



Travel Behaviour, Experience and Choices of Aucklanders: A Qualitative Investigation

Reduced CO₂ from Sustainable Household Travel Research Programme
(Funded by the Foundation for Research Science and Technology and undertaken in
association with OPUS International)

Technical Report
Objective 1 Milestone 3

Karen Witten
Tim McCreanor
Emily Rose

Centre for Social and Health Outcomes Research and Evaluation
Te Runanga, Wananga, Hauora me te Paekaka
Te Ropu Whariki

September 2005



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Acknowledgements

We would like to thank all the participants who took part in the focus groups and interviews that were conducted. The names of these individuals are not detailed anywhere in this report for privacy reasons. Instead, pseudonyms are used and only broad details of residential location are provided where applicable.

Executive summary

This technical report sets out the methodology and findings of a qualitative interview based study of travel behaviour in the context of Objective 1 of the *Reduced CO2 from Sustainable Household Travel Research Programme*.

The strategic intent of the *Reduced CO2 from Sustainable Household Travel Research Programme* is to achieve a sustained reduction in the CO2 emissions generated by domestic transport, while ensuring that New Zealanders are able to enjoy the benefits of an effective transport system. Objective 1 involves understanding behavioural influences on fuel use.

Methodology

- Six focus groups and 12 individual interviews were conducted using an interview guide containing questions relating to travel behaviour and experiences, mode choices and knowledge of strategies to reduce fuel use.
- The focus group discussions were held with participants living in diverse residential locations in the Auckland metropolitan region: lifestyle block residents (no public transport); inner city apartment dwellers; inner suburbs (public transport corridor); low socio-economic status outer suburb (limited public transport); high socio-economic status outer suburb (limited public transport); and cycling/walking interest group members. The individual interviews supplemented these groups by capturing further transport-related experiences of people from diverse household types, and at various life stages.
- Transcriptions of the interviews were loaded into QSR's NVivo software package then coded and analysed using thematic and discursive approaches.

Findings

Attitudes, experiences and behaviour relating to specific transport modes

- A car's attractiveness is based on the convenience it offers to go anywhere, anytime. Not having a car, particularly in suburbia, significantly limits personal mobility and freedom. Cars provide a personal mobile space.
- Negative attributes of cars included their role in accidents, the noise they produce and their contribution to environmental pollution and energy consumption. While the rising costs of car use concerned participants, cost was not generally so much of a concern that people would restrict their use of cars because of it. Traffic congestion and parking were noted as disincentives to car use.
- Car pooling was considered by some participants to be an attractive means of transport, but only in very specific circumstances. Car pooling generally involved some compromise to individual freedoms and therefore lacked flexibility as a means of transport.
- Some benefits to using buses were identified. These included avoiding the stress of driving, having a relaxing travel experience, being able to take advantage of

bus lanes and early green traffic light changes for buses, and the information provided by Rideline (now called Maxx).

- Bus use was more often described in negative terms. Buses were considered 'down market'. The experience involved sitting next to people you did not know, waiting at bus stops, standing in crowded buses, lengthy walking distances to bus stops and destinations, and rudeness and unhelpfulness of bus drivers. Safety issues onboard buses were also raised. Key limitations of buses related to the service they provided. It was generally considered to be unreliable, infrequent, limited in coverage - particularly cross city routes, and indirect in its path to destinations. Bus travel for families was seen as expensive compared to travel by car.
- Trains were generally looked upon in a positive light, specifically their ability to take a direct route to a destination and avoid road congestion. Trains were also considered to be cleaner and safer than buses. They allowed passengers to read and work on the journey. Limitations of trains included safety at some train stations, reliability (although participants generally considered this was improving), and convenience in terms of city coverage and frequency of trains.
- Ferries were another form of public transport that was generally looked upon positively. The pleasure of being on the water, direct routes to destinations, available seating, lack of congestion on the water, and the opportunity to move around as a passenger and partake in activities such as reading, were all attractive to participants. However, the frequency and coverage of ferries were again seen as limitations.
- Taxis were considered a convenient option in some situations, such as taking groceries home or after a night out. Cost was described as a limiting factor on their use. Taxi drivers with limited knowledge of city streets and poor ability to communicate in English were noted negative factors of taxi use.
- Participants put forward a range of opinions on cycling. Some considered it to be healthy, energising and a good form of exercise, while others noted safety concerns when driving amongst cars. Cycling was seen to be faster than cars in some situations. However, practical considerations were important, including the distance to travel, the weather, the journey purpose (sweatiness tolerance), and lack of secure street storage facilities for bicycles.
- Walking was generally considered to be a pleasurable activity people participated in for fun, recreation or fitness. As a means of transport, walking had a number of constraints, including safety issues (such as traffic and walking in the dark), distances that needed to be covered, time, rain, dogs, and the hilly topography of Auckland.

Lifestyle choices

- Time efficiency was a key determining factor of transport mode choice.
- Car ownership and a penchant for travel were seen as hallmarks of the New Zealand lifestyle. Acquiring a driver's license, closely followed by car ownership, were considered to be significant rites of passage for many New Zealand young people.
- Housing preferences, particularly the access to private outdoor space, were identified as an important part of the New Zealand lifestyle. The notion that New Zealand is a good place to bring up children was associated with homes with gardens and outdoor living. Apartment living was talked about as an option for

young adults, post-children households, and for new settler households who have experienced a higher density of housing in their countries of origin.

- House prices are a crucial factor in housing choices. Participants also spoke in both ideal and pragmatic terms about the trade-offs they had made or would consider between location of choice, and access to private outdoor space and public services and amenities.
- Suburban residents' spoke of multiple transport and access factors influencing where they had chosen to live, including location of family, friends, school options and work locations. There was a pervasive sense that the advantages of suburban living (such as space and privacy) were severely eroded by the stress and demands of transport issues. For those without use of a vehicle, some had experienced severe isolation due to the poor quality of the public transport system. Employment options, school options and participation in activities could also be limited without good transport (be it private or public).
- Central city dwellers were generally strong advocates of the benefits of not having to use a car to access work, amenities and services. Public transport and walking were considered viable transport options. Private vehicles were still commonly used to get out of the inner city for recreational or business purposes.
- Participants from lifestyle blocks had mostly made a deliberate transition from a suburban situation to their current situation, trading accessibility against space and quiet. Public transport, walking or cycling were not viable options. Car dependency was high for nearly all forms of participation: work, accessing amenities, and socialising. Participants were committed to their lifestyle choice and indicated that the cost of running a car would have to go very high before they would consider moving or substantially changing their travel patterns.
- Cars as a form of recreation or entertainment are also a part of the New Zealand lifestyle. The recreational use of the car was depicted as a source of pleasure for a number of participants.

Perspectives on car use

- A number of participants expressed a moral position in relation to their own or other people's travel behaviour. This took the form of negative judgements about 'unnecessary' car trips and high levels of car use in Auckland.
- Participants argued strongly that at both personal and community levels, cars, roads and the associated stresses are seen as threats and impositions upon physical and mental health. Vehicles and their infrastructures were seen as an imposition on neighbourhoods. However, others thought that vehicles and roads extended the neighbourhoods people can have social contact within.

Fuel use

- Participants' estimates on household fuel consumption ranged from \$10 to \$200 per week (for households that had vehicles).
- In general participants found it difficult to respond when asked about changing levels of household fuel consumption over the past decade. A common approach to answering this question was to think about household composition and the changing ages of children in a household. Households with more children and/or older children now than 10 years ago were likely to indicate increased fuel use. There were also accounts of a change in workplace (more or less distant from

home), change in residential location, and the uptake of a recreational activity impacting on the level of household fuel use.

- With the exception of lower socio-economic participants and those without access to a car, participants were generally unable to identify latent travel demand – travel needs were seen as largely met.
- Participants had a wide knowledge of strategies to reduce fuel use in their own cars and many spoke knowledgeably about features of fuel efficient and dual fuel vehicles. Other participants argued for trip-saving, carpooling and even car-less days as means of fuel reduction. Others argued for a notion of essential use and a reduction in recreational use to reduce fuel consumption, increased use of public transport, alternative fuel vehicles, and working from home. While there was much talk and an apparent willingness to attempt to shift from dependence on private vehicles this was often frustrated by impracticality.

Multi-mode trips

- Participants reported that multi-mode travel, which combined walking, bus and car, were commonplace. This was particularly so for children. However, a large number expressed that their intentions of multi-modal travel were thwarted by a less than perfect public transport system.

Common discourses

- The data and analyses reported encompass a wide array of discursive resources that can be deployed by speakers to articulate and defend various positions on travel related behaviours.
- The foundation assumption in participants' discursive puzzling over their transport and access issues is that the solutions proffered and taken up will be the ones that connect with the realities of their lives and in this sense serve and make sense for them.
- A key contrast exists between the talk of those with much and those with little over what assumptions underpin transportation in the city. Philosophically those with resources favour the private vehicle for its flexibility, its efficiency, and role in expressing identities. Public transport is often looked down upon. While those who do not have the resources to access private transport, they are resigned to work within the public transport system, with all its limitations.
- Cars were also associated with the discourse of control: control over how and when people travelled, the potential to respond at any time to any eventuality requiring mobility, and control of the routes taken and the potential to multi-trip. The internal environment of a car is under the control of the user. Control was also implicit in parents' talk about the use of a car to transport children from venue to venue.

1. Introduction

This technical report sets out the methodology and findings of a qualitative interview based study of travel behaviour in the context of Objective 1 of the *Reduced CO₂ from Sustainable Household Travel Research Programme*.

The strategic intent of the programme is to achieve a sustained reduction in the CO₂ emissions generated by domestic transport, while ensuring that New Zealanders are able to enjoy the benefits of an effective transport system.

The research programme aims to identify causal factors that have contributed to a rate of increase of CO₂ emissions from household transport which has exceeded population and economic growth. This will involve understanding the access demands of New Zealanders, the reliance on private motor vehicles, including the choice of particular vehicle types, and the particular social and behavioural aspects of New Zealand culture that shape household transport fuel consumption. The research will also identify the critical role of access to social outcomes and the feasibility and acceptability of achieving access in ways that differ from current patterns.

New Zealand has a unique market for used vehicles from Japan, a culture of expectations for travel, a well developed private transport infrastructure, and a less well developed and supported public transport infrastructure. Significantly reducing New Zealand's domestic fuel use will require significant behavioural change. Co-ordinated sequences of strategies, posited on the causal factors which underlie behaviour, are needed to embed and sustain this change in the long term. An increased understanding of the unique New Zealand cultural context that has generated the recent trajectory of increasing fuel consumption will inform strategies to reduce domestic fuel consumption.

The proposed programme operates within three interlinked objectives addressing the behavioural and social determinants of fuel use and travel:

1. Understanding behavioural influences on fuel use;
2. Identifying systemic and individual barriers to better travel; and
3. Measuring the social impacts of reduced fuel use.

The research outlined in this report comprises a component of the first objective – understanding behavioural influences on fuel use. Qualitative data relating to travel behaviour and mode choices has been generated through focus group discussions and one-to-one interviews with a diverse group of Auckland residents. The data has been analysed to examine the range of social, economic, cultural and environmental factors that influence travel choices and behaviours. The understandings emerging from the qualitative research will inform the development of a broad item pool from which a transport survey instrument will be developed for use in subsequent phases of the research programme.

Discussions with end-users of transport research, knowledge of the limitations of existing data (in particular the Land Transport Safety Authority Household Travel Survey 1989/90 and 1997/98), and knowledge of relevant international literature have

identified a need for an enhanced understanding in the following areas as they relate to the New Zealand cultural context:

- The latent demand for increased access: measures of the future demand for travel and existing factors impeding access (for example, car parking costs, car ownership costs, compliance costs, congestion and time);
- Trip types that induce or necessitate private vehicle ownership;
- Knowledge, awareness and concern for strategies to reduce fuel use;
- The propensity to combine public and private transport to meet access demand; and
- The mediating effect of access demand resolution on lifestyle (for example, choice of recreational activities participated in and commuting distances considered acceptable).

These issues informed the data collection and analysis. The findings place these concepts within the lived reality of a number of Auckland residents and, in doing so, provide a richness and authenticity to their meaning.

The technical report is structured as follows:

- Section 2 briefly reviews some of the existing literature that relates to Auckland's transport system.
- Section 3 describes the research methodology and the ethical review process.
- Section 4 details the findings from the interviews. These are structured thematically as follows: attitudes, experiences and behaviours relating to specific transport modes; lifestyle choices; perspectives on car use; fuel use; and multi-modal trips.
- Section 5 discusses the common discourses that emerge from the findings.

2. Background

New Zealand is a nation of car drivers. It has one of the highest rates of car ownership in the world (Ministry of Transport, 2002, Auckland Regional Council, 2003). The number of registered private motor vehicles is increasing, with growth of 26% between 1990 to 1999 bringing the number of registered private motor vehicles to 1.9 million (Ministry of Transport, 2002). This pattern is mirrored in the Auckland region. Car availability in Auckland has increased from 1.47 per household in 1991 to 1.66 per household in 2001 (Auckland Regional Council, 2003). There are approximately 630,000 cars in the region, which translates to nearly one car for every second Aucklander (Auckland Regional Council, 2003).

Concern has been raised about Auckland's reliance on the motor vehicle as the main mode of transport used by its residents. Aucklanders are making more trips per person than ever before and a greater proportion of these trips are being made by car (Auckland Regional Council, 2003). Other forms of transport, including walking, cycling, buses, ferries and trains, are used to a far lesser extent. Weekday mode use comparisons between Wellington and Auckland indicate that public transport, walking and cycling are used for a smaller proportion of trips by Aucklanders than Wellington residents. For example, 6 % of trips in Wellington are made by buses or trains whereas in Auckland only 2.9% of trips are made by these modes; a finding attributed at least in part to the higher proportion of jobs located in the Wellington CBD (22%) compared to Auckland's CBD (14%) (O'Fallon and Sullivan, 2003).

Predicted levels of population growth for Auckland, at a rate of 1.5% (18,000 people) per annum, are expected to further increase the level of private car use in the city. Traffic has been forecast to grow by 25% by 2016 (Auckland Regional Council, 2005a).

Auckland's urban form is characterised by dispersed, low density development with a decentralised pattern of commercial centres and employment opportunities - all factors that contribute to higher levels of private vehicle use and lower levels of public transport use and walking and cycling (Newman and Kenworthy, 1989, Newman, 1992, Burton, 2000, Frank et al., 2003). Public transport provision becomes more viable as population and household densities increase and greater numbers of people are proximate to the public transport system (Frank et al., 2003). It is also assumed that greater population density will mean that there will be greater 'trip ends' or places that people want to go that are close to public transport stations (Frank et al., 2003). Low population density, conversely, will mean that there are few numbers of trip origins or destinations within a close radius of a public transport station.

The Auckland Regional Council recognises that the urban form of the metropolitan region is presenting problems in terms of transport use (Auckland Regional Council, 2005c). The post 1950s development has been predominantly low density single level housing. This has been a reflection of the space and means that have been available to allow for the kiwi dream of owning a home on a ¼ acre section (Auckland Regional Council, 2005b). This is no longer sustainable. The Auckland Regional

Growth Strategy has set the goal of 70% of future growth to be accommodated within the existing urban area (Auckland Regional Council, 2005a).

3. Methodology

The research utilised qualitative techniques, specifically focus groups and individual interviews, to determine participants' knowledge and experiences around travel and fuel use in order to understand the broad social and behavioural influences operating. Qualitative research is invaluable for the scoping and defining of topics that are under-researched or poorly understood (Denzin and Lincoln, 2000, Wetherell et al., 2001). It is also invaluable for assessing the range of experience as well as tapping into the specificities of the ways in which social and behavioural phenomena play out in real lives. Focus groups are an increasingly utilised data-gathering method in the social sciences for exploratory research for scoping new research areas, and for providing richness and depth to such investigations (Carey, 1995, Wilkinson, 1998). Individual interviews are similarly regarded and offer the opportunity for the detailed information that may be less salient in the focus group setting (Taylor, 2001).

Thematic and discursive analyses were conducted on the data gathered. These types of analyses generate what Patton (1990) has termed "thick description" of data; rich, diverse, detailed accounts, often built around verbatim data excerpts, of the discursive resources drawn upon by speakers as they talk about the topic (Irurita, 1996, McCreanor and Nairn, 2002). The value of such understandings, both to the project as a whole as it works to enhance our knowledge of fuel use and to the specific goal of contributing to an item pool from which a national survey can be constructed, is that it provides research based accounts of personal experience.

In addition to primary data collection, a range of reports and papers were also examined to further develop an understanding of the social and behavioural dimensions of high and low fuel use. The conclusion was drawn that it is more useful to consider such characteristics as a spectrum, as opposed to polar opposites. Because of this the sampling frame for the focus groups and individual interviews focussed on including participants at a range of life stages and social strata and who were resident in locations that were diverse in their transportation amenities and characteristics. We then explored high and low fuel use with these individual and groups in relation to these settings.

3.1 Sampling frame

Six focus group interviews were undertaken using a purposive case frame based on the following residential zones:

- lifestyle block residents – no public transport (*Lifestyle block focus group*)¹;
- inner city apartment dwellers (*Inner city focus group*);
- inner suburbs – public transport corridor (*Inner suburbs focus group*);
- low socio-economic status outer suburb – limited public transport (*Outer suburb - lower socio-economic focus group*);
- high socio-economic status outer suburb – limited public transport (*Outer suburb – higher socio-economic focus group*); and
- cycling/walking interest group (*Cycling focus group*).

¹ The italicised names of focus groups are used to identify excerpts in section 4

In addition to the focus groups, 12 individual face-to-face interviews were undertaken. These participants were selected to supplement the data gathered in the focus group discussions. For example, to ensure a broad range of age groups were included, to capture the experiences of people from single person and multi person households, and to include a range of commuting experiences.

3.2 Data collection

A comprehensive interview guide with key questions and probes was developed. Slight adjustments were made to this, depending on whether groups or individuals were being interviewed. The guide was effectively piloted with a small number of initial interviews and slightly refined before engaging in the main data gathering phase. Interviewers encouraged participants to ‘talk out’ each interview topic until participants were satisfied with what they had offered and indicated a readiness to move on. The interviewer listened, clarified, probed, and, if necessary, brought up issues which were within the research focus but had not arisen spontaneously in the course of the conversation. Interview length ranged from half an hour to an hour and a half. Interviews were transcribed verbatim and checked before inclusion in the project database.

3.3 Analyses

Transcripts were loaded into QSR’s NVivo software package then coded and analysed using thematic and discursive approaches (Patton, 1990, Potter and Wetherell, 1987). Working analyses were produced by close reading of the data and consideration of the commonalities and variations in the coded materials. These were adjusted until the analyst was happy that the emerging themes were stable and an accurate reflection of the data.

3.4 Data presentation

The materials presented here are meta-level thematic accounts and present a mix of interwoven contexts and practices that constitute the experiences of our participants in relation to fuel use and travel behaviour. The format of presentation is primarily descriptive. Direct quotes from interviewees are used to illustrate, ground and orient the emerging findings.

The findings traverse a range of travel modes and a number of other domains of interest or concern that fall out of the data generated by participants. They are presented in ways that attend both to the imperatives of the research brief outlined above and the further requirement for contributing to the development of survey items in subsequent stages of the research.

3.5 Ethics

The project was conducted under the guidelines of the Massey University Human Ethics Committee and as such guarantees anonymity and confidentiality to all participants. Care has been taken in the gathering, transcription and analysis of all data to avoid identifying any person. Recognisable features relating to any person

(apart from locations) are not reproduced in this report or any document for release beyond the research team.

4. Findings

The findings of the thematic analysis of interview and focus group data are presented in five sections.

- Participants' attitudes, experiences and behaviour relating to specific transport modes – cars, car pooling, buses, trains, ferries, cycling, walking, and taxis. A consistent range of sub-themes such as mode attractiveness, safety, cost, reliability, coverage, and disincentives to mode use guide the discussion.
- Lifestyle choices of New Zealanders. This involves comments on New Zealand's culture of car ownership, people's preference for houses with outdoor space, and travel as recreation or entertainment.
- Respondents' perspectives on car use, specifically their moral perspectives and views relating to health and wellbeing.
- Aspects of fuel use – cost, changing levels of household consumption, and knowledge of fuel reduction strategies.
- The use of more than one mode of travel for trips.

4.1 Attitudes, experiences and behaviour relating to specific transport modes

4.1.1 The car

Attractiveness

A car's attractiveness was attributed to the flexibility it offers to go wherever whenever. Being without a car, particularly for participants who lived and/or worked in suburban locations, was seen to significantly limit personal mobility and freedom.

They're [cars] totally flexible, and totally at your control. Like I can go anywhere I want in my car, when I want. (Lifestyle block focus group)

Participants with children placed high value on utility and being able to extract multiple uses from the vehicle.

I transport kids in my car from school to swimming and stuff like that. Having a big boot I have my wetsuit and a whole lot of stuff that most people don't have in their cars, and clothes, and all of that sort of thing. (Lifestyle block focus group)

The convenience of the car underpinned its taken-for-granted use to meet all travel needs by many participants. The only limits to reaching destinations by private vehicle were the driver's personal time and financial budget. A number of participants had never considered whether they could use public transport to meet travel needs.

The car was seen to provide a personal mobile space in which the driver can attend to their personal needs, work, sing and be entertained – all things that are not possible in public transport.

And your car's personal. You can do whatever you want. I mean, you watch people at lights – they pick their nose, they can do anything, do their hair, put their makeup on in the car it's personal ...I'll try and do as many phone calls as I can so I'm kind of doing [while] I'm driving to where I'm going...It's a business centre. (Outer suburb – higher socio-economic focus group)

Negative attributes of cars in general were identified as their role in accidents and injury, their nuisance value in terms of noise and congestion, and their role in environmental problems, such as energy consumption and pollution. Sport utility vehicles (SUVs) were singled out for being energy wasting, a risk for smaller cars, and problematic for cyclists to manoeuvre around on the road.

Whereas the capsule like personal space provided by a car was attractive to many participants an alternative view was that the isolation of car travel was stressful and unhealthy. At a community level, walking and cycling were considered more likely to enhance social interaction than car travel.

They are very isolating, you are in your little metal box whereas if you are walking or on a bike you can see people and often you say hello or have some contact, it doesn't happen in a car, unless it is road rage. (Cycling focus group)

Safety

Speed, dangerous driving, bull bars, drag racing, driving without a license, and school gate congestion were identified as key safety concerns.

Ever since the cheap imports have been coming in and the way it is with young guys a lot of them are getting cars really cheap, souping up to way too much power, asking for trouble a high powered car in the hands of a 16 year old. It is a loaded gun. (Inner city focus group)

Safety considerations impacted on the choice of vehicles for some participants, with larger vehicles often being perceived as safer.

I love my car, I think it is great, it is a four-wheel and I wouldn't go back into a small car ... I feel a lot safer, a lot higher, see a lot clearer. (Cathie)

Cost

Rising per litre costs of petrol and diesel, increasing fuel consumption due to stopping and starting in congested traffic, central business district (CBD) parking costs, and increasing road user charges were all points of disgruntlement for participants. However, most participants indicated that in spite of increasing costs they would continue to use their cars at a similar level.

If fuel costs increase, I think for running a family we'd still run a car anyway. I mean really when you've got kids our age there's no escape from the usual after-school activities a couple of days a week. But no I don't, I think it's just one of those things that you swallow up what it costs really. (Owen)

One household was an exception in that it minimised the use of a vehicle because of the high running costs.

It is good to have a car but the petrol keeps going up that is why we don't use the car a lot...It is good to have a car for emergency like in the middle of the night when somebody got sick but petrol is too expensive. (Outer suburb - lower socio-economic focus group)

The cost of car use was talked about in various ways. Sometimes it was talked about as running costs only, excluding the upfront purchase and insurance costs. Other participants took account of these broader costs as well as maintenance costs. One group discussed the 'real' costs of car use:

Cars are always more expensive than they seem aren't they. There's the prangs and breakdowns and all those different things.

Yes, warrants and rego.

Yes, I mean you know people always say the real cost of the automobile isn't really reflected in the cost, because the Government kind of doesn't want to annoy taxpayers by taking the tax up too much, so it lags behind the real cost of roading and all that. (Inner suburbs focus group)

Participants with company cars noted that they were less aware of petrol and maintenance costs than other group members.

With regard to the costs of motoring one participant who worked in the motor industry commented:

I am in an industry that is pro traffic in a way. We need there to be a chunk of traffic about to subsidise our business, motoring mishaps. (Steve)

Reliability

Congestion was a source of enormous frustration to participants and seen as an impediment to their efficient use of time, particularly given the unpredictability of journey durations. Travel time variations were attributed to a range of reasons, including whether it was peak or off-peak traffic times and whether it was during the school term or school holidays. However, travel at the same time of day was also subject to varying levels of congestion for reasons not always apparent to participants.

But one thing about the traffic is one day there will be hundreds of cars queued up and the next day they are not there...sometimes North Western motorway is chokka and next time it is not. (Cathie)

Where participants had discretion over their times of travel for particular journeys congestion was talked about as a key variable in their decision making, usually in terms of departure time. For the following participant congestion influenced mode choice.

For me at rush hour, I mentioned congestion but a car is the last choice. I will only take it of necessity if I have to in the rush hour. Outside of rush

hour I am a bit less constrained I might hop in the car and go somewhere if I am in a hurry but congestion is a big constraint for me so that is why I take my pushbike if I can. (Cycling focus group)

The following participant, whose job involved driving around the city, schedules his working day around what he knows to be varying levels of traffic congestion in different locations.

Well I'm based in New Lynn and I won't go south after 2 o'clock...So if I have a south pick up it will be in the morning and it will be generally after 9.30 so that that early rush is gone, as well. You go out and do it, and you come back and you get back before it starts again in the afternoon. Then you work around West Auckland in the afternoon or the Shore doesn't seem to be so bad. (Lifestyle block focus group)

A stressful traffic related situation was identified as being stuck in peak hour traffic knowing that you have a meeting or other deadline that you are unable to meet owing to the traffic congestion.

And it all builds and builds. I am surprised you know like people shoot out in schools and stuff I am surprised no one has just had a go at the motorway at rush hour because sitting in gridlock I just couldn't do it and I thought I can't do this any more. (Inner city focus group)

Participants were generally critical of the increased traffic on the road during school term time, arguing that more children should be encouraged to walk or cycle to school. However the following quote captures one parent's rationale for driving a child on the journey to school.

I guess she's old enough I could make her catch the bus, but I prefer to know where she's going when and that sort of thing, it gives me a bit of control. (Inner city focus group)

Disincentives

Parking availability in the CBD, and also satellite cities, was a major impediment to bringing a car into central city areas. For the participant quoted below parking was a major disincentive to attending events in the central city during the daytime.

Seminars, workshops, conferences, interesting events in places where I know parking is going to be a nightmare and I can't get there and it is a bit hard to justify taking a taxi ... I have just given up trying to get to the ones at Auckland [University] because it is so difficult. And AUT on Akoranga campus is a nightmare... even if there is parking – where I park my car in town is a 20 minute walk, so I am thinking gee that's 40 minutes plus driving there plus getting there. So that sometimes deters me as well. (Verna)

Parking was also identified as a downside of apartment living as friends coming to visit often experienced difficulties parking. An apartment may have an allocated parking space but in participants' experience this seldom extends to visitor parking.

Heavy traffic was noted as a disincentive for the following participant. He chose to undertake trips at non-peak to avoid certain places as busy times of day.

Sometimes the vehicle will be available within our household and I think, in my ideal world I'd love to go there, but god I can't stand getting involved in Auckland traffic. So in that sense it's not a case of not having the transport mode, it's not having the temerity I suppose to take on Auckland traffic to cross town to go somewhere ... it's the stress of dealing with congested traffic I think and the likelihood of encountering lunatic drivers. (Owen)

School gate congestion was another disincentive to driving to school as a destination.

4.1.2 Car pooling

A range of car pooling practices had been experienced by interview participants. These included: picking up a colleague to share the journey to work; participating in a youth group where members were given taxi van chits by local government so that they could attend meetings and conferences; a family of four adults sharing a daily car trip to the CBD and back; car sharing for recreational trips out of town; transporting groups of neighbourhood children to the bus stop; workplaces that pick up and drop off groups of workers; and a workplace that practiced car pooling. The following quote details an opportunistic approach to car pooling.

[If] we want to use the transit lanes in Onewa Rd we will pick up one or two bus users to get into the transport lane but we had a regular pool of people who will recognise the vehicle and flag us down. (Cycling focus group)

Attractiveness

Car pooling could, in some cases, provide a convenient transport option. A regular meeting with fixed start and finish times that is attended by people living in close proximity to each other was one such example. It reduced the cost of the trip, including car parking fees, and provided an opportunity to debrief after the meeting on the return trip. However, most examples of car pooling did involve some compromise to individual freedoms.

Car pooling was seen as particularly attractive for participants who did not have their own car. It was also mentioned as an option for transporting children to sporting events. But for households without a car in low socio-economic areas the need for rides outstripped capacity to offer rides between local households. Some children were excluded from sports team participation because of transport issues as car pooling was not a reliable enough option for children to commit to teams.

Convenience

Car pools were seen as inconvenient as they reduced the freedom to go whenever and wherever – a fundamental attribute associated with driving a car. Discussions on the difficulties of car pooling centred on a lack of flexibility, for example if the driver or a passenger needed to work late, start early, or stay at home with a sick child. It was noted that the more individuals included in a car pool the more complex arrangements and inconveniences could become.

If you want to go somewhere afterwards you can't. If you've got someone in your vehicle you've got to drop them off first. (Outer suburb – higher socio-economic focus group)

A situation in which car pooling was considered more workable was the use of a workplace car to pick up several workers as there was a recognised trade off – access to a work vehicle compensated for the reduced convenience. It was also noted that a car sharing website that a participant had been involved in setting up had had few successes with commuter car pooling but a reasonable success with car sharing to get to specific events or venues, and long distance ride sharing between back-packers.

In the following situation the person getting a lift, a student, was able to adjust her routine to fit into the regular routine of her car share partner.

Mum drops me off at the girl's house that takes me but basically I just go home when she wants to you know. Well she's got kids and she's got to go pick them up from school ... if I want to stay late I can't for study or anything. So you just sort of work out what you're going to do during the day to be ready to go? Yeah we leave at the same time everyday. She has to pick up her kids yeah. (Outer suburb – higher socio-economic focus group)

The importance of an incentive to car pool was discussed. One example of an incentive was the ability of cars to use the bus lane around Onewa Road, Northcote if there are three passengers or more in the car. Free city parking for car poolers was suggested as another possible incentive. The following comment refers to car pooling on the Onewa Road bus lane.

I am amazed at how few people figure out the system, the number of single occupant vehicles is just incredible, and I have got stuck in that lane and it was 22 minutes as opposed to 7 minutes. (Cycling focus group)

Although congestion was seen as a rationale for car pooling other responses to congestion undermine the potential for car pooling to be an effective strategy, for example flexitime working hours.

Several examples of parents car pooling to take children to schools and events were noted but as the following quote indicates it was also considered a difficult option for households in which two parents worked.

When I had kids to look after there is no way I could have ever carpooled, I had to pick them up here, drop them at my mothers so she could take them to school and then after work and then lunchtime I would have to go and do the

shopping, you know it was just completely impossible and I think that is more and more the case. (Cycling focus group)

4.1.3 Buses

Attractiveness

Participants expressed a range of views on the appeal or lack of appeal of bus travel. On the positive side it avoided the stress of inner city driving and, if you were able to get a seat, it could be relaxing – a chance to read or fall asleep. The priority bus lanes, early green traffic light changes for buses, and Rideline (now called Maxx) were praised.

But the best thing about the bus was ringing up to find to get the information how to get there, they were excellent. They told me how long it would take me to walk to the stop, where to get on, where to get off, how long it would take me to walk to the street that I was ... You can do that on the net as well. They we're really good.

THIS IS RIDELINE?

Yeah. They're excellent. (Outer suburb – higher socio-economic focus group)

On the negative side, the image of buses was portrayed as very 'down market' and several participants indicated that they did not like sitting next to someone they didn't know.

People kind of look down on the buses. (Outer suburb – higher socio-economic focus group)

Common complaints were the waiting times at stops, having to stand for long periods in crowded buses, the walking distances between bus stops and destinations, and the rude and unhelpful behaviour of bus drivers.

I notice a lot of times I go on the bus there is a young mum with children and they [drivers] won't help with the pram, they just sit there and then the mum will bring like four children inside the bus and then she will have to go back outside and grab the pram. (Outer suburb - lower socio-economic focus group)

Safety

Safety concerns about bus travel centred on possible crashes and also the human threats both onboard and getting to and from stops, particularly at night.

Well I was on a bus last year and there were a lot of kids fighting at the back and people were yelling at the driver saying there was a problem and he just kept going. (Outer suburb - lower socio-economic focus group)

Participants noted the potential for older people and children to be hurt when buses suddenly decelerate and standing passengers pile into one another.

Cost

The cost of bus travel was talked about at two levels: the cost of operating a bus system city-wide in Auckland, and at the individual level in terms of bus fares.

At the city level several participants questioned whether a quick, cheap and efficient bus service was feasible given the city's low population density. These attributes – quick, cheap and efficient – were seen as prerequisites for a high uptake service.

At the individual level cost comparisons with car travel were often made but the car related costs that were considered varied widely between participants, for example they may or may not include the costs of a warrant of fitness, registration, insurance and maintenance. However there was a common perception that car travel was cheaper than bus travel when a number of family members were travelling together. In the following excerpt a mother without a car compares the costs of a return trip to the supermarket by taxi, bus and car for herself and two children.

It [a car] would be cheaper for me to get to places because taxi for me to go to Pak 'n Save and back would cost I am looking at \$15-18 ... if I caught the bus, three of us, that is \$4.00 and then \$6 for my whole family to go one way, just to go and then if we catch another bus to come back from Henderson to Pak'n Save there goes another that is \$20 for one trip out. (Outer suburb - lower socio-economic focus group)

A similar scenario for the journey to work is relayed below.

Plus the cost. \$6.10 each. So there's four of us going into town, now why would you take a bus. \$6.10 each, each way, so multiply that by 10, that's \$61 times four. There is no way running a car could possibly compare with that. (Verna)

Reliability

While the common view was that Auckland bus services are unreliable and infrequent there were dissenting viewpoints as illustrated by the following quote.

For me buses in Birkenhead are another good option for getting to work they are fast, they are regular, they are relatively clean. Getting home is a little bit slower don't have exclusive lanes but otherwise a perfectly reliable option for me. (Cycling focus group)

There was limited praise for initiatives such as the Link, Nightrider, Remuera Rider, and the free inner city circuit electric bus, due to experiences of variable reliability. Bus lanes were anticipated to make a difference to the reliability and duration of some of these trips.

A range of complaints were made about buses: that they are often late or do not show up at all; that weekend buses are too infrequent to be useful; cross city and non-CBD directed bus travel is, in most instances, impossible; finding out where buses stopped on particular routes was difficult; and that full commuter buses go straight past

waiting passengers leaving them uncertain of how long their wait for the next bus will be.

He had to get somebody to drive him home otherwise he'd have to wait an hour I think it was from knock off time before the next bus came along. (Rob)

Like three Links will come at once and then nothing for an hour, so if you watch all three pull off you may as well walk. (Inner city focus group)

The 'scenic tour' or 'tiki tour' bus that winds through suburban streets picking up passengers before heading to its destination was identified as a source of frustration for users. This often meant that a ten minute car journey could turn into a much longer trip on the bus.

I go to Point Chevalier there in 11 minutes, from where I am with my car, it takes 50 minutes on the bus. (Joan)

If you don't get the express bus you go through Henderson and New Lynn and all over the place and that can take up to hour and a half or longer. And the buses aren't always reliable. I've given up on buses. It is too stressful. (Verna)

The following comment was made by a mother whose children were often late for school because of buses arriving late.

I am not having them get up at 6.00 am catch a 6.30 bus to get to school by 9.00 am. (Outer suburb - lower socio-economic focus group)

Participants frequently contrasted the frustration of Auckland buses to the ease of car use and to the convenience of bus services they had experienced in overseas cities.

I mean traffic isn't always a non-frustrating thing but less frustrating than standing in the bus because it is totally over fill and it has been in traffic and you are late and you know nine times out of 10 taking the bus is frustrating. (Inner city focus group)

Shift workers who started early or finished late identified themselves as a group who were unlikely to find buses a satisfactory transport mode. A number of conditions were mentioned that would need to be met before participants would consider using a bus rather than their car for commuter travel: buses would need to show up at the timetabled time, get passengers to their destination at the scheduled time, and be quicker and cheaper than a car.

If it was reliable, if it was quicker than taking a car, which a bus lane probably would do. (Liam)

The prospect of bus travel becoming a feasible option for non-commuter journeys and journeys beyond the inner city suburbs was not seen as high.

I find it frustrating because if I want to go anywhere other than the suburbs adjacent to town there is about a bus an hour so if I want to go out to Penrose, or Panmure or Henderson for an appointment or a meeting or

anything you can forget taking a bus because you can say it is 2/3rds of day expedition to get from the city out to Henderson or Penrose and back again. (Inner city focus group)

There was however the occasional participant who was residentially well positioned to use buses for short and long distance travel.

Disincentives

In addition to the inconvenience of the ‘scenic tour’ and the frequency and reliability issues noted above, walking to and from bus stops in wet weather and the difficulty of carrying loads, such as groceries or books, were mentioned as deterrents to bus use. Other disincentives related to the inherent lack of freedom to move easily between a number of spatially dispersed destinations, drivers who were on occasions rude and unhelpful, crowded and dirty buses, personal safety walking to and from stops and waiting at isolated stops, and the stigmatisation associated with bus travel as being ‘for poor people’.

4.1.4 Trains

Attractiveness

Trains were the mode of public transport about which participants were most effusive. The attractiveness of trains was based on their direct routes that avoided road congestion, and, compared to buses, their reliability for arriving at a stop and getting to a destination on time. Trains and train stations were generally seen as cleaner and safer than buses and bus stops. Reading, and working on a laptop, were possible on trains. Trains were also seen as a potential site of social contact.

The trains are very social, too. I actually, I caught it for two years every day and I actually got to know the people in my carriage. A group of us still actually get together every now and then and have lunch. You can read, you can do your work, no trains are brilliant.

I'd much rather read on a train than a bus. (Lifestyle block focus group)

But I would love to take a train every day, because it doesn't get held up by traffic. If there was a train I would definitely take it every day. (Liam)

The following is a set of quick fire responses from participants in the Outer suburb – higher socio-economic focus group, an area with poor train access.

WHAT IS IT ABOUT TRAINS THAT YOU LIKE?

Quick

It's fast yeah

It's not a road yeah it's straight there.

Yeah you don't get caught up in the congestion

Yeah it's not stop, start, stop, start. (Outer suburb- higher socio economic focus group)

Further comments from an interviewee who lived in West Auckland included the following.

Comfortable, Very clean, Lots of seats (Outer suburb-lower socio-economic focus group)

Although trains were praised by most participants, frequently mentioned conditions that would need to be met before they would consider using them as a mode of travel included convenience and location of train stops.

... if it was convenient I'd definitely do a train. (Outer suburb – higher socio-economic focus group)

If it would stop within five minutes of walking each way. (Outer suburb – higher socio-economic focus group)

If the Auckland public transport system got stitched together around the connections a little bit better, I could see using public transport more. (Owen)

While bus drivers' behaviour towards passengers was often criticised as rude and inconsiderate the few comments made concerning train conductors were positive.

I love the trains even the people on the trains, the conductors, they are really really good and they are very polite. Mums with prams they help them and even at night there is security there on the platforms. And you feel safe. (Outer suburb - lower socio-economic focus group)

Trains were seen to offer opportunities for multi-mode travel as bikes can be taken on the train, and park and ride facilities enable car and train trips.

Safety

The safety of train stations was a point of discussion in several focus groups. Ranui participants felt their local station was safe, noting the presence of security on the station at night, and Britomart was viewed as a safe and attractive station. However, the impression of non-train users was more of isolated 'creepy' stations away from the public view.

Most children and parents are now accustomed to using children's car safety seats so bus and train travel is seen by some as comparatively unsafe.

I know, but it's [travel with a baby on a bus or train] not something that I would do, I don't know why.

Then you could take the pushchair.

It just doesn't seem right, he should just go in the car in his car seat.

I know that we had a bus trip for my niece who was two and had never been on a bus she wouldn't go in it because there was no car seat. So she felt unsafe.

Yes, the train for some reason doesn't feel as unsafe.

Trains aren't, I guess it's all that it's more controlled in a train. Like a bus anyone can run into you, the bus driver can take off a lot more. A train can only go on the track. You can still have train crashes but it's different. (Lifestyle block focus group)

Cost

There were few comments on the cost of trains. One participant noted that they are cheaper than buses and another argued that they should be subsidised.

Reliability

A number of stories were told about late trains, breakdowns and trains that do not arrive. Whether these were temporary teething problems was a posed but unanswered question.

I was waiting at the train station going to Henderson to my doctors appointment. I waited and waited and then there was a bus that came and said that the trains are not going.

I've have had that many times even from Henderson then they will have a taxi ramp and say you are not waiting for the train are you 'yes' oh we are here to pick you guys up to drop you off to Ranui station. (Outer suburb - lower socio-economic focus group)

We have taken the train a few times but it takes a long time to get to town from Kingsland so I don't think we would do it again, plus it broke down and no one said anything so we sat in this tunnel in the dark for about 10 minutes and then it started going again, it was really strange. (Inner city focus group)

Timetabling issues and the distance from stations to destinations were also key factors in determining whether trains were considered a viable option for commuting. For a number of participants they were not frequent enough to be an attractive alternative to other modes (comparisons were made to cycles, cars, and buses).

If I caught it to work I'd either be 20 minutes early or 20 minutes late sort of thing. (Inner suburbs focus group)

Convenience

One participant lived within minutes of both bus and train stations and would hop on which ever came sooner. This was seen as convenient. However, it was often noted that there are few places in the city well serviced by trains. There was a discourse of – you're lucky if you are near a station. A number of participants indicated that if their area was serviced by trains they would like to use them, although such

statements were usually qualified with comments about the inflexibility of public transport for multi-destination journeys and the needs of busy lifestyles.

Comparisons were made with train services in other countries that were seen as convenient because of their wide coverage.

Anywhere you needed to go in London you were five minutes away from the tube station. So that was the cheapest, convenient and best option. So I think because of the lack of population the city of Auckland has compared to its actual physical size, it is going to be very hard to get that level of convenience.

DID YOU ACTUALLY THINK ABOUT HAVING A CAR IN LONDON?

No, it would have been a crazy thing and it wouldn't have made my life any better, it would have been worse, there would have been parking hassles, it would have been quite expensive and wouldn't achieve anything. The tube was fantastic. (Sam)

Disincentives

A commonly noted disincentive to train travel, like bus travel, was the journey time when more than one train is needed to get to a destination.

So by the time you do this trek, I mean the train would be about an hour and 10 minutes, by the time you take two trains.

THE CAR WOULD BE HALF AN HOUR?

Yes, and half of it is the connection time at Britomart, so it's, public transport is great for short hauls within Auckland, but if you want to do anything that involves connections, it's lousy, it's not sorted yet. (Owen)

4.1.5 Ferries

Attractiveness

The attractiveness of ferry travel centred on the intrinsic pleasure participants reported of being out on the water. Other attractive features of ferries included the direct route to a destination, available seating, lack of congestion on the water, the opportunity to move about to get a coffee or go to the toilet, and the ability to read a book.

You look out the window and it is just open space rather than someone else's car. (Outer suburb – higher socio-economic focus group)

The downside of ferry travel was seasonality and the chance of seasickness under rough conditions and the limited range of destinations. No comments were made about the safety of ferry travel.

Ferries compared favourably to buses.

I would rather spend an hour on the ferry than an hour on the bus. (Outer suburb – higher socio-economic focus group)

Cost

East Auckland participants, the only group who had relatively close access to a ferry service, debated how the \$13 return ferry ticket between Half Moon Bay and the city compared to the cost of taking a car. For one participant the answer hinged on whether a more expensive but convenient car park was used or the cheaper alternative located further from their destination.

Reliability

Ferries were considered less frequent but faster and more reliable for commuters in terms of destination arrival times than a bus. The downside of less frequent trips meant that if you miss a ferry it can be a long wait for the next one. Ample parking at suburban ferry terminals enabled park and ride.

Coverage – location

Ferry services are limited in their number of destinations and participants felt that extending the services was an obvious option given the geography of Auckland.

4.1.6 Taxis

Attractiveness

Taxis were considered convenient in specific situations, for example taking groceries home in households without a car and getting home after a night out.

We have to, can't walk 40 minutes with groceries ... Especially if you are doing a big load of shopping. Your meat will cook by the time you get home. (Outer suburb - lower socio-economic focus group)

However not all participants considered taxis a safe and/or attractive service. Several accounts of scuffles with taxi drivers were recalled.

Cost

Viewpoints varied on the cost of taxis depending on the route and time of day.

Because of petrol, extra surcharges [it's] far more expensive to actually take a cab than anything else, it is so expensive now. Add on top of that the tampered metres and such. (Inner city focus group)

Getting caught in gridlock in a taxi had been a costly experience for one participant.

Reliability

Some, but not all, taxi companies were harshly criticised for employing drivers with little English and limited knowledge of city streets.

Some of the worst [taxi] drivers in the world, some of them don't even have licences. I had a driver once who fell asleep at the wheel. I said to him 'how many shifts have you done' he admitted finally he had done three 8 hour shifts. (Inner city focus group)

The taxis that are just flooding the central city particularly at night time don't necessarily know where they are going, don't know Auckland particularly or often don't have the level of language to understand where it is that you are directing them to go unfortunately. (Inner city focus group)

Taxis were used mainly by participants who lived in the inner city and participants who did not have access to a car. Waiting times for taxis were not raised as an issue by the inner city participants but participants from an outer West Auckland suburb, noted waiting times of between 10 minutes and one hour for a taxi.

After shopping ah and you want to catch a taxi. Especially on a wet day it is awful, it is bad enough on a normal day but on wet day the weather is miserable you just don't want to be out there, it takes forever. (Outer suburb - lower socio-economic focus group)

4.1.7 Cycling

Attractiveness

Cycling was seen as healthy, energising and a good form of exercise. A number of participants spoke about the pleasure of cycling, and cycling fast. It was also seen as an economical form of transport.

It is really exhilarating because you can just get that adrenalin rush and speeding hard out it is just a rush. (Outer suburb - lower socio-economic focus group)

Partly because we enjoy it, we are not fitness freaks but enjoy being out there and feeling our blood surging through our legs and that sort of thing. And because for economics it makes more sense to get places for no cost. The whole thing seems to just mesh in and make sense to us. We don't mind spending longer getting places sometimes. (Ron)

Distance from destination had an impact on the attractiveness of cycling, although there were a range of distances that were seen as acceptable commuting distances. The maximum regular commuting distance noted by a participant to be a forty-five minute ride between Grey Lynn and Penrose. Within the city a cycle was seen by some participants to be more convenient and faster than a car. Situations where more formal dress was needed were an exception.

The higher performance of modern bikes enhanced the image of cycling for the following participant.

And there have been huge technical development in bikes to make them more attractive for use over time, gears and things like that in particular, and the stigma attached to cycling has been partly broken down because of the fashionability of the gear all that sort of, so more people are attracted to it now I think than were even 10 or 20 years ago. (Ron)

The attractiveness of cycling a particular journey is determined by attributes such as distance, weather, journey purpose (sweatiness tolerance), add on trips, and the congestion on route at time of travel. Cut off points around decisions on whether to cycle or not cycle on particular journeys were discernable as illustrated in the following quote:

Yes, I mean some places you get there and it's got a gym, or your work has got a shower or there's some sort of thing like that. But like with my one, I'm fit enough that when I get there it's just short enough. I've found that I've gone to other libraries to work, like I work at Avondale Library and I've been to Blockhouse Bay and it's just a bit more hilly and it takes me like just five or 10 minutes longer to get there, but I'm just so much more sweaty. (Inner suburbs focus group)

Recreational cycling was commonly mentioned by both commuter cyclists and other participants.

Safety

Viewpoints varied on the safety of cycling in the city – some recreational riders would not consider cycling in the city whereas for others it was their primary mode of travel. Cyclists' perspectives on the safety issues of cycling differed from car drivers' views. Car drivers' talk about cycling safety centred on issues such as difficulty seeing bikes in heavy traffic, the dangers inherent in swinging out to give cyclists space when passing them, and cyclists riding without a helmet or lights. Cycle riding on the footpath and adopting pedestrian rules at intersections were sources of annoyance to car drivers, although as recreational riders themselves, riding on the footpath was reported as a safety strategy.

I go to work when it's still dark and um they're really hard to see. They may have lights but they're really hard to see and um a lot of them don't have lights, a lot don't have helmets.

Yeah if it is peak hour traffic then there's this continuous stream of traffic and everyone's having to do that manoeuvre to go around them so it's actually one bike is causing a lot of obstruction to a lot of vehicles. (Outer suburb – higher socio-economic focus group)

Cyclists details issues of safety from their perspective:

Out there mixing with the traffic, you have got to be fast, you have got to keep your wits about you and be prepared for idiot car drivers at all times. So

there is a combination of health benefits but there is also the health risk as well if you are in an accident. (Inner city focus group)

I think if you cycle defensively you can avoid them, just assume every car door that you pass is going to open and every car is going to pull out and then you are usually alright. (Cycling focus group)

A confusion created by cyclists who ride by both road and pedestrian rules at intersections was mentioned. This was also mentioned in the context of safety for children on bikes. Riding on the footpath was seen to have its own dangers such as potential collisions with pedestrians and cars coming out of driveways.

In the absence of cycle lanes cyclists talked of having to remain vigilant and to ride defensively.

Bad weather can also be a safety issue for cyclists.

Cost

Two comments were made regarding the cost of cycling. For one group (*Outer suburb - lower socio-economic focus group*), the cost of a bicycle was not affordable. Another group considered that cycling was an economically sensible alternative to a car.

It saves you time in terms of you don't have to earn the money to buy a car if you don't have a car. This is from my point of view, I have lived with being a student for many years without a car and also not having to find time to go to the gym or pay money to go to the gym so when you add the amount of time it takes to earn money to pay for the gym and pay for the car, it is the amount of time it takes to cycle, I have actually seen calculations. (Cycling focus group),

Coverage – location

The cycling focus group was made up of very committed cyclists who were prepared to commute relatively long distances (for example, up to 45 minutes each way) on their bikes. Intermittent car journeys were utilised to transport loads of goods or equipment. The lack of a cycle lane on the harbour bridge was a noted impediment to coverage.

Disincentives

Disincentives for cycling included the lack of purpose built cycle ways (the development of which was described as being excruciatingly slow), a scarcity of workplaces offering showering facilities, and the lack of street and workplace secure storage facilities for bikes. Cycle ways beside railway lines and motorways were seen as ideal in New Zealand because the corridors are flat and have relatively low noise levels compared to those found in high density cities.

And just showing up wherever you are going all kind of sweaty and smelly you know, do you want to show up at an important business meeting with

helmet hair, smelling like an athlete. You have to pick your moments for it. (Inner city focus group)

Congested suburban streets that present hazards for the cyclist were also identified as a disincentive.

Traffic congestion is a real barrier, like for instance, even just going down to the local post shop in the Mount Albert shops, I can cycle as far as the intersection at the shops, but from then it's walking a bicycle along the footpath because it's just too dangerous to be in amongst the traffic. The intersection is too tight, it's far too much traffic. (Owen)

The limited carrying capacity on a bike was a disincentive to cycling in certain situations, for example when transporting tools and materials to the workplace. The pleasure of cycling can also be seasonal with rain a disincentive.

4.1.8 Walking

Attractiveness

For some participants walking was a pleasurable activity that they did for fun, fitness or recreation, whereas for others walking was avoided because it was considered boring.

I think the slow pace of walking also enables you to see things that you wouldn't normally and it becomes an interesting journey, you notice a lot of things that you wouldn't if you in any other form of transport even a biker. (Outer suburb – higher socio-economic focus group)

Walking home after a night out was seen to make sense to avoid drink driving. Walking school buses were also identified as a positive activity. Various arguments are used to persuade parents of the walking school bus option:

It is more of a social thing, you get to walk to school with your friends, you walk to school, it is free exercise, a bit that we pass on to the parents is that children who have had that burst of energy first thing in the morning are actually much better behaved in the classroom and consequently they learn better because they have done their burst of energy or they have woken up their whole body and so their brains are energised, they learn better. And yes the pitch to the parents as well is you don't have to be at the school gate and join that scrum and because of the way we run it the parents only need to walk on it once or twice a week. (Olive)

While walking was considered to be good in some respects, this does not mean that it is automatically taken up by interviewees.

It is good for you but I am originally a motorist so if I had a choice I would probably drive but then when I do drive it just stresses me out. (Inner City focus group)

Safety

Safety concerns relating to walking included danger from other people (particularly if walking alone at night), a scarcity of pedestrian islands and crossings on streets, and the inconsiderate behaviour of car drivers. Drivers of vehicles were noted to pull out at side streets and driveways without looking for pedestrians and not slow down or stop at pedestrian crossings.

Frustration – stress

The apparent prioritisation of cars at intersections was a source of frustration for walkers. This frustration encouraged risk taking behaviour by some participants.

I just find it infuriating down Queen St, just standing there and waiting for like five minutes and then the light goes green for about two seconds and then it is flashing red at you telling you to get out of the way for the cars. (Cycling focus group)

I actually play a sequencing game which might mean crossing in the middle of a block or matching up or running to catch the light or whatever. (Cycling focus group)

Coverage – location

Walking was the only mode of travel available to some participants who did not have a car and for whom buses did not go to the places they needed to get to.

If I need to go shopping sometimes the bus don't go to where we do our shopping at Pak'n Save. Walk, we have to walk or use a taxi. (Outer suburb - lower socio-economic focus group)

One participant commuter walked between the homes of her clients. This journeying took several hours a day and she was not paid for this time.

PRESUMABLY YOU ARE NOT PAID FOR THE WALKING TIME

No that is the reality of it. Because buses are so hard they are not on that route to where I am going. (Outer suburb - lower socio-economic focus group)

Another participant, quoted below, counted up the hours per day she spent walking between locations in her West Auckland suburb.

It is half an hour to get there, another half hour home, half an hour to come back to take Jamie, and half an hour home. Half an hour to come back to work and then I think you are looking about three to four hours sometimes. (Outer suburb - lower socio-economic focus group)

Disincentives

Distance, time, rain, dogs and a hilly topography were identified as disincentives to walking. The following quote from a mother of a preschooler mentions the additional time factor of walking with children.

I think it depends on how I am feeling on the day. The fact that it takes longer to walk up a hill than the same distance if it was flat that also puts a spin on it and at the moment because I often go places with the children, I mean I can walk home from school in about 15 minutes by myself, with Zoe it is a good 25. (Olive)

Safety was a consideration when walking at night and getting sweaty a disincentive for commuter walking. Although the following participant knew that walking was the sensible option for short journeys she regularly used the car as it was less hassle when transporting a number of children.

For me to leave the house, can I come, I'm coming, I'm coming all the kids want to come, you can't leave them behind oh mum's going we're going too. Oh, take the car (laughing) pack a bag put the kid in a pram, put your shoes on, get your jacket it's just a hassle [to walk]. (Outer suburb – higher socio-economic focus group)

The sprawling nature of Auckland was a noted disincentive to walking.

4.2 Lifestyle choices

4.2.1 Car ownership

Car ownership and a penchant for travel were seen as hallmarks of the New Zealand lifestyle. Acquiring a driver's license, closely followed by car ownership, were considered to be significant rites of passage for many New Zealand young people.

Yeah, well New Zealanders do love their cars. I mean as I say when I was car painting and panel beating business and that sort of thing it was quite so obvious, you know, it was their pride and joy, the second biggest cost and outlay and therefore you learnt to enjoy it. Sunday drives, when I was young, was a thing of the week, you know. Your father, mother and kids all went out for a drive and went and had picnics at parks and all that sort of thing. We were raised in cars, we were raised to like them. (Rob)

The early age at which driver's licenses can be acquired in New Zealand was seen to negate the development and embedding of public transport related behaviours into young people's lifestyle. It was suggested that adolescents would develop more pro public transport habits if the age at which a license can be obtained was raised. Comparisons were made with European cities, where the suitability of train, bus or car is weighed up for each journey compared with Auckland where the car is assumed to be the mode of choice by many.

4.2.2 The ‘quarter-acre section’

Participants identified housing preferences, particularly the access to private outdoor space, as an important part of the New Zealand lifestyle. The notion that New Zealand is a good place to bring up children was associated with homes with gardens and outdoor living. Apartment living was talked about as an option for young adults, post-children households, and for new settler households who have experienced a higher density of housing in their countries of origin. Higher density housing was generally not thought of as appropriate for families with young children.

I mean I don't, like when I have kids I want to have a house and have a garden but right now it's no big deal. (Outer suburb – higher socio-economic focus group)

No one of the things I enjoy about New Zealand cities as opposed to London or others is that we do have land around our houses we do have that space to be able to grow trees and the kids can run around without having to go down to the park ... I think it is probably a physically healthier also mentally healthier that you are not sitting on top of each other, you have that space. (Olive)

They [apartments] would be convenient for flatting but if you have got a family it is not convenient, not enough space, that is where the acre and the house and the lawn comes in.

Greenery.

Yes that sort of thing, you need your space and grass. But for flatters that is a suitable environment for them.

For single people maybe but not for families. (Outer suburb - lower socio-economic focus group)

The desire to have a healthy environment for children – open spaces and fresh air – was seen as the reason families often sought suburban housing. However, as the following excerpt indicates, it was not the only variable considered when determining location and style of residence. House prices were a crucial factor in housing choices. An apartment in a ‘better’ area near ‘good’ schools could be exchanged for a house and garden in a less desirable area. A garden was exchanged for outdoor public spaces.

We moved from a big huge lawn and high maintenance trees, fruit trees, big section to an apartment ... The only price that was affordable for what could accommodate the kids because it's four bedrooms, three levels so all the kids had their own bedroom and it was just the right price I suppose.

AND HOW'S IT BEEN FOR YOU?

Yeah, it's been good because we've got parks close by so I looked at it like well we could walk to the parks so we've still got the playtime. Out the back it's all sort of concrete so they ride bikes and scooters and stuff like that so they haven't missed out yeah. (Outer suburb – higher socio-economic focus group)

The cost of housing and the dwindling prospect of home ownership for younger people in Auckland were mentioned in several focus groups. Living in high density housing was seen by some as a likely outcome because of financial constraints.

Well I think, you know depending on what your circumstances are, if you have no choice, then you have no choice, but if you do have a choice and I think most of us do you make that choice and that's the choice I made a long time ago. I was, as a child I was brought up in a hotel in the middle of city in town and I saw that and I don't dislike that, but I don't want to live like that as I get older and I don't want my children to live like that as they grow older (Lifestyle block focus group)

The exchange below refers to the New Zealand lifestyle and the way one aspect of it – the barbeque – is compromised by apartment living.

Yeah, now that we're in it [an apartment] we're missing out on being able to entertain and go outside because whenever someone comes around we just gather around the bench and we want to go outside and sit on a deck and barbecue ... so we've missed out on that yeah.

The kiwi lifestyle.

... you can get those units now that have got the big decks and things.

Yeah, yeah. We've got like a little patio but still you're sitting out there and people can look in on you.

Privacy yeah. (Outer suburb – higher socio-economic focus group)

Parks were not seen to offer the easy, safe access to open space that back yards provided for children's play. This loss of green space significantly reduced the appeal of intensified housing for participants with children.

I like my green, I really like the space where the kids can get out and play within their own boundaries. Again it comes back to the safety issue, they can play out there in their own back yard without me having to worry where are they. The only time they go to the park is when I am with them. I will not let them go on their own. And I think New Zealanders are very proud, we have got a lot of greenery in our country and that is really important but I don't know if those houses like that [high density] would take off in Ranui. There will be people who will say we will take it because it is a roof over our head but for me personally I don't think I could live in it. (Outer suburb - lower socio-economic focus group)

For the parent quoted in the following text the backyard was appreciated as it enabled her to use their time more efficiently.

My life is structured in the way that we don't have a couple of hours every afternoon to go off to a park or whatever so having the ability for the children to run around and do their thing while I can get on and do other things is certainly very attractive. (Olive)

Although the importance of a garden was seen as paramount when households had children it was not only households with children that valued a private outdoor space. Apartments with a garden were considered more desirable as indicated in the following scenario where the participant was trying to recruit new flatmates.

Like it is a big thing if you have an outdoor area inner city and a lot of people turned us down when we were looking for a flatmate because there was no outdoor area. (Inner city focus group)

While participants noted that new settlers were more inclined to live in intensified housing the observation was made that Auckland's poor public transport system had meant these new settlers, like fellow Aucklanders, had adopted the car as the preferred transport mode. The participant quoted below identified this as a lost opportunity for promoting public transport.

... in the early 1990s, there was a huge influx of people from Asian countries, all those people were accustomed to use public transport ... They hadn't lost confidence in it, they hadn't found alternatives, they are looking for public transport. And no-one did anything. So we lost that huge, thousands of people, which would have put the injection of funds back into it. And those people went out, got their licenses and bought cars. (Verna)

Faced with questions about the options they had or could exercise around residential location, participants spoke in both ideal and pragmatic terms about the trade-offs they would consider between location of choice and access to amenities. Rural locations were dreamed of by many but the pragmatics of commuting distances, and amenity, service and event access (particularly for emergencies and for children) meant that suburban locations were preferred, and suburban locations with good transportation features especially for car, train and ferry were most valued. Inner city living was valued for its high accessibility but criticised for the lack of private green space. Comments on the decision to live in suburbia, the central city, or lifestyle blocks, and the transport considerations that go with these choices follow.

4.2.3 Suburban living

Participants spoke of multiple transport and access factors influencing where they had chosen to live. These included location of family and friends, school options, and work locations. As illustrated in the following quote, dependence on a private car was almost considered a fact of life in suburban Auckland.

I think life would be rather miserable actually if you didn't have your own car. It is really difficult to get around, it is really expensive to get around. (Verna)

There was a pervasive sense that the advantages of suburban living (such as space and privacy) were severely eroded by the stress and demands of transport issues. Some participants reported that they had experienced severe isolation in suburban locations due to the poor quality of the public transport system, while another older participant dreaded the forced loss of his car due to age and/or infirmity.

Several participants who had chosen their residence for proximity to family and friends made the observation that services and amenities were improving in their area and that they could increasingly shop, find services, engage in recreational activities and socialise in their own area. Trips to the CBD had diminished accordingly.

There were a number of comments about the ways in which transport impacted on work and jobs. Residential location could limit employment options if you have no private vehicle or if public transport was unavailable or difficult. Some jobs also required transport as part of the job.

That is why most of us look for local work so it is easy to get there on time. If you are looking for work out of your community you have got to try and get there on time. (Outer suburb - lower socio-economic focus group)

I just didn't even consider it because of the transport, I wasn't getting angry over it not being able to get there, I just didn't even consider it because I knew I couldn't get there. (Liam)

I have to drive because ... I do a lot of the merchandise so I go to lots of different stores throughout the day. (Outer suburb – higher socio-economic focus group)

Several participants reported choosing their residential location in order to be close to the school of choice for their children. At least one of these valued proximity so that the children could walk to and from school (via a walking school bus). Participants noted that children's expectations of travel choice has increased sharply and that this was a major component of family travel as they were driven to school, sport, work and social occasions. Travel pressures particularly in the absence of a car led to one participant withdrawing her children from Saturday sports because of the impossibility of accessing grounds by public transport.

A number of participants had adopted strategies to minimise vehicle dependence. One of the key strategies in this domain is that of electing to work from home, which, while challenging, was seen as having multiple rewards.

I'm trying this year to doggedly stay home, work at home one day a week, and partly that's because I'm just far more productive on focused sort of projects. But, it is also just a darned relief not to have to travel in here. (Owen)

The realities of working life mean that the majority of people are required to move around the city. In the public transport arena one participant spoke of an adaptive framing that entailed a certain acceptance of public transport delays which allowed for work in transit and deliberative space.

For others the alternatives were private and proactive, for example investment in bicycles and related technology to enable a range of otherwise 'ordinary' activities.

We use bicycles to go and do the shopping and my partner has a bike trailer. He does the regular trip to the supermarket and I do the regular trip for the veges and there are various other errands we run all on the bicycle and we

deliberately think about doing things as local as possible. (Cycling focus group)

House affordability within cycling range of the CBD (work location) was seen as a barrier to maintaining cycle based transportation. Another participant described at length his home based business (as a potter) which he had established over a couple of decades and found to be easily sustainable using cycling as the main form of transportation in his suburban setting. Other participants described strategies including car-sharing, use of a motorbike, walking and running as key or supplementary transportation options around suburban living.

4.2.4 Central city living

A number of our participants were inner city apartment dwellers who had in some instances elected their location out of frustration with the transportation issues experienced while living in other locations. Whether it was a motivating factor or not, most of this group were strong advocates of the benefits of not having to use a car to access work, amenities and services. Participants were clear that central city living allows a wide range of activities without a vehicle, with working, relaxing and socialising all comfortably accessible. Some had no private vehicle at all and found that public transport and walking were very viable options.

Others had retained a vehicle which they used for irregular activities such as business related travel and recreational trips out of the city. They acknowledged that there were certain costs or tensions of their lifestyle choice arising from the need to be able to reach beyond its self-contained boundaries for work, recreation or socialising. Most of the participants from this group had sufficient means to be able to travel out of the inner city areas when they wanted to, which probably accounts for the general satisfaction with living in the inner city they have expressed.

4.2.5 Lifestyle blocks

A number of our participants had elected to live in peri-urban settings mainly on 'lifestyle' blocks which usually imply a certain socio-economic status. Most had made a deliberate transition from suburban situations to their current location and had actively traded accessibility against space and quiet. Public transport was not an option in either of the lifestyle block locations in which interviews were undertaken, and distances precluded walking and cycling as feasible commuting options.

Car dependency was high in this group of participants. It was vital for commuting to work, transporting children to activities, maintaining social circles, and accessing amenities. Larger vehicles and diesel powered vehicles were common, with participants noting the distances travelled and, for one group, the steepness of the access roads as reason for this.

Participants in the lifestyle block groups were committed to their life style choice and indicated that the cost of running a car would have to go very high before they would consider moving or substantially changing their travel patterns. Changing work location and work related travel was seen as the most likely area of change.

ARE THERE ANY PLACES OR ACTIVITIES THAT YOU DON'T ACCESS ON ACCOUNT OF TRANSPORT ISSUES?

No we don't, if we want to go we go, the cost of fuel is not an issue for us. (Cathie).

Well it is for me, but I try to use the company vehicle. (Steve)

Other participants reported reorienting to more locally-based social activities and managing communications electronically. However, it was clear, particularly where children and young people were part of the household, that multiple cars and longer travel distances are an essential part of the lifestyle.

With the closest dairy located six kilometres away, one group of lifestyle block participants described a number of strategies they used to minimise shopping related trips. For example, households had large freezers for storing foods, they shopped after work to avoid weekend trips to the city, and they worked an informal system of reciprocal favours whereby neighbouring lifestylers in town for the day could be called and asked to pick up goods. Although strategies were employed that saved on shopping related travel, the same group of participants gave several examples of two cars per household being taken daily to workplace destinations in the city. Even where the city destinations were close to each other and the travel times similar, two cars were used for the freedom it gave people to participate in after work social, sporting and other activities.

4.2.6 Recreational travel

Cars as a form of recreation or entertainment are also a part of the New Zealand lifestyle. The recreational use of the car was depicted as a source of pleasure for a number of participants. One participant had a high performance car and he enjoyed this aspect of the vehicle whereas other people spoke about the pleasure of driving and travelling to places.

I was brought up in 50s and 60s and the Sunday drive was compulsory. In fact I enjoy going for long drives in my car, if it was in the country, down Te Awamutu just to escape. I find my car a pleasure, not a tin box or a coffin, great fun, racing away. Spent two years in Australia and drove in the outback, it was fantastic. (Cycling focus group)

While car ownership meant that attending any recreational activity or event held anywhere was possible, a number of participants were well aware of the imposition this could entail.

Oh God we in a weekend we could drive, we'd drive around Auckland for a couple of hours you think could have gone to Whangarei and back by now but that's just ... going to the park. (Outer suburb – higher socio-economic focus group)

A lack of car access was identified as an impediment to recreational choice.

A number of participants, who were committed car users for commuting and errand-based trips, reported taking part in cycling and walking for recreation and/or fitness.

4.3 Perspectives on Car Use

4.3.1 Morality

A number of participants expressed moral feelings in relations to their own or other people's travel behaviour. These reactions included judgemental interpretations of others' 'discretionary' trips.

You see a whole bunch of kids walking every morning. And then you see a whole bunch of parents taking their cars when there is no need to. (Outer suburb - lower socio-economic focus group)

Outrage was expressed by some participants at the perceived waste inherent in the high levels of car use in Auckland.

Everyone driving around in a mass of metal boxes is a complete waste of resources because in terms of the design of the city and also in terms of energy as well. (Cycling focus group)

A number of participants were pessimistic about changing the car related behaviours of their fellow New Zealanders.

But it's kind of like changing the attitude of people who don't really care anyway ... You can see by the amount of diesel cars on the road that are not maintained that people just don't care. So you've got to actually physically stop them. (Lifestyle block focus group)

Others expressed a sense of guilt at using more than a fair share of travel resources. For some this had resulted in their modifying their travel behaviour, for example by choosing not to be the sole occupant in their vehicle for some journeys.

4.3.2 Health and wellbeing

Participants argued strongly that at both personal and community levels, cars, roads and the associated stresses are seen as threats and impositions upon health.

One of the main things about cars is the sort of general unhealthiness, physical and mental. It is quite stressful so abnormal to be by yourself driving at speed, it is not how humans evolved and I think it leads to tension and stress. (Cycling focus group)

Cars in particular are seen as a major environmental problem with participants noting that vehicle emissions contribute to the death of some people. Some participants argued that the level of pollutants in the air while driving on the motorway makes it unhealthy to have the car windows down. One person took an even wider view of this aspect of the problem noting that pollution affects everyone in the city.

The traffic in New Zealand, even in the past few years, has actually really, really increased, it is quite significant the amount of cars on the road now. And you are starting to get that feel of a cloud covering every day, and you know you are going to be walking in it all day long. (Jaime)

Vehicles and their infrastructures were seen as a major imposition on neighbourhoods.

Like cars and roads just basically suck lives out of communities, nobody knows their neighbours because they are not regularly walking past them and interacting they just dash from their house into their garage, into their car and out to wherever they are working, most people don't know their neighbours now because there is no interaction. (Cycling focus group)

However, opposing views were also expressed to the effect that cars and roads extend the neighbourhoods people can have social contact within.

While walking and biking were frequently undertaken for exercise purposes (as distinct from commuting or errand based journeys reasons), participants were clear that the health benefits could be compromised by factors including air pollution and personal safety.

While some participants reported regular walking for errands or business, it was only in the lower socio-economic West Auckland and central city focus groups that walking was reported to be a dominant travel mode for some participants.

4.4 Fuel Use

4.4.1 Cost

Estimates of current private vehicle fuel consumption ranged from \$10 to \$200 per week per household (for households that had vehicles). Some estimates were fairly vague. The following excerpt details the estimates of household expenditure on fuel given by focus group participants selected purposively from their affiliation with walking and cycling groups.

I am pretty consistent around \$1500 a year. (male 4)

Probably \$15 diesel a week. (male)

Probably on average \$30 a week for me, more because I use a car for getting out of town rather than commuting. (male)

Using nothing apart from when we go away for the weekend when it might be like \$5 each between us. (female 3)

It would be about \$30 wouldn't it. (female 2)

\$100 - \$60 to fill the car up, \$30 to fill the truck, it has to be \$60 or \$70 a week. (male 1) (Cycling focus group)

4.4.2 Changing levels of fuel consumption

In general participants found it difficult to respond when asked about changing levels of household fuel consumption over the past decade. There was considerable uncertainty as to whether household consumption was likely to have increased or not, with no one recalling definitively their changing levels of fuel use. One participant recalled the changing price of fuel over the period. Young people who had become car owners within the past 10 years were the exception, indicating increased use, although they made no reference to their contribution to the fuel consumption in the family household they had previously been a part of.

A common approach to answering the question was for participants to think about their household composition and, in particular, the ages of children now and 10 years ago to try to recall the way their child related travel had changed. There were also accounts of a change in workplace – more or less distant from home, change in residential location, and the uptake of a recreational activity that participants indicated would probably have contributed to a change in fuel consumption. However, except for households with children, participants generally found it difficult to weigh up the range of household changes that had occurred over the ten years in order to make judgements on increased or decreased fuel use. Households with more children and/or older children now than 10 years ago, were likely to indicate increased fuel use. Journeys to school and travel related to children's sporting and cultural activities were seen as likely to have contributed to higher fuel consumption. This was depicted as both child driven, with children having a higher expectations of car travel now than 10 years ago, and parent driven, with mention of the perceived safety in driving children places. Considerable probing was needed to get participants thinking about other lifestyle factors that could have influenced fuel use such as vehicle size, shopping patterns, and holiday destinations.

4.4.3 Knowledge of fuel reduction strategies

Participants had a wide knowledge of strategies to reduce fuel use in their own cars and many talked knowledgeably about features of fuel efficient and dual fuel vehicles.

I think fuel injection is good to have, as well, because then you're not using as much gas, and 1600 fuel injected I reckon is probably the best engine you could really go for, so long as you don't want too much horsepower or anything. (Lifestyle block focus group)

The fuel use characteristics of overdrive systems, diesel vehicles, and small capacity cars together with the impact of ongoing maintenance were all discussed.

When I go out by myself without the rest of the family to meetings in the evening and things I tend to take the Astina because it uses less petrol than the Odyssey. (Olive)

Other participants argued for trip-saving, carpooling and even car-less days as means of fuel reduction strategies.

If you did it all in one go, so you went where you needed to go and then you went to the supermarket and then you went elsewhere and did it all in one trip, as opposed to going backwards and forwards. (Inner City focus group)

I do think that it's shocking how there's like one driver in every single car. Yeah there should be car pools. (Outer suburb – higher socio-economic focus group)

They used to have carless days. I reckon carpooling is a good way to start. Or just don't drive at all but Elaine has got that solar powered car. (Outer suburb - lower socio-economic focus group)

One interviewee argued for a notion of essential use and a reduction in recreational uses to reduce fuel use.

I'm just wondering whether fuel we'll get to the stage where you'll only be able to use it for essential things rather than play because fuel is used today in the cars that hoon around. (Rob)

Further ideas on fuel reduction ranged from aspects of the transport infrastructure, such as the use of motorways where vehicles are more likely to operate at peak engine efficiency, to public transport - including discussion on the use of minibuses, concession tickets, and day passes. Participants noted the possibilities of alternative fuel vehicles, working from home, utilising communication technologies including internet banking and internet shopping, and the creation of a second international airport for Auckland.

While there was much talk and an apparent willingness to attempt to shift from dependence on private vehicles this was often frustrated by impracticality.

If someone said that you could catch public transport and it was half an hour or maybe quicker, then I certainly would look at it because sitting in the traffic every day is not fun and if you are on a train then you can read a book, read the newspaper, do some work, or whatever, so you could utilize that time better. (Sam)

Most participants agreed that price incentives (such as increasing costs of using cars compared with cost of public transport), and the increasing time costs associated with travel, would eventually catalyse such moves, however there was a general consensus that changes would need to be at radical levels given the entrenched nature of car use.

4.5 Multi-mode Trips

Those who had made active choices around transport had sophisticated strategies and flexible combinations of modes that they used to access the places they needed to.

If there's a train that happens to be coming past while I'm heading out of the house, I'll get that train as far as Kingsland and then just walk along a couple of hundred metres and get a bus from there and then the bus will drop me outside here. (Owen)

Many participants provided explanations as to why their intentions of multi-modal travel were thwarted by a less than perfect public transport system.

I could ride a bicycle to the ferry, get on the ferry and come across but the logistics of doing that just don't seem to come together well for me and usually I am going back and forth at times after the ferries have stopped running to Birkenhead. (Cycling focus group)

Participants reported that multi-mode travel, which combined walking, bus and car, were commonplace. This was particularly so for children, such as through the use of the walking school bus. A corollary of this was that parents often had responsibility for getting children (by car) to travel termini.

5. Common Discourses

The data and analyses reported here encompass a wide array of discursive resources that can be deployed by speakers to articulate and defend various positions on travel related behaviours. Among these three run strongly through a large number of submissions and serve as a kind of commonsense or “lived ideology” (Billig, 1995) in relation the topic. The first is a pragmatic position which is overtly stated and widely implied and the second and third relate to the role of social class, and the importance of control, in participants transport choices.

It's got to work – it's got to make sense

The foundation assumption in participants' discursive puzzling over their transport and access issues is that the solutions proffered and taken up will be the ones that connect with the realities of their lives and in this sense serve and make sense for them. The diversity of our participants, encompassing the range of socio-economic situations as well as those with specific philosophical and political positions on transportation, gives a sense of how fundamental this understanding must be. Those with fewest resources and options are very clear that pragmatics relating to travel impact on aspects of their life experience as important as employment, schooling, recreation and social opportunities. Those for whom transportation resources are not an issue demonstrate that resources are deployed to enhance and facilitate what are already profoundly liveable lives. Others who seek systemic changes to the established practices and provisions for transportation critique the workability and rationales for the status quo, and have in a number of instances constructed alternatives (cycling, multimode travel and diverse fuel reduction strategies), that make sense and work for them. In a wide range of circumstances then, the imperative that transport solutions meet practical standards of timeliness, cost and safety, the psychological issues of comfort and appropriateness, as well as more epistemological criteria such as ecological and ethical sustainability, is fundamental to our participants' understandings of transportation.

A class based transport system

A key contrast exists, between the talk of participants with adequate financial resources and participants with few resources, over what assumptions underpin transportation in the city. Philosophically those with resources favour the private vehicle for its flexibility, its efficiency and its role in expressing their identities and sense of self. To many of these participants most public transport options (particularly buses) are derogated and marginalised for a range of reasons. Comments such as ‘suits don't ride buses’ and ‘people think you're broke if you're on a bus’ were indicative of this position. There are some exceptions to this. One of these was the treatment afforded to the train, but this may be a somewhat bogus position, possibly romanticised in the absence of a viable rail network in many parts of the metropolis. Another exception to the favouring of private transport over public was for some who live in inner city suburbs along main transport corridors. The short trip lengths and drop off points proximate to work and other desired locales in the central city provide a convenient alternative to cars in some cases. While nearly all participants desired to have access to private transport, participants without access to such resources seem

resigned to the use of public transport despite the inconveniences that the weaknesses of the established systems impose upon them.

Control

In addition to the flexibility and freedom of movement provided by a private vehicle, the car was also associated with a discourse of control. The car offered users a sense of control over how and when they travelled; the potential to respond at any time to any eventuality that required mobility; and control over the routes taken and the potential to multi trip. To use public transport on the journey to and from work involved relinquishing control of how and where a lunch hour could be spent and the potential to access additional destinations between work and home. The internal environment of the car was also under the control of the user to an extent impossible in public transport, for example, in terms of temperature, music, company and comfort. Control was also implicit in parents' talk about the use of a car to transport children from venue to venue – by driving children around parents controlled the physical and social environments through which their children moved.

The frustration of congestion was associated with a lack of control as was the frustration of buses and trains that did not arrive as per a timetable and full buses that went past a stop leaving waiting passengers uncertain of whether, and by what time, they would make their destination. Walking and cycling were perceived to provide more control over the journey duration than cars or buses that could be prone to congestion delays.

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