

JUNE 2015

PREPARED FOR: AUCKLAND TRANSPORT

MEASURING AND GROWING ACTIVE MODES OF TRANSPORT IN AUCKLAND



The issue at hand



THE INCREASE IN AUCKLAND'S POPULATION WILL PUT SIGNIFICANT PRESSURE ON ROAD CAPACITY OVER THE NEXT 30 YEARS.

Given that, Auckland Transport are looking to invest in, and promote, active travel modes (walking and cycling) to relieve pressure on the roading network. This also has the added benefit of helping to improve the wellbeing of Aucklanders.

This study seeks to inform where investment and focus around active modes should lie by:

Understanding current behaviour around active modes

Understanding barriers and levers to achieving behavioural change

Identifying target groups to achieve change in

Today's Agenda

01.

Current behaviour
around active modes
of transport

02.

Understanding the
barriers and levers
to behavioural change

03.

Targeting population
groups to drive
behavioural change

04.

Bringing it
all together

What we did

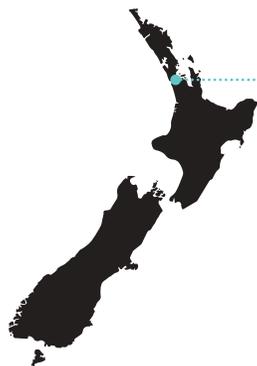
Stage 1

A Quantitative Survey

To understand behaviours and attitudes in relation to active modes and also the levers and barriers to active modes adoption.



A 15 minute online survey



- **ONLINE SURVEY:** n=1615
- **INCLUDING:** n=200 REGULAR CYCLISTS (cycling at least once per week)

Representative of the Auckland population
by age, gender and location (ward)

Stage 2

A Data Investigation

To understand the propensity to adopt active modes across Auckland's regions and identify where opportunities for growth exist.



- **USING 2013 CENSUS DATA FOR THE AUCKLAND REGION AS PROVIDED BY STATISTICS NEW ZEALAND**

.01

Current behaviour
around active modes
of transport

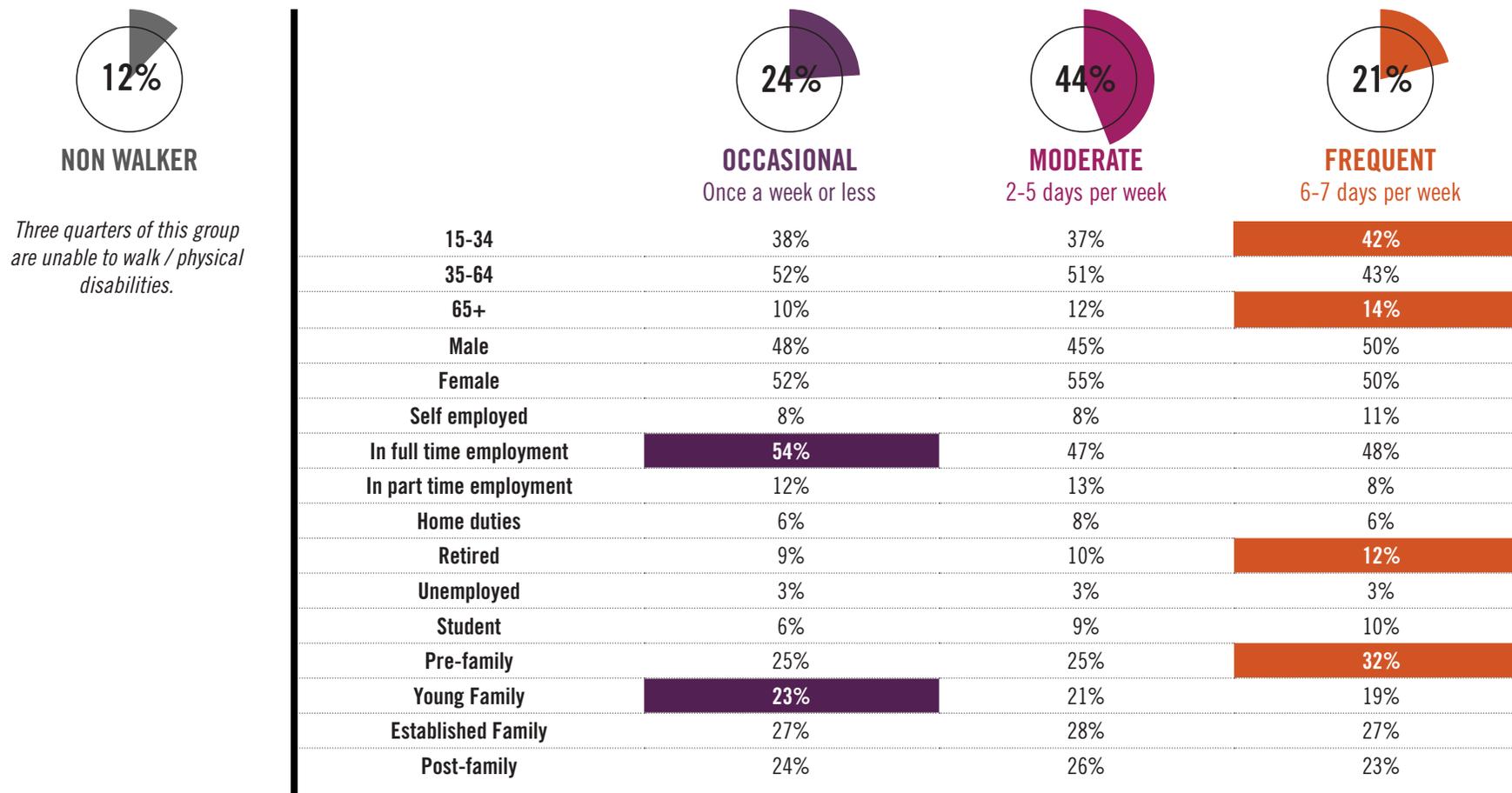


Who is walking?



Everyone is. The frequency with which you walk is not particularly about demographic factors. But it does appear to be about how much money and time you have on your hands.

% of Aucklanders

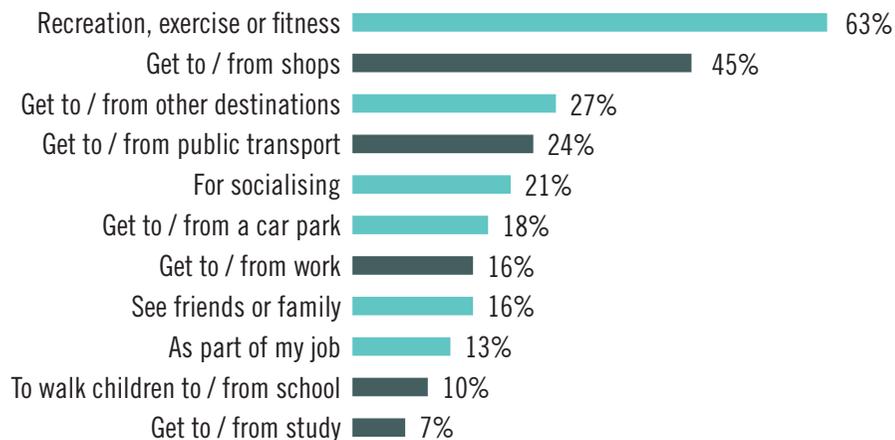


Base: B2. And how often do you walk (for ten minutes or more) for any reason? Total Sample
Demographics profiled by walkers of that frequency segment.

Why do people walk?

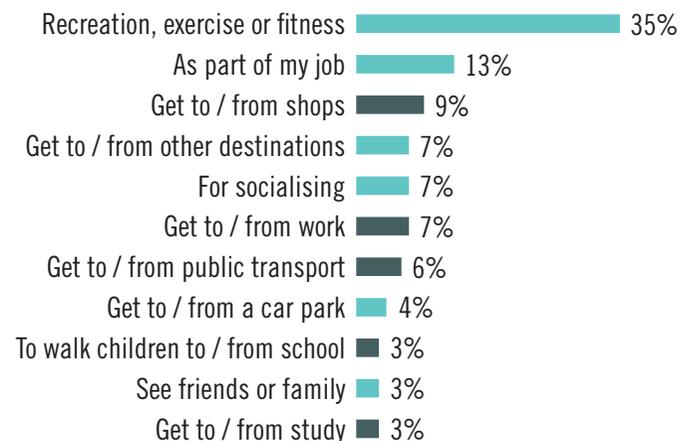


Occasions for walking



MOST ARE LOOKING TO WALK FOR RECREATION, EXERCISE OR FITNESS.

Share of walking time by occasion



THERE IS ONLY A LOW VOLUME OF TIME SPENT WALKING AS A SUBSTITUTE FOR PUBLIC TRANSPORT OR TAKING VEHICLES.

Walking to work is definitely about where you live



From Census data, we know those walking to work tend to be located close to commercial hubs, particularly the central city.

Put simply, the closer you are to your destination, the more likely you are to walk.



It is difficult to see any positive change in the overall pattern of walking in Auckland

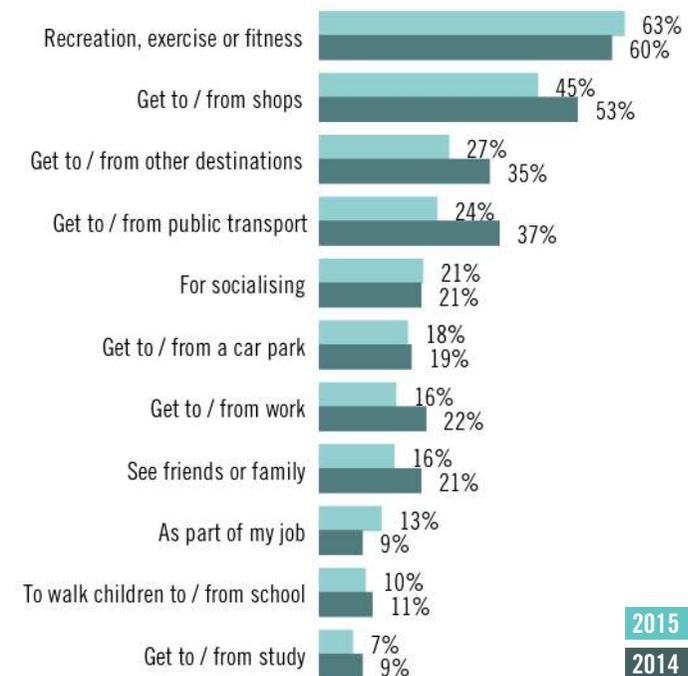


Our best efforts to compare suggest no positive change in the number of people participating nor the reasons for participation.

The number saying they regularly use walking as a way to get around Auckland has dropped from 46% in 2014 to 42% in 2015.

Further, the number saying they are walking for a reason other than exercise is declining.

Year on year



Base: A2. And which of the following do you regularly use e.g. once a week? Total Sample | B3. For which of the following reasons do you have these walks? Current Walkers | B7. On average, do you think you will be walking more or less in the coming year?

*Note 2014 data based on Normalised segment and Change segment (n=656)



While most engage in walking, this is often just about light exercise



Most Aucklanders are engaging with walking at some level.

However, walking as a mode of transport is often occasional and more for recreational purposes, rather than point-to-point travel.



As a mode of travel, it is much more for people with either an over-resource of time or an under-resource of money. Or for people who happen to live close to their ultimate travel destination. Largely the CBD or city fringe.

The core implication is that currently little walking is actually accounting for journeys which would otherwise be taken by car or public transport, and not necessarily relieving pressure of the roading networks. And nor is this situation changing over time.

A closer examination of barriers and levers is required to understand how behavioural change can be initiated.

What does the cycling landscape in Auckland look like?



27% of Aucklanders are cycling

ONLY 11% cycle on a regular basis (at least once a week). *This is the only group where cycling is used to replace any form of car/public transport use.*

% of Aucklanders



NON-CYCLIST
Never



OCCASIONAL
Less often



MODERATE
Once a week



FREQUENT
2 or more times per week

WHICH OCCASIONS?

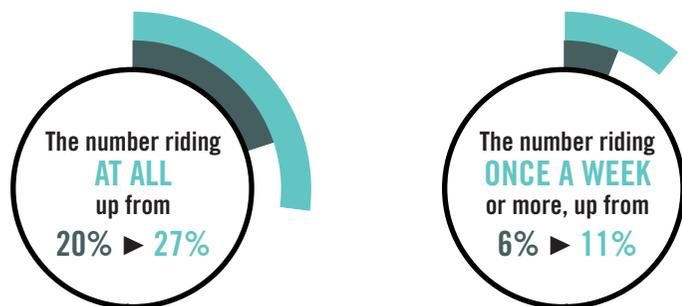
63% Exercise/fitness
61% Recreation

64% Exercise/fitness
50% Recreation
22% To/from shops
17% See family/friends
10% To/from work

73% Exercise/fitness
40% To/from shops
39% Recreation
34% To/from work
29% See family/friends
14% To/from study
10% Get to public transport

Base: A6. And how often do you use a bicycle for any reason? Total sample
A7. And for which of the following reasons do you ride a bicycle? Cyclists of that frequency segment.

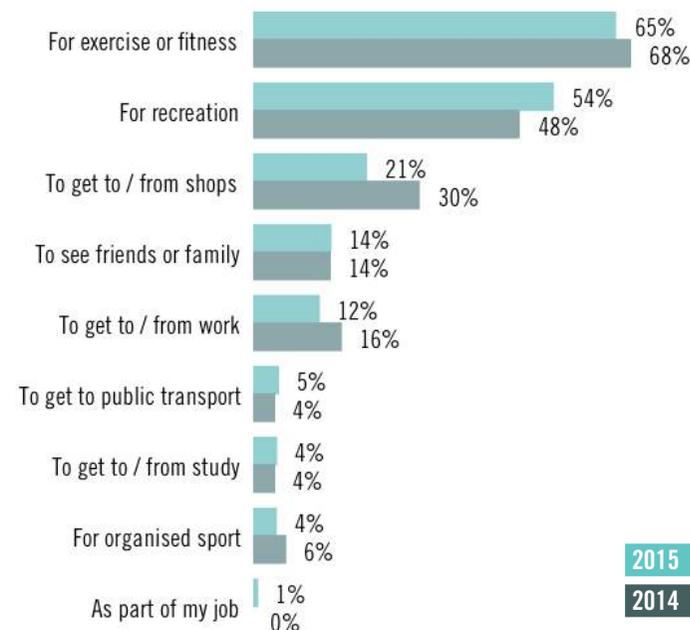
A growth in cycling from the previous measure



But from an occasion perspective, much of this growth is about **RECREATION.**

The proportion riding to get to work or to the shops is in decline.

Which occasions are cyclists doing?

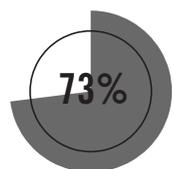


Base: A2. And which of the following do you regularly use e.g. once a week? This can be for any reason, including work, sport or recreation? Total Sample
 A7. And for which of the following reasons do you ride a bicycle? Cyclists.

A very definite demographic skew in those who are riding frequently



% of Aucklanders



NON-CYCLIST
Never



OCCASIONAL
Less often



MODERATE
Once a week



FREQUENT
2 or more times a week

	OCCASIONAL Less often	MODERATE Once a week	FREQUENT 2 or more times a week
15-24	14%	17%	15%
25-34	35%	23%	24%
35-44	22%	27%	26%
45-54	14%	13%	21%
55-64	10%	13%	10%
65+	6%	6%	5%
MALE	51%	79%	71%
FEMALE	49%	21%	29%

Base: B2. And how often do you walk (for ten minutes or more) for any reason? Total Sample
Demographics profiled by cyclists of that frequency.

Where do our current cyclists live?



Current cycling patterns are less concentrated than walking when we examine census data.

Inner city areas, where distance to the city centre is moderate, dominate. The key exception to this is the Whenuapai / Hobsonville area which show significant use of cycling due to the RNZAF base in the area.

And what is clear from geo-mapping, is that cyclists are predominantly based around areas with existing cycling infrastructure.





A niche transport method currently



Cyclists represent only a small group within the population, especially when we look at those who do it regularly.

And a very singular demographic – young and middle-aged males.

And while penetration and frequency of cycling is increasing, this growth is not occurring around occasions that would drive a reduction in car or public transport usage. Usage growth is all about recreation and fitness, which suggests we are benefiting from a fitness trend within a demographic.

What all of this suggests is that serious barriers are inhibiting other population groups from participating.

What is also interesting, is that usage is heavily related to infrastructure. Where cycleways exist, usage is higher. Again this suggests the presence of core barriers outside of these spaces that hold back wider participation.

.02

Understanding the
barriers and levers to
behavioural change



What drives adoption of desirable walking behaviours?



From the survey of Aucklanders, we can look at those who do walk frequently, and as a way of replacing car/public transport trips.

They are MORE LIKELY TO AGREE with some key statements about walking:

“I’m able to walk to work/study.”

“I’m happy to walk for longer than 10 minutes.”

“I have friends and colleagues who do it.”

“I enjoy walking.”

“I’m happy to be seen doing it.”

And more likely to OVER-INDEX ON THE FOLLOWING REASONS for engaging in the activity more:

Cheap, saves money

Convenient, close

Less hassle than parking

Good on a nice day (enjoy it)

Similarly, there are some attitudes around walking which hold others back



Looking at people who walk, but not as a replacement to car/public transport

“I’m not as able to walk to work/ study.”

“I can’t be bothered walking more than 10 minutes.”

“I don’t know others doing it.”

“I’m not as happy to be seen doing it.”

Essentially, for those not walking for the purpose of travel, there is less normalisation of the activity in their group and less motivation to travel further than a small distance on foot.

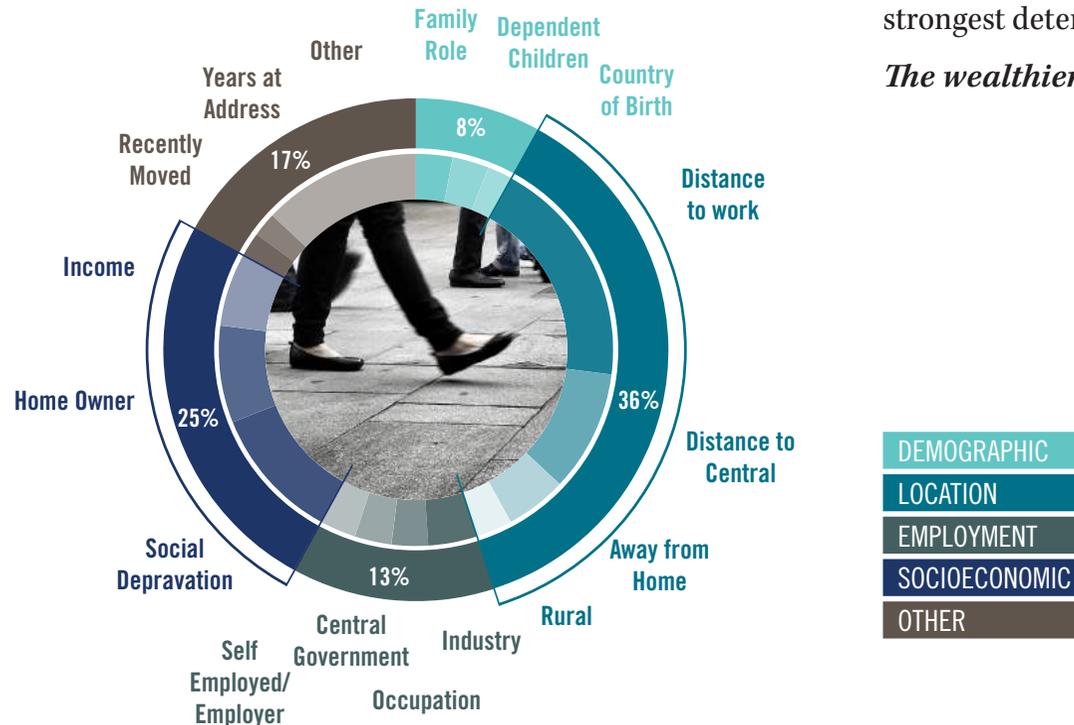


Can’t be bothered and not something that people like them do.

We can also use Census data to model what factors drive propensity to walk to work



Walking to work

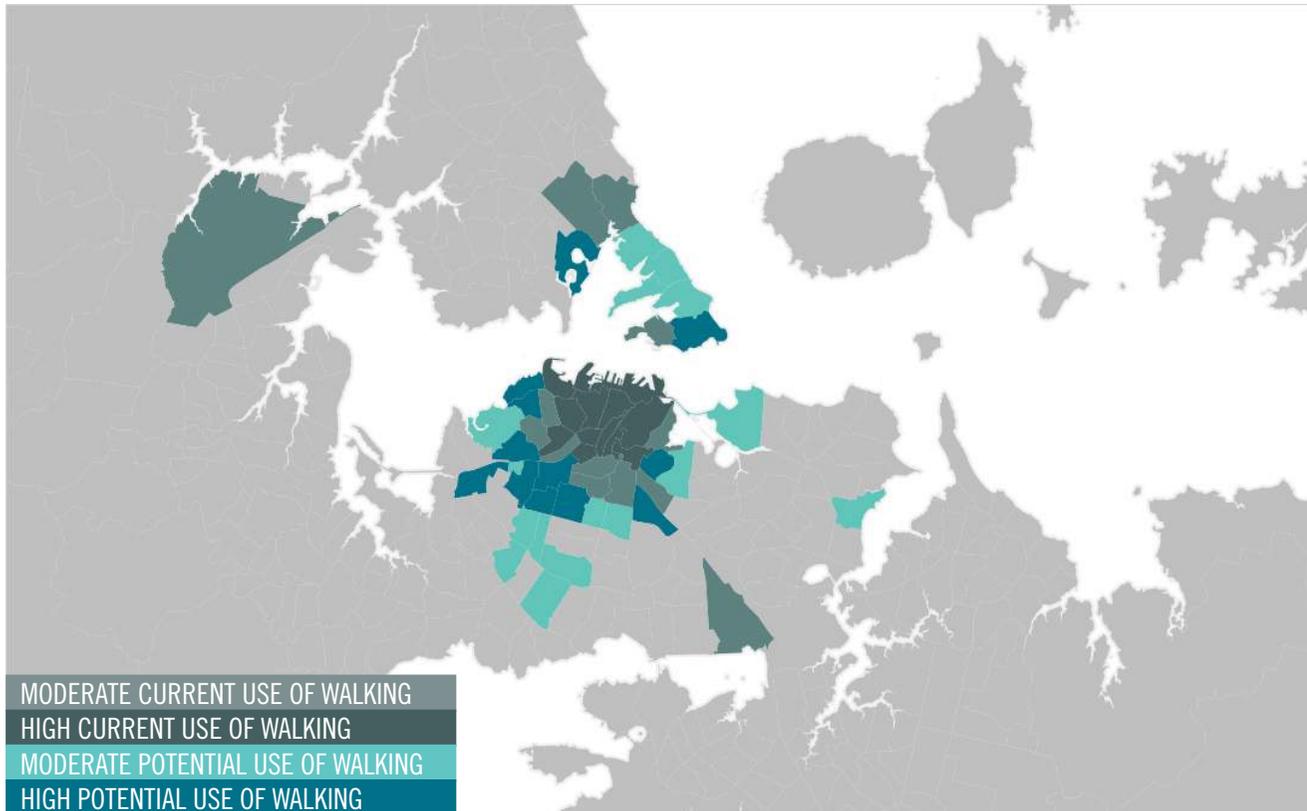


Distance to work, and proximity to the city are strong determinants of a current walker (travelling to/from).

But in addition, social deprivation comes through as one of the strongest determinants.

The wealthier you are, the less likely you are to walk.

We can geographically model propensity as well – growth will come from city fringe



The city centre offers little further growth.

Those in city fringe areas show the greatest potential for future activation.

While location drives a lot of their potential, an interesting barrier to overcome will be that of social deprivation (or lack of).



How do you get wealthy people in city fringe suburbs to walk?



Growth will come from confronting social imagery, removing effort



As a first cut, we must accept the reality of geographic barriers – only those near their destination will choose to walk it. And what that means for a lot of road replacement journeys is targeting Aucklanders near commercial hubs – particularly the central city.

But once this is removed, the real barrier that AT can look to address would seem to lie in the issue of persuading more affluent residents of city fringe suburbs, who don't have to walk, that this is an activity for them.

Normalising within their social strata. Making the behaviour aspirational in social terms beyond just the clearly present health benefits.

And potentially correcting notions of effort – how far is it to the centre from Grey Lynn or Parnell?

» Greater clarification of these levers will be required from qualitative work.

What drives adoption of desirable cycling behaviours?



Again, we can understand something about levers to positive behaviour from the survey.

Those who cycle frequently, for trips that replace car or public transport, agree more that:

“I have friends who also cycle.”

“I can avoid parking hassles.”

“It’s fun.”

“It saves money and time.”

“There are lots of cycleways available.”

Relative to walking behaviour, those using cycling as an active transport mode do see some real functional benefits – it saves not only *money* but also *time*. And it reduces hassle around parking. There are strong lifestyle impacts at play that could be further leveraged.

Interestingly, it is also about normalised behaviours:



Friends who cycle

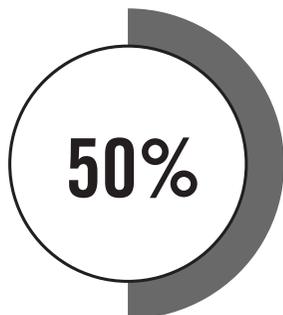


Visible cycle networks and infrastructure

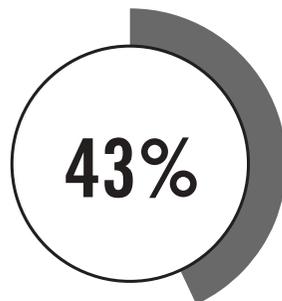
Similarly, there are some attitudes around cycling that hold others back



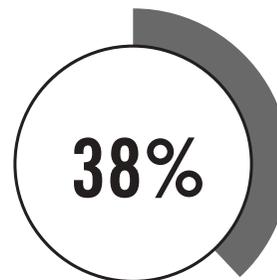
LOOKING AT PEOPLE WHO DO NOT CYCLE AS A REPLACEMENT to car/public transport, there are some clear attitudes present:



Don't feel safe because of how people drive



Not enough cycle lanes separating bikes from traffic



Don't feel safe cycling after dark

Relative to why people don't walk, the barriers to cycling are much less about emotional considerations (how I'll look, etc.) and much more about how safe people feel in the activity.



PEOPLE ARE SCARED TO CYCLE.

The safety aspect



WHEN ASKED HOW PEOPLE FEEL ABOUT CYCLISTS,
THE NUMBER ONE RESPONSE FROM EVERYONE WAS:



“They are brave for riding in Auckland traffic.”

A serious perceptual barrier exists regarding the relative safety of this transport method, which clearly bears up under increased usage.

Which is probably not unexpected when one examines the messaging that exists around this space in the media and social marketing.



NEWS | 'I thought I'd never see my baby' - Cyclist lucky to be alive



5:00AM Monday Jun 08, 2015 By Morgan Tait

... was taken to Auckland City Hospital in a critical condition ... the vehicle up enough for him to breathe, the 35-year-old Aucklander doubts he would have. Mr Redmond ... More

National - Front Page - Top Stories - Accidents

NEWS | Members of public tried to lift vehicle off trapped cyclist



6:55PM Wednesday May 27, 2015 By Morgan Tait

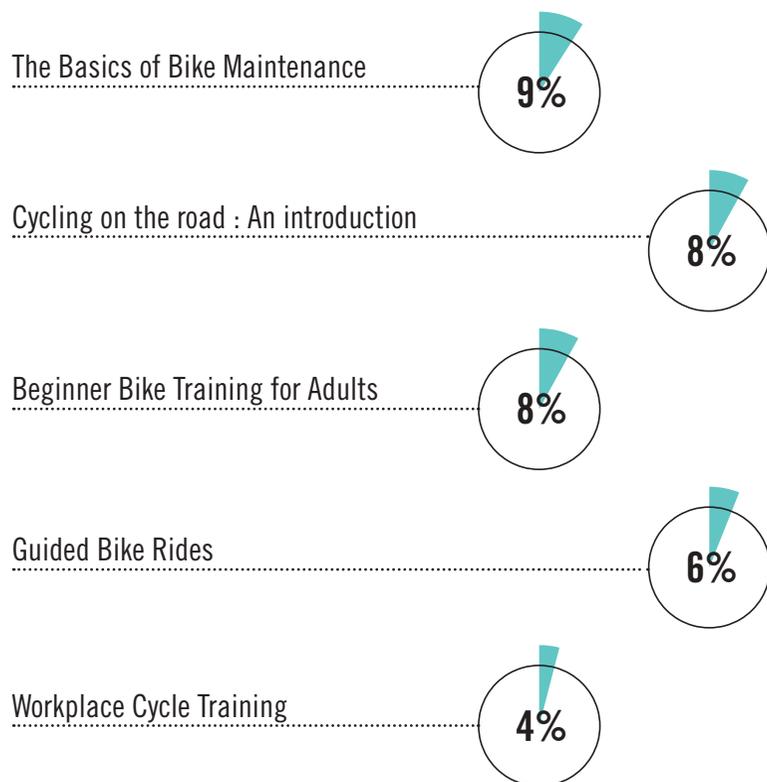
... As he lay trapped under an SUV, a cyclist critically injured in a car accident in central Auckland ... said the man was taken to Auckland City Hospital in a critical condition. Mr ... More

Road Accidents - Accidents - National - Front Page - Top Stories

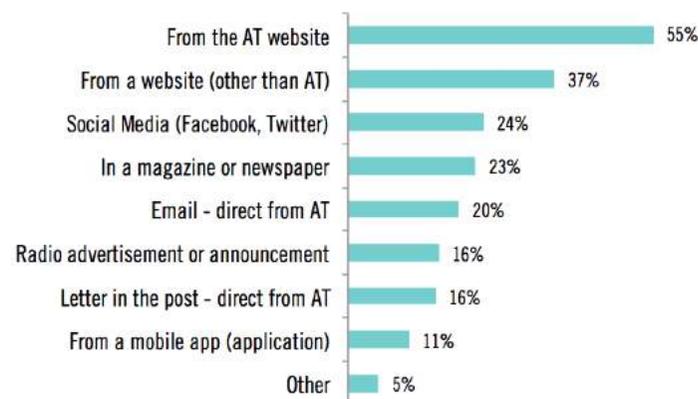
And while training courses are in place, only a select few are aware of these



AWARENESS OF INITIATIVES



INFORMATION CHANNELS



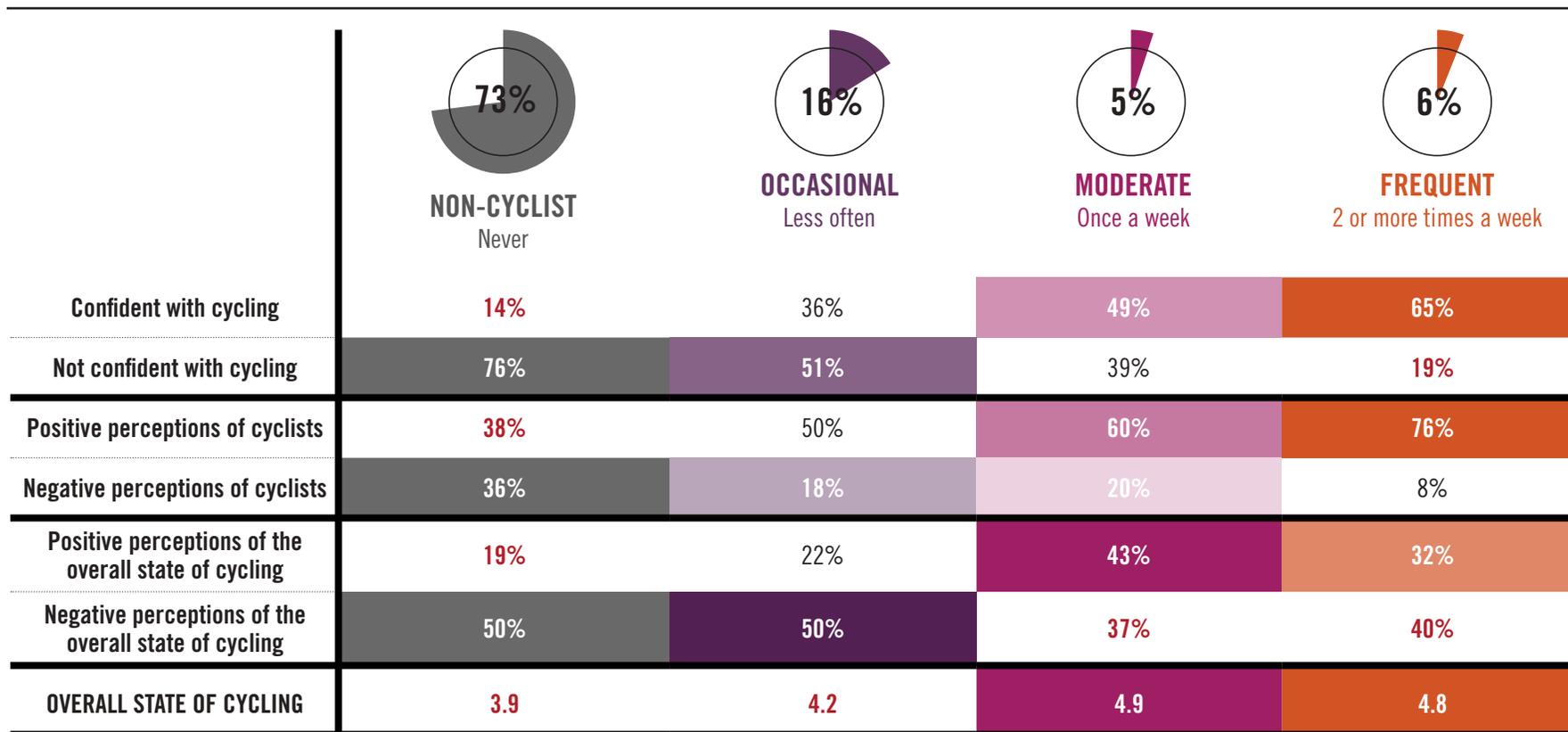
The web (both owned channels and others) is the current channel Aucklanders would expect to go to to get further information on cycling.

Base : A21. Auckland Transport offers a number of cycling-related training courses. Which, if any, of the following have you heard of? Total Considerers + Cyclists. | A19. If you were to search out or receive information about cycling, which of the following places would you go to, or expect to get cycling information from? Total Able Bodied.

Attitudes towards cycling and cyclists are quite mixed



% of Aucklanders



A5a. In general, how confident are you / would you be in riding a bicycle in the Auckland Area?

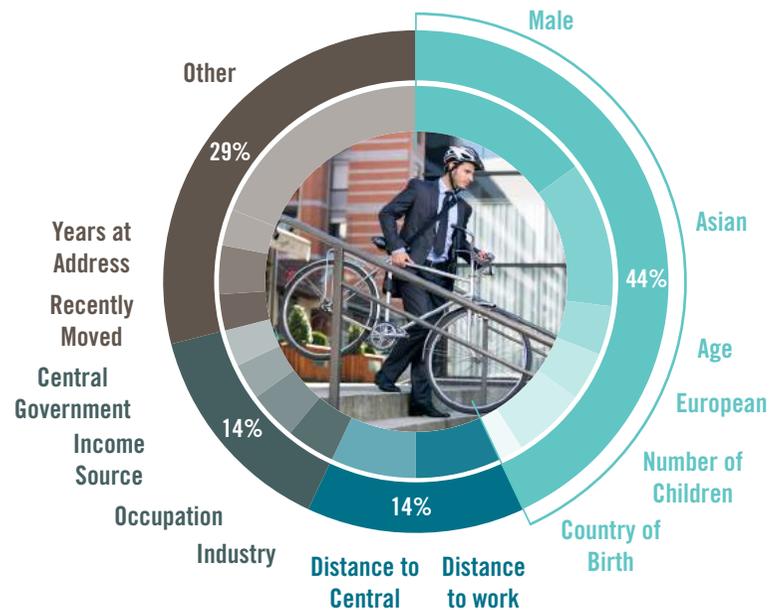
A13. What are your feelings when you think about the cyclists you see riding around around Auckland?

A24. Overall, how do you view the current state of cycling in Auckland? Total sample, by frequency framework.

What does the Census data tell us about the drivers of cycling propensity?



Biking to work



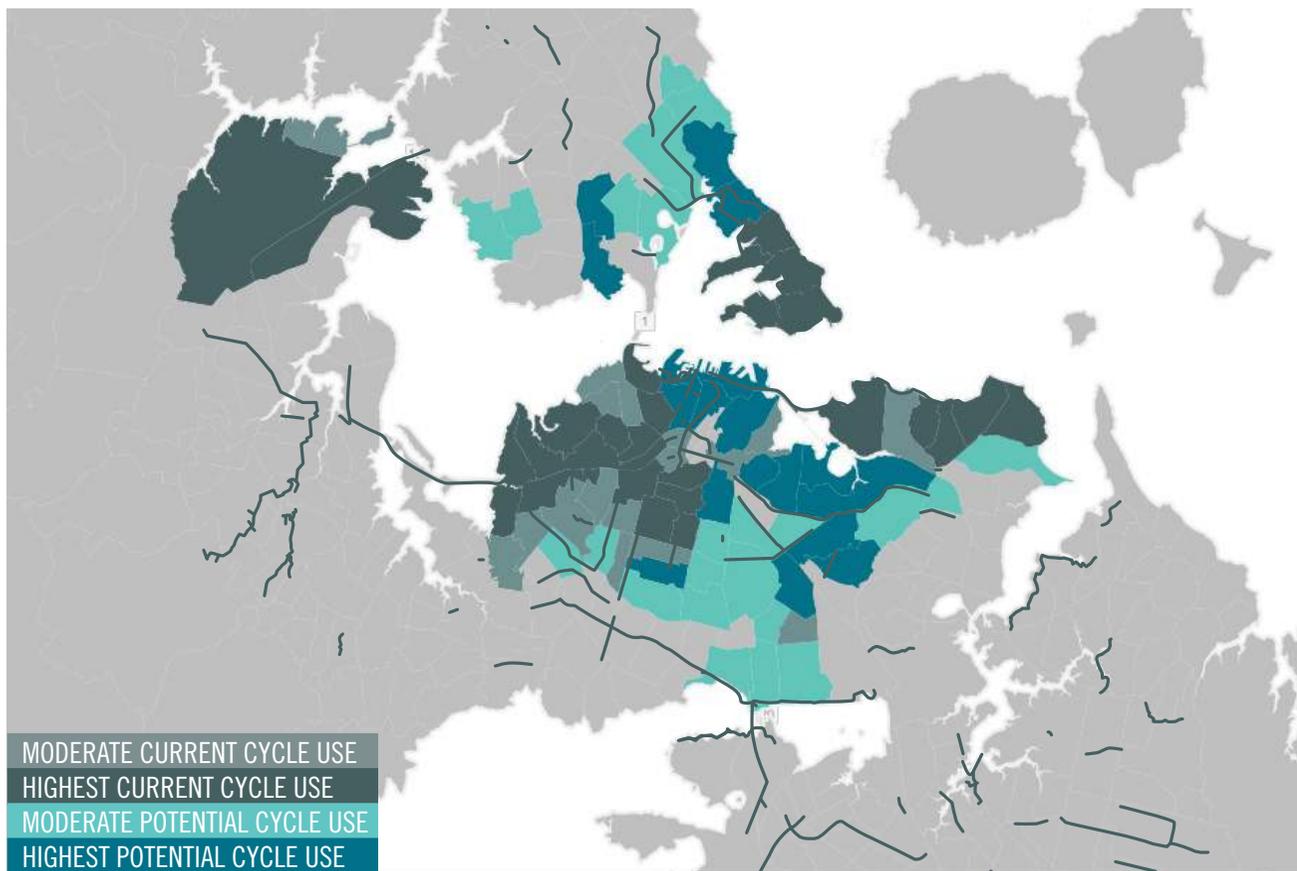
Almost half of all propensity to bike to work is linked to demographics. Male and European, and particular age brackets increases likelihood.

Female, Asian and having kids all lower dramatically the likelihood of cycling.

Location to work actually plays less of a role here and socio demographics are unimportant.



Infrastructure is key to current rates of cycling and potential growth opportunities



East and west of the central city show higher current rates of cycling likely due to better current infrastructure while the north/south commuter corridor shows potential for higher use.

The city centre has higher potential, but taking this would mean undermining walking behaviour to some degree.



Cycling marginalised by safety concerns

While cycling offers real benefits as a replacement to car or public transport use, and allows users to travel far greater distances than those on foot, it has far lower adoption by the general population, largely because of its perceived safety.

And this is probably a factor beyond just the perceptual as well – heavy cyclists are the most likely to admit it is dangerous. To achieve greater traction this will need to be addressed as a primary concern.

Cycle infrastructure is clearly a big part of what ‘normalises’ usage, and a clear indicator to users that safety is being addressed. Usage shows strong spikes where these networks are established.

How safety is tackled is something best understood via qualitative work. It would be interesting to understand more as to the role social marketing to motorists around sharing the road, and news outlet coverage on cycling, is playing in creating the sense of fear.

Working to get out of the European male 'ghetto'



Another barrier which might exist lies in the strong association of cycling with the male, European demographic.



More needs to be understood about what this singular image of who cycles is doing for wider adoption. Potentially this will be holding back wider adoption, as people lack reference points which suggest it is an activity for them.

We should also consider the growth of this segment over time as potentially more of the product of fitness and lifestyle trends working in our favour than any active adoption of cycling as a specific replacement to car and public transport travel.

.03

Targeting population groups to drive behavioural change



Sizing the opportunity in the walking market



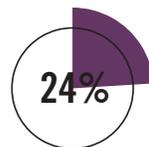
How many people could be walking to work, study or somewhere they regularly travel but they don't currently?

% of Aucklanders



NON WALKER

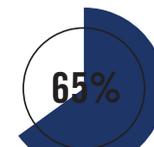
Three quarters invalid/unable to – no real opportunity.



OCCASIONAL

Once a week or less

16% of these available to walk more on regular journeys



REGULAR

At least twice a week

5% say it is possible but they don't currently

7% of Aucklanders could be walking to regular locations but they are not currently doing so. 80,939 people
This is the group that we need to target and better understand.

The potential 'walker' – who they are



	Total population	Opportunity Group
15-34	37%	42%
35-64	49%	55%
65+	15%	4%
Male	48%	53%
Female	52%	47%
Self employed	9%	7%
In full time employment	47%	54%
In part time employment	11%	12%
Home duties	7%	9%
Retired	13%	4%
Unemployed	4%	1%
Student	8%	11%
Pre-family	26%	24%
Young Family	13%	14%
Established Family	34%	41%
Post-family	28%	21%
HH Income Under \$60K	27%	27%
\$60K - \$99K	25%	24%
\$100K - \$149K	18%	15%
\$150K +	10%	14%

	Total population	Opportunity Group
NZ European or Pakeha	61%	55%
Maori	6%	5%
Samoan	3%	6%
Other Pacific	3%	4%
Asian	20%	25%
European	8%	7%
Other	4%	7%

As Census modeling suggests, little about walking is defined by demographics.

Full time workers are the target.

Family life-stages.

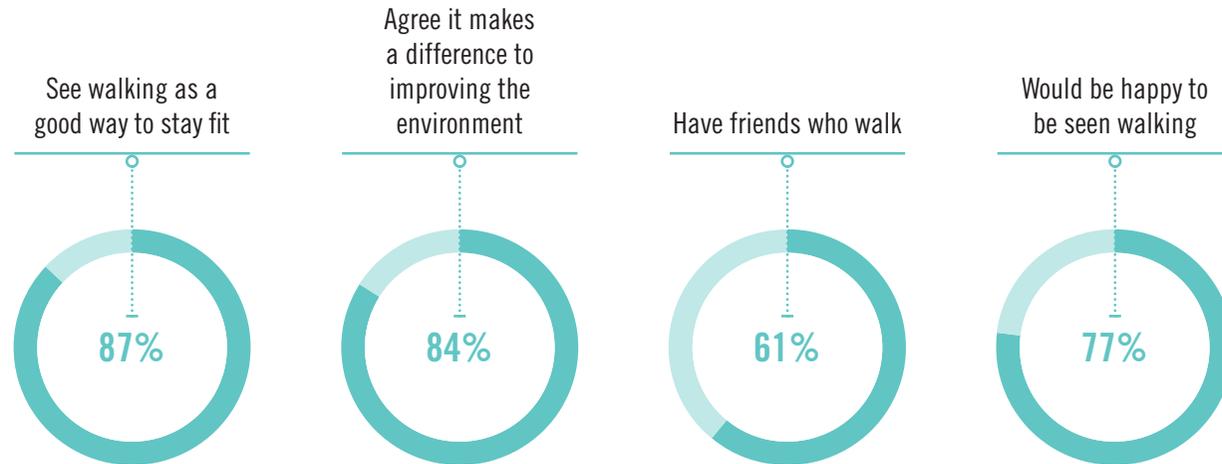
High incomes.

Pacific and Asian.

The potential 'walker' – their key motivators



Like most walkers, our target group are motivated by the fitness and exercise benefits. There is also a sense that walking is fairly normalised within their social circle.



The issue is possibly more that there aren't any specific motivators *beyond* these. And that this group aren't any more motivated by these ideas than the population generally.



WHERE WE SEE MORE WALKING CURRENTLY, SECONDARY BENEFITS EXIST – *IT SAVES MONEY, IT SAVES HASSLE, THEY ENJOY WALKING.*

The barriers are all about motivation



They know walking has health benefits, the issue is more their motivation to increase their walking.

Far less likely to happily consider walking more than 10 minutes

Can't be bothered to walk journeys of >10 mins on foot

Far less likely to find walking enjoyable

Unsure about personal security

At heart, they don't find walking enjoyable, despite the benefits it brings. Indeed some aren't even sure how safe walking is.



THERE IS A LACK OF REAL NEED PRESENT CURRENTLY.

B13. How strongly do you agree or disagree with each of the following statements about walking in Auckland?

(Nett Agree). Opportunity group.

B16. Which, if any of the following would encourage you to walk more often or for greater distances?

The opportunity for growth in walking



WHAT IS THE OPPORTUNITY FOR GROWTH?

- » 7% of the adult population have a regular trip they could walk but don't. 80,939 Aucklanders.
- » Get 1 in 10 of these people to start and we would convert ~ 8,000 regular trips to foot.
- » Assume a frequency of 3 trips per week and this equates to **1.2m trips per annum.**

WHO IS THE TARGET MARKET?

- » Full time workers living in city fringe suburbs, Albany and Manukau.
- » Higher socio-economic groups.
- » Families.
- » Pacific and Asian.

WHAT ARE THE CORE BARRIERS TO GROWTH?

- » Low motivation to walk more, not much enjoyment in walking.
- » No real need.

WHAT ARE THE CORE LEVERS?

- » Motivated by fitness and physical benefits.
- » Amongst current heavy walkers, benefits exist around saving money, saving hassle with parking and the pure enjoyment of walking.

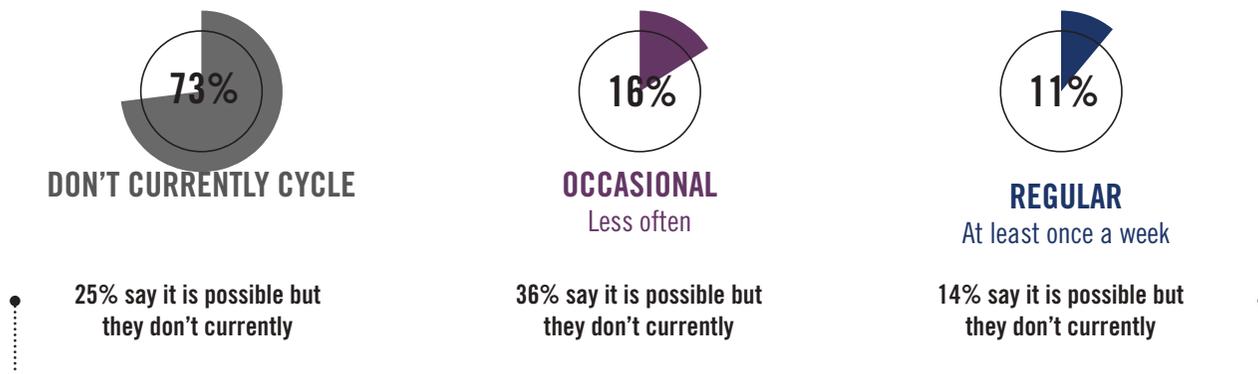
A REAL REQUIREMENT FOR DEEPER INSIGHT INTO BARRIERS AND LEVERS THAN CAN BE DELIVERED VIA A SURVEY.

What is the size of the opportunity in the cycling market?



We look at whether it is possible for them to cycle to work, study, or somewhere they go regularly but they don't currently.

% of Aucklanders



It is possible for 26% of Aucklanders to cycle for point-to-point journeys who are not currently doing so. 293,276 people.

Factor in cycle ownership, we can take this number down to 258,136.

The potential 'cyclist' – who they are



	Total population	Opportunity Group
15-34	37%	51%
35-64	49%	44%
65+	15%	5%
Male	48%	52%
Female	52%	48%
Self employed	9%	4%
In full time employment	47%	52%
In part time employment	11%	13%
Home duties	7%	7%
Retired	13%	3%
Unemployed	4%	3%
Student	8%	15%
Pre-family	26%	33%
Young Family	20%	22%
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\$60K - \$99K	20%	18%
\$100K - \$149K	14%	15%
\$150K +	8%	8%

	Total population	Opportunity Group
NZ European or Pakeha	61%	56%
Maori	6%	8%
Samoan	3%	5%
Other Pacific	3%	3%
Asian	20%	22%
European	8%	8%
Other	4%	5%



Younger men and women,
pre-family life-stage key.



Increased ethnic diversity
in the opportunity.

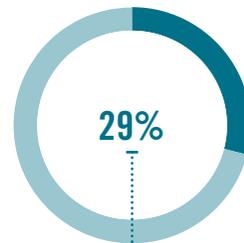
The potential 'cyclist' – what's holding them back



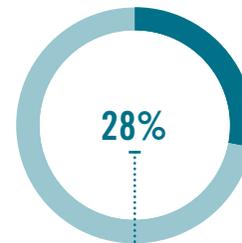
Of potential cyclists, just **31%** feel confident in riding a bicycle in Auckland. Part of this may well be due to how they ride their bike currently.



And attitudinally, this group have weak perceptions of the existing network and their relative safety on the road.



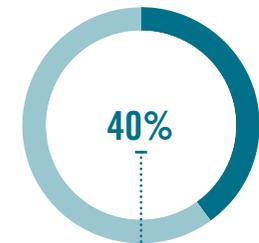
Just 29% agree that Auckland has a well connected cycle network



Just 28% agree that cyclists are sufficiently separated from traffic



Just 24% agree that there are enough cycle lanes in Auckland



40% don't think that motorists are considerate of cyclists

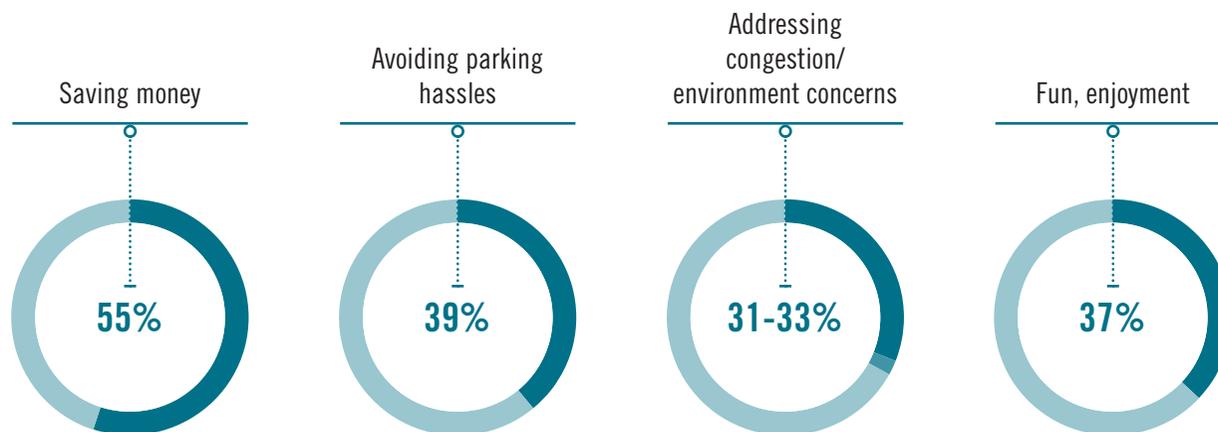
A8. Where do you usually cycle.

A26. How strongly do you agree or disagree with each of the following statements about cycling in Auckland?
Opportunity group.

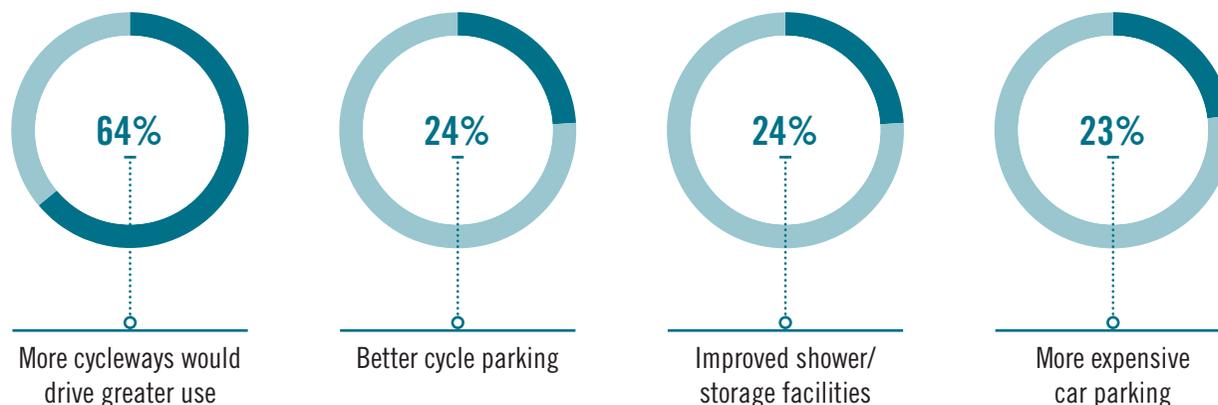
What would encourage greater use?



All see cycling as benefiting health, but beyond this a number of practical levers exist to drive cycling adoption within the target.



These would be further enabled with infrastructure additions:



A17. From the list below, which reason(s) contribute to you cycling or thinking about cycling more often?
 A18. Please tell us what changes would be most likely to make you consider cycling more? Opportunity group.

The opportunity for growth in cycling



WHAT IS THE OPPORTUNITY FOR GROWTH?

- » 23% of the adult population have a regular trip they could bike but don't. 258,136 Aucklanders.
- » Get 1 in 10 of these people to start and we would convert ~ 25,814 regular trips to cycling.
- » Assume a frequency of 3 trips per week and this equates to **3.9m trips per annum.**

WHO IS THE TARGET MARKET?

- » Younger, pre-family men and women.
- » Currently riding their bike for fun/short trips along footpaths, quiet roads and in parks.

WHAT ARE THE CORE BARRIERS TO GROWTH?

- » Low confidence cycling in heavier traffic. Safety concerns.
- » Lack of infrastructure off-putting. Both travel and storage/parking.
- » Potential also that wider middle-age white male image limiting cues on who rides.

WHAT ARE THE CORE LEVERS?

- » Save money, avoid parking hassles.
- » Improve environment.
- » The sheer joy and fun of cycling as a transport method.
- » Visible improvement in infrastructure.

A REAL REQUIREMENT FOR DEEPER INSIGHT INTO BARRIERS AND LEVERS THAN CAN BE DELIVERED VIA A SURVEY.

.04

Bringing it
all together



A significant opportunity, particularly in cycling to drive growth

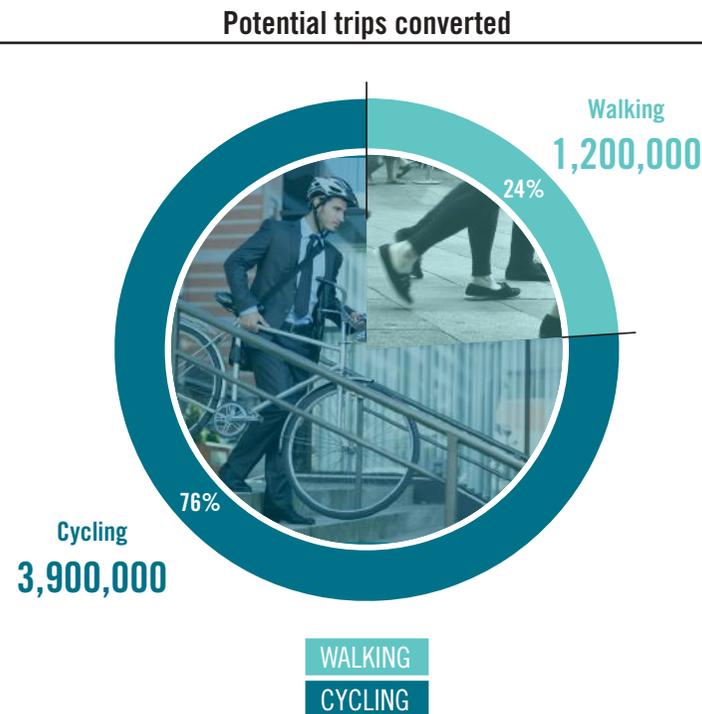


A clear benefit in saving money and parking hassles, particularly for younger travellers.

Allay safety concerns via infrastructure and clear cues on who cycles.

Convincing people who don't have to walk/ don't particularly want to walk to do so.

More information needed to understand where potential levers lie.



Thanks for Listening



Access to the Census data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the author, not Statistics NZ.