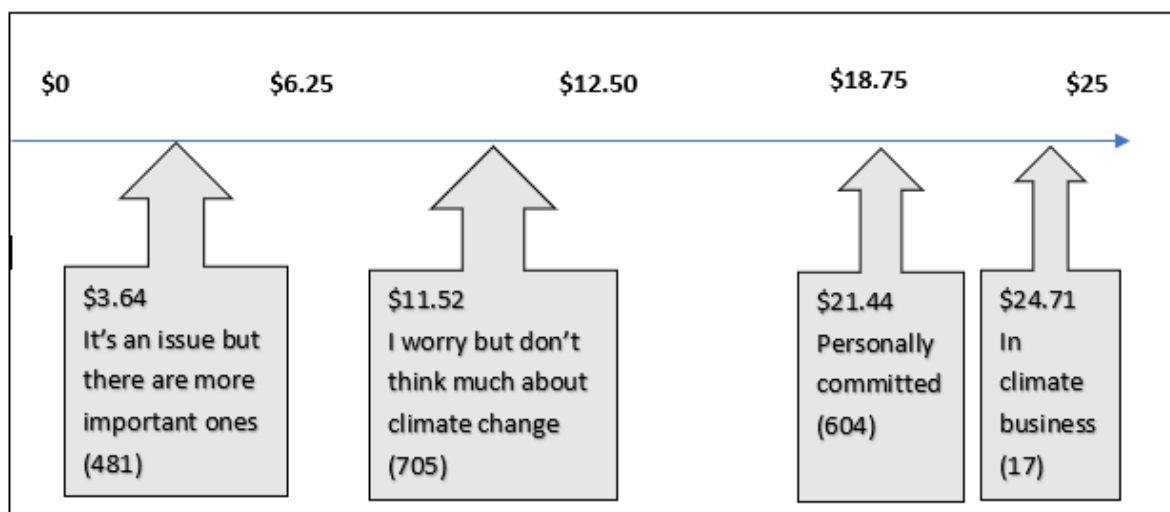
We asked: How much more per month would you personally be willing to pay for fuel and food in the form of a tax for a general government climate change fund?

Using a slider which incremented in units of \$5 up to a maximum of \$60 per month

The mean was \$11.52 but the median value was \$5. Obviously this shows a strong skew by those more committed to climate change to pay more.

The following number line shows different means based on answers to other relevant questions.

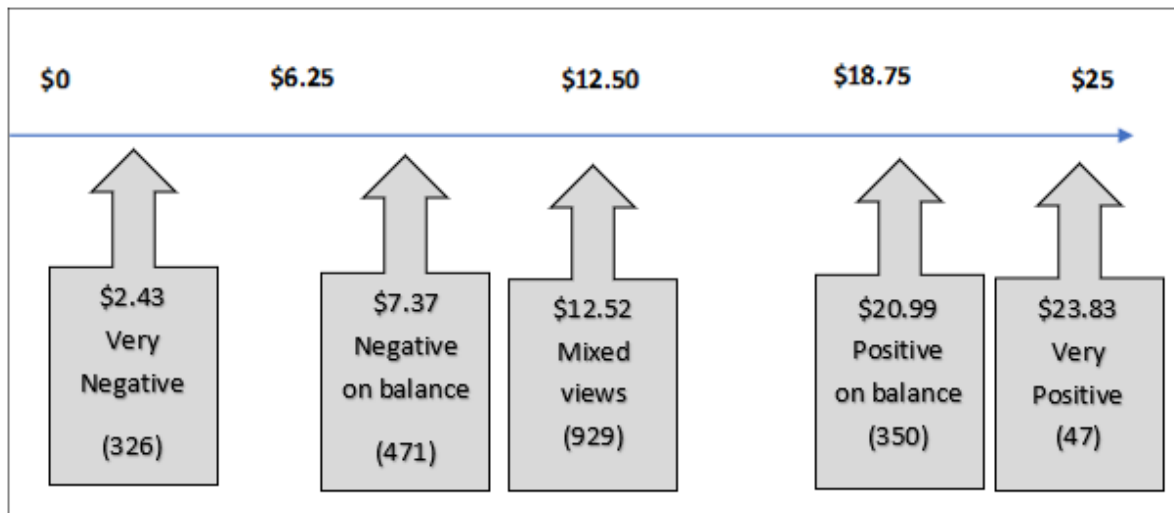
Here we plot willingness to pay against responses to the question “How much do you care about climate change?”



Note because not all options fit on the graphic only the major ones are included.

The number of respondents e.g (481) is provided for scale. The total was 2578

Economic outlook was also a predictor



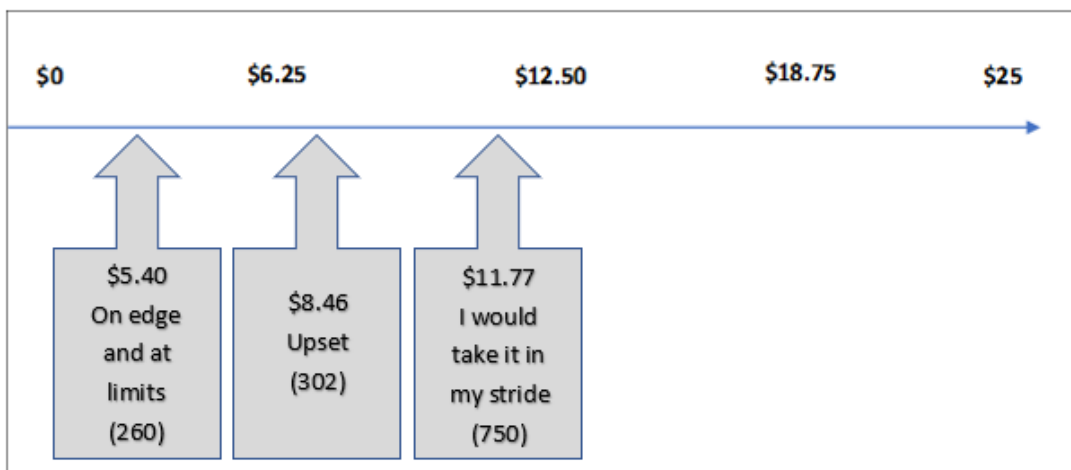
As was economic stress

We measure economic stress using a standard stress scale and the scenario of an unexpected bill of half a week's wages at the average wage. Stress has increased notably since the panel was recruited in November 2019 (before Covid).

Our question is "How would an unexpected \$500 bill due in 30 days make you feel?"

\$500 is chosen as it is half a week's earnings at the average wage. The stress scale is adapted from a standard ten point scale to form five levels of stress.

Stress Indicator	2019	2023
I would take it in my stride	60.4%	30.2%
It would make me a bit upset	24.4%	37.5%
It would make me on edge	8.4%	18.1%
It would push me to limits of coping	4%	8.5%
I could not cope	2.8%	4.3%



And we could also examine by 2023 IRD income tax band. However, income tax band did not have much effect on the willingness to pay more for climate change so apart from the 61 respondents who earned more than \$180,000 in the 2022/3 tax year who were willing to pay an average of \$21.31 the rest were in a range clustered around the \$11.50 mean for the whole sample.

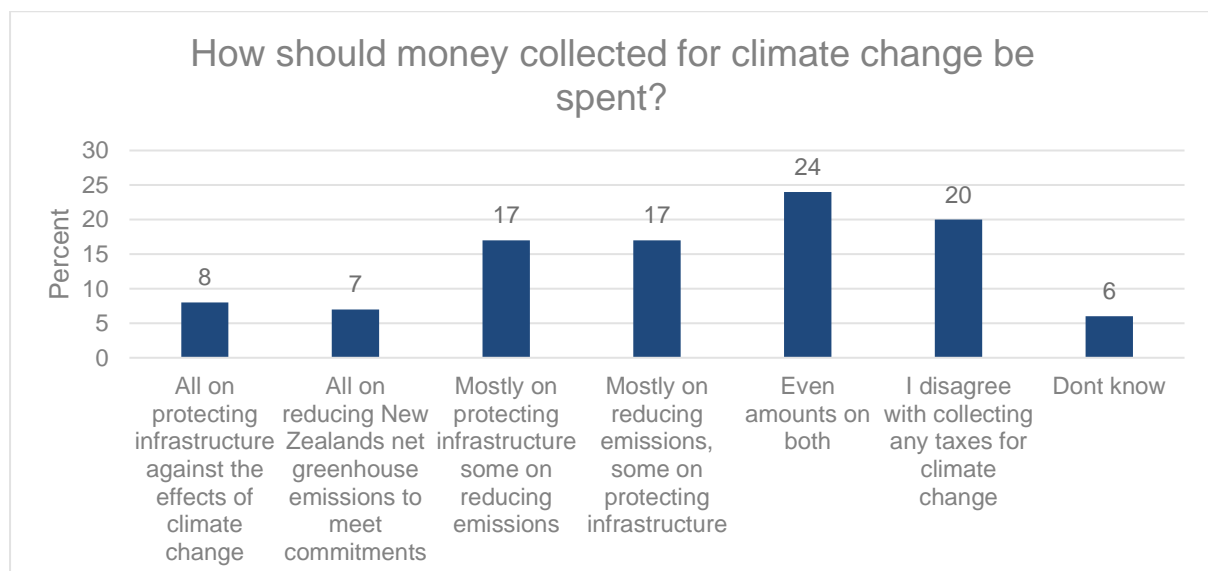
In previous years we have compared willingness to pay with the answer to the question: *If meeting our target of 30% less emissions by 2030 will require difficult changes to our economy, how much action do you think NZ should take to reduce climate change?*

We found good evidence that this question predicts the willingness to pay variance but also note that between the change in the question (now capped at \$60) and the more conservative response to the Willingness to Pay question itself there is an attenuation, even for the most committed.

	2023	2020
As much as it takes	\$21.84	\$48.5
More than other nations (on a cost per person basis)	\$20.15	\$34.27
The same as other nations (on a cost per person basis)	\$8.86	\$16.48
Less than other nations (on a cost per person basis)	\$3.49	\$9.96
Mostly symbolic gestures	\$1.03	\$5.2
Total	\$12.02	\$29.94

1.4 Allocation of Income From the ETS

The impact of Cyclone Gabrielle was still a topic of daily news at the time of the survey.



1.5 Conclusions

The bulk of AA respondents remain pro-environmentalism and concerned about climate change. But the 2023 survey showed some significant differences to previous years largely connected to the rising cost of living.

The Covid-19 period has had a significant impact on people's perceptions about location and transport. The 20% who are now working from home, to working entirely remotely is a legacy of the Covid transformation. The surprisingly large numbers who have relocated from suburbs to rural or peri-rural environments is also a consequence of the learnings from this period.

There is no evidence that there is any significant change of attitude in favour of public or active transport modes. While people continue to find the concept of public transport appealing the actual use of it has fallen. Active modes for non-recreational transport remain used by a small minority (3.8%).

Willingness to pay for climate change actions has definitely reduced in line with greater economic hardship and stress.

There is still a great deal of cynicism among the public that New Zealand's contribution to the global climate change effort is disproportionate to its small size, particularly given the perceived lack of progress internationally.

2. Working From Home

2.0 - AA Research Foundation Pilot Project

The New Zealand government has invested a relatively modest \$2.13 billion in its Ultra Fast Broadband programme delivering high speed internet connections to 87 percent of New Zealanders by the close of 2022.

A scoping study on the difference one day working from home could make to New Zealand's emissions was started by the AA Research Foundation, ironically just before the nation was plunged into lock-down by the Covid-19 pandemic. Researchers from the NZ Institute of Economic Research quickly found themselves in a living experiment in the very thing they were studying. This helped inform the scoping study, which has unfortunately not been progressed because government transport agencies continue to focus on transport rather than transport avoidance.

% of employed people working at home at each COVID-19 alert level, by industry

Industry	Level 4	Level 3	Level 2	Level 1
Agriculture, Forestry and Fishing, & mining	43.0	42.3	43.1	33.6
Manufacturing & Electricity, Gas, Water and Waste Services	32.4	30.3	20.9	16.2
Construction	25.8	30.9	23.4	23.2
Wholesale Trade	44.7	42.2	32.1	27.3
Retail Trade & Accommodation and Food Services	16.6	16.4	14.7	12.2
Transport, Postal and Warehousing	25.9	21.4	16.8	16.4
Information Media and Telecommunications	78.2	82.1	59.2	47.8
Financial and Insurance Services	82.9	83.3	68.0	53.4
Rental, Hiring and Real Estate Services	62.4	62.8	51.9	55.8
Professional, Scientific and Technical Services & Administrative and Support Services	68.8	70.0	54.3	46.9
Public Administration and Safety	61.7	61.7	49.7	38.9
Education and Training	61.9	65.6	50.9	45.2
Health Care and Social Assistance	29.1	29.2	21.6	19.8
Arts and Recreation Services & Other Services	38.5	39.4	33.9	36.5
Total	41.8	42.7	34.0	29.0

Source: Stats NZ

The scoping study identified potential benefits (in need of research), potential costs (also to be researched) and confounders, such as the degree to which a day working from home could result in increased light vehicle usage as those who normally use public transport to get to work switch to

private transport for other errands or visits while working from home. However one of the main co-benefits identified was reduced congestion.

While it is easy to over-estimate the importance of commuting because it creates a peak-time stress on the roading network it only accounts for 30% of trips away from home. This is, because a lot of only 29% of the population over 15 makes a journey to work.

Table 3 Estimates of Auckland workforce able to WFH, by industry

Number of workers

Industry	Work from home	Industry sub-total	% that can WFH
Agriculture, Forestry and Fishing	3,000	18,000	17%
Mining	0	1,000	0%
Manufacturing	17,000	87,000	20%
Electricity, Gas, Water and Waste Services	2,000	5,000	40%
Construction	14,000	86,000	16%
Wholesale Trade	15,000	59,000	25%
Retail Trade	10,000	86,000	12%
Accommodation and Food Services	5,000	77,000	6%
Transport, Postal and Warehousing	6,000	45,000	13%
Information Media and Telecommunications	10,000	23,000	43%
Financial and Insurance Services	18,000	34,000	53%
Rental, Hiring and Real Estate Services	7,000	25,000	28%
Professional, Scientific and Technical Services	57,000	94,000	61%
Administrative and Support Services	21,000	66,000	32%
Public Administration and Safety	10,000	34,000	29%
Education and Training	38,000	69,000	55%
Health Care and Social Assistance	10,000	76,000	13%
Arts and Recreation Services	4,000	16,000	25%
Other Services	7,000	32,000	22%

Source: MBIE

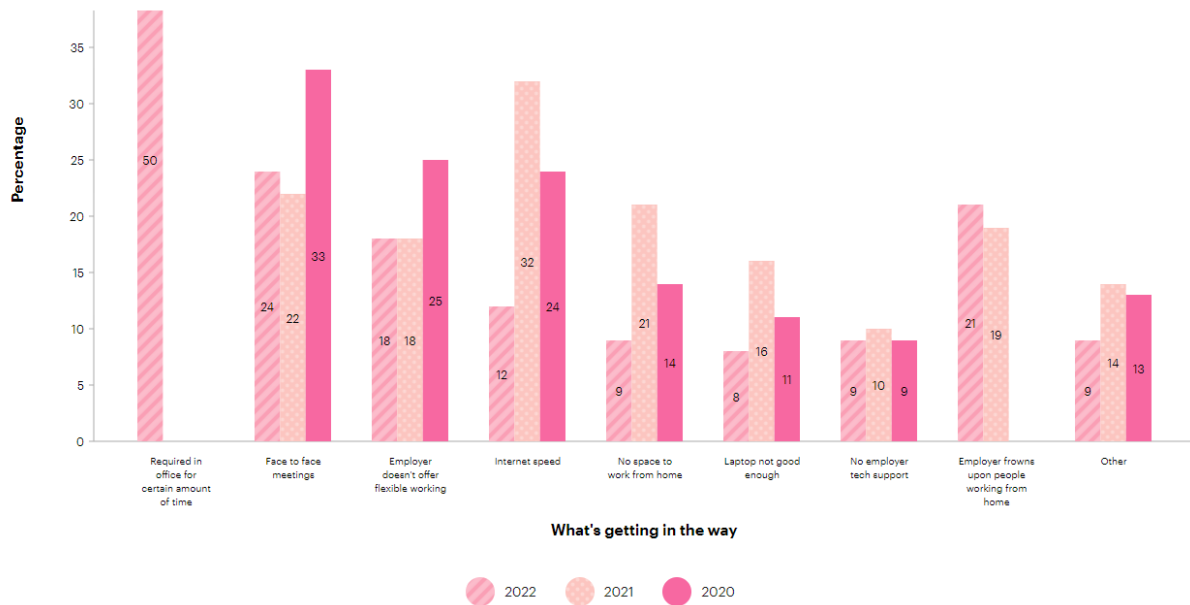
This suggests that 254,000 Aucklanders or about 25% could work one or more days from home.

2.1 Subsequent Research

Not only *can* people work from home there is data to suggest they *want* to work from home. This was a finding of a survey carried out during the survey but has been reinforced by subsequent research. There may of course management considerations as to why working from home may not be suitable.

Research commissioned by InternetNZ and carried out by Kantar Public into working from home in their latest study released in March of this year. This data is published by InternetNZ at <https://internetnz.nz/new-zealands-internet-insights/new-zealands-internet-insights-2022/flexible-working>

Kantar’s study identified the following impediments to more working from home.



Kantar Public /Internet NZ

2.2 Tomtom Estimates

The global traffic monitoring service TomTom is used by Waka Kotahi for speed management (Megamaps). It is notable that the average speed of traffic in New Zealand cities as monitored by TomTom corresponds with Household Travel Survey averages i.e roughly 37km/h, and the HTS average time for a vehicle to travel 10 kilometres in New Zealand is 16 minutes which also corresponds closely to Tomtom data.

Tomtom compares congestion in 390 cities across 56 countries on 6 continents, the TomTom Traffic Index measures cities around the world by their travel time, fuel costs and CO2 emissions, providing free access to city-by-city information. TomTom also shows the carbon savings that can accrue from working from home.

Potential carbon benefits of working from home

City	Census 2018 car driver	Tomtom 1 day WFH/vehicle (kg co2) per year	20% 1 day WFH KT CO2 p.a	30% 1 day WFH KT CO2 p.a	40% 1 day WFH KT CO2 p.a
Auckland	576,033	177	20.4	30.6	40.8
Wellington	133,362	189	5.0	7.6	10.1
Christchurch	196,602	157	6.2	9.3	12.3
Rest of NZ	781,902	140	21.9	32.8	43.8
Total	1,687,899		53.5	80.2	107.0

*.. 140 is the Christchurch value with most of the congestion carbon removed

In addition to the potential direct benefits of working from home are the indirect benefits from fewer commuters on the road.

Tomtom data also shows that the annual difference in emissions per vehicle between Auckland and Christchurch is roughly 95 kilograms. If Auckland emissions per vehicle were the same as Christchurch's the saving would be around 100 kilotonnes of carbon per year. That is the equivalent of 120,000 Aucklanders taking up cycling, which while desirable, is highly unlikely.

	Emissions per vehicle Co2 kg	Annual Co2 congestion kg	1-day WFH annual co2 saved kg
Wellington	950	178	189
Auckland	887	197	177
Christchurch	792	98	157

2.1 Research

Please note these are very approximate figures. NZIER produced a comprehensive report on the nature of the research which needs to be done. The AA was unable to complete its full investigation into the difference a day working from home would make due to the difficulty in finding research co-sponsors. The scoping report is available here:

<https://www.aa.co.nz/about/aa-research-foundation/programmes/working-from-home-costs-and-benefits/>

3. Relevant Research Notes of Interest

3.0 Summary of Findings from the Household Travel Survey

The HTS latest round for 2019-2022 found that 82% of New Zealanders travel time is by car or van, with an average trip leg (i.e the distance between stops) of 10km taking 16 minutes at an average speed of 37.5km/h. This is ten times faster than the next most popular mode (walking), a third faster than public transport and three times faster than cycling.

Mode	Share of total NZ transport time	Average trip leg distance	Average trip leg duration	Average speed
Car	82%	10km	16 minutes	37.5 km/h
Public Transport	5%	11km	28 minutes	23.5 km/h
Bicycle	2%	4km	19 minutes	12.6 km/h
On foot	10%	1km	15 minutes	3.6 km/h

By comparison with the results of the same survey twenty years ago the share of car use has climbed 5 percentage points from 78% in 2003, walking has dropped three percentage points from 13%, cycling has remained the same, and public transport has gained 1 percentage point.

3.1 Research Paper on VKT and Mode Shift

Waka Kotahi’s Te Puna Taiao strategic insight series contains the paper “Household travel in our major urban areas” from WSP Opus (December 2022) by Prince, Frith and Tait, three well known and regarded New Zealand transport researchers. It investigates the mode shift targets in the first Emissions Reduction Plan, investigating with close reference to the Household Travel Survey.

The paper finds as the graphic below shows there are lots of short trips but they don’t contribute much to total VKT, it’s the few longer trips that make the difference.

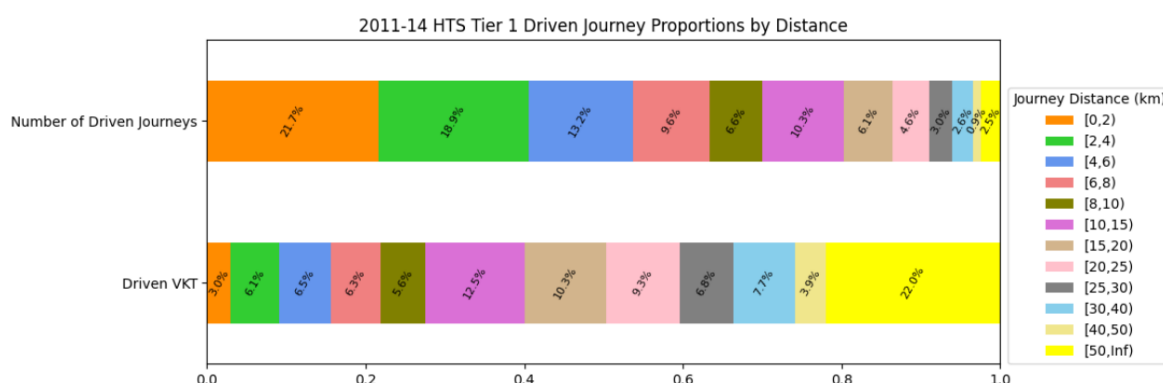


Figure 14: 2011-14 HTS Tier 1 Car/van driver Journey Numbers and VKT by Journey Length

Link: [Household travel in our major urban areas \(nzta.govt.nz\)](https://nzta.govt.nz)

3.2 Urban Form and Emissions Per Capita

Evidence supporting carbon footprints being linked to urban form is a rich but contentious field of study. One of the principal problems is a lack of consistent reporting as different urban administrative zones over different time frames can create misleading comparisons. To overcome this an international team headed by Daniel Moran of the Norwegian University of Science and Technology took a global perspective and using a Gridded Global Model of Carbon Footprints with 250 square metre cells evaluated the footprints of 13,000 world cities. The base year for the study was 2015. Reference [Daniel Moran et al 2018 Environ. Res. Lett. 13 064041](#)

Of interest are its findings comparing Auckland with other cities of comparable size or significant reputation in transport circles which show Auckland already has the best carbon footprint of all these cities.

Urban Cluster	Country	2015 Footprint/cap (t CO2)	2015 Population (thousands)	2015 Urban CO2 MT
Vancouver	Canada	9.4	1,856	17.5
Munich	Germany	7.2	1,639	11.8
Stockholm	Sweden	6.7	1,352	9.1
Portland	USA	16.7	1,164	19.4
Copenhagen	Denmark	10.1	1,155	11.7
Amsterdam	Netherlands	9.9	1,107	11.0
Dublin	Ireland	9.1	1,028	9.4
Auckland	New Zealand	6.4	910	5.9
Adelaide	Australia	16.2	874	14.1
Helsinki	Finland	7.4	862	6.4
Edmonton	Canada	15.1	796	12.1
Jacksonville	USA	17.0	552	9.4

It must be stressed that the Moran et al investigation is into total carbon emissions not just transport carbon emissions, recalling that transport carbon emissions are a small but significant proportion of the total.

4.Call not to neglect motor vehicle efficiency in pursuit of alternate modes

4.0 Rationale

The household travel survey shows that the most significant mode of travel with regards to CO₂ emissions in Aotearoa New Zealand is the private passenger vehicle. While this has encouraged the Commission to seek alternatives to the fossil fuel powered vehicle it should be borne in mind that the effect of changes in ICE vehicles fuel efficiency on emissions multiplied over the literally millions of vehicle kilometres travelled can be extremely significant. Policies, practices or road management designed to disincentivise motor vehicle usage in favour of alternate modes run the risk of increasing emissions if the level of mode substitution does not balance the increase in emissions due to reduced fuel efficiency.

4.1 Data Table of Evidence

The following table was produced using locally published data combined with reputable international data providers including OECD and Tomtom.

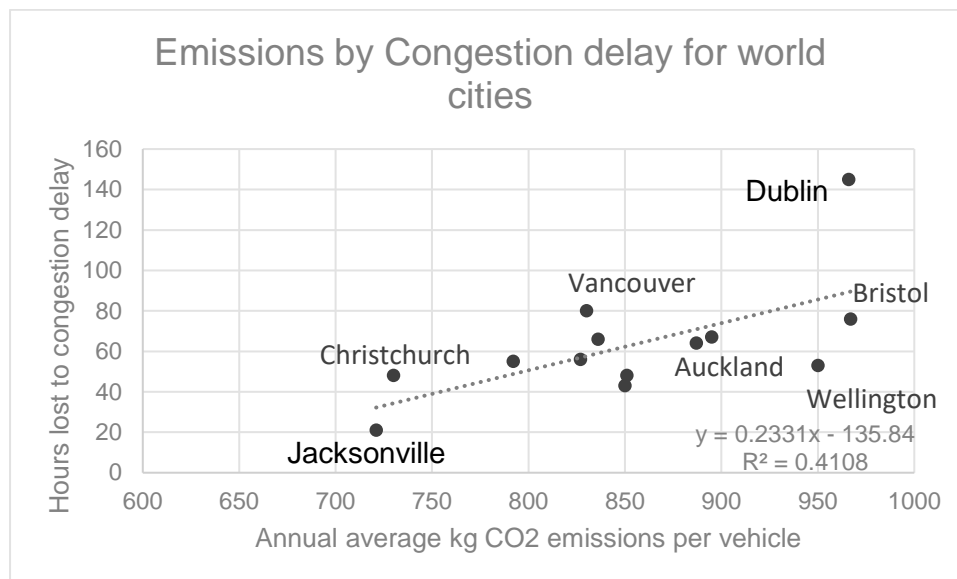
It compares a range of cities on the basis of their travel time performance over ten kilometres, their mode share, population size and annual per vehicle emissions.

Correlation of	Wider Metro Pop (2019)	Journey to work PT Share	Journey to work Cycle Share	Average time to drive 10km (latest)	CO2 kg per vehicle per year (Latest)	Hours lost to congestion/year (latest)
Wellington	436,732	23%	4%	0:18:20	950	53
Auckland	1,652,643	12%	1%	0:15:30	887	64
Christchurch	488,936	5%	6%	0:18:30	792	55
Vancouver	2,651,874	21%	3%	0:22:30	830	80
Bristol*	963,522	19%	10%	0:20:40	967	76
Jacksonville	1,658,215	2%	1%	0:09:20	721	21
Stockholm	2,344,124	32%	7%	0:15:20	827	56
Belfast	794,773	5%	5%	0:16:30	836	66
Munich	1,562,128	24%	18%	0:20:10	895	67
Portland	2,385,552	7%	3%	0:13:40	851	48
Dublin	2,097,973	15%	7%	0:28:30	966	145
NewCastle, NSW	474,067	2%	1%	0:16:30	730	48
Swansea	390,308	3%	NA	0:15:40	850	43
Average	1,293,853	14%	5%	0:17:45	861	63
Data sources:	OECD + Local	Local Census	Local Census	TomTom	TomTom	TomTom

* Bristol adopted a 20mph (30km/h) urban speed limit in 2012 for road safety reasons

4.2 Correlation of Congestion and Emissions

The table based on Tomtom data shows a mild correlation between emissions and congestion. It is probable a hilly topography also plays a role in each city's emissions profiles.



A difference of 100kg CO₂ per vehicle per annum over 100,000 vehicles is 10 kt CO₂. To balance an increase of 10 kt CO₂ would require 12,000 people to forego driving every day of the year and replace their car with a bicycle.

If Christchurch's emissions per vehicle became as high as Auckland's, New Zealand would have to take responsibility for another 30 kt of CO₂.

If Auckland's emissions per vehicle became as high as Dublin's, it would have to take responsibility for closer to another 100 kt of CO₂.

This suggests that reducing the fuel efficiency of motorised traffic in order to give priority to other modes may well have a deleterious effect on emissions if the balance of removals through increased alternative modes to increased emissions due to fuel efficiency reduction is not correct. A better approach is to encourage alternative modes by providing better dedicated facilities, ideally on new corridors or routes.

Conclusions

The evidence presented here does not suggest there is much chance of the vehicle kilometres driven reduction target being achieved.

The evidence in this regard is the Household Travel Survey which has shown over the past twenty years, little mode change; the paper by Prince et al, which shows the length of journeys people make would be unlikely to be substitutable; and the finding of the AA survey which shows members find achieving the proposed target unlikely, and that they have not made such changes themselves in any significant degree.

We hasten to point out that whether the target is met or not, does not depend on the AA, the New Zealand government or local government. It will be determined rather by millions of New Zealanders making daily decisions based on their available time, the weather, their mood, and a balance of income and costs.

The AA is supportive of its Members' travel choices and will adjust its services to meet demand. For example the AA already provides an ebike roadside assistance offering.

However, it does seem necessary to point out that the weight of evidence is that private motor car trips will dominate New Zealand transport for many decades to come. While New Zealand's emissions per vehicle are already disturbingly high by world standards it is still possible for them to become worse if the wrong policies are adopted.

In the pursuit of mode shift it is important be sure new measures actually achieve measurable emissions reduction rather than adopt them on the basis of models which may be theoretical.

About the New Zealand Automobile Association

The NZAA is an incorporated society with over 1.8 million members, representing a large proportion of New Zealand road users. The AA was founded in 1903 as an automobile users' advocacy group, but today our work reflects the wide range of interests of our large membership, many of whom are cyclists and public transport users as well as private motorists.

Across New Zealand, the motoring public regularly come into contact with the AA through our breakdown officers, 36 AA Centres and other AA businesses. Meanwhile, 18 volunteer AA District Councils around New Zealand meet each month to discuss local transport issues. And based in Wellington and Auckland, our professional policy and research team regularly survey our Members on transport issues, and Members frequently contact us unsolicited to share their views. Via the AA Research Foundation, we commission original research into current issues in transport and mobility. Collectively, these networks, combined with our professional resource, help to guide our advocacy work and enable the NZAA to develop a comprehensive view on mobility issues.

Excluding the Government's 2022 temporary fuel tax discount, motorists pay around \$4.5 billion in taxes each year through Emissions Trading Scheme levies, fuel excise, road user charges, registration fees, ACC levies, and GST. This money is reinvested by the Government in our transport system, funding road building and maintenance, public transport services, road safety work including advertising, and Police enforcement activity. On behalf of AA Members, we advocate for sound and transparent use of this money in ways that improve transport networks, enhance safety and keep costs fair and reasonable.

Our advocacy takes the form of meetings with local and central government politicians and officials, publication of research and policy papers, contributing to media on topical issues, and submissions to select committees and local government hearings.

Total Membership

1.8+ million members

Over 1.1 million are personal members

Over 0.7 million are business-based memberships

% of licenced drivers

At least 29% of licensed drivers are AA Members

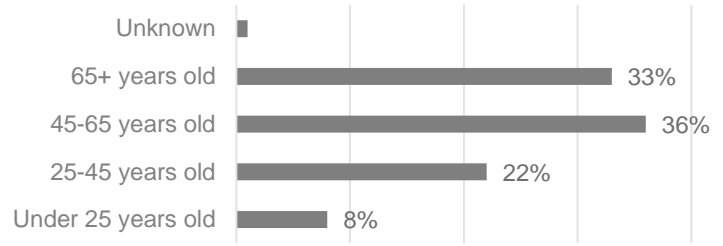
Gender split

54% Female

46% Male

Age range & Membership retention

Age of AA Members



52% of AA Members have been with us for over 10 years.
