

Research note – pedestrian levels of service qualitative report

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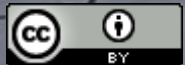
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Kantar was contracted by Waka Kotahi NZ Transport Agency in 2019 to carry out this research.



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A young child wearing a green t-shirt, blue shorts, white sneakers, and a dark blue cap with a white 'R' is riding a red balance bike on a brick sidewalk. The child is viewed from the side, looking towards the left. In the background, there is a crosswalk on an asphalt road. The right side of the image features a decorative graphic with blue and yellow-green diagonal stripes.

1

Background, objectives and methodology

Background to the research

There is currently a gap in terms of robust national models and tools that provide customer levels of service information regarding the 'walkability' of our pedestrian networks. Decision makers need better information from the perspective of people as pedestrians or public transport users, not just as drivers. The methodology developed in 2011 has not yet been validated for use across a variety of settings, including places with poor access for pedestrians.

Specifically, the One Network Road Classification (ONRC) currently lacks guidance on pedestrian customer levels of service or performance measures. Additionally current initiatives, such as South Auckland *Safe and Healthy Streets*, would benefit from better tools to assess the walkability of neighbourhoods to help prioritise improvements for pedestrians and public transport users and support the uptake of active transport.

To fill this information gap, a level of service methodology is needed that will be tested in the context of the South Auckland Safe and Healthy Streets programme to demonstrate its accuracy and usefulness. This research should provide a foundation for that methodology.

The customer level of service model is of interest to local government as well as to the Waka Kotahi investment decision makers. It will inform transport solutions contributing to the inclusive access, well-being and liveability, and healthy and safe people transport outcomes.

This research can be utilised to inform the ongoing development of updated ONRC performance measures and broaden these out to include customer levels of service measures relating to walking outcomes for customers. Furthermore, the research supports the requirements of the current Government Policy Statement on Land Transport.

The Kantar research was conducted in partnership with Abley transportation consultants. Abley undertook a literature review prior to this research which informed this piece of work. The customer priorities identified through the Kantar qualitative work outlined in this document have informed research report RR 667 – *Developing methodologies for improving customer levels of service for walking* available at www.nzta.govt.nz/resources/research/reports/667.

Kantar research objectives

The overall purpose of this part of the research is to identify transport customer priorities for a pedestrian network that people value and find attractive to use.

Specific research questions include:

- What makes for a good walking environment, from a customer perspective?
- How do customers differ in the priorities they place on different attributes of the walking experience?
- Why do people sometimes choose not to walk over relatively short distances?
- How does the walking experience affect the decision to use other transport modes, such as public transport?

This research will inform other research intended to generate a customer levels of service framework. This will feed into and extend the One Network Road Classification performance measures, directly supporting better outcomes for pedestrians but also supporting investment and funding decisions.

It will help decision makers in urban areas achieve intended outcomes of better access for transport users as well as connectivity between different transport modes, and improved attractiveness of urban areas for customers.

The research approach was designed with the following considerations

Outcome needs

Immediate use for two key Waka Kotahi projects:

1. One Network Framework (ONF) – requires a ‘modest⁽¹⁾’ number of network wide measurable pedestrian factors
2. Network Operating Plans (NOPs) – interested in mobility-based measures that are important to pedestrians and can be translated into operational measures

Also need a more detailed understanding of differences across different parts of the network and pedestrian types that can be developed into levels of service frameworks for urban designers, street designers and other transport projects. More perceptual based measures, if important to pedestrians, need to be identified as well, even if they can’t be robustly informed or inferred by datasets.

Note:

1. Modest indicated to be something like 7

Factors

Need to be customer derived, from the ground up, based on real pedestrian experiences.

However, should reference:

- 70 ‘factors’ identified in Abley literature review
- The needs/expectations/wants/desires provided by the Customer Experience and Behaviour team research
- 7 ONF outcome areas (confirmed in early July)

Scope

To include a variety of:

- Customer types (age, gender, deprivation index, occupation, walking habits)
- Environment types (using grid based on place and movement to define), but excluding pure rural
- Trip purpose (commute, first/last mile, school, personal business)
- Did not include non-walkers

Methodology

The research used an iterative qualitative approach involving the following three phases:

Phase 1: 'Light touch' immersion

The purpose of this phase was to provide valuable real life context for the group discussions and to help refine areas for probing and the appropriate language to use within the next phase of research to ensure customer centricity.

This stage involved 3 x half day immersions in Auckland, Napier and Oamaru across a range of pedestrian environments, identified by Abley

Within each location:

- Pedestrian behaviour was observed
- A small number of short 'in the moment' intercept interviews were undertaken with pedestrians about their 'in the moment' experiences
- Photos and short video clips were taken across a range of pedestrian walking environments and used as stimulus material in the group discussions

Please note, further detail about the methodology and the stimulus used in the groups / depths is included in the Appendix.

Phase 2: 6 x group discussions with the core pedestrian audience

The purpose of this phase was to gain deep insight into the walking experience facilitated by real 'in the moment' stimulus captured through a detailed walking diary during the week before the group discussions.

This phase involved 6 x group discussions with 5 – 6 respondents in each group and a total of 32 respondents. The groups were split across Auckland, Napier and Oamaru with 2 x groups undertaken in each location. The groups were structured around age with a younger (18 – 34 years) and older (35 – 65 years) group in each location.

Strict recruitment criteria were applied to ensure a mix of respondent demographics, walking frequencies, trip type and pedestrian environments were included across the sample. Prior to the group discussions, each respondent completed an in-depth written and photographic diary capturing two pedestrian experiences across a range of pedestrian environments and trip types. These diaries were analysed prior to the groups and the photos used as stimulus material within the groups to prompt respondents' memories. Photos and short video clips of five different pedestrian environments were also used as stimulus during the groups. The group discussions were 2.5 hours in duration and respondents were given incentives in appreciation of their time and contribution.

Phase 3: 6 x targeted deep dives with youth and the elderly audiences

The purpose of this phase was to capture the perspectives of a wider pedestrian audience using a methodology that suited their needs, and to provide the confidence that the main pedestrian needs and priorities have been captured.

This phase involved 6 x extended individual in-depth interviews including an accompanied walk at the end. Interviews were held in Auckland and Oamaru. The interviews were split between the following two sub-groups:

- 3 x paired interviews with youth aged between 13 – 14 yrs
- 3 x elderly aged between 65 – 75 yrs with no specific mobility related issues

Across the two sub-group samples, strict criteria was applied to ensure a mix in terms of walking frequency, trip type and pedestrian environments was included.

Prior to the group discussions each respondent completed an in-depth written and photographic diary capturing one pedestrian experience across a range of pedestrian environments and trip types. These diaries were used as stimulus during the interviews to prompt respondents' memories. Photos and short video clips of five different pedestrian environments were also used as stimulus during the depths. The interviews with youth were 1.5 hours in duration (including the accompanied walk) and the interviews with elderly were 2 hours in duration.

Methodology (cont'd)

Further detail about the recruitment criteria adopted to ensure a comprehensive mix of pedestrians were included in the research:

A mix of demographics	A mix of walking frequencies	A mix of trip type	A mix of pedestrian environments	A mix of regions
<ul style="list-style-type: none"> Gender Ages between 13 – 75 years Lifestage Living situation (i.e. living at home, renting, home owner) Occupation including students Household income Ethnicities 	<ul style="list-style-type: none"> All respondents walk at least once a fortnight for a minimum of 10 minutes and walk along a public street or footpath for at least 10 minutes of their walk Low frequency defined as one trip a week for at least 10 minutes on a footpath Medium frequency defined as one trip on 2-3 days a week High frequency defined as one trip on at least 4-5 days a week 	<ul style="list-style-type: none"> Commute (school/work) Personal business (local shops / appointments / friends houses etc.) Leisure / fitness (e.g. exercise, taking dog for a walk, fresh air...) The inclusion of some people within Auckland who walk first/last mile (e.g. those who use public transport as part of their journey and walk the first / last 10 minutes or so) 	<ul style="list-style-type: none"> Industrial area Busy main street (i.e. mix of retail / commercial) Reasonably sized roads with a mix of residential and commercial Local suburban streets City / town centres <p>* Definitions included in the Appendix</p>	<ul style="list-style-type: none"> Auckland, Napier and Oamaru were the agreed regions, giving a mix of metropolitan and provincial, North Island and South Island locations Mix of areas where people reside across each local region, e.g. central, suburban, rural

Methodology (cont'd)

The research approach was designed to be iterative as well as highly collaborative with both Waka Kotahi and Abley.

This enabled us to revise and adapt our approach as we went and to ensure the results met the needs of both Abley and Waka Kotahi.

What did an iterative approach involve?

The timing of each phase and each of the mini group discussions was staggered so that the project team could reflect on how each phase / group had gone and agree any changes in terms of areas to focus on in subsequent phases / groups.

At key stages during the research and especially during the fieldwork, we came together as a team to discuss:

- What we are learning?
- What's working well and not so well?
- Any gaps or areas we wish to probe more on?
- Changes we wish to make to the discussion guide

Methodology (cont'd)

Limitations to the research approach

Due to resource constraints, it was not possible to include all target groups within the scope of the research project. Important groups not able to be included were:

- Non-walkers. In terms of Levels of Service, it was felt non-walkers would not provide as much value as the other groups covered in the research.
- Rural audiences, although provincial audiences are well covered through Napier and Oamaru locations
- Pedestrians with mobility impairments

Risk management

A key risk identified for the qualitative phase was that the research would not get sufficient technical direction given that Kantar are consumer research experts, not technical transport experts.

The following strategies were implemented to mitigate this risk:

- Three Kantar researchers attended the face to face scoping meeting with Abley to ensure good understanding across the whole Kantar team
- Sign off of the scoping document as done by Waka Kotahi, Abley and peer reviewers
- Fortnightly meetings with Kantar, Waka Kotahi, Abley and steering committee representation provided regular updates on progress and ensure technical input and direction
- Abley observed the first group in Auckland to provide guidance and understanding to findings
- Kantar ran a workshop with Abley and Waka Kotahi to review the results before producing the final report



2

Barriers and motivators to walking

New Zealanders appear to be fairly wedded to their cars

While New Zealanders can see the benefits of walking, they often default to driving - it's the easy 'go to' option.

While walking is considered to be the healthier option there is a perceived time and place to walk. People are more motivated to walk for leisure rather than for a purpose as driving is just easier and more convenient.



There are many perceived benefits to driving:

- **Speed and convenience** - you can travel directly, via the quickest route, in your own time and on your own schedule, without any pre-planning or organisation
- **Independence** – no need to rely on anyone else or have to deal with other people
- **Practicality** – you can go to multiple destinations in one trip taking the quickest and most direct route, take others with you, take as much luggage as you need, go whatever the weather or time of day and you arrive in the same condition as you left
- **Accessibility** – you can go anywhere you wish to go at any time
- **Comfort** – you have your own space, have control over your environment, you are warm and dry, sitting down and it requires no physical exertion

By comparison, there are fewer downsides to driving but these are growing in significance:

- **Parking** – limited availability and high cost
- **Cost** – of running a car
- **Traffic** - congestion

The cost of owning and running a car will be prohibitive for some parts of society. In some areas such as busy metropolitan areas, issues around congestion (which in turn causes slower and unpredictable journey durations and parking) are being more widely recognised.

So what?

Where people consider walking (or walking combined with public transport) a feasible option (i.e. they can get to where they need to go relatively easily) the downsides to driving can encourage consideration of other modes of transports.

For many, walking is more attractive as a recreational activity than as a mode of transport

Many New Zealanders seem to have got out of the habit of considering walking as a mode of transport or it's just not a viable option.

While parts of society use walking as a regular mode of transport, particularly the younger population (pre driving and students who often can't afford to own and run a car) and the elderly, other parts of society often rely heavily on their cars to get themselves from A to B. For them life often feels too busy and time pressured to consider walking except as a form of exercise and recreation.

The benefits of walking are anchored in health and wellbeing:

- **Good for your body** – exercise and fitness, fresh air
- **Good for your mind** – relaxing, clears your head, time to yourself, slows down the pace of life, de-stressing, connection with the environment
- **Free** – costs nothing, saves money
- **Social** – companionship if walking with others, connection with local community



The perceived barriers to walking especially for the purpose of getting from A to B are many:

- **Inconvenience** – time consuming and therefore requires more planning
- **Inaccessibility** – too far to walk, can't get to where want to go even combined with public transport
- **Impractical** – can't do everything you need to do in one easy trip, can't take others, can't carry everything you need or uncomfortable carrying a bag, weather and time dependent (feel unsafe in the dark), have to take more stuff and carry it around with you for the rest of the day (i.e. coat / change of clothes)
- **Unenjoyable** – can be physically hard (hills), wet and cold or too hot / no shade, arrive sweaty and uncomfortable, boring / unsafe / unpleasant pedestrian environments

So what?

Because of the many downsides to walking, people often feel more motivated to walk for pleasure and recreation rather than relying on walking as a mode of transport to get from A to B.

Using public transport is also associated with many barriers which in turn further compounds the barriers to considering walking as a mode of transport

While the use of public transport is growing and is considered to be a 'good thing to do', for many it's not viewed as practical or convenient, or for some even a viable option, when compared to driving.

The benefits of using public transport include:

- **Cost effective** – no parking, saving fuel / the costs associated with running a car
- **Convenience** – don't have to worry about finding a carpark
- **Good use of time** – can use travel time in other ways i.e. listen to music, read a book etc.
- **Good for the environment / society** – contributing less to pollution, traffic congestion etc.

The downsides or barriers to using public transport include:

- **Unreliable** - delays
- **Inconvenience** – takes more time, requires more planning and organisation, on someone else's schedule, can involve multiple forms of public transport and / or changes
- **Inaccessibility** – too far to walk before or after public transport, can't get to where want to go, or route too indirect / complex it's not feasible
- **Cost** – can be quite expensive
- **Impractical** – can't do everything need to do in one easy trip, weather and time dependent if incorporates walking, limit to what can comfortably carry
- **Uncomfortable** – shared space with others and at peak times squashed, can't get a seat

Breaking down the purpose of walking into the following three categories helps us better understand barriers to walking

1. As a mode of transport

The purpose and focus is to get from A to B (could be combined with public transport).

For example, going to work, school, to an appointment, grocery shopping etc.



2. As part of a recreational activity

Walking is part of a recreational experience but not the focus / purpose.

For example, going shopping or walking up to the local café for lunch with friends / your partner at the weekend, an evening out in town etc.



3. As a recreational activity

Walking (or running) is the focus and the purpose in its own right.

For example, walking as a form of exercise and / or to relax, get some fresh air, connect with nature.



Walking as a mode of transport has the most barriers

1. As a mode of transport

The purpose and focus is to getting from A to B (could be combined with public transport)

For example, going to work, school, to an appointment, grocery shopping etc.



This is because pedestrians have the **least** amount of control over their pedestrian experience.

So what?

For people who choose to regularly walk to get from A to B, it feels like they are making more of an active decision based on strong feelings around health, cost, convenience and / or the environment.

Trip feasibility is also an important factor to consider, in that for many people it's just not possible for them to walk to work, school or to the shops due to proximity - it's just too far, and / or public transport is not available or a viable option.

These walking trips are characterised by the following which can all represent barriers to walking:

- When they go is more likely to be pre-determined
- They are on a time schedule and so may not be able to avoid walking in the dark
- The destination is pre-defined
- They have little choice around trip length
- It's harder to walk with others (as on their own schedule and route)
- Limited flexibility around the route and ability to avoid less pleasant pedestrian environments and gradients
- Inability to avoid poor weather and have to be prepared for changeable weather
- No control over reliability of public transport or complexity of trip (i.e. multiple changes of bus/train)
- More planning and organisation required
- Less control over what they wear (i.e. work attire, school uniform etc.) and the condition they need to arrive in (i.e. ready to work / presentable)
- Less control over what they need to carry

By comparison, walking as a recreational activity is associated with fewer barriers

This is because pedestrians have the **most** amount of control over this type of pedestrian experience.

So what?

Walking as a recreational activity is accessible to all and is an easy decision to make. It is typically motivated by the belief that getting out in the fresh air and walking is good for you.

Because of the flexibility around when, where, for how long and with whom, it's easy for people at all ages / life-stages to incorporate into their lives. It can be spontaneous depending on how they are feeling and it doesn't have to involve any pre planning or organisation. Unsurprisingly, walking as a recreational activity typically increases during the summer when the weather is fine / more predictable.

These walking trips are characterised by the following which removes many of the barriers associated with walking:

- They can choose when, where and how long they walk for
- They can choose pleasant environments to walk in (i.e. quieter and more attractive routes), avoid steep gradients
- They have the flexibility to time their walk around good weather as well as around others so they have company
- They can wear comfortable walking clothes and shoes, and get changed or have a shower when they get home
- They don't have to carry anything heavy

3. As a recreational activity

Walking (or running) is the focus and the purpose in its own right.

For example, going for a walk for exercise and / or to relax, get some fresh air, connect with nature.



The impact of pedestrian environment on walking behaviour

The pedestrian environment can act as a barrier or motivator to walking and therefore can influence the tendency and / or the frequency of walking.

Where the pedestrian environment is deemed unpleasant, such as a busy road with fast, smelly and noisy traffic, particularly where the pedestrian feels unsafe this will act as a barrier to walking.

“I tried taking the train to work but I had to walk along a really busy road which was horrible, cars flying past, I just didn’t like it. And then on the way home it was all uphill and I just couldn’t face it after a long day. So I drive”

Similarly, where the pedestrian environment is deemed safe, pleasant and attractive, with interesting things to look at along the way, this is likely to encourage walking.

So what?

A poor pedestrian environment impacts walking as a mode of transport most strongly as pedestrians have less ability to avoid unpleasant or unsafe roads, which will in turn put them off walking.

3

Priority factors for a positive pedestrian experience



Pedestrians' core need is to relax

Walking is all about relaxing.

Whatever the walking purpose, pedestrians are ideally looking for a pleasurable experience.

It's about getting out in the fresh air, looking around, enjoying and being stimulated by the environment, chatting to their companions if walking with others or letting their mind wander and enjoying the time and space to themselves.

Pedestrians do not want to feel on edge or on high alert

What pedestrians don't want is to have to think about, engage and concentrate on the traffic and keeping themselves safe and out of harms way.

A pleasant pedestrian experience is not about a noisy and smelly environment. It's not about looking down at your feet in order to avoid hazards, having to concentrate on where you are going nor avoiding obstacles or other people in your way.

So what?

The ideal pedestrian environment requires minimal concentration and provides maximum pleasure.

There are two overarching factors that contribute to a positive pedestrian environment and a relaxing experience

Safety

Feeling safe when you walk is the number one priority for pedestrians

Feeling unsafe represents a significant barrier to walking.

+

Amenity

Once pedestrians feel safe, then it's the pleasantness and attractiveness of the pedestrian environment that drives a positive pedestrian experience.

A pleasant and attractive environment acts more as a motivator to walking.

=

A positive and relaxing pedestrian experience

To measure pedestrian safety a wide range of factors need to be considered

When pedestrians talk about safety it can mean a number of different things:

Safety from vehicles

- Cars veering off the road and hitting pedestrians
- Being forced onto the road and into traffic
- The unexpected happening such as at entranceways and driveways where vehicles can appear in pedestrians' space without warning
- Vehicles not seeing pedestrians and not stopping at pedestrian crossings
- Larger / heavier vehicles (e.g. trucks) are more intimidating – you can feel them move past you, the fear of them swerving is greater as they would cause much more serious accidents, and crossing the road is more dangerous as heavy vehicles take longer to slow down

Safety from other people

- Narrow alleyways with reduced visibility
- Dark streets / poor lighting
- Closed in due to overgrown greenery, lack of space and visibility
- Being alone and feeling vulnerable as no one else around
- Threatening neighbourhoods

Safety from other footpath users

- Bikes, scooters, skate boards
- Mobility scooters
- People walking their dogs
- Getting in each other's way, not knowing where you should walk or look

Safety from hazards on the footpath

- Falling / slipping over and hurting yourself
- Falling into the road / traffic
- Falling off scooter / bike

Measurable factors relating to pedestrian safety

Footpath width	Wide enough to put some distance between yourself and the traffic, have enough room to safely share the footpath with other users and not be forced onto the road
Traffic speed	The slower the traffic the safer the pedestrian environment feels – slower traffic has greater ability to look out for pedestrians and stop when required including at pedestrian crossings <i>“You don’t want them to be walking and cars are flying past you. You feel a lot safer obviously if they are going 50 kms as opposed to double that but the slower the better when you are a pedestrian”.</i>
Traffic volume	The lighter the traffic flow the less dangerous the environment feels - less going on / less chaotic and easier for vehicles and pedestrians to be aware of and look out for each other
Composition of traffic	In particular the amount and size of trucks as the larger the truck the more dangerous and scary the environment – take longer to slow down, accidents more serious when they happen
Visibility	Around entranceways / driveways, at pedestrian crossings (so you can see vehicles and they can see you with enough time and warning to avoid danger), including sunstrike and maintenance of greenery (not overgrown and obstructing visibility)
Separation from traffic	Separation between traffic and pedestrians to protect pedestrians from traffic – this may be in the form of a physical barrier or space (e.g. grass verge and / or parked cars)
Pedestrian crossings	Frequent crossings, in the right / practical places so can get where you need to go, the right kind for the type of street
Signs and markings	Warnings around schools and crossing to encourage traffic to slow down, markings to clarify who has right of way both on footpaths (pedestrians versus cycles) and on crossings (pedestrians versus cars), signage around roadworks including alternative routes taped off from traffic if pedestrians required to walk on the road etc.
Footpath quality and maintenance	Smooth, no changes in texture, cracks, potholes, roots, flooding, ice, moss, fallen leaves
Lighting	Good lighting helps pedestrians to feel less vulnerable as they can more easily see where they are going and who is around (vehicles and other footpath users) – good lighting should be on both sides of the road with no dim patches in between

Similarly, to measure **amenity** a range of factors need to be considered

The footpath

- Clean and tidy, no rubbish
- Well maintained
- Enough space to walk alongside others and chat without disruptions and to share the footpath easily with others pedestrians and footpath users
- Ability to maintain the desired pace, don't have to slow down or constantly dodge around other pedestrians, footpath users or obstacles
- Things of interest to look at

The street

- Pleasant surrounding, trees, greenery, interesting houses, well maintained buildings, attractive architecture
- Things going on and to look at
- Other people around, feel part of the community
- Not too steep
- Protected / sheltered from the elements
- Quiet / peaceful
- Fresh air

The wider environment

- Interesting things to look at
- Nice scenic views
- Greenery

Measurable factors relating to amenity (pleasantness and attractiveness):

Footpath width (space)

Pollution

Vehicle noise

Shelter and shade

Points of interest

Cleanliness of footpaths

Social

Gradient

Greenery

Aesthetics

Obstacles

Footpath maintenance

The priority factors to measure

Given the safety and amenity (pleasantness and attractiveness) needs of pedestrians the following eleven factors stand out as contributing MOST to a positive pedestrian experience and therefore the most important factors to measure.

Please note the full list of factors that contribute to a positive pedestrian environment is included in the Appendix.

- Footpath width**
- Traffic speed**
- Traffic volume**
- Composition of traffic**
- Visibility**
- Pedestrian crossings**
- Separation from traffic**
- Footpath quality**
- Signs and markings**
- Lighting**
- Greenery**

It is difficult to prioritise these eleven factors further, for example into tiers based around importance, because pedestrian priorities change depending on the pedestrian environment.

As outlined in the next section, the importance of individual factors can be dialled up or dialled down depending on the mindset of the pedestrian as well as the unique characteristics of each particular pedestrian environment.

Differences by age / lifestage

While these eleven priority factors relate equally well to pedestrians across all ages and life-stages, there are some differences in walking behaviours as well as concerns identified in this research:

Children / youth

- More in the habit of walking regularly
- Walking more about a purpose (e.g. going to school, going to their friend's house, sport or to the shops etc.)
- Often walking in groups as well as using different modes of transport – bikes, scooters, skateboards
- Walking seen as a positive experience and often motivation is quite high - enjoy the independence and freedom of walking
- Concerns around personal safety are typically dialled up – they worry about strangers, parked cars, moving cars which are driving close to them, poor visibility at driveways and in alleyways
- Unlike adults, the sense of vulnerability among this group is just as evident in the daytime and when with others (of a similar age)

Young adults (pre children)

- For young adults, walking can be relatively easy to fit into their lives as they only have themselves to think about and they are potentially fitter and more in the habit of walking
- They tend to live more centrally with greater proximity to desired destinations, making walking a more feasible option
- Potentially more motivated by health and fitness compared to families – see walking as valuable exercise opportunity
- However, at the same time, getting a car and having their independence is exciting and enticing
- For young adults, directness of route seems to be more dialled up as using walking as a mode of transport more than in later life stages

Families

- Young families tend to be quite motivated to walk as a family leisure activity, to school and as a way to teach road safety, however walking with young children can also be challenging and stressful
- Parents of older children seem to get out of the habit of walking and appear the least motivated to walk, they struggle to fit walking into their busy lives, fitness can be a barrier along with different family members needing to go in different directions
- For families, vehicle safety is dialled up for their children particularly around the unpredictability and lack of visibility around driveways, around schools and crossings, plus trip hazards for bikes and scooters
- They also worry about the unpredictability of their children and the risk of them running on the road dialling up concerns around traffic speed / volume / good signs and markings
- For young families access to toilets is dialled up

Elderly

- Older lifestages seem to get back in the habit of walking, particularly as a leisure / recreational activity
- Their motivation is around exercise, health and wellbeing as well as for sociability. They also have more time and space in their lives to incorporate a walking routine
- For this lifestage, safety from trip and slip hazards is dialled up as well as accessibility (i.e. steepness, steps, handrails and non slip)
- Access to benches is also dialled up



4

How priorities vary by pedestrian environment and by region

Commercial Roads

Definition:

Industrial and business park areas. Wide streets with high traffic volumes including high heavy vehicle volumes. Typically, 2-8 traffic lanes and 50-80kph vehicle speeds.



Characteristics:

- High traffic speed (60 kph plus) and volume including high number of trucks
- Multiple lanes
- Noisy and smelly (polluted)
- Vehicles pulling in and out of driveways / commercial properties with no warnings / signs / markings on footpath to indicate vehicles have right of way
- Tall buildings makes visibility poor at entranceways
- Concrete jungle / no greenery
- Little shade / shelter
- Nowhere to dodge the traffic
- Vehicles own this space and have right of way even when crossing footpaths



Usage:

- Daytime
- Fewer pedestrians
- Bikes likely to share footpath as too dangerous on the road
- Walk for purpose (rather than leisure)
- Try to avoid if possible



Feelings / concerns:

- Pedestrians feel intimidated and vulnerable in this environment
- Scary and dangerous, fear of vehicles coming too close / coming onto footpath
- Put on edge when feel traffic whizzing past, especially trucks, feels very close
- Need to be on alert / focus on what is going on around you
- Vehicles appearing out of nowhere can catch you off guard
- Hard to know where to look and where is safe territory where lots of entranceways
- Not pleasant / enjoyable
- Hear of serious accidents



"On 70km roads, I don't care how wide the pavement is, I want a barrier just because people can't drive" Auckland older

"Where would I go to if a car comes towards me in a hurry. Where am I going to run to?" Oamaru older



Safety from vehicles and other footpath users dialled up as vehicles more dominant in this space and footpaths seen as more of a shared space

Key priorities

- ▷ **Width of footpath** – no risk of tripping / being forced onto road and into traffic
- ▷ **Separation from traffic** – pedestrians need solid protection (e.g. metal / concrete) and a buffer in centre of the road if multiple lanes
- ▷ **Visibility** (entranceways and crossings)
- ▷ **Speed of traffic**
- ▷ **Volume of traffic**
- ▷ **Composition of traffic**
- ▷ **Pedestrian crossings**
- ▷ **Signs and markings** – as warnings and to clarify who has right of way esp. at entranceways
- ▷ **Footpath quality** – don't need to look at your feet, can concentrate on looking around
- ▷ **Cycle lanes** – safe separate cycle lanes or clear separation if shared
- ▷ **Greenery / trees** – noise / physical buffer & to create a more pleasant environment



Pedestrian crossings:



- Less often than in other environments so they don't frustrate traffic
- In practical and safe positions to aid getting where you need to go (so not tempted to cross in other places) with good visibility (not close to corner or intersection)
- Highly visible to ensure traffic slows and stops
- Traffic lights (longer crossing time with timer) so enough time to get across multiple lanes safely
- Islands (clearly visible, with barriers)
- Diagonal crossings at major intersections so can cross efficiently / have direct route

Local suburban

Definition:

Quieter two-lane streets in residential areas with low traffic volumes and vehicle speeds below 50kph.



Characteristics:

- Quieter, more local traffic - lower speeds, less traffic
- Less engaging / interesting
- Vehicles pulling in and out of driveways, visibility often obscured by greenery / fences, no warning
- May be obstructions (cars parked halfway on pavement, rubbish bins, power poles on footpath)
- High variability in cleanliness and footpath maintenance
- Can be poorly lit
- Footpaths a shared space with many different user types



Usage:

- Wide number of users (families, children, dogs, young and old, bikes, scooters, runners, walkers etc.)
- Day and night
- Local community looking out for each other - vehicles aware of and looking out for children



Feelings / concerns:

- Comfortable and familiar, expect to be safe, a relaxed mindset - feel don't want to have to be on alert or keep an eye on feet
- False sense of security as need to be on alert for cars coming in and out of driveways
- Parents worry about kids' safety, don't look out at driveways, crossing roads, uneven surfaces for bikes and scooters
- Need to be aware of other pavement users, especially children and dogs
- Can be forced to walk on the road as narrow footpaths / other users / parked cars etc.
- Can feel dangerous at night (nobody around and dark)
- Avoid rough neighbourhoods, narrow alleyways and lonely areas as feels less safe



"It had the green verge as a boundary and the trees along that verge which would be nice when all the leaves were on. And you've got plenty of vision. No one is going to jump out at you. And you've got plenty of space to pass people. It ticks all the boxes." Auckland older



Personal safety, amenity and sense of personal space is most important

Key priorities

- ▷ **Width of footpath** – room for all user types, won't end up on road avoiding others
- ▷ **Separation from traffic** – grass verge between traffic and footpath
- ▷ **Visibility (driveways)** – grass verge / low fences between footpath and houses
- ▷ **Footpath quality** – no trip or slip hazards, smooth and even surface
- ▷ **Lighting**
- ▷ **Greenery** – for shade / shelter and aesthetics, well maintained to avoid obscuring visibility
- ▷ **Clean / tidy footpath** - incl. rubbish and dog poo bins
- ▷ **Obstacles** – reduced obstacles (e.g. cars parked on pavement and wheelie bins)
- ▷ **Social** – others around, sense of community
- ▷ **Openness** – feels safe
- ▷ **Proximity to shops**



Pedestrian crossings:



- No crossings necessary

Busy main street

Definition:

Busy retail area. Busy traffic and pedestrian areas especially at peak time including public transport. Typically, 2-6 traffic lanes and 30-50kph vehicle speeds.



Characteristics:

- High traffic volume
- Reduced speeds
- High number of pedestrians especially at peak times
- Traffic aware and on alert for pedestrians – pedestrians more dominant in this environment / greater right of way
- Lots of movement in all directions (in and out of shops, cars, public transport, intersections, people waiting for buses)
- Lots of parked cars acts as buffer
- May be obstructions (cars parked halfway on pavement)
- Points of interest (shops, signage and café seating on footpath etc.)
- Noisy (people and traffic)



Usage:

- Wide number of users (young and old, prams and mobility scooters) but more pedestrian focused rather than other types of users (i.e. bikes etc.)
- Mixed used (purpose and leisure / recreation)
- Day and night
- Busier on weekends
- Sociable / walk with others, often at a relaxed and meandering pace
- Want to walk alongside companions and chat
- Cross road frequently



Feelings / concerns:

- Relaxed and fun mindset, looking for more enjoyment and stimulation from companions and from the environment
- Don't want to think and be distracted by traffic / vehicles
- Want to flow without interruptions or having to reduce pace or go single file
- In busy times have to concentrate on avoiding other pedestrians as well as obstacles
- Need to be on alert with pedestrians going in every direction and car doors opening
- Can feel dangerous at night (drunk and homeless)



"It used to be hard to cross the road because you had to go all the way up to the pedestrian crossings at the traffic lights but when they put those islands in it's made a big difference"
Auckland older



Sense of personal space, pedestrian crossings and aesthetics are most important

Key priorities

- ▷ **Width of footpath** – room for everyone, can walk abreast & chat, no manoeuvring around others/obstacles, room for things of interest on streets without impacting flow
- ▷ **Pedestrian crossings** - frequent
- ▷ **Separation from traffic** – space away from vehicles / can relax
- ▷ **Footpath quality / smooth surface**
- ▷ **Obstacles** – flow isn't interrupted by avoiding obstacles
- ▷ **Lighting**
- ▷ **Greenery and aesthetics** – pleasant and stimulating
- ▷ **Visibility** – especially at crossings
- ▷ **Traffic volume**
- ▷ **Clean / tidy footpath** (including rubbish bins)
- ▷ **Benches**
- ▷ **Shelter and shade** – awnings and trees
- ▷ **Signs and markings** – clear who has right of way



Pedestrian crossings:



- Traffic lights on main roads with count down (more often and shorter crossing period)
- Crossings wide enough for mobility scooters
- Raised zebra crossings on side roads with clear signs and markings to slow traffic down and indicate pedestrians have right of way
- Zebra crossing where safe / practical and / or islands to provide other crossing opportunities
- Dropped kerbs for prams and mobility scooters and tactile pavings for clarity for all (not just those with a disability)

Mixed use

Definition:

Streets with a mix of residential (e.g. terraces, apartments), shops, civic uses, hotels and restaurants. Have 2-4 traffic lanes, medium traffic volumes, medium numbers of pedestrians and vehicle speeds of about 40kph. Mix of traffic types including cycling and public transport.



Characteristics:

- High traffic volume
- Mixed vehicle use including large trucks
- Typically higher vehicle speeds than suburban but not as fast as commercial
- Vehicles pulling in and out of driveways / commercial properties / petrol stations
- High number of parked cars
- Open and wide space
- Not so many pedestrians



Usage:

- Mostly daytime (but evening too)
- All types of pedestrians (business people, families, children)
- Walk for purpose (rather than leisure)



Feelings / concerns:

- Can feel dangerous with vehicles coming from every direction (especially with children)
- Need to be on alert / focus on what is going on around you
- Concern / confusion around who has right of way on footpaths at entranceways / petrol stations / driveways



“They could give entrance ways a different colour or a sign so it doesn’t look like the footpath and drivers and pedestrians are both on the same page as to where they are supposed to be going” Auckland younger

“The parked cars hinder the visibility for people walking along so the benefit of having a wide footpath is that it gives you a little bit of a safety barrier if cars do swerve into the shopping centre car park” Napier older



Safety from vehicles is the priority in this environment

Key priorities

- ▶ **Visibility** (driveways and entranceways)
- ▶ **Signs and markings** - around entranceways (to clarify who has right of way) and signage for cyclists (to clarify where various pathway users should be)
- ▶ **Width of footpath** - room for all types of footpath user
- ▶ **Separation from traffic** – parked cars and / or grass verge
- ▶ **Traffic volume**
- ▶ **Composition of traffic**
- ▶ **Pedestrian crossings** – frequent and clearly visible
- ▶ **Speed of traffic**
- ▶ **Footpath quality / smooth surface**
- ▶ **Greenery**
- ▶ **Lighting** – especially at driveways and entranceways



Pedestrian crossings:



- Zebra crossings to help slow down traffic (especially around schools)
- Frequent islands in convenient places (opposite shops, bus stops etc.)

City / town centres

Definition:

The public spaces or shared spaces in the centre of town. Some will have vehicle traffic and others may not. Busy pedestrian area with lower traffic volume and speed.



Characteristics:

- High number of pedestrians
- Lower traffic volume
- Slower moving vehicles
- Lack of clear signage and differentiation between footpath and road
- Wide pavements
- Lots of movement in all directions (in and out of shops, crossing over the shared space)
- Benches / seats outside cafes
- Points of interest (shops, signage and café seating on pavement etc.)



Usage:

- Daytime and evening
- Recreational (e.g. shopping, evenings out) and purpose (e.g. work, lunch)
- Mixed users but more pedestrian focused / dominant



Feelings / concerns:

- Freedom for pedestrians to meander and cross as they please
- Pedestrians see themselves as having more ownership of the space / their right of way
- Relaxing and sociable
- Can be confusing how the space is shared and who has right of way over vehicles and other users
- Can feel intimidating at night (drunk people, homeless)



"Shared spaces are confusing, I don't know if I should be looking out for cars or where I'm supposed to be – it's often not clearly signposted" Auckland younger

"You do feel the freedom to cross over without the overbearing traffic and, because it's predictable, you know that it's coming from that way" Napier older



Space and freedom to do as please within an attractive and stimulating environment

Key priorities

- ▷ **Signs and markings** – transparency around who has right of way
- ▷ **Clear delineation / differentiation** - between footpath from road
- ▷ **Width of footpath**
- ▷ **Footpath quality**
- ▷ **Greenery**
- ▷ **Lighting**
- ▷ **Points of interest** - (e.g. shops, information boards)
- ▷ **Shade and shelter**
- ▷ **Clean / tidy footpaths**
- ▷ **Seating**



Pedestrian crossings:



- No marked crossings required in this space

Differences in priorities by region

While priorities in terms of the factors that contribute most to a positive pedestrian environment were extremely consistent across the three regions included, namely Auckland, Napier and Oamaru, each region had some unique characteristics which impacted the concerns pedestrians in these regions had.

The following slides identifies high level differences between these three regions.



Napier



Characteristics:

- Very aesthetic and engaging - art deco town centre, coastal views and information boards about the earthquake
- Friendly and sociable
- Heavy and fast traffic comes through Napier, often not slowing down as much as they should



Usage:

- Very hot in the summer so walking often restricted to cooler summer evenings
- Can get very busy with tourists (e.g. cruise ships)
- Bikes often using the footpath



Feelings / concerns:

- Pleasant / enjoyable to walk around the town centre
- Frustrating when cruise ship comes in as the tourists create blockages and don't understand the rules around the shared spaces
- Confused by courtesy crossings (there are a number in Napier) – it is ambiguous who has right of way, which can be confusing and disruptive



“Emerson Street is the pinnacle of a good walking experience in Hawkes Bay” Napier younger

“I think the big thing for Napier is that they also stick the photos of the old earthquake. That's a big plus and people can stop and look at it” Napier older



Aesthetics very important to this town as well as safety from vehicles on feeder roads and signs and markings (due to high number of tourists and cyclists as well as the ambiguous courtesy crossings)

Key priorities

- ▷ Width of footpath
- ▷ Speed of traffic
- ▷ Volume of traffic
- ▷ Composition of traffic
- ▷ Visibility
- ▷ Pedestrian crossings
- ▷ Separation from traffic
- ▷ Footpath quality
- ▷ Signs and markings
- ▷ Lighting
- ▷ Greenery

Auckland



Characteristics:

- Spread out, people are often too far from shops / work / amenities to walk (unless combined with public transport)
- Pedestrian environments are more discrete, less pleasant streets can often be avoided
- Weather unpredictable and wet in winter
- Public transport options available with walking being part of their journey



Usage:

- Cars are the norm, the default option as considered the more convenient option to get to where you need to go despite congestion and often hard to find and expensive parking
- City centre often very busy with pedestrians and vehicles
- Scooters are becoming more widely used on footpaths



Feelings / concerns:

- Pedestrians often competing for space on footpath (tourists, scooters etc.), especially in the city centre
- Fear around dangerous / unpredictable drivers
- Can feel unsafe to walk around at night (homeless, drunk, unknown people, poorly lit areas)
- Walking is heavily weather dependant as don't want to arrive wet or sweaty
- Aucklanders can feel "too busy" to walk



"As soon as it rains, Queen Street becomes like sheet ice. I've seen so many people slip as there is zero traction and it's Auckland so it can rain even in the summer." Auckland older

"I grew up in the suburbs and you drive everywhere because nothing is close by - you are busy, you are time poor and you are driving here, there and everywhere and you wouldn't have time to walk." Auckland older



Safety (from other people, vehicles and hazards) and personal space are top priority in Auckland but aesthetics / amenity is needed to motivate people to walk

Key priorities

- ▷ Width of footpath
- ▷ Speed of traffic
- ▷ Volume of traffic
- ▷ Composition of traffic
- ▷ Visibility
- ▷ Pedestrian crossings
- ▷ Separation from traffic
- ▷ Footpath quality
- ▷ Signs and markings
- ▷ Lighting
- ▷ Greenery
- ▷ Proximity and directness of route



Characteristics:

- Very aesthetic – historic buildings, botanical gardens, scenic / coastal views
- Busy SH1 runs straight through town centre (high volume, speed and large vehicles)
- Associated with poor traffic flow
- Roads often mixed usage (busy main, town centre and residential)
- Residential quickly runs into ‘rural’ (concrete footpaths turn into gravel / grass)
- Cold and frosty in winter (slippery)



Usage:

- People often walk as everything reasonably close but on the flip side parking is easy making driving an attractive option
- Different types of footpath user including disability vehicles and Postie scooters
- No public transport



Feelings / concerns:

- Fear of traffic especially of the large trucks on SH1 - examples of cars coming off the road and pedestrians being hit
- Vulnerability at traffic lights on SH1, will the traffic stop? – speeding and inconsiderate drivers, trucks drive fast and take time to slow down
- Competing for space on footpath with disability and Postie scooters
- Little choice: Less pleasant streets can often not be avoided



“I don't love walking near State Highway One because of the smells and the sounds of cars and the increased risk of accident from being in close proximity to traffic.” Oamaru older

“I pass by some old style Oamaru homes with a lot of character, there is always activity happening when I walk to work be it people heading to the post office, Countdown or work” Oamaru older



Safety from vehicles especially large trucks and around entranceways, at pedestrian crossings and from other roadside users (i.e. cyclists, mobility and Postie scooters) are top priority in Oamaru

Key priorities

- | | | |
|--------------------------|---------------------------|----------------------|
| ▷ Width of footpath | ▷ Visibility | ▷ Signs and markings |
| ▷ Speed of traffic | ▷ Pedestrian crossings | ▷ Lighting |
| ▷ Volume of traffic | ▷ Separation from traffic | ▷ Greenery |
| ▷ Composition of traffic | ▷ Footpath quality | ▷ Traffic flow |

KANTAR

WAKA KOTAHI
NZ TRANSPORT
AGENCY

Appendix



List of all the factors identified as contributing in some way to a positive pedestrian experience. Please note the order does not signify importance.

Factor	Good experience	Negative experience	Pedestrian quotes
1 Shelter from the weather	From rain in winter, shade from the sun in the summer. Well maintained trees, overhangs/awnings around retail and commercial areas	Arrived at destination wet and cold, or hot and sweaty	<i>Even if you just had just like even a bus stop somewhere along the way and you get some shops that have their own awning thing. Walking from the bus station to my work there's literally no shelter, there's no bus stop either so if it rains you are going to get wet. If you don't have an umbrella that's game over. Trees are a good barrier because they can shelter you but also if it's windy they can just break that a bit. Big open spaces, nothing. Pretty hard when there's bad weather</i>
2 Gradient	If older (65+) If a gentle slope is available next to stairs (easier to walk up for some older people) - further improved if handrail and non-slip surface	Uphill is hard and tiring, makes you sweaty which can be inconvenient (e.g. going to work, out for dinner etc.) If older (65+) then may be difficult to walk up stairs	<i>Where it is starting to slope but there are no steps, if there's any loose gravel there or anything like that, it is a bit treacherous. Napier older</i>
3 Volume of traffic	When there are fewer cars on the road which creates less noise, traffic and makes it easier to cross the road	Lots of traffic, noisy, vehicle fumes, hard to cross streets, a lot going on, unpleasant	<i>If it is bumper to bumper, you don't feel as comfortable. It doesn't put me off walking, but I wouldn't call it a pleasant experience if there's masses and masses of cars around. Auckland aged 60 plus</i>
4 Speed of traffic	When the speed of traffic is enforced (by speed cameras, speed bumps, roundabouts and clearly marked pedestrian crossings) – slower traffic helps to make pedestrians feel safer and less nervous about crossing the road, feels less stressful so more at ease	Feel traffic rushing past, feels dangerous and scary especially if trucks, have to concentrate/keep wits about you, risk of serious injury/death, risk of traffic not stopping at pedestrian crossings/running traffic lights, speeding, hard to cross streets, risk of getting stuck in the middle of the road. Roads at risk of speeding include those where speed is reduced from 100km to 50km but road is wide and open and no roundabouts / crossings to slow traffic down	<i>You don't want them to be walking and cars are flying past you. You feel a lot safer obviously if they are going 50 kms as opposed to double that but the slower the better when you are a pedestrian. Auckland older</i>
5 Footpaths well maintained	Trees and bushes trimmed back, footpaths not cracked, don't have to look at your feet/look where going, can relax and look around you	Trees and bushes overhanging (may have to dodge (which may push you into the road), blocks visibility and may drip on you), paths slippery (with moss, ice, water, sodden leaves), cracks and uneven footpath (potential hazard and unsightly), have to look where you are going/look at your feet/be careful / not relaxing	<i>I get really frustrated having to always move over and like swat tree branches out of my way and ducking Auckland child The entirety of Queen Street as soon as it rains becomes like sheet ice if your shoes don't have a tread like work shoes or something. I've seen so many people slip on Queen Street not because it's cracked or uneven it's just zero traction the second it gets wet and it's Auckland so it can rain even in the summer Auckland older</i>
6 Safe roadworks	Good signage, fenced off, safe alternative route i.e. fenced off if causes pedestrians to walk on the road	Not fenced off, forced onto the road, mud and water on the footpath	<i>Roadworks for me would be a bad thing because I have found myself going onto the road to get beyond the roadworks. If they fence a little bit off for you to walk around, it would be better. Oamaru older</i>
7 A nice environment	Things to look at (scenic views, shops, nice houses, information boards), other people around (but not too busy), a good social vibe/experience, relaxing, well kept greenery (engage you with the environment) - this can be along roadside or houseside or in roundabouts	Too busy and crowded, people bumping into you or blocking your path, have to avoid people, busy/fast traffic, feel on edge/can't relax, a lack of greenery/concrete jungle (drab, bleak) or greenery that isn't well maintained / blocks visibility of traffic at crossings (you get wet, scratched) / driveways / other pedestrians (when it is dim), masses of powerlines which are unsightly, graffiti, homeless people can be intimidating	<i>I work right opposite the Civic and there are a lot of homeless people, they are all out and it's quite intimidating to be honest Auckland older There's lots of those big poplar trees. You are in the city but trees just make you feel like you are outside. It's calming, peaceful. Auckland older When there's more trees I've heard more birds. Auckland older It had the green verge as a boundary and the trees along that verge which would be nice when all the leaves were on. And you've got plenty of vision. No one is going to jump out at you. And you've got plenty of space to pass people. And even with that fence along the right hand side, I mean that's just someone's property but it's ticks all the boxes Auckland older</i>

List of all the factors identified as contributing in some way to a positive pedestrian experience. Please note the order does not signify importance (cont'd)

Factor	Good experience	Negative experience	Pedestrian quotes
8 Proximity to shops/places I want to go to	A convenient route to get things done all in one go, close enough to walk	Too far, can't get everything want/need to do in one trip/without doubling back on yourself, feels inconvenient and time consuming	<i>I grew up in the suburbs and you drive everywhere because nothing is close by. Auckland older</i>
9 Safe and convenient places to cross	<p>Safe and convenient places to cross:</p> <ul style="list-style-type: none"> - good visibility for pedestrians to see it / traffic to see it and pedestrians and pedestrians to see traffic (e.g. zebra crossing light - especially visible at night - and no obstructions like big trees), - clear - everyone knows this is the place to cross/traffic expecting and preparing for pedestrians to cross, - crossings in the right place to enable you to go where you want to go easily/conveniently (e.g. opposite convenience store or bus stop), ability to cross major intersections diagonally and get straight to where want to go - crossings well positioned (not close to intersections) with good visibility (not close to a corner), - type of crossing suitable to type of street so feel safe, know traffic will stop when walk across the road, enough time to cross the whole road or have a safe zone/island in middle if multiple lanes which is clearly visible to oncoming traffic and has barriers on higher speed roads, good signage and warnings for traffic to slow down and be prepared to stop 	Feels dangerous, visibility of crossing / traffic / pedestrians poor (e.g. near a corner), confusing for pedestrians and / or vehicles (not clear if its where supposed to cross or not, e.g. courtesy crossings), feel taking life in own hands, worry traffic won't stop, crossings not often enough or in the 'right' place to enable you to get to where want to, inconvenient, encourage pedestrians to try and cross where there isn't a crossing, not enough time to cross or worry will get stuck or not safe in the middle of the road where multiple lanes, lack of signage or warnings to vehicles to slow down and prepare to stop, feel inconveniencing/holding up big lines of traffic as a pedestrian making crossing stressful	<p><i>Well defined means it's got the bars on the side, on the footpath side. You've got your light, you've got your black and white stripes. If it's a big road (two - way) you've got the stop in the middle. Napier older</i></p> <p><i>There's an island in between but it's a thin strip of grass so it's not pedestrian friendly, it's not for pedestrians as such, it's just to separate the traffic Napier younger</i></p> <p><i>if you've got a bus stop on one side and someone lives on the other side, and they want to be making public transport more accessible, then you want to be helping the people get across 4 lanes of traffic Napier younger</i></p> <p><i>And now that island is there, you (as a driver) can see someone crossing that side of the road heading towards the island, and so you've got that time to slow. When I'm in a truck, it takes me a long time to slow down, I can see that person crossing the road and going to the middle so I've got a whole lot more time to slow down. Big fan. Napier younger</i></p> <p><i>I think there definitely could be like those orange bulby lights, I feel like every zebra crossing should have one of those because like there's been times where I've stopped for a pedestrian and the other cars just don't stop Napier younger</i></p> <p><i>We want clear, concise instruction. Consistency. Is it a crossing or isn't it? Napier older</i></p>
10 Raised bumps on road	Visual signal to traffic to slow down, to expect pedestrians to cross, that pedestrians have the right of way, communicates it's the right place to cross for pedestrians/can cross with confidence, traffic forced to slow down	Traffic travelling too fast, doesn't slow down, doesn't give way to pedestrians, pedestrians feel more vulnerable, less clear who has the right of way Raised bumps can be ambiguous as to whether it is a crossing or not which can lead to confusion as neither pedestrian nor car knows which has the right of way (e.g. courtesy crossings)	<p><i>"I noticed bumps on certain intersections, the whole bit of road was raised and it was quite rouogh gravel like a red kind of concrete which is good. It just makes people slow down as they don't want to munt their car and makes you feel a bit safer, because you know they are going to slow down. It says this is the right place to cross"</i></p> <p><i>I think the definition of the crossing needs to be more clear to the public as well because one thing I struggle with in town is that there's these kind of speed bumps but they look quite nice and they almost look like crossings but they are not. Sometimes you have one car that stops but the other one doesn't then you are just standing there thinking when can I go? They are very confusing. Napier younger</i></p> <p><i>Because we've got far too many of those raised courtesy crossings in Hawkes Bay and people do, they just walk across any old time. common sense would say keep an eye out because there are no white stripes but mothers with little babies in prams just walk right on out. Napier older</i></p>
11 Safe	Can relax. Open and not overgrown, other people around, well lit at night, good footpath surface (i.e. not slippery)	Feel on edge. Overgrown, not well lit, too quiet/not any other pedestrians around, slippery (i.e. ice, moss, water on footpath)	<i>You want to feel safe enough to just zone out because that's part of the relaxing part Auckland older</i>

List of all the factors identified as contributing in some way to a positive pedestrian experience. Please note the order does not signify importance (cont'd)

Factor	Good experience	Negative experience	Pedestrian quotes
12 Good visibility	Good vehicle visibility especially at crossing and intersections; Good visibility of other pedestrians (especially in quieter areas / in the dark) - needs to be open, wide pavements, unobstructed	Windy roads with narrow paths and potential obstructions reducing visibility of other pedestrians / bikes / scooters Crossings at corners or crossing with large trees or other obstructions reducing visibility of traffic	<i>That pedestrian crossing needs to be moved, it's dangerous. Drivers can't see people about to cross as they are coming round the corner, you are in danger of hitting somebody, it needs to be further back as it's just not visible. Oamaru older</i>
13 Path width	Wide enough to be able to relax and not have to dodge/worry about bumping into other pedestrians / bikes / e-scooters / disability scooters (Oamaru)/ Postie scooters (Oamaru) / prams, ability to walk next to companions (some of whom may have prams), not have to dodge obstacles on the footpath, for the amount of pedestrians (i.e. wider in busier streets) as well as variety of footpaths users (i.e. children walking, biking and skating/scootering, people with dogs etc). A width of 3-4 pedestrians was considered to be suitable - this would allow 2/3 friends having a social walk, 2 friends with prams, a walker and a scooter / cyclist	Skinny (or even no footpath or footpath disappears) get stuck behind other pedestrians, can't go your own pace, have to dodge obstacles, can't walk the speed you want, disrupted conversations with companions, feel anxious and on edge, forced onto road to pass. Concerns that someone can pull up easily and quickly and run off. Feeling worried about having to look over shoulder for oncoming cars	<i>I'm always scared like walking on the grass because I feel like there's a hole that I don't see. I'm just always scared of twisting my ankle because there are little, you know, potholes and you just don't see it. Auckland older</i> <i>I like the footpath where the footpath is not too close to the road, and a big gap between the house or driveway / garage to the road so it just seems like quite spacious. It creates safety-ness Auckland older you wouldn't have much space like between you and someone else you don't know. It's putting people in your body space without you wanting it to happen. Auckland older</i>
14 Buffering from traffic	Feel safe and protected from traffic whatever the volume and speed of the traffic. For busier/faster roads, more distance and buffering between pedestrian and the traffic (i.e. grass strip with trees, parking lane, centre strip with trees to separate multiple lanes etc). . Can relax, not too noisy, can't feel the traffic rush past, stay dry (no splashback from puddles on road) nice greenery to look at and break up/protect from traffic and absorb noise.	Feel walking too close to busy/ fast traffic, especially larger vehicles. Feels dangerous, have to be on alert, causes anxiety, can feel traffic whizzing past. Noisy and unpleasant, nothing nice to look at, no greenery or trees. Can potentially get wet by vehicles driving through puddles.	<i>That would make me feel safe knowing that there is something there to stop between me and the cars. Auckland child</i>
15 Barriers from traffic	Feel physically more separated from fast/heavy traffic on busy roads and more protected in case a car came off the road. For roads where speeds exceed 60kmh plus, then solid roadside barriers should be considered (extra safety and reassurance). Can relax and feel safe.	Feel vulnerable with fast traffic especially with heavy vehicles, feels dangerous, a vehicle could lose control, could come off the road and hit a pedestrian. Feel on edge, have to concentrate and be on alert	<i>On a busy road with high traffic flow, like in a 60 or 70kmh zone, then your big bars and gateways I think would be great but in just your run of the mill a grass verge would be absolutely perfect.</i>
16 Clear separation from cyclists	Having cycle lanes that are safe and that cyclists want to use or, if they do share the pavement, having wide pavements and clarity around which side of the path is for pedestrians and for cyclists (e.g. share with care signs), good signage, everyone knows where they should be, no confusion or anxiety.	Confusion over where should be walking, feel anxious about bikes coming up from behind, cycle lanes that are dangerous (in between parked cars and traffic) and too narrow which causes cars to park on footpath and cyclists to opt for footpaths instead of cycle lane	<i>There's a public walkway down in Avondale and I just think oh god I get shouted at by these cyclists who don't have bells. They make me feel guilty for being on those pathways (older depth)</i>

List of all the factors identified as contributing in some way to a positive pedestrian experience. Please note the order does not signify importance (cont'd)

Factor	Good experience	Negative experience	Pedestrian quotes
17 Direct route	Ability to get to where you want to go as quickly and inefficiently as possible, ability to cut through / take short cuts when you want, but also longer routes when you want a longer walk	Route feels inconvenient and indirect, feels frustrating and time wasting	<i>There are lots of options to do a big walk or just a shorter walk depending on your timeframe which I think is awesome so that is a good idea. Because you might be doing that walk to work or you might be wanting to do an exercise walk Auckland older</i>
18 Clean / tidy footpaths	Clean and well looked after, adequate rubbish bins, room for dustbins in residential areas (i.e. grass verge), bins are not overflowing	Rubbish, glass on footpaths, dustbins to dodge; looks unsightly and unkempt, suggests the area may not be as well regarded / cared for and (therefore) safe Trees/greenery overhanging and poorly maintained, commercial signage all over stress so have to dodge (especially if narrow). Gravel from road or from roadworks on footpath Dog poo, litter, overflowing rubbish bins; looks unsightly, need to dodge and / or potential to get shoes dirty	<i>It was a wet day when I went for a walk but the mud over-washed onto the footpath and I nearly slipped. It was a bit deceiving. Auckland older</i>
19 Even surface	Smooth, even and well maintained	Cracks, potholes, crumbling, roots and changes in surface (concrete to gravel to grass), gravel/stones on footpaths from road and driveways, change in surface due to repairs and pavement sinking/potholes (water/drainage issues in Oamaru) - trip hazard, dangerous for children on scooters/bikes/skateboards, frustrating as gets in shoes, unpleasant bumpy experience when with pram/trundler, potholes/cracks collect water and so create big puddles	<i>I prefer like the newer concrete like the real smooth one because my youngest likes to go on a scooter to make the walk easier and he just can't do it. Napier younger</i> <i>The cracked footpath, when it's raised a little bit and it's so easy to trip and I've done it a lot of times. I walk it quite often so I should know it's there by now but I always forget. Napier younger</i>
20 Good visibility at driveways and for businesses	Good visibility and warnings at driveways (i.e. grass area, open driveways, mirrors, change in path/signage on path to provide a warning to pedestrians and vehicles to be careful etc). Clear who has right of way - pedestrian or vehicle	Vehicles appear from nowhere and without warning and drive across footpath - poor visibility, dangerous, on edge, not clear who has right of way, concern for self and for children	<i>Especially if you are walking along with like your headphones in and you are trying to block out the traffic or just trying to live in your own little bubble and someone comes flying out their driveway without looking. If you've got little ones walking or running off up ahead of you, they are pretty easy to miss. Napier younger</i>
21 Noise	Fewer vehicles / reduced speed, relaxing, less distracting, pleasant, can easily talk to companions. Ideally noise should be low enough to hear birds	On edge, unpleasant, can't easily chat. Caused by too many vehicles / high speed / trailers banging around	<i>Close to my work, there's undeveloped areas, land and it's peaceful, you can hear the birds, it's nice Auckland older</i> <i>I quite like all the interesting buildings. But it's noisier. It's heaps noisier and that's why I don't walk it. But it's a heap prettier that way. Oamaru older</i>
22 Lighting	Good lighting, feels safe, can easily see where going and who is around (pedestrians and cars), don't have to concentrate or look at feet, can relax, good lighting should be on both sides of the road	Worried about tripping, have to concentrate and look where going/at feet, feel vulnerable/unsafe; roads which are dim or dark patches between lights or dark on one side of the road can cause worry / fear	<i>I run early in the morning which is dark and I realised it's actually unsafe for a young woman with her headphone. It's dark, anyone could jump out Auckland older</i> <i>It was dark in places and I noticed the street lights were all on the opposite side of the street where there was no paved walkway. Oamaru older</i>

List of all the factors identified as contributing in some way to a positive pedestrian experience. Please note the order does not signify importance (cont'd)

Factor	Good experience	Negative experience	Pedestrian quotes
23 Free from obstacles	Don't have to avoid things in pathway, can relax and look around without having to concentrate on where going	Things in the way, dustbins, shop signage, power poles on the footpath - breaks rhythm, have to dodge/step on the road or grass verge/go single file; have to pay attention / be alert. Have to be extra vigilant with children who may not look out for cars as they dodge obstacles	<i>I took a photo of a neighbour who's just not parked right in the driveway, so hanging out over the footpath and then there was further on up some neighbours doing renovations and their builders get all stuff out the footpath. It was like an obstacle course. And then the e-scooters are going. The just leave them on the footpath. Auckland older</i> <i>You have to concentrate on where you are going - I've had it where I'm walking with a friend and we are talking and then it's like you look down the road and it's strewn with things for the next 5 minutes you are not talking you are weaving in and out of this and that because if you don't pay attention you are going to crash into something and have a bad time Auckland older</i> <i>If someone or something is blocking your footpath, you have to go on the road to get around and I'm always so conscious of my kid going on the road because they are too young to be that conscious of vehicles yet so I have to be extra cautious with them. Auckland older</i>
24 Good signage	Signs warning traffic to slow down, be aware of and slow down for children and elderly, clear signage/separation of pedestrians and cycling so everyone knows where they should be, coming up to a pedestrian crossing / schools etc.	No warnings, confusing about where pedestrians are supposed to be/who has right of way, traffic drives too fast or fails to slow down and stop at lights/pedestrian crossings. Pedestrians feel vulnerable	<i>They have the share with care signs. I'm a big fan of those. They make pedestrians and cyclists aware that it is a shared pathway, not just a cycleway. Napier younger</i>
25 Tactile paving	Visual signal for traffic to slow down, cue for people with visual disabilities but also for those without a disability as makes it clear where pedestrians should stand and where should be safe to cross, gives confidence to all, good for teaching children where to stop and stand	Potential hazard (pedestrians, scooters, skateboards) as can get slippery when wet and can be on kerb cutdowns, don't last long / can fall apart	<i>if they are done wrong they can actually become a hazard like when they are on the pavement where it slopes down to the road, I saw a guy today step on it and he just slid the whole way down into the street Auckland older</i> <i>They get wet as well and you go shhh straight down the bloody things. Napier older</i>
26 Seating	Provides options to those who want to rest (especially older and / or with children); looks like it is a pedestrian friendly zone (pedestrians and welcomed and being thought of first). Ideal if benches have a good view	In inappropriate places (e.g. skinny pavements where it could cause an obstruction). Not having seats at or near bus stops or along scenic paths (e.g. by parks, ocean etc.)	<i>I think that would be really good. If it was a nice sort of area and something to look at or you just want to have a breather. Napier younger</i>
27 Air quality	Fresh and healthy, typically dialled up in open spaces (e.g. ocean, parks)	Smog, smell car fumes, near fertilization plants or sewers, feels unhealthy and unpleasant	<i>It looks like there's some nice walking areas nearby the fertilising plant but I never do it because the smell from the fertilising plant is so horrid. Napier younger</i>
28 Kerbs (e.g. dropped kerbs / pram ramps)	Help to signal a good / safe place to cross. Makes travelling with a pram / trundler / children on scooters / mobility scooter easier	Can sometimes be too steep so dangerous when slippery and frustrating for scooters which can get stuck. Also, sometimes they encourage drivers to drive too close to the pavement making it unsafe for pedestrians	<i>I've noticed it can encourage drivers to get too close to the pavement. They come basically beyond the pavement because it's flat. You know if they had a kerb there, they'd bust their rims on it. Auckland older</i>
29 Shade	Having the option to walk / rest in shade if desired – e.g. one pavement is in shade or a bench under a tree	Too much shade, i.e. not having the option to walk in the sun if desired. If overhanging trees are providing the shade then these can drip when it rains	<i>I like trees being planted because in summer it is nice, especially if you have a sidewalk that's shaded on one side that's a good road. Gives you your options. Napier younger</i>

List of all the factors identified as contributing in some way to a positive pedestrian experience. Please note the order does not signify importance (cont'd)

Factor	Good experience	Negative experience	Pedestrian quotes
30 Other pedestrians / sociability	Good when some other pedestrians - sociable, friendly, feels safer	Too crowded (e.g. tourist groups) - difficulty getting through, they get in the way, may slow you down, can disrupt conversation with companion if have to jostle past. Empty - can feel more unsafe (especially at night / dimly lit areas), less atmosphere	<i>When there's too many people the walk becomes more about managing the crowd, you focus on just getting through it and it becomes more of a chore compared to when there's less people and you can make it leisurely and enjoy the things around you Napier younger</i>
31 Rough neighbourhood		Gangs, feels unsafe and less pleasant to walk around (for men and women). Have to be on alert	<i>We didn't used to have as many gangs and as many drugs as we do now and there are consequences so some places feel less safe than they use to. Where I live it's getting a bit bad, the kids could bike up and down the street, but now all these different people have moved in to our street and it's too dangerous. They just don't slow down. Oamaru older</i>
32 Dogs	Dogs on tight leads, wide enough pavements to walk past them easily	Off leads, get in your way, can be intimidating, loud, can put children at risk (who may run up to them to play)	<i>A lot of people walk their dogs at night, often without their dogs on a leash. So I'd be walking along and all of a sudden this dog will run up at us so it's a bit unnerving. It makes you feel unsafe. You see them walking around and you think I'm not going to go that way. Napier older</i>
33 Adequate parking	Space for cars to park and wide enough parking lanes so cars aren't forced to park on the footpaths. Designated parking for scooters so they do not block the pathway	Cars intrude on footpaths making them narrow or force pedestrians onto road	<i>Often I see scooters parked around, mainly at bus stops or at intersections. They shouldn't be there. They should have set places where they have to put them. I suppose the whole point of them is that you can just dump them anywhere isn't it. But I don't think they should be allowed to do that. Auckland aged 60 plus</i>
34 Good traffic flow (Oamaru)	Traffic flows well through town, traffic going the suitable speed for pedestrian environment, heavy vehicles diverted out of main town centre / across from schools etc (bypass), traffic lights spaced out so traffic doesn't get frustrated	Heavy traffic including large trucks going through busy town centre and past busy pedestrian areas such as schools, traffic lights too close together so traffic gets frustrated	<i>It is State Highway 1. It's got that many big blimming trucks and then the traffic of course going across at school time... To get across there is just ridiculous. Oamaru older</i>
35 Roads suitable for type of traffic (Oamaru)	Roads wide enough and junctions designed / suitable for type of heaviness of traffic especially where large trucks are common	Roundabouts and junctions not wide enough for large trucks to safely turn so impinge on pedestrian areas / footpaths - dangerous for accidents, cause accidents	<i>There are these massive trucks come past and these bikes are trying to get through and it is school time so there are school children - it's really scary. Oamaru older You can see some really deep gouges in the asphalt where some trucks have just cornered really close and if you were a pedestrian... you wouldn't want to be that person. Oamaru older</i>
36 Good drainage	Good drainage clear of leaves, footpaths don't flood after heavy rain	Piles of leave in gutters, footpath floods, get wet and can be forced to walk on road to avoid flooding	<i>I tell you what, the drains smell in Auckland. Drains stink in Queen Street sometimes yeah. Auckland aged 60 plus</i>
37 Adequate footpaths (Oamaru)	Concrete footpaths around all residential areas even on the outskirts of town	Suburban areas on outskirts of town have no footpaths - turn into grass, get muddy or forced to walk on road	<i>I don't like that there are big trucks that frequent the road and there is no footpath for some of the walk which makes it kind of dangerous. There was more traffic than usual which made it a bit stressful not having a footpath. The grass was muddy and wet from the rain we had a few days ago so was difficult to walk on. Oamaru older</i>
38 Public toilets (young families and older people)	Adequate and clean public toilets in busy pedestrian areas	No public toilets in close proximity, forced to go into a café etc.	<i>They have good toilets and you do need those too especially if you are getting on. Not that easy to hold on. Auckland aged 60 plus</i>

Homework instructions for children depths

Thank you for agreeing to take part in our research study. We really appreciate your help.

The purpose of the research is to understand what makes a good walking experience for people like you. In preparation for our discussion we would like you and your friend to go on a walk that you usually do and take some videos and photos along the way.

Here are your instructions:

Step 1. Arrange a time to go on your walk together. Remember your walk needs to be at least 10 – 15 mins long and somewhere you both regularly walk. You would have agreed with the recruiter about where you'll be walking.

Step 2. Before you go on your walk, make a short video answering the following questions. Maybe one of you could ask the questions and the other answer them. Remember it's very relaxed so don't worry if it's not perfect.

- Where are you going?
- How often do you walk along this route?
- What time of day do you usually go?

Step 3. Swap over now so the other person is asking /answering the question. Again, video your answer.

Briefly describe ALL the different types of streets you will be walking on (i.e. quiet roads around our house, busier road with lots of traffic, main street in town with lots of shops) etc.

Page 1 of 2

Step 4. Now go on your walk and take photos along the way to show each of different types of streets and walking environments you go along. Approx. 10 – 20 photos along your walk would be about right but if you want to take more that's fine too.

Along the way chat about and take photos of anything that you feel makes that part of the journey a particularly good OR particularly bad place to walk. For example, it might be something to be do with the pavement or the layout of the street, the other pedestrians or the traffic around you or something else that has an impact on you as a pedestrian.

Remember there are no right and wrong answers so anything you notice and anything you feel is worth taking a photo of will be helpful to us.

Step 5. After your walk, video yourselves answering the following question.

- Describe some of the things you noticed and took photos of that made it a particularly good or bad place to walk.

Step 6. Keep your photos and videos safe as we will be looking at them during our interview.

Enjoy your walk and don't forget your phone so you can take photos. 😊

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Homework instructions for older depths

Thank you for agreeing to take part in our research study. We really appreciate your help.

The purpose of the research is to understand what makes a good walking experience for people like you. In preparation for our discussion we would like you to go on a walk that you usually do and take some videos and photos along the way.

Here are your instructions:

Step 1. Arrange a time to go on your walk together. Remember your walk needs to be at least 10 – 15 mins long and somewhere you both regularly walk. You would have agreed with the recruiter about where you'll be walking.

Step 2. Before you go on your walk, make a short video answering the following questions. Maybe one of you could ask the questions and the other answer them. Remember it's very relaxed so don't worry if it's not perfect.

- Where are you going?
- How often do you walk along this route?
- What time of day do you usually go?
- Briefly describe ALL the different types of streets you will be walking on (i.e. quiet roads around our house, busier road with lots of traffic, main street in town with lots of shops) etc.

Page 1 of 2

Step 3. Now go on your walk and take photos along the way to show each of different types of streets and walking environments you go along. Approx. 10 – 20 photos along your walk would be about right but if you want to take more that's fine too.

Along the way chat about and take photos of anything that you feel makes that part of the journey a particularly good OR particularly bad place to walk. For example, it might be something to be do with the pavement or the layout of the street, the other pedestrians or the traffic around you or something else that has an impact on you as a pedestrian.

Remember there are no right and wrong answers so anything you notice and anything you feel is worth taking a photo of will be helpful to us.

Step 4. After your walk, answer these questions. You can write down your responses or, if you are comfortable videoing yourself, answer the questions using your mobile phone.

- What did you notice on your walk that positively impacted you as a pedestrian?
- What did you notice on your walk that negatively impacted you as a pedestrian?

Step 5. Keep your photos and videos safe as we will be looking at them during our interview.

Enjoy your walk and don't forget your phone so you can take photos. 😊

Page 2 of 2

Homework instructions for group respondents

Thank you for agreeing to take part in our research study. We really appreciate your help.

The purpose of this exercise is to get you thinking about your experiences as a pedestrian, specifically what types of things may make your walking experience good or bad / better or worse.

In preparation for the group discussion, we'll be asking you to go on two walks before the group. We'd like you to take some photos during your walk and we'll be asking you some video and written questions on this bulletin board before and after each walk.

General walking behaviour

1. We'd like to understand a little about your walking habits. For these questions we are interested in walks you do along roads / streets (as opposed to walks you may do in other areas such as parks or beaches etc.). Please help me to understand your walking habits by telling me how often do you tend to walk, how long for and for what purposes? (e.g. walk to work, to the local shops etc.)

First walk (pre-walk questions)

1. Now that you are ready to go on your first walk, we would like you to understand a bit about the walk before you go on it. Where will you be going on this walk? How often do you tend to do this walk? How long does it typically take?
2. Please describe the different types of streets / roads you will be walking along (e.g. are they in the city / suburbia? Single or multi lane roads? How busy are they?)
3. Tell us 3-5 things you like and 3-5 things you dislike about this walk. Please explain your answers so we can understand why you like and dislike those things.

Page 1 of 3

Thanks for answering those questions. Now we would like to read the instructions below before you go on your first walk.

We are keen to understand your walking experience so along your way think about all the things you notice that may make your walking experience more positive or negative.

We would like you to be even more aware of your surroundings and how you are feeling throughout your journey than you may usually are. Things you may like to think about on your walk include...

- What is the surrounding environment like? The type of street and what makes it pleasant / not so pleasant?
- What's going on around you (e.g. other cars, pedestrians, cyclists etc.) and what impact does that have on your experience?
- How are you finding the walk? Is it exciting / boring?
- How are you feeling? How, if at all, is this changing throughout your walk?
- Are you experiencing anything different from usual along your walk today? What difference is this making (good or bad)?
- What's the weather like? How is this impacting your experience today?

As you walk, please take photos of the different types of streets you are walking along AND all the things you notice that impact your walking experience (good and bad) today. Approx. 10 – 20 photos along your walk would be about right but if you want to take more that's fine too!

When you return from your walk, please upload all of your photos and complete the questions below. Ideally sooner rather than later so you can remember everything easily.

Enjoy your walk and don't forget your camera / smartphone! 😊

Page 2 of 3

Homework instructions for group respondents (cont'd)

First walk (post-walk questions)

1. Thanks for going on your walk! Now that you have returned from your first walk, please upload the photos and you've taken on your walk.
2. We'd really like to hear about your walking experience in your words. Using your camera or smartphone, please video yourself answering the question below:
 - In your own words, describe your walk and the things you noticed along the way that positively and negatively impacted your experience as a pedestrian.
3. Think of 3 – 5 things you'd change to make it a more positive experience for pedestrians like yourself.

Thanks! Now we'd like you to go on a second walk. When you are ready, please continue to the next set of questions.

REPEAT QUESTIONS FOR SECOND WALK

Page 3 of 3

Stimulus shared in Auckland groups

1. Commercial streets

Industrial and business park areas. Wide streets with high traffic volumes including high heavy vehicle volumes. Typically, 2-8 traffic lanes and 50-80kph vehicle speeds.



What's important to pedestrians for this street type?

2. Busy main streets

Busy retail area. Busy traffic and pedestrian areas especially at peak time including public transport. Typically, 2-6 traffic lanes and 30-50kph vehicle speeds.



E.g. Broadway (Newmarket) and K Rd



What's important to pedestrians for this street type?

3. Mixed used streets

Streets with a mix of residential (e.g. terraces, apartments), shops, civic uses, hotels and restaurants. Have 2-4 traffic lanes, medium traffic volumes, medium numbers of pedestrians and vehicle speeds of about 40kph. Mix of traffic types including cycling and public transport.



E.g. Williamson Avenue (Ponsonby)



What's important to pedestrians for this street type?

4. Local suburban streets

Quieter two-lane streets in residential areas with low traffic volumes and vehicle speeds below 50kph. Low traffic volumes and vehicle speeds below 50kph.



E.g. Collingwood Street (Freemantle Bay)



What's important to pedestrians for this street type?

5. City / town centres

The public spaces or shared spaces in the centre of town. Some will have vehicle traffic and others may not. Busy pedestrian area with lower traffic volume and speed. Could we say public spaces or shared spaces in the centre of town as there may be a few in each town. Some will have vehicle traffic and others may not (e.g. Aotea Square in AKL has no vehicle traffic whereas Jean Batten Place and High St do)



E.g. Jean Batten Place & High Street (central Auckland)



What's important to pedestrians for this street type?

FORM 3: Types of pedestrian crossings

Kerbs flush with bumps



Kerbs cut down



Midblock refuge with kerb cutdown



Midblock refuge with no kerb cutdown



Raised zebra



Controlled by traffic lights



Stimulus shared in Napier groups

1. City / town centres

The public spaces or shared spaces in the centre of town . Some will have vehicle traffic and others may not. Busy pedestrian area with lower traffic volume and speed.
 Could we say public spaces or shared spaces in the centre of town as there may be a few in each town. Some will have vehicle traffic and others may not (e.g. Aotea Square in AKL has no vehicle traffic whereas Jean Batten Place and High St do)



E.g. Emerson Street

What's important to pedestrians for this street type?

2. Local suburban streets

Quieter two-lane streets in residential areas with low traffic volumes and vehicle speeds below 50kph Low traffic volumes and vehicle speeds below 50kph



What's important to pedestrians for this street type?

3. Mixed used streets

Streets with a mix of residential (e.g. terraces, apartments), shops, civic uses, hotels and restaurants. Have 2-4 traffic lanes, medium traffic volumes, medium numbers of pedestrians and vehicle speeds of about 40kph. Mix of traffic types including cycling and public transport.



E.g. Emerson Street

What's important to pedestrians for this street type?

4. Busy main streets

Busy retail area. Busy traffic and pedestrian areas especially at peak time including public transport. Typically, 2-6 traffic lanes and 30-50kph vehicle speeds.



E.g. Marine Parade

What's important to pedestrians for this street type?

5. Commercial streets

Industrial and business park areas. Wide streets with high traffic volumes including high heavy vehicle volumes. Typically, 2-8 traffic lanes and 50-80kph vehicle speeds.



What's important to pedestrians for this street type?

FORM 3: Types of pedestrian crossings



Stimulus shared in Oamaru groups

1. Commercial streets

Industrial and business park areas. Wide streets with high traffic volumes including high heavy vehicle volumes. Typically, 2-8 traffic lanes and 50-80kph vehicle speeds.



What's important to pedestrians for this street type?

2. Busy main streets

Busy retail area. Busy traffic and pedestrian areas especially at peak time including public transport. Typically, 2-6 traffic lanes and 30-50kph vehicle speeds.



What's important to pedestrians for this street type?



3. Mixed used streets

Streets with a mix of residential (e.g. terraces, apartments), shops, civic uses, hotels and restaurants. Have 2-4 traffic lanes, medium traffic volumes, medium numbers of pedestrians and vehicle speeds of about 40kph. Mix of traffic types including cycling and public transport.



What's important to pedestrians for this street type?



4. Local suburban streets

Quieter two-lane streets in residential areas with low traffic volumes and vehicle speeds below 50kph. Low traffic volumes and vehicle speeds below 50kph.



What's important to pedestrians for this street type?



5. City / town centres

The public spaces or shared spaces in the centre of town. Some will have vehicle traffic and others may not. Busy pedestrian area with lower traffic volume and speed. Could we say public spaces or shared spaces in the centre of town as there may be a few in each town. Some will have vehicle traffic and others may not.



What's important to pedestrians for this street type?



FORM 3: Types of pedestrian crossings

Kerbs flush with bumps



Midblock refuge with kerb cutdown



Raised zebra



Kerbs cut down



Midblock refuge with no kerb cutdown



Controlled by traffic lights

