

CHINESE COMMUNITIES EXPERIENCES OF PUBLIC TRANSPORT IN AUCKLAND

Muhammad Imran, John Yin and Jane Pearce

School of People, Environment and Planning, Massey University

Email: m.imran@massey.ac.nz

Abstract: Transport research finds that the ethnicity is a critical factor in explaining travel behaviour. New Zealand cities have become increasingly ethnically diverse, and transport planning can therefore benefit from drawing on the plurality of cultures and values that underpin the social fabric of ethnic communities. The growing Asian population in Auckland provides an opportunity to transform an automobile-dependent city into a public transport friendly city, as in most Asian countries people make extensive use of public transport. This research explores opportunities for improving Auckland's public transport by studying the everyday experience and aspirations of the city's Chinese community. This paper reports data collected from Chinese community social media to explore daily experience of public transport in Auckland. The research identifies communication, expectations and perception gaps between Chinese users of existing and future public transport systems, and institutional practices.

1. INTRODUCTION

This paper explores opportunities for improving Auckland's public transport by studying the everyday experiences and aspirations of Auckland's Chinese community. Auckland is one of the world's most car-dependent cities, as car travel makes up nearly 80 per cent of total trips (Ministry of Transport, 2014). More than six decades of road-oriented development in the city has resulted in a sprawling urban form with an inefficient and underutilised public transport system (Imran and Matthews 2011). In 2012/13, only 3.7 per cent of trips in Auckland were made by public transport, while the estimated congestion cost amounted to \$1.25 billion per annum (Auckland Transport, 2013).

Contrasting with the persistence of Auckland's congested transport situation is the fast changing face of the city's population. Starting in the 1980s, a new pattern emerged as Asia became the primary source of immigrants (Bedford, Ho & Lidgard, 2000). Auckland has been traditionally known for its unique combination of European and Maori-Polynesian cultures, but Asian immigrants' influence has been gaining momentum as 20 per cent of Auckland residents are now of Asian descent (Statistics New Zealand, 2013). The Asian influence in Auckland provides an opportunity for transformation from an automobile dependent city to a public transport friendly city, as in most Asian cities people make extensive use of public transport (Newmans and Kenworthy, 2000). These observations lead to the research question: *What are the everyday experiences and aspirations of Asian communities regarding public transport in Auckland?*

The next section reviews the literature on transport in multicultural cities, focussing on how the views of ethnic communities' have been incorporated in transport policies. The third section details the methods used to identify and analyse the opinions and concerns of the Chinese community about public transport in Auckland. The following section describes the demographics, spatial distribution, and travel patterns of the Chinese community in Auckland followed by the views of this community on the challenges and opportunities for public transport. Those aspects are discussed in the context of the literature, and implications are drawn for public transport planning and policy making in Auckland.

2. PUBLIC TRANSPORT IN MULTICULTURAL CITIES

Multicultural cities should recognise and reflect the existence of cultural and racial diversity in their public policies and projects (Qadeer, 1997; Sandercock, 2000a). Sandercock (2005) argues that planning policies must reflect and accommodate a mosaic of values, practices and customs in order “[f]or a society to be functionally as well as formally multicultural” (p.309). She believes that planning policies can benefit from drawing on the plurality of cultures and values that underpin the social fabric of communities. Burby (2003) finds that by bringing together different stakeholders, pluralistic planning can facilitate the integration of scientific and lay knowledge and build social capital, which, in turn, leads to improved planning outcome. From a practical viewpoint, understanding immigrant communities is also important, as they have been shown to be an important force in reshaping the physical and socio-economic structure of cities (Pestieau & Wallace, 2003). This can be seen in the emergence of ethnic enclaves, shops and places of worship in many world cities, with implications for the provision of services and facilities, including transport infrastructure (ibid).

Transport planning also faces increasing challenges in recognising and providing services for the diverse travel needs of the communities it serves (Axhausen & Schonfelder, 2010). Wang and Lo (2007) and Lucas (2012) argue that a person’s cultural background can be an important determinant of their travel behaviour. Wang and Lo (2007) show that Chinese immigrants in Toronto prefer to shop at more distant ethnic stores than closer-by mainstream stores, even if the products that they seek are available at both. Such cultural behaviours influence spatial relationships and travel patterns in Toronto.

A growing body of literature has indicated that ethnicity is an important determinant of public transport usage even in highly motorised Western countries. A study from Norway by Uteng (2009), for example, shows that public transport makes up 32 per cent of the daily trips undertaken by immigrants from non-Western backgrounds, compared to 8 per cent for the native Norwegians. Meanwhile, only 41 per cent of trips made by these immigrants are by car, compared to 66 per cent for the natives. In a US study, Blumenberg and Smart (2010), find that immigrants are 2.8 times more likely to commute by public transport than native-born Americans. In a separate study, Blumenberg and Smart (2011) show that the immigrant population has a considerably lower car ownership rate (604 per 1000 persons) than the native-born (765 per 1,000 persons). In another example, from Australia, Klocker and Head (2013) observe that 74 per cent of foreign-born workers commute by car, which is markedly lower than the figure of 84 per cent for the native-born.

Many studies have however, noted that immigrants are often subject to the process of transportation assimilation, suggesting their preference for public transport may be time-bound (Blumenberg and Smart, 2010; Casas, Arce and Frye, 2004). In general, over a period of 15 to 20 years, immigrants’ travel behaviour tends to converge with that of the native-born population. Such an assimilation process has been documented by Heisz and Schellenberg (2004) in their study of immigrants’ use of public transport in Canada. The authors show that recent immigrants (arrived in less than 10 years) exhibit significantly higher propensity to use public transport than long-term immigrants (arrived more than 20 years go), even when controlled for other variables such as age and income. In Montreal, for instance, recent immigrants are 1.91 times more likely to commute by public transport compared to the native-born population, whereas long-term immigrants are only 1.06 times more likely to do so (Heisz and Schellenberg, 2004).

Blumenberg’s (2009) research on the travel behaviour of immigrants in the US has painted a more optimistic picture, which shows that - even as immigrants grow increasingly car-dependent over time - they persistently exhibit higher alternative transport usage. This view

is supported by Chatman and Klein (2009), who demonstrate that 73 per cent of immigrants who had been in the US for over 21 years drive to work, compared to 79 per cent of the US-born population. Moreover, the importance of public transport to the immigrant population in Western countries appears to have increased, even in the face of transport assimilation (Handy et al., 2009). In particular, Lo, Shalaby and Alshalalfah (2011) stress that “newer cohorts of immigrants have higher rates of transit use than earlier cohorts” (p.474). In Myers’ (1996) study of Southern California, the share of public transport riders who are recent immigrants rose substantially from 27 per cent in 1980 to 42 per cent in 1990. Heisz and Schellenberg (2004) suggest that such cohort effects are mainly a result of the changing composition of immigration source countries, as there has been an increasing inflow of immigrants from lower-income regions such as Asia and Africa. Notably, studies have suggested that Asian immigrants in Western societies tend to be less car-oriented compared to the native-born population (Bergmann & Sager, 2008; Shimazaki, Hokao & Mohamed, 1994).

Ethnicity also shapes gender dynamics which are inextricably linked to public transport use. For example, studies have found immigrant women are more likely to travel by public transport than immigrant men (Asumah & Johnston-Anumonwo, 2002). Apart from the obvious fact those ethnic women are less likely to hold a driver’s license (Blumenberg, 2009), several underlying cultural factors may have also contributed to the gender gap in public transport use. For instance, women’s traditional role of household duties in many ethnic cultures means that they make many domestic-related trips during the day while men are away at work (Uteng, 2009). Without access to cars, they have to rely on alternative modes. Bergman and Sager (2008) also observe that in some Muslim communities, women are discouraged from driving.

However, the lack of understanding of local language and culture presents both opportunities and challenges for transport planners in growing public transport usage. On the one hand, Chatman and Klein (2013) observe that it may contribute to the lower level of driving among immigrants, especially upon their arrival. In their focus group interviews, for example, one Indian participant mentioned that he was too afraid to drive in the US because he was used to right-hand driving, whereas the US is a left-hand driving country. On the other hand, however, Raje (2004) and Hine and Mitchell (2003) argue that language and cultural factors may equally discourage immigrants from using public transport. For instance, Blumenberg (2008) - in commenting on the exceptionally high car dependence found in the Southeast Asian community in California - notes that 68 per cent of the population lack English proficiency, which renders it difficult for them to “to navigate the transit system” (p.39).

Consequently, Chatman and Klein (2013) emphasise that achieving a critical mass of non-English speaking public transport users is important as it makes it easier for new immigrants to learn about the transit system. As an example, they argue that the growing number of Spanish-speaking transit riders in the US has reduced the language barrier to using public transport for the Hispanic community, contributing to their high level of transit ridership compared to most other ethnic groups. Therefore, Burayidi (2003) suggest that transport planners need to develop ethnic sensitivity in formulating policies in their respective cities, to ultimately increase public transport patronage. Given the notably less car-oriented culture commonly observed in Asian immigrant communities in Western societies (Bergmann and Sager, 2008; Shimazaki, Hokao and Mohamed, 1994), the research on which this paper is based, investigates the potential for transformative change in the public transport habits of Asian communities, as a catalyst for positive change in Auckland’s transport landscape.

3. METHODOLOGY

The purpose of this paper is to investigate the Chinese community's everyday experiences and aspirations for Auckland's public transport. The data includes Chinese communities living, or with experience of living in Auckland.

Social media has been used as the primary source of data for understanding the perspectives of the Chinese community regarding public transport. For many years social scientists have collected data produced as a by-product of organisational record-keeping (Golder & Macy, 2014) The rapid growth of social media as a communication channel in the past decade has created a new version of this old research strategy from a 'novel source of rich data' (Zafarani, Abbasi & Liu, 2014, p.6), which enables researchers to study human behaviour patterns. This data produces time-stamped 'digital footprints' (Golder & Macy, 2014: 131). In this research, the footprints of the Chinese were studied based on online comments collected from three sources:

- a) Skykiwi forum: Skykiwi is a New Zealand website targeting the country's Chinese-speaking population. The website receives 75,000 unique IP visits per day, and is the 56th most viewed website in New Zealand. Its forum is home to the largest online Chinese community in New Zealand with over 200,000 registered members, of whom 83 per cent live within the Auckland region;
- b) Skykiwi news section: In addition to the online forum, Skykiwi also runs a popular news portal covering the latest New Zealand news in Chinese. The news articles themselves were of little interest to this project as they were mostly translated from the mainstream English media. However, a group of active readers leave comments under the news articles; and
- c) Sina Weibo: This Chinese microblogging website is very popular with the Chinese communities worldwide, with over 50 million active daily users, including many living in New Zealand.

The relevant forum threads, news comments and microblog postings were identified by keyword searches. To ensure that the data had currency and was of a manageable volume, the research only included comments added between January 2010 and June 2014 inclusive.

Once the data gathering process was completed, thematic analysis was performed to identify "the recurring messages that pervade the situation about which the critic writes" (Eisner, 1998, p. 104). The comments were categorised, translated and then recorded in Excel spreadsheets for further analysis. Each comment was assigned a unique identifier for easy reference in the report. Using statistical tools in Excel, a summary table was also created to show the relative significance of each theme in the discourse of the Chinese about public transport.

The use of social media allows researchers to access hard to reach and empirically underrepresented groups (Golder & Macy, 2014; Leng, 2013). However, researchers do need to be aware of limitations centring on the generalizability of findings, and validity concerns relating to anonymity and low accountability (Leng, 2013). Concerns regarding generalizability stem from perceptions that internet access and use may be centred on a younger demographic than the general population, and thus not representative, but these differences are diminishing over time (Leng, 2013), and according to Golder and Macy do not warrant the 'widely used distinction between the web and the real world' (2014 p. 143). Further, the high level of use of the selected social media sites by the Chinese population increases its representativeness. It is also argued that social media participants comment on threads close to their experience, thus reducing distortion and increasing validity. In addition,

if participants have relative anonymity their comments may be more freely expressed, hence again increasing validity. However, Leng suggests that social media users who share a common identity, such as membership of an ethnic community, may feel pressured to be consistent with group norms and expectations, to some extent countering the positive impacts on validity gained from anonymity. Evidence of emotive or vitriolic responses to postings (Golder & Macy, 2014) may also indicate that discussions are not necessarily representative of 'real world' behaviours. The data analysed in this research came from the social media sources discussed above, and is not an attempt to provide comprehensive coverage of the views on transport held by the Chinese community in Auckland. The researchers are cognizant of the limitations of research using social media, but recognise that social media is becoming increasingly representative, and useful for collecting data concerning the viewpoints of hard to reach groups such as the Chinese community in Auckland. It is expected that the broad range of opinions of this community on the issue of public transport will be reflected in the data.

4. THE CHINESE IN AUCKLAND – BACKGROUND

Auckland has traditionally been known for its unique blend of European and Maori-Polynesian cultures, although since the 1980s, Asian immigration has been increasing (Bedford, Ho and Lidgard, 2000; King 2003). In particular, China has become the largest Asian ethnic group, making up over 8 per cent of the region's total population (Statistics New Zealand, 2013).

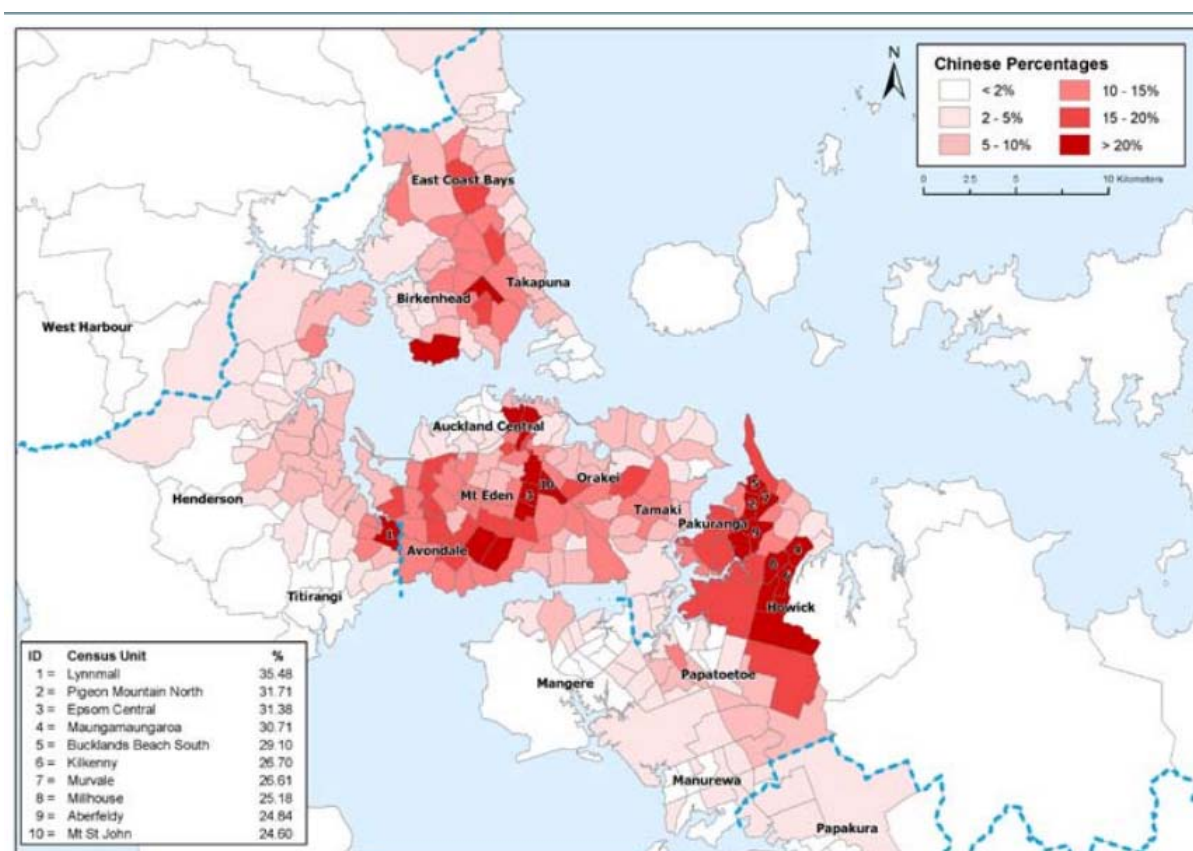
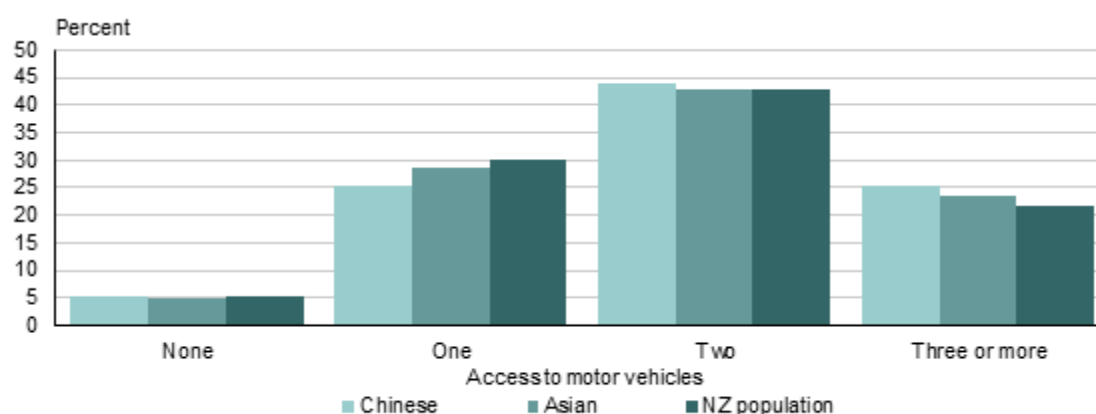


Figure 1. Chinese population distribution in Auckland (Meares, Ho, Peace & Spoonley, 2010).

According to the 2013 census, the Chinese population in New Zealand had reached 171,000 – a 16 per cent increase since 2006. Of these, 69 per cent, or 118,230 live in Auckland (Statistics New Zealand, 2014a). The Chinese tend to have low socioeconomic status with a median income of \$16,000, which is significantly below the national median of \$28,500 (Statistics New Zealand, 2014c). Similarly, the Chinese also exhibit a low labour force participation rate. Only 52 per cent of Chinese over the age of 15 were employed in 2013, which was 10 per cent below the national average. One key reason for this may be that 28 per cent of working-age Chinese were engaged in either full-time or part-time study, compared to 15 per cent of the total New Zealand population (Statistics New Zealand, 2014a).

The Chinese population in Auckland is predominately urban. While their presence can be detected throughout the region, their settlement pattern displays a trend of segregation. The areas with particularly high concentrations of Chinese include the CBD and Mt Eden in the city centre, Avondale in the west, Howick and Pakuranga in the east and Takapuna and Birkenhead in the north (see Figure 1). In many neighbourhoods in these areas, over 20 per cent of residents identify themselves as Chinese (Meares, Ho, Peace & Spoonley, 2010).

In terms of travel behaviour, the Chinese population exhibit high car ownership rates comparable to the national average (see Figure 2). In fact, the percentage of Chinese households with two or more private vehicles is even higher than that of the total national population. However, the Chinese are also more inclined to use public transport. As of 2013, public transport accounted for 8.5 per cent of commuter trips by the Chinese, compared to 6.5 per cent for the total population of Auckland (Statistics New Zealand, 2014b).



Note: Some percentages may be too small to show on graph.

Figure 2. Access to motor vehicles (Statistics New Zealand, 2014a).

5. RESULTS

In total, 184 online comments were gathered for the purpose of social media analysis. The comments were divided into two main themes: public transport infrastructure, and public transport services. Public transport infrastructure received 48 comments, while the public transport services received the attention of 129 comments.

a) Public transport infrastructure

Of the 48 comments posted on public transport infrastructure, the City Rail Link (CRL) and Waitemata Harbour Crossing (AWHC) proposals are the most frequently discussed infrastructural issues by the Chinese communities, making up 26% of all the social media

comments collected. The CRL has been a fiercely debated issue, accounting for 19 per cent of the total comments across three themes. The majority (69 per cent) of the 48 infrastructure comments referring to the CRL were against the proposal.

The Chinese community has strong concerns about the economic and financial viability of the CRL:

...rail development has very limited effect on relieving congestion. Yet [the CRL] costs more than Aucklanders can afford (comment CR09).

Several reasons are presented for opposing the CRL. Firstly, many argue that Auckland's built environment does not support rail development:

Auckland has low population density. Rail only benefits a minority of people where it goes. It is infeasible for the majority to use rail (comment CR09).

[The council should] replace the houses with high rises first. Then it can talk about rail (comment CR05).

A second commonly-cited reason for rejecting the CRL is lack of profitability:

With Auckland's small population, the question is how the CRL could possibly run profitably and generate a positive return on the investment (comment CR31).

The author of comment CR35 is also concerned that the "expensive second class unrealistic railway loop" will burden Auckland residents with a "huge debit".

The third major concern regarding the CRL is its usefulness:

I can't fathom why there is need for underground rail when Britomart and Mt Eden are so close anyway (comment CR23).

Investment in the bus system and bus only lanes is superior than rail investment (comment CR280).

However, 31 per cent of comments referring to the CRL show support for the project. They generally consider the CRL an effective way to improve public transport:

Singapore and Hong Kong have much lower car ownership rates than New Zealand ... because the public transport system is so excellent... From this point of view, Len Brown's proposal (the CRL) is a step in the right direction (comment CR12).

In contrast to the CRL, the AWHC receives majority support with 77 per cent of the relevant comments in favour of the project. The Chinese community particularly favour the tunnel option for the AWHC, which would provide a rail connection between the CBD and the North Shore:

I support the development of public transport such as underground rail and light rail. I do not support the road-only tunnel or bridge proposals, as they cannot resolve the [congestion] problem (comment HC08).

Comments against the harbour crossing are mainly concerned with the cost of the project, which as commentator HC01 worried, will be "passed on to Auckland residents".

b) Public transport services

The 129 comments made about public transport services have been further subdivided into issues of i) affordability, ii) reliability, frequency, and operating hours, and iii) customer service.

i) Affordability:

The most common theme in the Chinese community's comments on public transport in Auckland is its affordability, making up 29% of the total comments. Of these, the overwhelming majority (78 per cent) consider the fares to be excessive, and a major deterrent to public transport use. Of these 45 comments, 78 per cent, (n35) consider the ticket prices too high. For example, one comment from 2013 questioned:

I couldn't believe that it cost \$5 to travel [from New Lynn] to the central city by bus each way... How are poor people like me supposed to survive?

Another in commenting on a bus ticket price increase in 2013 argued:

When public transport becomes too expensive, then it doesn't deserve to be called 'public' transport.

There is a common perception that public transport is of poor value compared to driving. 18 per cent of the comments under this category were of the view that public transport costs at least as much as driving, which is a major disincentive to travelling by public transport. Several users even detail calculations to support their frustration against the perceived high costs of public transport. For example, in recounting his/her one-time experience of using public transport in 2013, one person stated:

I took a bus from New Lynn to the city. [I] bought a 3-stage return ticket costing \$9, or \$4.5 each way. In comparison, I used to drive into the city. My car costs \$55 to run 350km, so a return trip into the city is only about \$4 worth of petrol. That leaves me \$5 for parking. It costs only 2\$/hr to park on either Nelson Street or Hopson Street [I can't remember which one]. Therefore I can park my car there for 2.5 hours, which is long enough for the purpose of my trip (comment AF21).

One user argues an alternative viewpoint, that Auckland's public transport providers could justifiably charge higher ticket prices because it is generally much less crowded on buses and trains in Auckland (compared to Chinese cities) (Comment AF31).

The online comments suggest that the Chinese community's negative perception of public transport affordability in Auckland is influenced by their socioeconomic status. Comment AF27, for example, explains:

I am jobless at the moment. It is likely that I will be on the minimum wage if even I do get a job later on, which means that I may earn roughly \$400/week after tax... I need to purchase a 2-stage ticket from where I live [, if I get a job in] the CBD, which costs \$3.6 per trip or \$7.2 return. Lunch costs at least \$5 ... Rent costs over \$100 each week. Even if I budget carefully, food and other living expenses still are around \$200 per week. If I can't find a full-time job, and work only part-time, I doubt that I can survive on my wage even without the public transport costs.

Despite the negative perception about public transport affordability by the majority, a statistically significant minority (18 per cent) of online comments are neutral or supportive of public transport pricing policy in Auckland. For those who consider public transport to be fairly priced, most cite the lower relative cost of public transport compared to driving as the

primary rationale:

Bus is cheaper than driving if you take into account the costs of owning, maintaining, insuring and parking your car (comment AF14).

A monthly bus pass costs \$120. [In comparison] parking [in the CBD] usually costs \$4/hr, and full day parking at least \$10 (comment AF25).

Apart from the higher costs associated with driving, other concerns such as sustainable development, comfort of travel and the rising operational costs of bus companies also appear in the online comments in support of public transport pricing.

ii) Reliability, frequency, and operating hours

Reliability is the second most discussed theme among the Chinese community, making up 22 per cent of the comments collected. The overwhelming majority (90 per cent) of comments under this theme describe the public transport services in Auckland as unreliable. Firstly, many Chinese cite lack of punctuality as the leading issue that undermines the reliability of public transport, including claims that:

In recent months, my bus has never arrived on time (comment RL12).

I often have to wait for 30 to 40 minutes [to commute to work, because] there is only one car in my household and my wife is driving it (comment RL22).

It is noteworthy that most of the negative comments concerning reliability relate to bus services, while views on the reliability of trains are more divided. Some consider trains more reliable than buses because “they do not get stuck in traffic jam” (comment RL25). Others argued that trains are often late too, and sometimes run into mechanical problems.

Overall, the comments suggest that reliability issues render public transport an unattractive option for the majority of Chinese in Auckland, increasing the journey time, which imposes a substantial opportunity cost on public transport users:

...there is an opportunity cost for time spent on waiting for the bus... today it took me an hour to get into the city by bus, compared to just 45 minutes by car. In conclusion, I will never travel to the city by bus again (comment AF21).

People will take a bus if it is fast enough. If a bus trip takes 30 minutes whereas driving takes 50, would you rather travel by bus or car? I would definitely choose bus. It also saves the hassle of parking. I have been driving in Auckland for 7 years and have hardly ever used public transport. But I will always prefer public transport as long as it is faster than driving (comment JT04).

Secondly, the issue of poor punctuality is compounded by the low frequency and short operating hours of public transport. Many bus routes have hourly frequency during off-peak hours, which is a major drawback for the Chinese community. Comments include: states that

The unpunctuality, low frequency and early finishing times of certain [bus] routes upset me more [than the high costs](comment RL07)

We get only hourly bus service [in the North Shore] and so often [the bus] never even shows up (comment RL13).

Nevertheless, a number of online comments also express satisfaction with public transport frequency during peak hours:

The bus service in the North Shore is ok. During morning and evening peak hours, there is a bus every 5-10 minutes (comment RL23).

Additionally, the ticketing system is also seen to undermine the reliability of public transport:

The Hop Card technology is too immature...There are often issues (with the ticketing system)... For that reason I have been prevented from boarding the bus for several times (comment RL03).

iii) Customer Services

The social media data shows strong evidence that poor customer service and information deficiency has limited the Chinese community's access to public transport in Auckland. An overwhelming number of online comments describe the unfriendly and rude behaviour of bus drivers:

I say 'Hi' to the bus driver every time when I board the bus, but they often do not respond (comment CS17).

Once I only had a \$20 note when I got on the bus, so the driver asked me to go to the dairy shop nearby to get change. But once I got off the bus, he shut the door and drove away. I felt cheated (comment CS05).

At times, poor customer services may even escalate into safety concerns. Several online comments mention accidents caused by bus drivers' misconduct. According to comment CS14, the author was "thrown out of the bus" because the driver suddenly took off while she was still queuing by the door to purchase a ticket. Comment CS16 also talks about how a female passenger with a toddler in her trolley fell over as she got off because the driver did not put down the wheelchair ramp.

A large number of the postings found on the SkyKiwi forum were inquiring about public transport schedules and routes. One important reason underlying such information deficiency is system complexity. For example, between 2011 and 2012, Auckland Transport updated the bus cards twice, with the HOP card replacing the previous Go Rider card in 2011, and the AT HOP card replacing the original HOP card in 2012. This caused considerable confusion among Chinese public transport users. Secondly, some posts also clearly suggest language barriers to be an issue for the Chinese community in using public transport. For example, one comment asked:

I'm new to Auckland and need to catch a bus. My English is not good. Can anyone please tell me after I get my bus card, whether I only swipe it when I board the bus, or do I need to swipe it again when I get off (comment IN01).

6. DISCUSSION – Explaining the Chinese everyday experiences and aspirations on Auckland public transport

The section discusses the two main themes, public transport infrastructure and public transport services, identified in the analysis of the Chinese community social media comments. The analysis presents valuable insights into the Chinese community's opinions on both the positive and negative aspects of public transport in Auckland. Given evidence that immigrant communities often make greater use of public transport than native-born populations, insights such as these present can guidance to policy makers, on how to better tailor services to meet the needs of immigrant communities, with the intention of increasing their ridership.

a) Public transport infrastructure

Auckland Council proposed public transport projects such as the CRL and AWHC have sparked fierce debate among members of the Chinese community who use social media. In terms of the CRL, the majority of the comments about this project are negative. The key concerns are related to the project's high construction cost and its limited utility. By contrast, the AWHC proposal has received strong support from this community, with many emphasising the need for the crossing to effectively incorporate public transport.

Logan et al. (2002), and Tal and Handy (2010) argue that residential location may have a role to play in explaining opinions, such as those of the Chinese community on the two projects. Although there is a large Chinese community living in or near the CBD (see Fig. 1), Auckland's Chinese population is also found in many suburbs. As many of these suburbs – particularly those on the North Shore, Pakuranga and Howick - do not have access to rail, the benefit of the CRL is likely to be heavily discounted by residents from these areas. The additional harbour crossing by increasing the connectivity between the North Shore and the rest of the city, is more positively received as it benefits a wider population. Perhaps Chinese community's views represent the poor communication between the Council process and the local communities. CRL and AWHC projects are certainly evaluated in Auckland Transport's prioritisation process. The CRL doubles the capacity of the entire rail network which benefits a huge area of Auckland, impacting both the southern and northwestern motorway corridors.

It should be noted that many Chinese who are against the CRL are not fundamentally opposed to rail development per se. Rather, they consider it a poor fit with the low density characteristics of Auckland's existing urban landscape, which limits accessibility to rail for the wider population and thus the profitability of train services. From this perspective, the Council's strategy of promoting intensification may, overtime, increase the acceptability of the CRL to the Chinese community. This is because by actively advocating for medium- to high-density housing and infill development, particularly along major transport corridors, a land-use transport integration is likely to increase public transport patronage.

b) Public transport services

The research shows that the most significant public transport issue for the Chinese community in Auckland is its affordability (See Fig. 3). One reason for this may be related to the Chinese population's relatively low socioeconomic status, often as students and/or new immigrants, making them less likely to be able to afford public transport. The Chinese community's relatively low economic status and their strong affordability concerns tend to support the literature which argues that ethnic travel behaviour may differ from that of mainstream society, due to their unique socioeconomic profile.

It is also important to note that the impact of the perceived high fares on public transport in Auckland is not limited to the travel behaviour of those on lower incomes. The data shows that many people describe public transport as "expensive" (rather than "unaffordable"), which makes it an unattractive alternative to driving. Although there is no consensus as to whether public transport is cheaper than driving in terms of monetary costs, what emerges from the data is a prevailing view that high bus and train fares, in conjunction with poor reliability, increases the opportunity cost of time, rendering public transport as poor *value* compared to driving. This has led many to claim that they would rather spend more to drive their own car for its convenience.

The Auckland Plan (2012) describes affordable living, including transport, as a guiding principle in the Council's efforts to attain their desired outcome of a well-connected and

accessible Auckland. However, in giving effect to this principle, the council sees public transport as a means to reduce the cost of living, it usually being considered alongside the Council's affordable housing policies. In other words, by framing public transport as a positive, cost-saving modal choice within the broader context of rising house prices and costs of living, the council has avoided having to address the issue raised by the Chinese regarding perceived high costs of public transport.

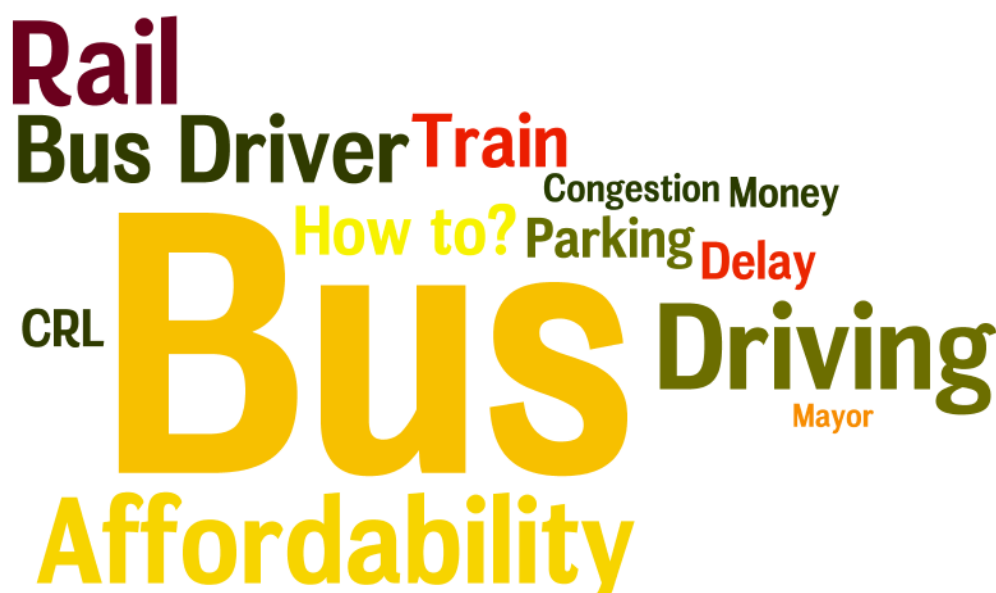


Figure 3. High frequency words used by the Chinese communities about public transport.
Note: The frequency of each keyword positively correlates to its font size.

Reliability, low frequency and operating hours of public transport services are all major shortcomings of Auckland's public transport for the Chinese. The research shows that while a few Chinese public transport users have commented favourably on the peak hour services, many others consider the frequency of services unsatisfactory, especially during off-peak hours and at weekends. Claims of having to wait for up to an hour for a bus were relatively common. While further confirmation is required, the low level of satisfaction with frequency appears to suggest that there is a strong demand for off-peak services (which tend to be less frequent compared to peak-hour services) in the Chinese community. Such demand is not unexpected considering the Chinese population has a low labour force participation rate with only 35 per cent working full-time, which suggests that they may be less likely to have a car and to travel during peak hours. This possible link between the socioeconomic makeup of the Chinese population and their travel demands for off-peak services is also supported by previous international studies by Lovejoy and Handy (2008) and Smart (2010). Auckland Council's proposal to create a modern, efficient transport system, and Auckland Transport's new network will no doubt help improve the reliability and frequency of public transport.

Customer service is another area of public transport that the Chinese regard as needing improvement. The research results suggest that some Chinese bus users find Auckland bus drivers to be unfriendly and/or impatient. A few have even raised safety concerns about the drivers' work practices. While customer service related issues appear to be of less significance than other matters such as affordability and reliability, they could still reduce the incentive for the Chinese to use public transport. The limited English proficiency of many Chinese immigrants further restricts their access to information and undermines their experience of the complex and potentially confusing public transport network in Auckland. Incidences in which people miss bus stops or catch the wrong bus appear to be common among the Chinese in Auckland, especially new immigrants. These findings coincide with the views of Raje (2004) and Hine and Mitchell (2003) that cultural shock and language

barriers may reduce the accessibility of public transport to ethnic communities. The finding of this paper also consistent with Syam's (2014) research that there is a significant difference between travel needs, attitude and perceptions of transport modes among different ethnic communities in Auckland. Asians travel noticeably less than people of other ethnicities (Europeans, Maori and Pacific Islanders) both in terms of number of trips and distance travelled. Failure to acknowledge the transport needs of these communities is likely to lead to inadequate infrastructure and service provision, creating barriers for people to fully participate in society.

7. CONCLUSION

The aim of this paper is to explore everyday experience of, and aspiration to use, public transport by Chinese community in Auckland. The research is motivated by the concept of multicultural cities, which posits that ethnic communities have the potential to facilitate institutional change towards effective and innovative policies. This is particularly important for transport policies, and public transport would benefit from engaging with a greater diversity of communities. This research focuses on Auckland's public transport policy because the city has suffered from chronic car reliance, which has prompted Auckland Council to promise a transformational shift towards a more public transport oriented future.

Auckland's Chinese community was selected as the subject of this study because of the strong growth in the Chinese population over the past two decades. The data shows that the Chinese community would like to see improvements in existing public transport services rather than focus on the mega projects advanced by the Council. Although Auckland Council has been campaigning heavily for CRL, there appears to be a generally negative attitude towards the project among the Chinese community as many consider the project to impose high costs yet yield limited benefits.

The service quality of Auckland's public transport is regarded as unsatisfactory by the Chinese. Particularly, affordability, reliability and low frequency have been key factors deterring use of public transport, issues which can be fixed in the short term, ultimately improving patronage (Imran and Matthews, 2014). Other issues include poor customer service, a complex and confusing network and language barriers. Auckland Transport confronts some of these issues in their new network design, which addresses issues of public transport efficiency, reliability and connectivity. However, customer service and language barriers have so far been largely neglected. Perhaps more bilingual staff and drivers might help improve this situation.

This paper has identified communities' preferences for improvements of public transport in Auckland. As Sandercock (2000a, 2000b & 2005) suggests, multicultural planning can potentially improve policy making by bringing fresh ideas and additional perspectives. The study of Chinese perspectives on Auckland's public transport has uncovered many issues, including affordability and language barriers, which Auckland Transport should consider. The Auckland Plan has placed a strong emphasis on social inclusion as part of its public transport policy. However, its strategy for this relies predominantly on improving the physical access of communities to public transport, and ignores the socioeconomic factors that restrict people's access to public transport. With public transport affordability left unaddressed, the mobility of low-income Chinese families is likely to continue to be limited, preventing them from fully participating in New Zealand society.

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