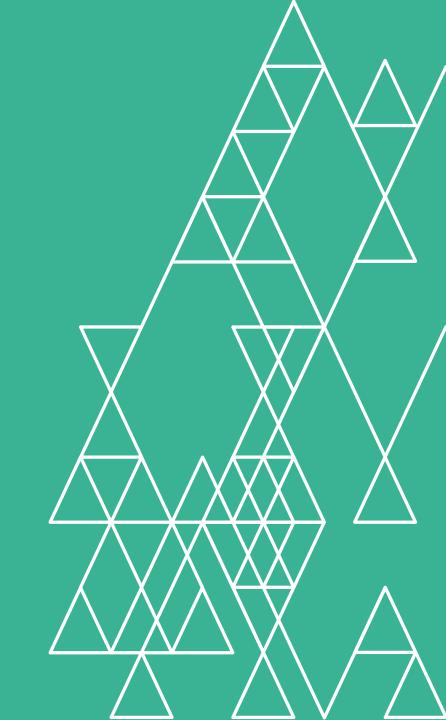




Transport choices represent New Zealand consumers' biggest use of energy. EECA has undertaken research to gain insight on New Zealanders' transport behaviour and the context of their choices, including motivations, barriers and attitudes.



Objectives and methodology

Objectives

Develop a databank to explore and measure:

- 1. Travel behaviour, how this varies for different trip occasions and by different demographics providing a baseline and set of metrics through which to track. Tracking individual vehicles through to shared and public modes, as well as active modes.
- 2. Motivations and barriers linked to mode choice, and appetite for mode shift.
- 3. Motivations and barriers towards BEVs, and future consideration.
- 4. Charging behaviour among EV owners and consideration towards smart chargers.
- 5. Where there is most opportunity for consumers to choose caralternatives.

Fieldwork for this period took place from April to June '24, with response captured from a representative sample of 1,039 New Zealanders (representative in terms of age, gender, region).

Methodology used: online survey using a consumer panel.





Summary

New Zealand's transport landscape is dominated by cars, but with a strong future intent to use alternative modes

Cars dominate as the primary mode of transport, with around three-quarters of all trips taken by car and over two-thirds seeing cars as the only feasible option to get around.

Despite this, a significant portion of the population is open to increasing their use of alternative modes of transport, particularly younger individuals.

Barriers to alternative modes include convenience, distance, and the need to carry items, which often deter individuals from choosing walking, cycling, or public transport.





Agenda

1

The New Zealand transport landscape

2

EV attitudes and uptake

3

Bringing it all together

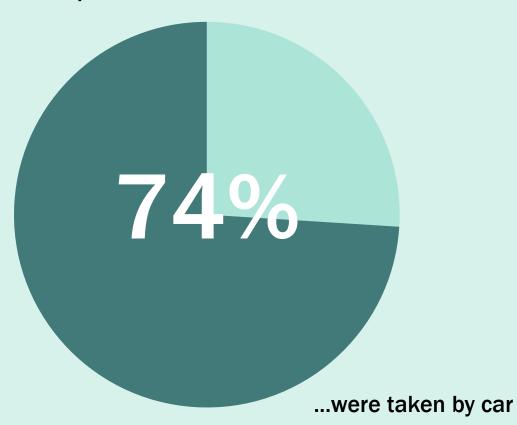




An update on the New Zealand transport landscape

Cars are the dominant mode of transport for all types of travel

Of recent trips taken...



Cars make up a 79% share of total travel time¹

We're famously a nation reliant on our cars with almost three-quarters of trips taken mainly by private vehicle, and 77% taken at least partly by car. Most drivers don't consider an alternative, but for around 1 in 5 trips taken by car, other options are considered.



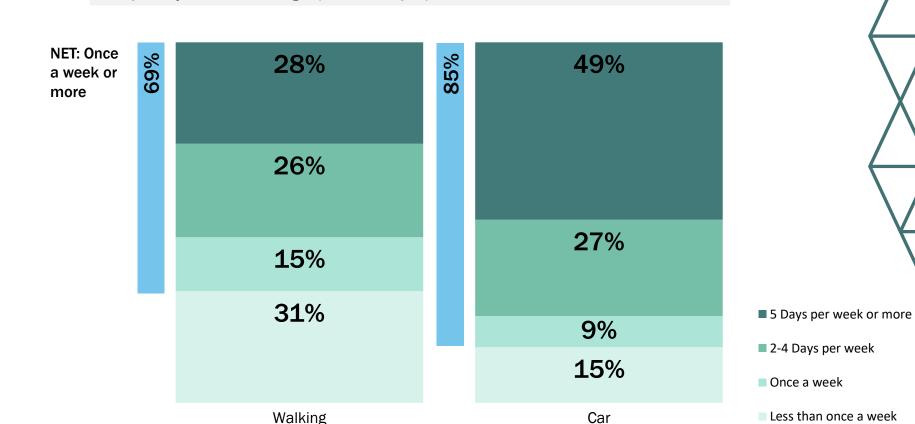
Across different transport modes, walking and driving are done most frequently

Frequency of mode usage (total sample)

Half of respondents report using their car to travel 5 days a week or more.

Wellington and Auckland have the highest incidence of frequent walking, while the Upper and Lower North Island regions report the lowest usage.

Frequent walkers are more likely to be male.

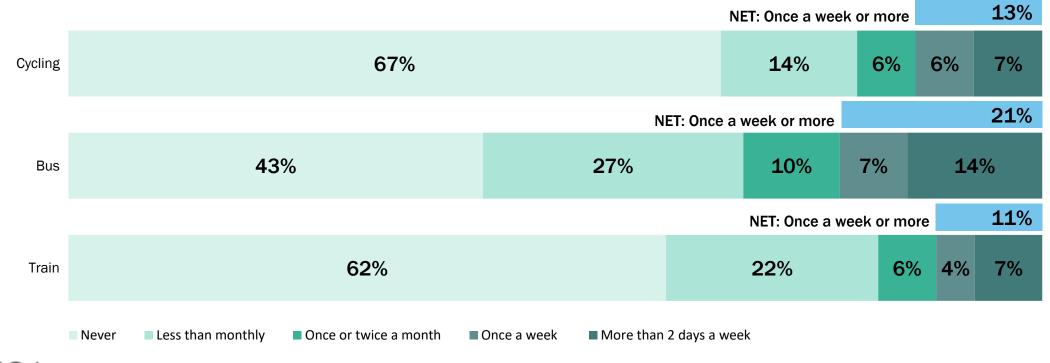




Frequent use of the bus, train, and cycling is significantly lower in comparison

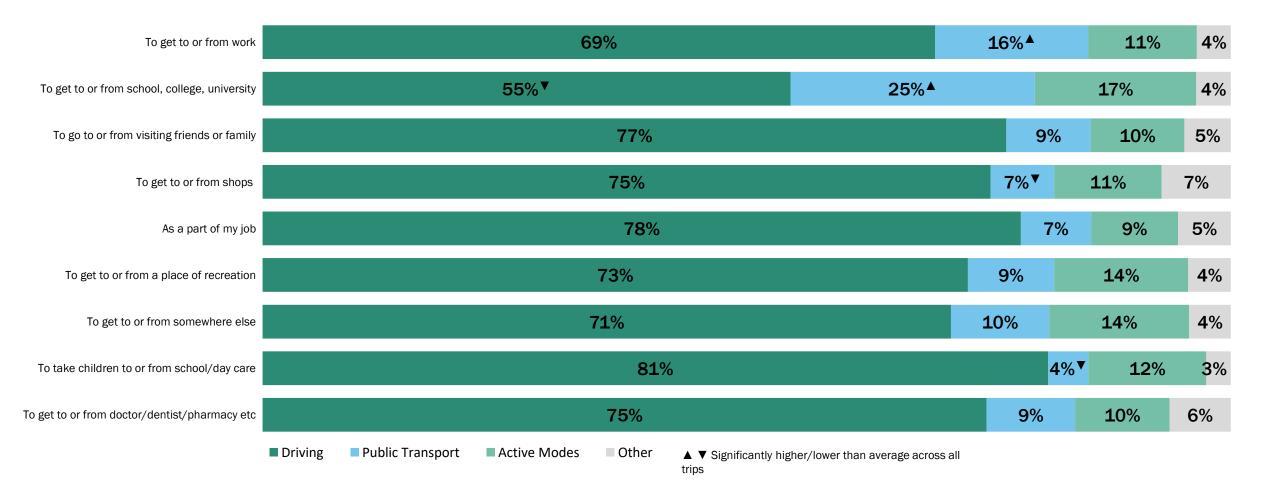
Younger people aged 18-34 report significantly higher usage of public transport, though overall a large proportion of respondents say they never use these modes.

Frequency of mode usage (total sample)





Trips to work and places of education show highest use of alternative modes

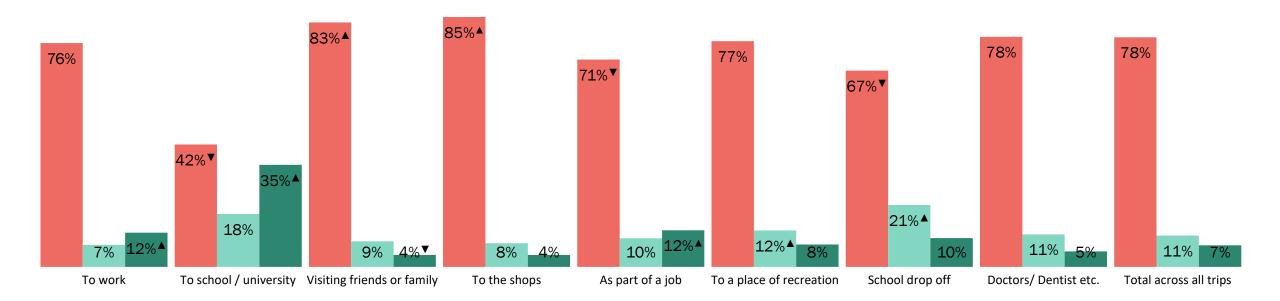




Trips made to a place of education, school drop offs, and trips taken as part of work pose the best opportunities for shifting away from cars

Overall there was at least one alternative mode considered for 22% of trips taken by car

Alternative mode considered among car users, by trip type (total sample)



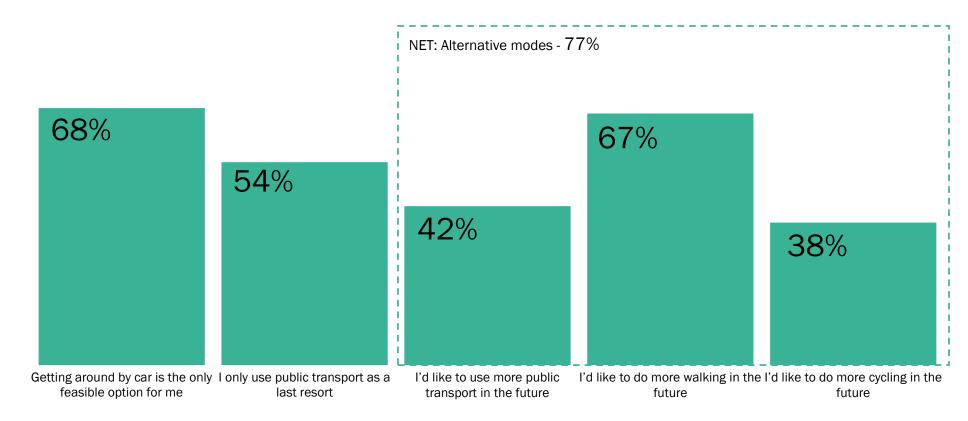


▲ ▼ Significantly higher/lower than total across all trips



Nearly four in five New Zealanders report wanting to increase their usage of an alternative mode

Transport attitudes (Total sample), % agree / strongly agree





We know certain population groups show more potential for mode shift: younger people are particularly open

% Agree with statement	Male	Female	18-34	35-55	55+	NET
I'd like to use more public transport in the future	42%	39%	47%▲	43%	33%▼	41%
I'd like to do more walking in the future	65%▼	69%▲	73%▲	72 %▲	58%▼	67%
I'd like to do more cycling in the future	44%▲	32%	48%▲	45%▲	21%▼	38%

Shifting the 55+ group towards alternative modes will be more of a challenge. Physical fitness is an increased barrier here, but even among those who *don't* report they 'aren't physically fit enough' we still see the 55+ group ranking significantly lower in wanting to do more cycling and walking.



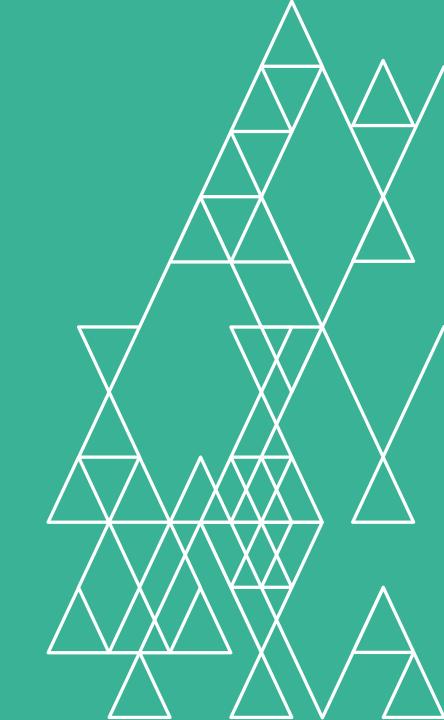
Even for those who never engage with a specific mode, at least 1 in 5 or more would like to do more (or start) in future

% Strongly agree or Agree statement by frequency o		Never	Less than monthly	Once or twice a month	Once a week	2-4 days a week	5 days a week or more	NET
I'd like to use more public transport in the future	Bus							
		22%▼	43%	58%▲	69%▲	70%	69%▲	41%
	Train							
		31%▼	46%▲	64%▲	78%▲	75%▲	72 %▲	41%
I'd like to do more walking in the future	Walking							
in the ruture		41%▼	48%	63%	70%	77%▲	76%▲	67%
I'd like to do more cycling in the future	Cycling							
iii tile lutule		22%▼	63%▲	69%▲	70%▲	78%▲	85%▲	38%



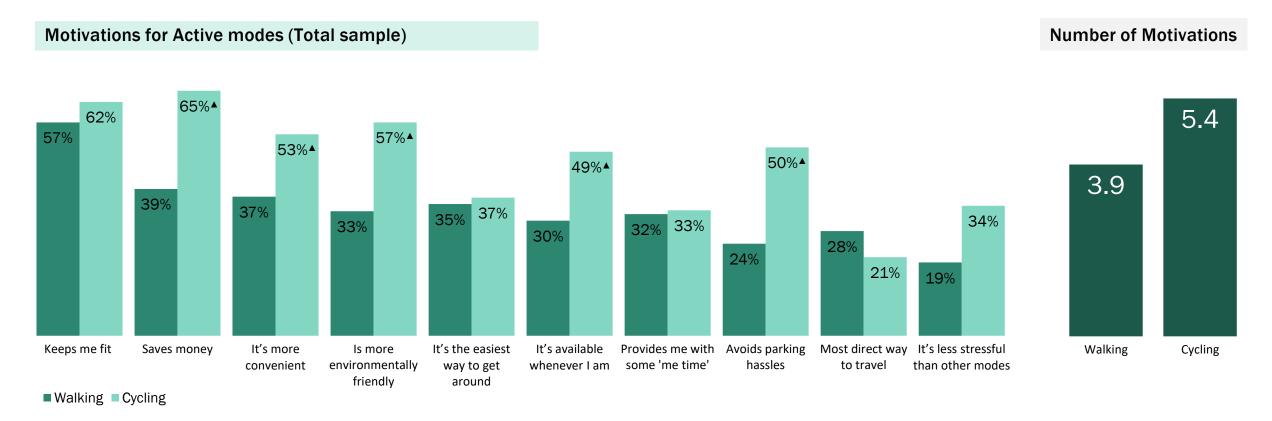


Understanding trip motivations and barriers is crucial to influencing greater consideration for alternative modes.



Respondents report a higher number of motivations for trips taken by bike than for walking

Both active modes are most often motivated by health benefits, but the benefits of walking don't resonate as frequently. Those who do cycle appear more passionate about their choice of mode.

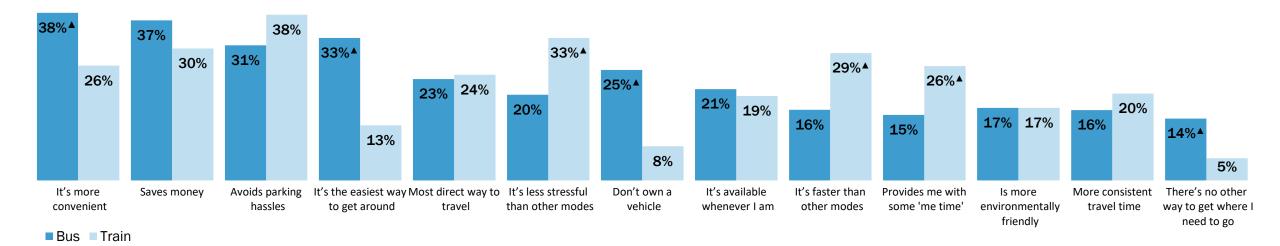


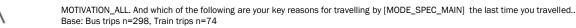


Convenience and saving money rank highest among benefits for taking the bus. Avoiding parking hassles sits at the top for trips by train

Travelling by train is seen as faster and less stressful, but isn't as often seen as 'the easiest way to get around'. Busses are seen as the more convenient and flexible option.

Motivations for Bus and Train (Total sample) Highest to lowest NET: PT benefit







Barriers to alternative modes

Walking

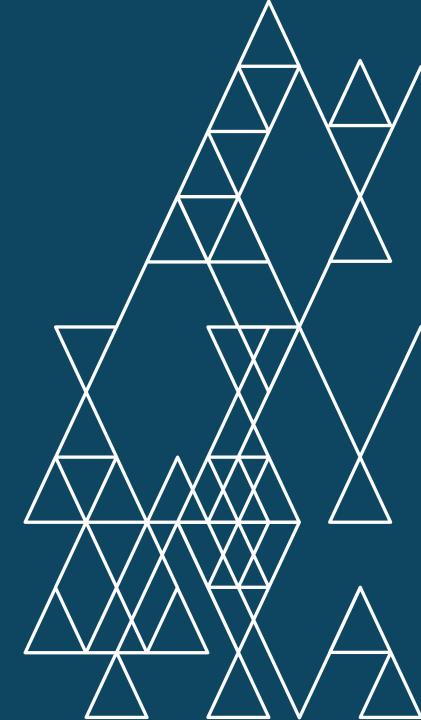
Distance is the key barrier for walking to be considered.
Once consideration is gained, convenience, having too much to carry, and the risk of bad weather typically prevent conversion to usage.

Cycling

Barriers to bike usage are similar to those for walking. Convenience, having too much to carry, and the risk of bad weather rank highly. Travelling with others and having to shower after travelling are additional barriers here.

Public Transport

Lack of convenience and the option of faster alternatives are the top barriers towards both consideration and usage. Once public transport is considered, having too much to carry becomes a more prominent barrier to conversion.



BARRIER_WALKING. What are the key reasons that you did not walk for this particular trip? Base: Random selection of those who did not walk for their trip n=1,114

BARRIER_CYCLING. What are the key reasons that you did not travel by bike for this particular trip? Random selection of those who did not cycle for their trip n=1,491

BARRIER_PUBLIC_TRANSPORT. What are the key reasons that you did not travel by public transport for this particular trip? Random selection of those who did not take public transport on their trip n=1,294

For trips where walking was considered, avoiding the risk of bad weather, having too much to carry, and lack of convenience were the top barriers to usage

Barriers to walking (Considered vs didn't consider walking)

	Barriers to consideration (Walking not considered)	Barriers to usage (walking considered)	Gap
It's too far to walk	71%	27%	-44%
It wasn't convenient for me	30%	33%	+3%
I had too much to carry	27%	35%	+8%
There are faster alternatives	21%	28%	+7%
To avoid the risk of bad weather	18%	36%	+18%
I'm not physically fit enough	14%	12%	-2%
I was travelling with others (children, pets, elderly etc)	12%	14%	+2%
I don't feel safe	8%	8%	=



These are also the top barriers for those who did consider cycling, but decided against it

Barriers to Cycling (Considered vs didn't consider cycling)

	Barriers when cycling not considered	Barriers when cycling considered	Gap
I don't have a bike	51%	11%	-40%
It wasn't convenient for me	28%	39%	+11%
It's too far to go by bike	26%	17%	-9%
I had too much to carry	23%	31%	+8%
It takes too long / there are faster alternatives	22%	16%	-6%
I don't feel safe	22%	12%	-10%
I'm not physically fit enough	18%	5%	-13%
To avoid the risk of bad weather	16%	28%	+12%
I was travelling with others (children, pets, elderly etc)	13%	21%	+8%
Having to shower and / or change after cycling is inconvenient	9%	24%	+15%
There are not enough cycleways / separated routes	8%	21%	+13%
There is often no bike parking at my destination	5%	14%	+9%



Most often public transport is ruled out for not being seen as convenient and for taking too long

These two barriers are most common among both those who didn't consider public transport and those who did but who opted to drive instead. Having too much to carry is a prominent barrier among the latter group too.

Barriers to Public transport (Considered vs didn't consider Public Transport)

	Barriers to consideration (Public Transport not considered)	Barriers to usage (Public Transport considered)	Gap
It wasn't convenient for me	48%	34%	-14%
It takes too long / there are faster alternatives	36%	31%	-5%
Lack of public transport in my area	29%	13%	-16%
I had too much to carry	20%	30%	+10%
Public transport is too unreliable	18%	15%	-3%
I would have to deal with multiple services to get where I need to	18%	20%	+2%
I find public transport stressful	15%	12%	-3%
It's too expensive	12%	15%	+3%
I was travelling with others (children, pets, elderly etc)	11%	12%	+1%
I don't feel safe	9%	6%	-3%
I prefer to get some exercise	6%	18%	+12%



Convenience still reigns as the top barrier for those living in cities with more public transport infrastructure

Those living in Wellington or Auckland less often feel a lack of public transport is preventing them from getting on the bus or train. Aucklanders were significantly more likely to say Public transport is too expensive.

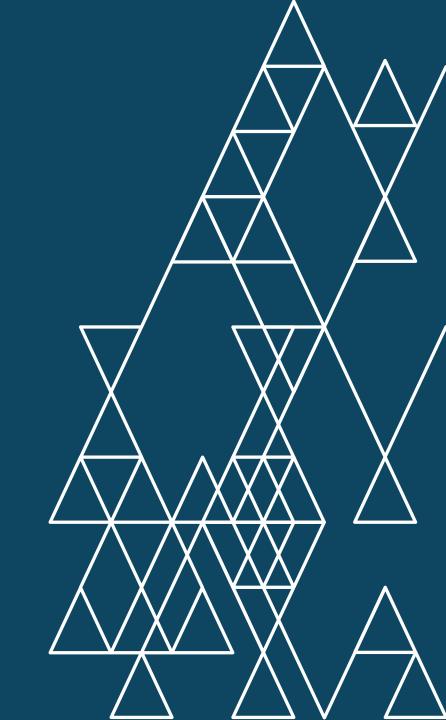
Barriers to Public transport (Auckland, Wellington vs Total sample)

	Barriers to usage (Auckland total sar	mple) vs NET	Barriers to usage (Well	ington total sample) vs NET
It wasn't convenient for me	48%	+2%	55%	+9%
It takes too long / there are faster alternatives	40%	+5%	40%	+5%
I had too much to carry	25%	+4%	24%	+3%
Lack of public transport in my area	21%	-6%▼	11%	-16%▼
Public transport is too unreliable	21%	+3%	19%	+1%
I would have to deal with multiple services to get where I need	21%	+3%	14%	-4%
It's too expensive	18%	+6%▲	9%	-3%
I find public transport stressful	15%	=	18%	+3%
I was travelling with others (children, pets, elderly etc)	10%	-1%	17%	+6%
I don't feel safe	10%	+1%	7%	-2%
I prefer to get some exercise	8%	=	11%	+3%
^ ^				





EV attitudes and uptake



Ownership of Non-ICE vehicles has been steadily increasing over time

89%

89%

86%

Hybrids, Battery Electric Vehicles (BEVs), and Plug-in Hybrid EVs (PHEVs) are becoming increasingly common. Internal Combustion Engine (ICE) vehicles are slowly declining.

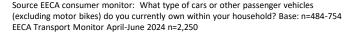
Car ownership over time

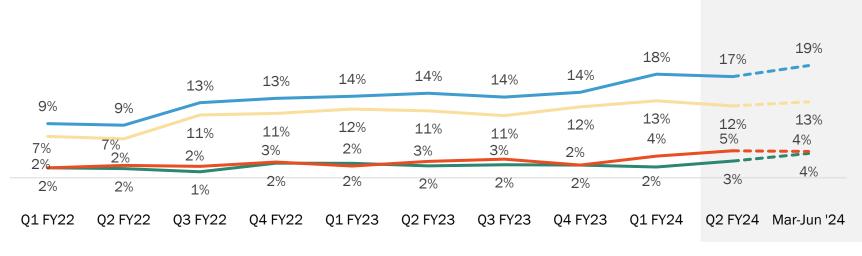
---NET: ICE

NET: Non-ICE

Hybrid

---PHEV





88%

86%

85%

85%

81%

85%

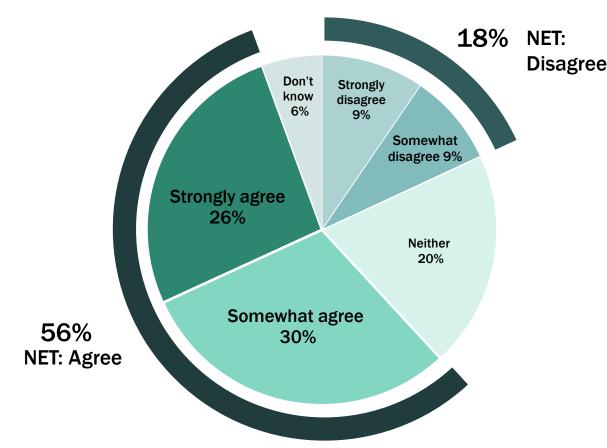
86%

87%



And the majority of New Zealanders support investment in public charging infrastructure

Agreement with 'The Government should continue to invest in public EV chargers'



Even among those who don't own an EV, just over half support further investment in the charging network. Nearly nine in ten EV owners are in favour

% Agree / Strongly agree with statements by would vs wouldn't' consider BEV (Non-BEV owners)

	Non-BEV owners	BEV owners	Gap	
The Government should continue to invest in public EV chargers	55%▼	88%▲	26%	



Although ownership is increasing gradually over time, consideration for both BEVs and PHEVs decreased significantly since the end of last year

This downward shift is likely a result of the Clean Car Discount ending in December 2023.

People's 'consideration set' is narrowing in recent times, with signs consumers are less willing to take the leap to new technology and defaulting to the familiar / more 'tried and tested' of ICE vehicles.

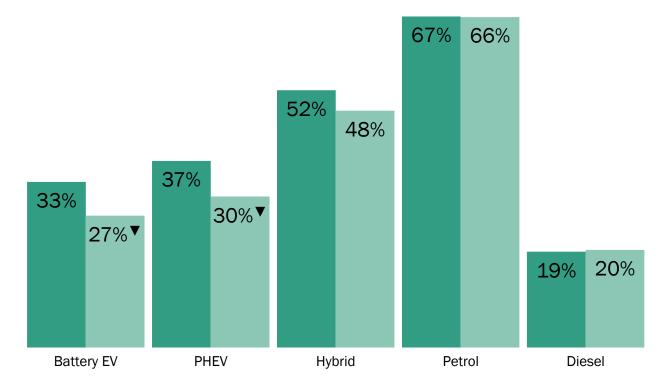
CAR_CONSIDER. There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?

Base: EECA Transport Monitor April-June 2024 total sample n= 2,250, EECA Consumer Monitor April-June 2024 n=698



Future purchase consideration across different vehicle types

(T2B Very likely + Likely to consider vehicle for next purchase)

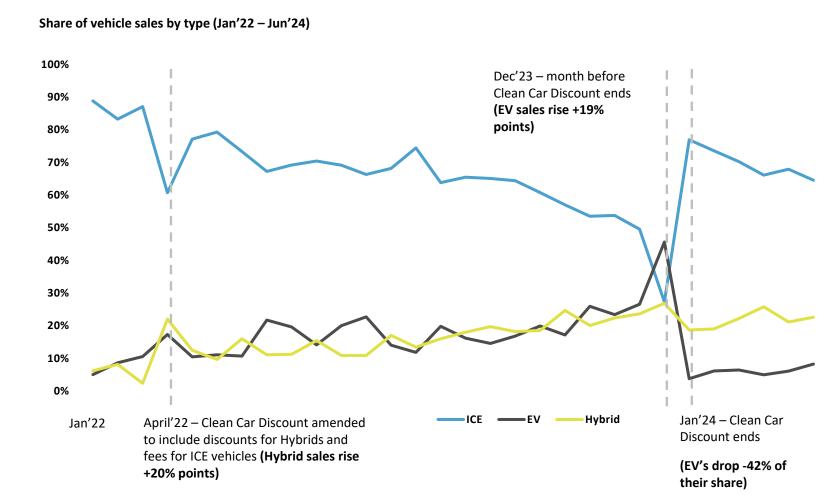


■ Q2 FY24 ■ Mar - Jun'24

Men, under 55's, and those living in Auckland are significantly more likely to say they'd consider buying an electric vehicle for their next purchase

There's clear evidence that the Clean Car Discount has had a huge influence on vehicle purchase behaviour

The landscape for EV purchases has changed drastically. Many who might otherwise have purchased an EV in 2024 rushed to get one before the feebate ended, leaving a drought of purchases this year. Amidst lowering consideration and tightening budgets, the start of this year saw EVs holding the lowest share of vehicle sales since 2021 levels.



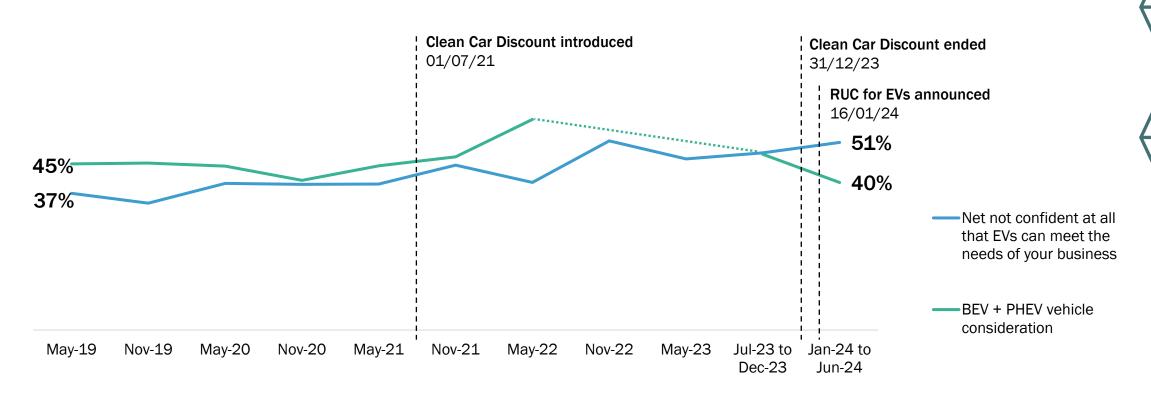
Source: MIA sales data



We've seen a similar risk averse behaviour among businesses, with consideration towards EVs at an all-time low

EV consideration and confidence (**EECA** Business Monitor)

Base: n=500-1026





EV_CONS: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next decision on the type of company vehicles you will use, how likely are you to consider the following vehicles for some or all of your fleet?

EV_CONFIDENCE: To what extent are you confident that Electric Vehicles can meet the needs of your business?

And there's a general upwards trend of perceived disadvantages towards EVs among New Zealand consumers

Perceived disadvantages of EVs (Non-BEV owners)

		Q2 FY24
They are not available at an affordable price	59%	-4%
Uncertainty about the battery lifespan and replacement	58%	+5%
They have a driving range that is not suitable for long distance travelling	41%	+3%
There are not enough public chargers available	39%	-2%
It takes a long time to charge them	35%	+5%
They are not "tried & trusted" yet	29%	+2%
I'm unsure about their environmental benefits	25%	+1%
I don't know enough about them to consider them	25%	+5%▲
They don't perform as well as petrol cars	17%	=
They have a driving range that is not suitable for my typical day-to-day needs	16%	+1%
There is not a wide range of body types / models available	14%	-2%
There isn't the vehicle type to meet my needs	13%	+2%
They are not easily found for purchase	10%	-1%
Something else	9%	+1%
None of the above	6 %	+2%

Change vs

EV_BARRIERS "And which, if any, of the following do you think are drawbacks to electric vehicles?"

Base: EECA consumer monitor Q2FY24 Don't own BEV or PHEV n=360, EECA Transport Monitor AprilJune 2024 Don't own BEV or PHEV n=2,153

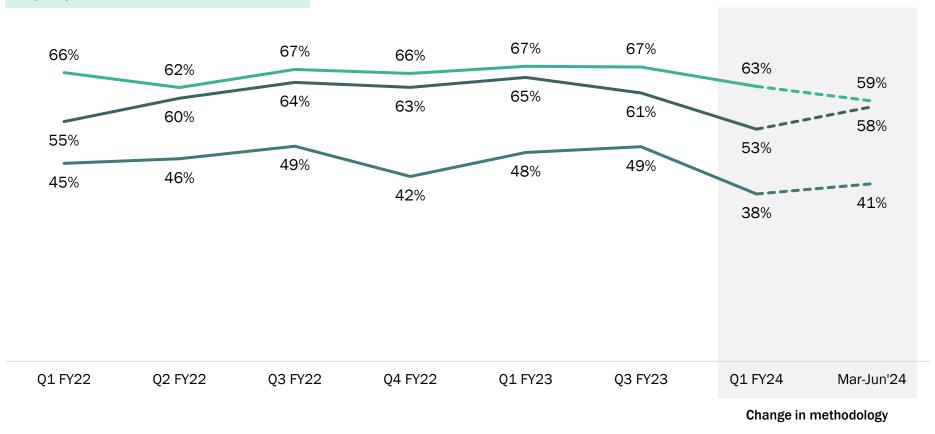


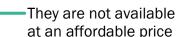
Cost concerns and battery lifespan have been persistently high barriers over time

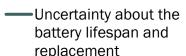
Driving range is consistently perceived as a lesser barrier to battery-related concerns.

Although affordability remains the top concern, this barrier has trended downwards over the past year.

Top 3 perceived barriers over time







They have a driving range that is not suitable for long distance travelling



Perceived advantages of EVs have also weakened over time

Being quiet while driving, producing less emissions, charging independently of petrol companies, and being cheaper to maintain have all seen significant decreases.

 $4.3 \rightarrow 3.1$

Mar-Jun'24 Q2FY24

EV_BENEFITS: Which, if any, of the following do you believe are benefits of electric vehicles Base: EECA Consumer Monitor April-June 2024 Owners of petrol or diesel vehicles n=332, EECA Transport Monitor April-June 2024 Owners of petrol or diesel vehicles n= 1.891



Perceived advantages of EVs (Non-BEV owners)

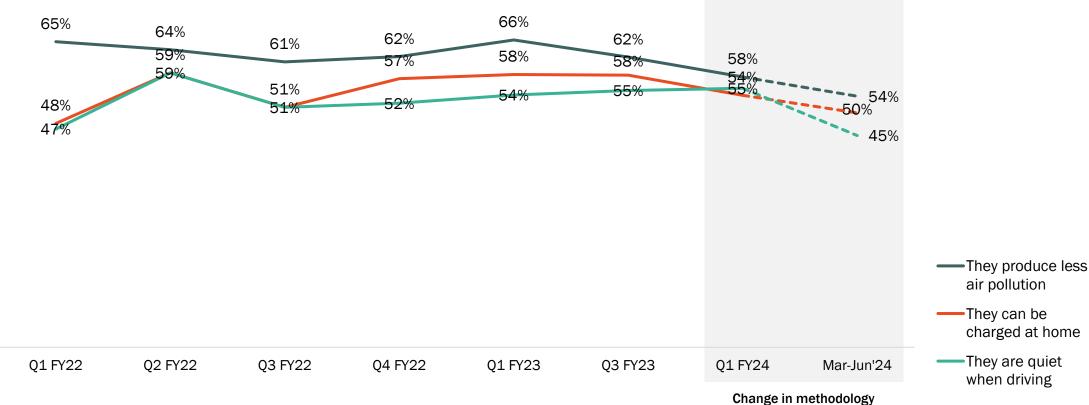
■ Environmental benefit
■ Personal benefit

			vs Q1FY24
They produce less air pollution	54%		-5%
They can be charged at home	50%		-5%
They are quiet when driving	45%		-12%▼
They produce fewer greenhouse emissions	43%		-7%▼
They're cheaper to run	43%		-4%
They use renewable energy	36%		-1%
They can be charged independent of petrol companies	29%		-12%▼
They use an innovative technology	27%		-4%
They're cheaper to maintain	20%		-7%▼
They accelerate faster than petrol cars	14%		0%

We've seen the top perceived advantages of EVs soften over the past year

Perceptions of these advantages have decreased to levels similar to those seen in 2021-2022

Top 3 perceived advantages over time



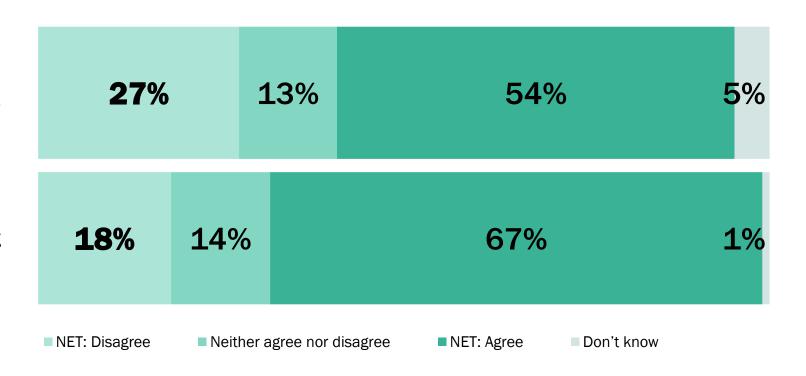


Among those who own an EV, just under 1 in 5 aren't convinced of their suitability for long-distance travel

EV charging attitudes amongst owners

There are enough EV public chargers in New Zealand to get anywhere I want to

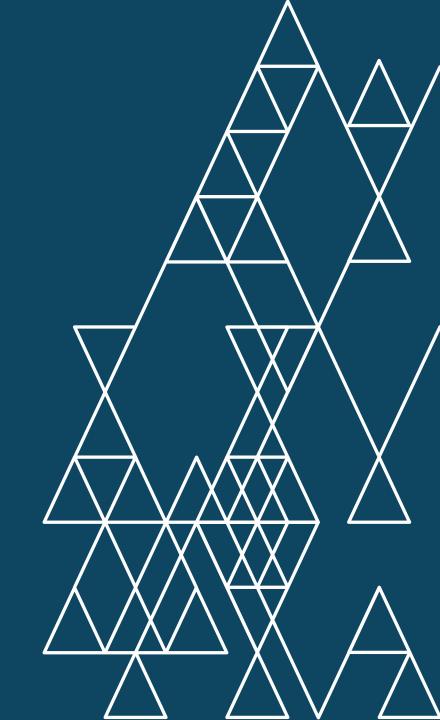
EVs are suitable for long distance travelling







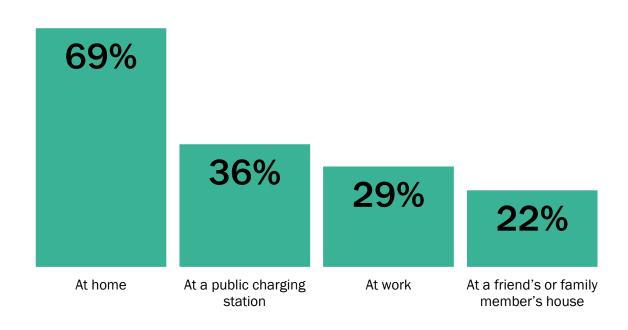
EV charging habits



Most EV owners are charging their cars at home using a 3-pin trickle charger

Usual charging locations for EV owners

And most seem to be either using – or have access to – a combination of charging methods. Three-quarters of owners have a 3-pin trickle charger, but only 47% use this method alone.



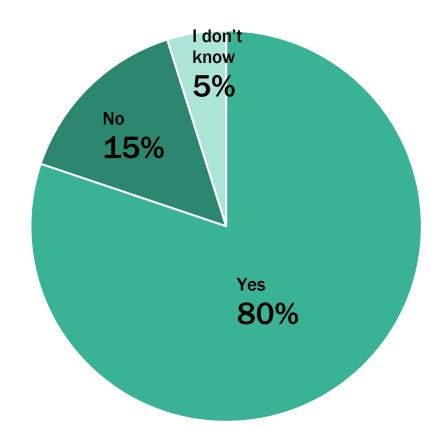
Charging methods at home	
3-pin charger	77%
Caravan charging	31%
EV charging unit	37%

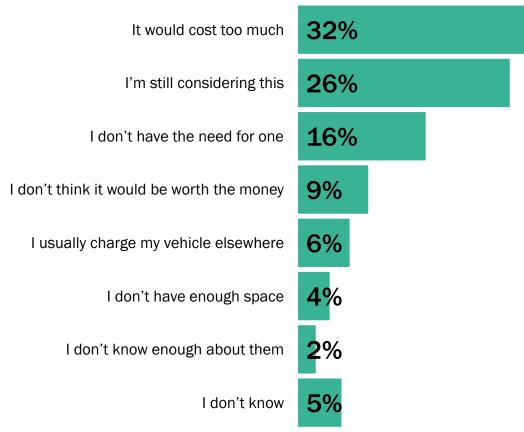


A wall-mounted charger is a viable option for 4 in 5 EV owners, but cost is the biggest barrier

Putting aside the cost of the unit and cost to install, would you have the option (space, authorisation to install etc.) for a wall charger at home?

Barriers to installing an EV charger (those who do have the option)

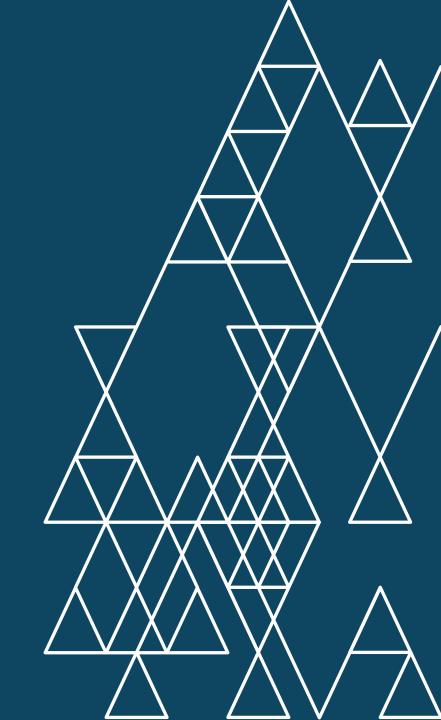








Bringing it all together



Bringing it all together

Car alternatives are a strong aspiration, how do we ramp up the convenience of alternative modes?

This is about mindset. But it's also about supporting infrastructure and potentially incentives.

Once people start using a car alternative, we can see their appetite grows to ditch the car more in future. It's a journey. How do we get more people to take that first step?

It's never been more important to fight against perceived EV barriers, and reinforce the positives

EV adoption is clearly sensitive to economic factors, especially with the recent removal of financial incentives.

The reduction in perceived advantages of EVs is noticeable compared with previous research, and financial constraints on New Zealanders may be influencing this.

In this context, it's crucial to communicate the longterm economic benefits for consumers; while the initial cost is higher, the investment can pay off over the longer term





Thank you.

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