

# **Age, Transport, and Technology: Older Queenslanders' travel behaviours and use of transport-related technology**

Kelly Bertolaccini<sup>1</sup>, Mark Hickman<sup>2</sup>

<sup>1</sup>Griffith University

<sup>2</sup>University of Queensland

Email for correspondence: k.bertolaccini@griffith.edu.au

## **1. Introduction**

Like many developed nations, Australia's population is aging (Australian Bureau of Statistics, 2018; World Health Organization, 2007). According to the Australian Bureau of Statistics (ABS), the proportion of Australia's population over age 65 increased from 12.1% to 15.4% between 1997 and 2017 and is projected to reach just over 18% by 2030 (Australian Bureau of Statistics, 2017; Australian Bureau of Statistics, 2018). As Australia's population ages, our transport and government services will need to adapt and become more age friendly. At the same time as we experience these population changes, technological changes are rapidly changing the way we find, hire, and use transport services. This research explores the intersection of these demographic and technological trends.

## **2. Methodology**

Between May 2019 and October 2019, we held focus groups with older Queenslanders across the state. We organised a total of 12 focus groups across Brisbane, Gold Coast, Hervey Bay, Cairns, Atherton, Charters Towers, Ravenshoe, Richmond, and Greenvale with the help of local governments and seniors' organisations. A total of 131 people participated in these discussions. Each focus group lasted approximately 90 minutes, with the first 45 minutes dedicated to a discussion of transport and travel behavior and the later 45 minutes dedicated to a discussion of technology and its uses in transport. The discussion were semi-structured. The moderator would start a discussion using a scripted set of questions, but participants were allowed to take the conversation in the direction of their choosing. The discussions were recorded and transcribed for thematic analysis (Braun & Clarke, 2012). A minimum of two researchers read, coded, and identified themes for each of the transcripts. After each researcher independently identified themes in the focus group discussions, the researchers met to discuss, compare, and consolidate their findings. The themes and our findings on these themes are summarised below and inform our recommendations. In this discussion, we have categorised the locations as major cities (Brisbane, Gold Coast), regional cities (Hervey Bay, Cairns), secondary cities (Atherton, Charters Towers), or remote locations (Ravenshoe, Richmond, Greenvale).

## **3. Discussion of Themes**

In this section, we will discuss the themes developed from the focus group discussion. These themes are categorised as related to transport mode, trip type, technology, or other.

### **3.1 Transport Modes**

#### ***3.1.1 Walking and Wheeling***

Safe and accessible pedestrian networks are important for all seniors, regardless of their primary travel mode and ability to walk or drive. Without footpaths, people are unable to access other modes of transport. In some locations, low quality footpaths and inaccessible crossings led participants to walk, ride mobility scooters, and use wheelchairs on the road with vehicular traffic which can be unsafe.

#### ***3.1.2 Driving and Private Automobiles***

Participants living outside of major cities were significantly more dependent on private vehicles than participants from major cities. Non-driving participants outside of major cities generally relied on partners or similarly aged friends for rides, raising concerns about what might happen as the entire community ages. Many participants reported self-regulating their driving by choosing not to drive long distances or at night, preventing them from participating in social activities.

#### ***3.1.3 Public Transport***

Most of the public transport complaints from major and regional city participants mirrored the complaints we would expect from the general public, including infrequent service, too many transfers, and limited off-peak service. Long walks and inaccessible footpaths were the greatest barriers to public transport use among participants with local public transport options. Intercity bus services into regional centres are important for residents of secondary cities and remote locations, but the vehicles were generally inaccessible to those with mobility impairments. Intercity rail was considered to slow and expensive to be a viable alternative.

#### ***3.1.4 Community Transport***

People in major cities had access to the greatest range of community transport services. Participants familiar with local community transport services spoke highly of service quality, but cited limited hours, service duration, and advanced notification requirements as major limitations to use.

Participants who did not use community transport services were either unaware of their existence or overestimated the services that would be available to them as they age. Eligibility requirements were unclear to many participants. However, there is a clear mismatch between the types of disabilities that led to the loss of a license and the more severe disability required to gain access to community transport services. Participants from secondary cities and remote locations reported long waiting lists for community transport services even after qualifying.

#### ***3.1.5 Taxi and Limousine Services***

Major city participants generally use taxis as a back-up plan when planned rides fall through and public transport is not a reasonable option. In regional and secondary cities, taxi services are unreliable but used for a greater variety of trips than in major cities. There are no taxi services in the remote locations included in this research. The high price of taxis was the greatest barrier to their use by older Queenslanders. Those eligible for reduced taxi fare greatly appreciated the fare reduction, but many participants expected access to this scheme only to find out they were ineligible after losing their license.

## 3.2 Trip Types

### 3.2.1 Healthcare Trips

The topic of healthcare trips dominated the discussion in secondary cities and remote locations, likely due to the difficulty of accessing healthcare in these areas. Accessing healthcare is particularly difficult and expensive for residents of remote locations who are unable to make a return trip to the nearest regional hospital in one day. The lack of sufficient community and public transport options in secondary cities and remote locations leaves residents dependent on driving themselves or finding someone to drive them to hospitals. It can be so challenging to find transport to healthcare appointments that some have resorted to unsafe or illegal transport choices.

### 3.2.2 Shopping and Social Trips

Most participants viewed in-person shopping as a way to socialise and be a part of their community. Online shopping cannot replace the social aspect of in-person shopping. Participants across the state, including in areas with public transport, found it difficult to attend social events without driving. Outside of major cities, participants felt they would need to move to maintain their current social life, if they were no longer able to drive.

## 3.3 Technology

### 3.3.1 Attitudes Towards Technology and Technology Use

Participants expressed a broad range of attitudes towards and familiarity with technology. Participants in major and regional cities used technology more often and have stronger opinions about technology than their more rural counterparts. Most participants, across locations, appreciated technology's ability to connect them with family and friends. The most common technology-related fear among participants was making "one wrong click" and revealing private information online.

They also expressed frustration that the government and private companies are pushing them to adopt technology they do not feel comfortable using. One commonly cited example was My Aged Care, the Australian Government's centralised online portal for older people and their carers to apply for access to aged care related services, including transport support. While it is possible to go through the application process offline, participants reported it was challenging and confusing to do so. Additionally, the online application process requires the provision of sensitive information leading, again, to the fear of making "one wrong click" and exposing private information. Ultimately, they felt forced to go through the online process in order to qualify for benefits.

### 3.3.2 Transport-related Technology

The most common use of technology for travel was the use of online booking services for intercity, interstate, or international travel. Participants in major and regional cities also reported frequent use of navigation websites and apps. Typically, they used navigation websites to plan their trips in advance, rather than using the service for real time directions and information.

Participants expressed a strong preference for taxis over ride-hailing services, like Uber. This is largely because they prefer to call to book a ride and to pay in-vehicle. Neither of these options are currently offered by ride-hailing services in Australia. Of the 131 participants,

only 2 had ever used an app to hire and pay for a service. One of these participants had used a ride-hailing app, while the other had used a taxi app.

### **3.4 Other Themes**

#### ***3.4.1 Social Networks***

The composition of a participant's social network varies significantly by location. People living in major cities are much more likely to have children, grandchildren, and other young people in their local social circles than people living elsewhere. The lack of younger people living outside of major cities means that residents in these areas are less likely to have people around who can offer them rides when needed or assist them in using new technologies.

#### ***3.4.2 Banking***

People who felt less comfortable using the internet in general were less confident in their ability to keep their financial information safe online. They were therefore less likely to use online banking or use bank cards for online transactions. Some of those who did report using online banking reported feeling coerced into doing so, as the best interest rates are only available from online accounts. However, all but two participants, including the most tech savvy, refused to use any apps requiring them to provide bank card information, including transport-related apps like taxi and ride-hailing apps. Functionally, this means they do not use any transport services that require in-app payment.

#### ***3.4.3 Moving for Transport Access***

Many residents had considered moving, or actually moved, from the outskirts of their town into their town centre to improve access to transport and other services. The primary obstacle to moving is the cost of housing. Unless a person is experiencing severe health problems requiring frequent hospital visits, participants prefer not to make a large, intercity move.

While participants appreciated the government's "aging in place" efforts, they are frustrated by the lack of services that would allow them to maintain their lifestyle as they age. People reported friends making decisions to stay in or move to the outskirts of their town on the encouragement of the government's aging in place policy, only to find themselves isolated when they are no longer able to drive.

## **4. Recommendations**

Based on these findings summarised above, we make the recommendations below.

1. Prioritise the building of safe and accessible pedestrian networks.
2. Restructure and expand affordable, door-to-door transport options for older Queenslanders.
3. Explicitly consider the location of retirement and aged care facilities when designing public transport routes.
4. Consider restricted licensing over full removal of license, especially in remote areas.
5. Provide older Queenslanders with clear, accurate information about the transport services they can expect to receive as they age.
6. Provide older Queenslanders with accurate information on protecting sensitive information online and safe online banking.

## 5. Conclusions

Through our analysis of the focus group discussions, we developed a more thorough understanding of why and how older Queenslanders in different locations struggled with transport services and related technologies. While transport is difficult for non-driving seniors across the state, transport is particularly difficult for older Queenslanders living in remote locations and secondary cities due to multiple compounding issues: the long distances they must travel, limited transport options, and fewer younger people to offer rides to aging community members. Once a person living in a remote area loses their license, they have very limited options beyond finding someone else to drive them. Some non-driving participants reported making unsafe or illegal transport decisions due to the difficulty of finding someone to drive them, while others chose to limit their travel, isolating themselves from their community. Unfortunately, unsafe travel behaviours and isolation of older people living outside major cities are likely to increase as fewer members of their communities are able to drive. There is a need to improve safe, affordable transport options for older Queenslanders living outside of major and regional cities.

Our analysis also delved into the barriers older Queenslanders face with respect to technology. This is particularly important as more transport services attempt to go cashless or push users onto apps. We found that even among older people who were tech savvy, there was a hesitance to use online banking or to use banking information to pay for things online and through apps. This finding is consistent with our previous survey research on older Queenlander's use of transport-related technology (Bertolaccini & Hickman, 2019). Older Queenslanders should be provided with further resources and instruction on safe online banking and protecting their sensitive information online. We also recommend that government-run transport services continue to offer options for people who prefer to pay in cash and are not comfortable with smartphone apps for the foreseeable future.

## 6. References

- Australian Bureau of Statistics, 2017. *Feature Article: Population by Age and Sex, Australia, State and Territories.*, s.l.: s.n.
- Australian Bureau of Statistics, 2018. *Population Projections, Australia, 2017-2066*, s.l.: s.n.
- Braun, V. & Clarke, V., 2012. Thematic Analysis. In: H. Cooper, et al. eds. *APA handbooks in psychology. APA handbook of research methods in psychology.*. s.l.:American Psychological Association, pp. 57-71.
- World Health Organization, 2007. *Global age-friendly cities: a guide*. s.l.:World Health Organization.