Pathways to inclusion

A research report into access and inclusion barriers for users of electric mobility devices

WESTERN AUSTRALIA

Equal Opportunity Commission

Curtin University

Acknowledgment of Country

Curtin University and the Equal Opportunity Commission Western Australia acknowledges and pays respect to the past, present and future Traditional Custodians and Elders of this nation and the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples.

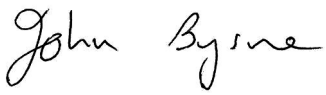
Table of Contents

1 Introduction

The Equal Opportunity Commission (EOC), with assistance from Curtin University intern Shannon Galvin, conducted a research project to investigate issues concerning the use of electric mobility devices (mobility scooters/gophers and electric wheelchairs) in Western Australia in the areas of public life covered by the *Equal Opportunity Act 1984*. Shannon was undertaking professional practice for his Bachelor Urban and Regional Planning.The objective of the project was to consider a range of issues for the users of mobility scooters which arise from a planning and policy setting, and to identify best practice solutions for users of electric mobility devices.

This report was formed using the knowledge and data derived from three key components of the project. The first component of the project was a literature review regarding electric mobility devices including information about the devices themselves, the policy context and any issues of access, inclusion and discrimination that may arise. It draws from grey literature and peer reviewed articles. The second is the WA Equal Opportunity Commission Mobility Device Survey, created to gather data from mobility device users to better understand issues of access, inclusion, and discrimination from their perspective. The third component is a series of interviews conducted with government officials to better understand issues of significance and examples of best practice. The Local Government Areas interviewed included the City of Rockingham, the City of Mandurah and the Shire of Mundaring.

The report is divided in to three main sections. Firstly, the Context section defines mobility scooters and explains how they are classified, used and why. It draws on the literature review to inform the reader and build a foundation for the rest of the report and is reinforced by the results from the electric mobility device survey. Secondly, the Statutes, Regulations and Policy section looks at the policy pertaining to mobility scooters, as well as a brief overview of the 2018 Commonwealth senate inquiry into the need for regulation of mobility scooters. It draws on grey literature and peer reviewed articles from the literature review. The Issues section explores the physical and social barriers to access and inclusion experienced by mobility users. It draws on peer reviewed literature from the literature review, results from the electric mobility device survey and findings from the interviews with government officials. Lastly, the Solutions section contains the findings from a series of interviews with government officials, primarily access and inclusion officers from local governments.
The officials from these LGAs provided examples of issues mobility scooter users had reported to them and the solutions the local government used to resolve these issues.
I would like to thank Commission staff, and particularly Shannon, who worked on the project.



Dr John Byrne
Western Australian Commissioner for Equal Opportunity

2 Context

2.1 What are Electric Mobility Devices?

The electric mobility devices referred to in this report include electric scooters and wheelchairs. They are small, battery powered 'dedicative assistive vehicles' designed to assist people who have a limited range of mobility resulting in difficulty travelling distances and performing tasks (Isaacson and Barkay 2020). Mobility scooters typically consist of three or four wheels, a seat over a platform and a tiller with controls that allows the user to steer and adjust their speed (May et al. 2010). In the UK, mobility scooters are classified as one of two classes, determined by weight and power (Isaacson and Barkay 2020). While this classification is drawn up by the UK government to legislate the use of mobility scooters in Britain, it is a helpful description of the two most common formfactors of mobility scooters: Class 2 mobility scooters (first from the left, figure 1) have a small, lightweight and compact formfactor that can be folded and stored. With a top speed of 6.44 km/h, they are primarily designed to enable access to public transport, for indoor use (such as in shopping centres) and some light outdoor use. Class 3 mobility scooters (second from the left, figure 1) have a much larger footprint and are designed primarily for outdoor use. As such, they have a number of safety features such as indicators and side mirrors, and a top speed of 10 km/h.

Figure 1: Electric Mobility Devices pictured left to right; Class 2 Mobility Scooter, Class 3 Mobility Scooter, Electric Wheelchair

Electric wheelchairs and mobility scooters are fundamentally similar, but their differences must be acknowledged. Mobility scooters are designed to assist those who are limited to the confines of their home, and are unable to perform long distance travel due to the loss of their licence, debilitating conditions, or injuries, etc. (Isaacson and Barkay 2020). Scooters can help these people remain independent by eliminating the need for a carer. Unlike mobility scooters, electric wheelchairs have a small footprint and are more easily manoeuvrable inside buildings (AHRC 2014). They are designed to provide support and mobility to people who cannot remain mobile due to a severely debilitating injury or condition (Mobility HQ 2021).

2.2 How are Electric Mobility Devices Used?

Mobility devices allow users to partake in activities at a variety of destinations by reducing limitations caused by distance and mobility (Isaacson and Barkay 2020). They don't just improve mobility, they are also associated with many other benefits including an improved quality of life, confidence, and sense of independence (Jang et al. 2020). They can change the lives of people with limited mobility by enabling them to participate in the community and remain independent.

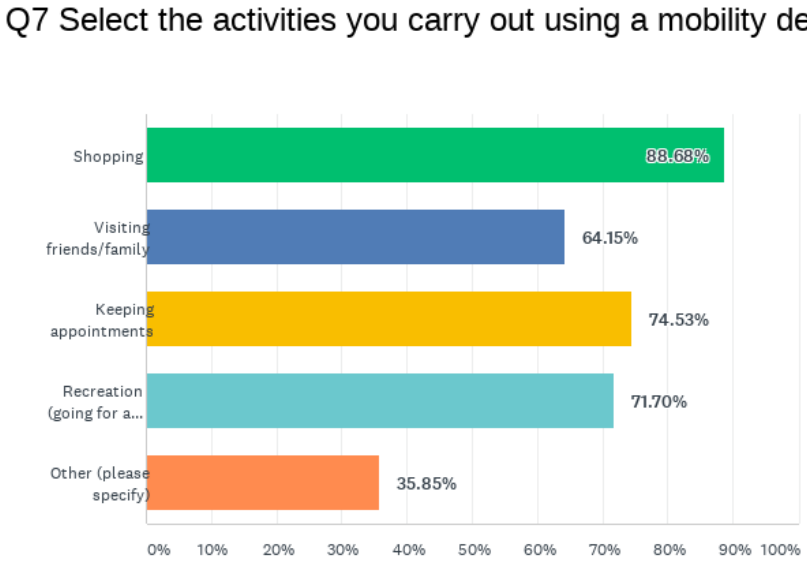


Figure 2: Survey Question 7

According to the mobility device survey (figure 2), the vast majority of respondents (88.68%) use their mobility device for shopping. Around two thirds of respondents (64.15%) use their mobility device to visit family and friends. Just under 75% of respondents use their mobility device to keep appointments. Over 70% of respondents use their mobility device for recreation.

The survey results support the notion mobility devices assist users in remaining mobile, which in turn increases their social and economic engagement opportunities. Furthermore, they illustrate the importance of considering issues of access and inclusion for mobility scooter users when designing and maintaining retail spaces.

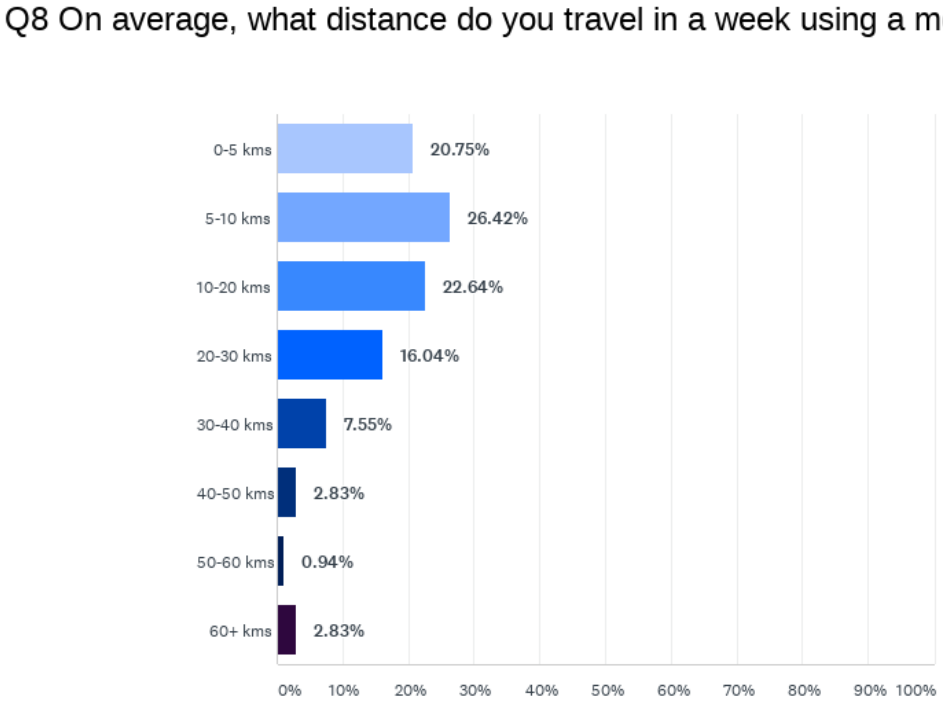


Figure 3: Survey Question 8

As seen in figure 3, just under half the respondents (47.14%) use a mobility device to travel short distances averaging at less than 10kms per week. A significant number of respondents (38.68%) travel a medium distance of 10-30kms a week using their device. A small number of respondents (14.15%) travel more than 30km a week using their device.

These results suggest that the majority of users are using their mobility devices to travel relatively short distances throughout their week. This could be attributed to the limited battery size and lack of charging stations users have to consider.

2.3 Who Uses Electric Mobility Devices?

Some research suggests on average the majority of mobility scooter users live independently, have modest walking impairments and are between the ages of 75 and 81 (Isaacson and Barkay 2020). An Australian survey called the 'Mobility Scooter Usage and Safety Survey' was conducted in 2012 and found that over 50% of users were aged less than 60 years, challenging the assumption the majority of users are elderly (AHRC 2014). The survey also uncovered without mobility scooters, many users would be restricted to the confines of their homes and their homes' surroundings and reliant on carers, family and friends for transport. Such reliance can not only undermine a person's sense of confidence and independence, but can also be a burden on the carer, family or friends who are tasked with transporting those in their care (Isaacson and Barkay 2020).

The usage of mobility scooters has been steadily increasing in recent years thanks to a number of factors including advances in technology and a more widespread acceptance of mobility scooters (May et al. 2010). The driving force behind this increase however is Australia's ageing population. According to a report by the Australian Institute of Health and Welfare (AIHW 2018), the percentage of the population aged 65 and over has been steadily growing in recent years, with WA among the top three fastest growing states. Over the period of 1999 to 2019, the number of people aged 85 years and over increased by 117.1% compared to a total population growth of 34.8% over the same time span.

One of the main problems for older people is remaining mobile in an urban setting due to the physical effects of ageing that restrict mobility (Isaacson and Barkay 2020). Modern mobility scooters offer an effective solution, allowing a steadily ageing population to engage with the community and perform tasks (Jang et al. 2020). So as the elderly population grows, so does the amount of mobility scooters in use in our urban environments.

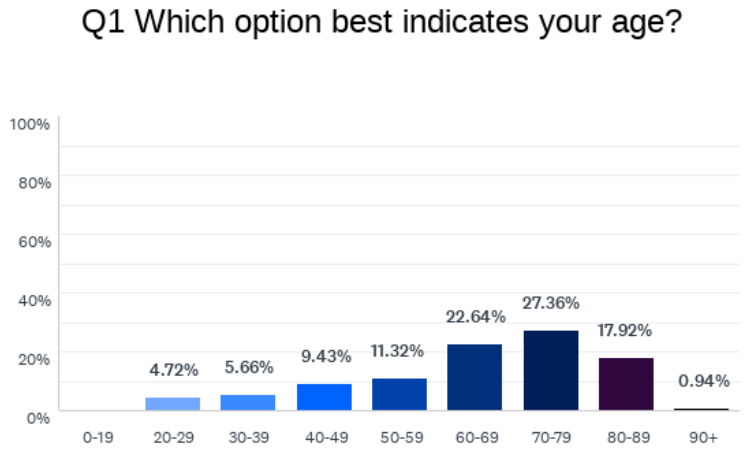


Figure 4: Survey Question 1

According to the survey results collected for this report (figure 4), the majority of the respondents were elderly, with most falling in between the ages of 70-79.

3 Statutes, Regulations and Policy

3.1 Electric Mobility Device Regulations

Electric mobility devices are subject to the Australian Road Rules (ARRs) which are guide laws set out by the federal government that states and territories can introduce into their own road laws as they see fit, depending on the local conditions (Parliament of Australia 2018). The ARRs regulate the use of 'motorised wheelchairs' on roads and road related areas including footpaths, they classify device users as pedestrians and limit their top speed to 10 km/h (May et al. 2010).

Classing users as pedestrians does not account for the differences between a conventional pedestrian and a mobility device user, creating the potential for device users' needs to be overlooked, leading to discrimination (OHRC n.d.). It is also important to note more regulation of mobility scooters would further restrict users in a way that wouldn't restrict conventional pedestrians. For example, users are restricted to a maximum speed of 10km/hr while there is no limit on how fast pedestrians may travel on foot.

Under the Road Traffic Code, users of electric mobility devices are required to travel only on the footpaths and shared paths, unless there are none available, in which case users may travel cautiously on the side of the road (DoT: DVS 2015). Mobility scooters are exempt from registration in every state of Australia apart from Queensland, where only Class 3 scooters are required to be registered (Isaacson and Barkay 2020). There are currently no laws restricting the use of mobility scooters to those with limited mobility (RRATRCCA 2018).

E-scooters and e-skateboards are increasing in popularity as the public look for convenient and sustainable ways to commute and, unlike e-bikes, many e-scooters and e-skateboards are illegal to use on public roads and paths in WA, given the speed they can travel and the power of their motors; however riders of these devices that are compliant with the relevant power output and speed regulations are permitted on footpaths and shared paths as long as the rider keeps left and gives way to pedestrians.

3.2 Access and Inclusion

There are many state and federal statutes, Acts and standards which seek to provide equal access and inclusion to people with disabilities that apply to mobility scooter users. Under the Western Australian *Equal Opportunity Act 1984*, it is illegal to discriminate against any person on the grounds of impairment, including access to places (Government of Western Australia 2018). The Commonwealth *Disability Discrimination Act 1992* (DDA) makes it unlawful for a person with a disability to be discriminated against in access to premises and allows for the development of "disability standards" pertaining to public transport, education, accommodation, employment, and Commonwealth programs (DSC n.d.). The Disability (Access to Premises - Buildings) Standards 2010 set out the disabled access standards for development (Australian Government 2010).

All local government and selected State Government agencies are required to develop a Disability Access and Inclusion Plan (DAIP) under the *Disability Services Act 1993* which include strategies to improve equal access opportunities for people with limited mobility (DoC n.d.).

3.3 Senate Inquiry

Having historically been used by only a small portion of the population, mobility scooters have often been neglected by researchers, planners and policy makers, leaving a gap in the research and policy surrounding these devices (Isaacson and Barkay 2020). As such, the current regulatory framework of mobility scooters in

Australia has been described as outdated and does not enable safe use of these devices (NTC 2019). The growth in the use of mobility scooters in recent years has revealed a growing need to address the topic from multiple perspectives.

A Commonwealth senate inquiry into the need for the regulation of mobility scooters was conducted in 2018 in response to a request highlighting the increase in the number of deaths and injuries due to mobility scooter accidents (COTA 2018). The report recommended a nationally consistent regulatory framework for motorised mobility devices be developed and the consideration of simple and low-cost licencing and registration arrangements, along with third party insurance, be considered (RRATRCCA 2018).

4 Issues

4.1 Physical Barriers

Unlike pedestrians without limited mobility, mobility scooter users face many physical barriers that stop them accessing public places and spaces. These barriers can prevent safe and reliable access to transport, buildings, infrastructure, streetscapes, etc. and may lead to discrimination. Public transport poses various accessibility issues to scooter users. These issues include difficulty entering and exiting buses due to the small turning area inside buses and large footprint of scooters, and the gap between the platform and the train increasing the risk of an accident (Jang et al. 2020). These issues may discourage users from choosing to travel on public transport and therefore restricts their economic and social engagement opportunities.

> ***"Equal access when it comes to public transport is non existent. Let's start with the basics of manoeuvring a gopher in a train, there is a pole right in the centre of the doorway!"***
> ***- Survey participant***

Access issues may also arise from poor design features such as entrances that can only be approached via steps/stairs, and doorways, corridors and aisles that are too narrow for the body of a scooter (AHRC 2014). Streetscapes with uneven or poorly maintained footpaths and curbs are a safety risk to users (Jang et al. 2020). They can cause accidents such as tipping or falling from the scooter, which may result in injury and sometimes death. Some users report spending a long time searching for safe and accessible entrances to public buildings, as well as difficulty finding safe places to leave their scooters while using facilities (May et al. 2010).

Public ablution facilities are notorious among users as they are usually not designed to accommodate the large body of the scooter. Beyond this, they often lack features such as automated doors, grab bars, and elevated seats (Jang et al. 2020). Charging stations are necessary to enable users to travel long distances. Many users will avoid visiting places if they think they will not have enough battery in their device to make it to their destination and back home.

Q12 Rate the level of difficulty experienced when completing the following activities using a mobility device

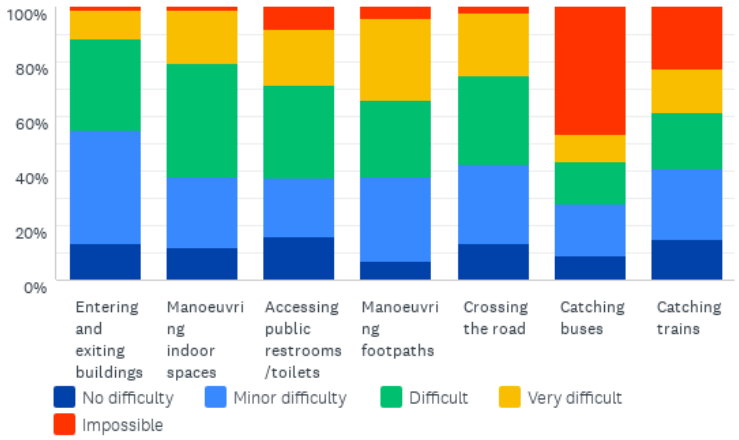


Figure 5: Survey Question 12

As seen in figure 5, very few survey respondents (12.23% on average) experienced no difficulty when completing these activities using a mobility device. Over half (54.99%) of respondents experienced no or minor difficulty when entering and exiting buildings. The level of difficulty appears to change once inside a building, with 61.23% of respondents claiming it is difficult or very difficult to maneuverer indoor spaces. Many respondents (54.45%) found it difficult or very difficult to access public restrooms/toilets, while 7.92% found it impossible. Very few respondents (6.8%) had no difficulty manoeuvring footpaths. Around a third of respondents found it very difficult and a further third experienced minor difficulty. A very high number of respondents (46.67%) found it impossible to catch the bus, while a much lower number (26.14%) found it impossible to catch the train.

Furthermore, according to the survey results, 81.13% of respondents have never experienced an accident on their mobility device. Of those respondents that had experienced an accident on their mobility device, very few (2.5%) had experienced an accident due to a mechanical fault of the mobility device, suggesting physical barriers were the cause. For the majority of respondents who have ever experienced an accident on their mobility device (86.68%), the accident resulted in an injury to themselves.

4.2 Social Barriers

Mobility device users face many social barriers that may result in them being discriminated against. Negative stereotypes and attitudes towards users can discourage them from accessing places and spaces where stigma exists, which in turn limits their social engagement. Many users report experiencing situations where negative assumptions were made about their intelligence, independence, and cognitive and functional abilities because they use a mobility scooter (Jang et al. 2020). Mobility scooter users are often negatively portrayed in the media, particularly in tabloid newspapers. They are frequently described as being a threat, and the danger is attributed to limited ability, recklessness, and age of the user (Mortenson and Kim 2016). There are some people with limited mobility who forgo obtaining a scooter, and therefore the benefits one can bring, because they associate them with these negative stereotypes (May et al. 2010).

> ***"People believe since you're in a chair you have a mental illness and are not capable of communicating, they look down on you," - Survey participant***

According to the mobility device survey, around half of respondents (48.11%) felt they were discriminated against or treated less favourably than others because of their use of a mobility device.

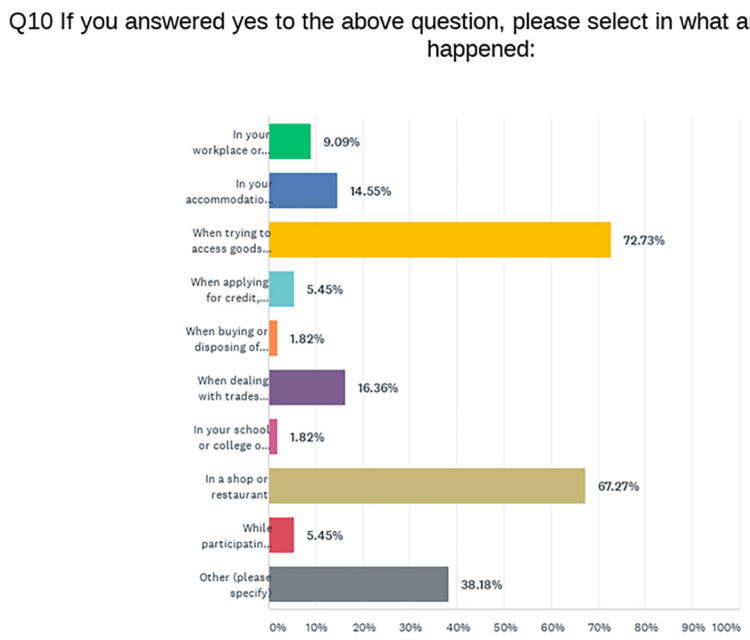


Figure 6. Survey Question 10

As seen in figure 6, the majority of respondents who felt they were discriminated against (72.73%) experienced discrimination when trying to access goods or services. A large number (67.27%) felt they had been discriminated against in a shop or restaurant. Other areas of life included when dealing with trades people, businesses or state or local government (16.36%) in their accommodation or looking for accommodation (14.55%). Around 9% of respondents who felt they were discriminated against had experienced discrimination in their workplace or when seeking employment.

The survey data suggests the main areas where mobility device users experience discrimination are when trying to access goods or services, particularly in a shop or restaurant. This further reinforces the importance of making retail spaces accessible and inclusive for device users to lessen the possibility of discrimination arising.

4.3 Lack of User and Community Education

Mobility scooter users do not receive a suitable level of training and pre-purchase advice. Studies have suggested as little as 10% of scooter users received any form of formalised training (Jang et al. 2020). According to the survey results, 78.3% of respondents did not receive any formal mobility device/road rules training before or after the purchase of their device.

It is very important for the user to understand the road rules and how to use a scooter safely, especially those transitioning from driving a car to a scooter and those who have not driven in some time (Isaacson and Barkay 2020). It is also important that users obtain a scooter that suits their needs and will be suitable for the type of terrain they intend to travel on. Failure to do so increases the likelihood of an accident. There have been surveys that show very few users seek out advice before purchasing their scooter, and some report overzealous salespeople trying to sell them an unsuitable model (Jang et al. 2020).

Furthermore, there is a lack of understanding in the wider community about mobility scooter users and their rights (May et al. 2010). Owners and operators of clubs, venues, services, etc. must train their staff to meet the needs of people with limited mobility as a failure to do so can lead to discrimination (AHRC 2014). Sharing spaces with other pedestrians, cyclists and motorists can bring about other issues that limit the users' ease and quality of access. Some users report feeling invisible to other pedestrians, while others felt they had to 'prove' they have a disability that warrants a mobility scooter (Jang et al. 2020). Pedestrians distracted by their mobile phones walk in an unpredictable manner on footpaths and make it hard for users to

safely navigate around them (Jang et al. 2020). A lack of understanding from the wider community can lead to accidents, and potentially negative social interactions between users and non-users.

4.4 Issues of Access and Inclusion from the User's Perspective

To help understand key issues of access and inclusion when using an electric mobility device from the user's perspective, survey respondents were asked to explain issues and situations in which they felt they were being discriminated against. A brief summary of the responses follows:

When using footpaths and streetscapes, users reported:

- Difficulty manoeuvring footpaths due to poor surfaces and varying heights between footpaths, driveways, and curbs.
- Cars parked over footpaths and kerb ramps, blocking access entirely and forcing users to find an alternative route.
- People not being aware of mobility scooters, walking out in front of them without realising.
- Footpaths damaged by construction, with nothing done to fix the path until after the construction is completed making that area inaccessible for the duration of the construction.
- Inclines too steep for mobility devices to overcome.

When using buildings and retail stores, users reported:

- Poor mobility device access in shop entrances, particularly due to a lack of automatic doors.
- Speed bumps blocking access to shopping centres for device users, poles/bollards blocking entrance to shops from disabled bays.
- Poor access when inside shops due to shop layout and sometimes due to stock being left in the way.
- Reception desks that are standing height only.
- Doors too heavy to open with one hand from a mobility scooter.
- Out of order access facilities such as access lifts, leaving few alternatives.
- Unreliable information surrounding accessibility for some venues.
- Being subjected to uncomfortable alternatives where there is no disabled access, such as being lifted down a flight of stairs or using a side entrance not usually meant for the public.
- Wheelchair accessible hotel rooms often being of a lower calibre than other rooms, sometimes overlooking a carpark on the ground floor.
- Lack of suitable mobility device parking, especially out of the elements.
- Poorly positioned charging stations in shops.

When using public facilities and services, users reported:

- A lack of accessible toilets, poorly positioned mirrors in accessible toilets, no lighting in portable disabled toilets.
- Grab handles on trains that make it difficult for mobility devices to manoeuvre.
- Lack of consideration for access and inclusion by event holders.

Users reported experiencing an overall lack of education, respect and empathy from other pedestrians and road users:

- Mobility scooters are generally not well received by other customers in shops.
- Lack of respect, education and understanding from others when sharing roads, footpaths, and shops with other transport modes.
- "While other couples can stroll side by side people get furious that I'm supposedly blocking their way. I have to ride behind my husband. Others get angry that they might waste a second of their life waiting for

me to pass. They frequently jump in front of me. Scooters have no brakes so can't screech to a halt, but I always quickly take my hands off the control, often feeling like I could fly over the handlebars. Sometimes the impatient person gets knocked by (or they knock) the scooter as they jump across. They become abusive about my driving or supposed speed. Officially I am well looked after, although I long to have a path leading onto the beach. Selfish private individuals need educating on simple courtesy and respect for those who can no longer walk with ease."

User's reported feeling invisible to others:

- People handling a user's electric wheelchair to reach items, rather than waiting until the user had finished browsing. People hitting the back of the user's wheelchair with shopping trolleys in line at the checkout, people leaning or resting heavy items on user's wheelchair, people pushing past wheelchairs in line when trying to observe social distancing, refusal of service.
- Assumptions being made about users' mental capacity due to their use of a mobility device; some survey respondents felt they were treated as though they were unable to communicate. Staff talk to carers first before the mobility device user, and some even looked to the next customer in the line as if they were the person's carer.
- One respondent could not attend university and requested to attend via video call, but the university took some time to set up the calls, putting the respondent at a disadvantage due to their condition.
- Disabled access is often separated from normal access, limiting social engagement, and isolating the user.

Users reported occurrences of refusal of service:

- One respondent experienced a shop assistant serving others before serving them, they now have to speak up to say they are next in line.
- One respondent recalled being told they couldn't access certain areas of a store because it wasn't safe.
- One respondent came across a shop where the owner banned all mobility scooters entirely due to concerns over damage to the floor: "Owners banned all gophers is shop due to new flooring, reckon we might damage it."

"Staff do not talk to me, they talk to my carer or partner," - Survey participant

5 Solutions

5.1 Interview Findings: Solutions to Issues of Access and Inclusion

Many local governments receive complaints about a general lack of accessible features and facilities in the built environment. Local governments have Access and Inclusion Advisory Groups, made up of residents and individuals who are passionate about universal accessibility. They perform accessibility audits on local infrastructure. A report including recommendations is then made and passed on to the local planning department for further consideration. The planning department can then make alterations and additions to local infrastructure as well as removing physical barriers.

Many local governments have responded to calls for dedicated mobility scooter charging stations and parking by introducing charging/parking points in a mixture of places including City buildings, public spaces and private buildings. Charging points allow users to travel further and for longer using their mobility scooters, increasing accessibility. The City of Mandurah and Shire of Mundaring have introduced three new charging points each, while the City of Rockingham has introduced ten. Councils can also work with the Recharge Scheme Australia, a non-profit organisation that works in partnership with local councils and businesses/ organisations to ensure there are adequate charging stations for electric mobility devices (Recharge Scheme 2016). Their website lists official locations of recharge stations for electric mobility devices so that users may plan their trips without fear of running out of battery. They also provide best practice guidelines for their partners.

The City of Mandurah have received many complaints about alfresco seating and retail displays encroaching on footpaths reducing accessibility for users. Other reported issues include users being denied access to businesses due to their mobility scooters. In response, compliance officers approach business owners directly and make presentations to local business groups such as the Chamber of Commerce about accessibility issues related to their businesses. They explain how device users are impacted through examples of lived experience to help owners understand issues caused by retail displays and alfresco seating. The city takes this informative and friendly approach to educating business owners to minimise negative backlash from owners and to increase positive outcomes.

The City of Rockingham reported tensions surrounding ACROD (disability) parking in situations where a person's disability is not immediately visible. Some community members believed mobility scooter users don't have a severe enough walking impairment to be allowed to park their motor vehicle in ACROD parking bays due to stereotypes about ACROD users being exclusively wheelchair users, and not mobility scooter users. To resolve this the City promoted the National Disability Services multimedia campaign; 'This Bay is Someone's Day.' The campaign is designed to spread public awareness about ACROD bays, who the users are and how important they are to each individual user.

One last key issue the City of Mandurah seeks to resolve is the lack of accessible events and a lack of community awareness about accessibility. In response to this the city holds local government led events such as the Mandurah Stretch Festival. These events allow local government to have greater control over accessibility requirements. They ensure events are as accessible as possible, going beyond the legislative requirements for access. The events provide information about what accessibility features are available in the area.

5.2 Interview Findings: Suggestion to Improve Access and Inclusion

The local government officials interviewed made suggestions they would like to see implemented to resolve issues of access and inclusion for mobility scooter users. One official spoke about the value of including people with lived experience in the consultation and decision-making process, given their useful perspective on access and inclusion issues. It was also suggested local governments should go beyond the legislative requirement where possible, to really get to the bottom of why the requirements exists. Another official suggested local government could host public information sessions addressing road safety, mobility scooters and training options, as well as promoting community awareness campaigns that educate people on different types of disabilities.

5.3 Survey Findings: Suggestions to Improve Access and Inclusion

The survey respondents were asked what they believe could be improved to make public spaces such as footpaths and buildings more accessible to mobility device users. Respondents indicated that State and Local Governments could improve the accessibility of footpaths, streetscapes and public transport by:

- Using consistent materials and heights when constructing footpaths.
- Increasing the width and quality of existing footpaths.
- Clearly marking out where ramps are even on streets to indicate where it is safe to mount a kerb.
- Ensuring foliage, and alfresco seating does not encroach on footpaths.
- Providing warning of obstructions such as compromised footpaths, perhaps through an online group, signage, etc.
- Prioritising the repair of uneven or broken footpaths due to tree roots or construction, etc.
- Taking extra measures to discourage parking on footpaths and any other forms of obstruction such as by council bins.
- Providing adequate signage and drop kerbs at crossings, ensuring there is at least one drop kerb on each side of a crossing.
- Reducing the incline on kerbs to reduce a risk of rolling a mobility scooter.
- Providing safer access to parking lots.
- Improving mobility device access on public transport.

Respondents indicated local governments, developers and retail owners could improve the accessibility of public buildings and retail stores by:

- Widening aisles inside shops.
- Widening entrances and ensuring they have no lips or gaps to reduce risk of injury trying to fit through doorway.
- Providing a ramp where there are stairs leading to entrances and providing automatic doors.
- Placing ACROD parking as close to entrances as possible.
- Ensuring bollards are spaced far enough apart to allow the body of a mobility scooter to get through.
- More widespread provision of options for assistance at shopping centres, such as being able to phone ahead to get help removing mobility scooter from car.
- Improving minimum access standards and imposing sanctions on builders and businesses who do not adhere to those standards.
- Increasing the amount and quality of mobility device parking areas.
- Increasing the width of ACROD parking bays to allow access to cars with scooters.
- Improving the quality and availability of accessible toilet facilities with automatic doors and suitably sized entrances and interiors.

Respondents indicated non-government organisations and federal, state and local governments could improve issues of inclusion for mobility device users by:

- Providing more widespread education of road users and pedestrians about the rights of mobility device users.
- Educate people on the importance of not obstructing access for users, such as by blocking parking and footpaths.
- More user consultation about access and inclusion.
- Improve complaint mechanisms so the burden isn't entirely on users to prove discrimination and lack of access.
- Request users to complete trials for council planning,
- More government officials such as planners, access and inclusion officers, regulators, etc. that have lived experience.

6 Recommendations

Based on the issues highlighted in this report, the feedback from local government officials and the survey results, a series of recommendations have been made:

1. All local governments consider partnership with Recharge Scheme Australia and follow their best practice guidelines for implementing an adequate amount of recharge stations for electric mobility devices throughout their LGAs. So far there are only 23 locations listed on the Recharge Scheme Australia website in WA. It would be highly beneficial to device users to have a comprehensive, state-wide network of recharge station locations with all local governments included.
2. Local businesses/organisations consider space for electric mobility devices when planning shop floor layouts, facilities, and entrances. Cafe and retail store owners should consider alfresco seating and signage does not encroach on footpaths too severely.
3. Local governments and the Main Roads Authority should prioritise the fixing of broken or damaged footpaths to ensure consistent access for mobility device users. Furthermore, they should consider updating device users regarding areas that have become inaccessible to electric mobility devices within their local area through council websites or social media.
4. Local governments and businesses/organisations be mindful ACROD parking is spacious enough to allow for the safe removal of a mobility scooter from a vehicle and research how often mobility device users frequent centres so they can be better informed about how many ACROD parking spaces are needed.
5. The public transport authority research the possibility of making buses more accessible by mobility scooter.
6. Businesses consider equal opportunity training or training to optimise customer service to mobility device users.

7 Conclusion

The objective of this research project was to consider a range of issues for the users of mobility scooters which arise from a planning and policy setting, and to identify best practice solutions for users of electric mobility devices. The literature review, WA Equal Opportunity Commission Mobility Device Survey and interviews with local government officials revealed many issues of access and inclusion for mobility device users. Some stem from physical barriers in the built environment such as a lack of universal accessibility features and dedicated mobility device infrastructure. Others stem from a lack of empathy, understanding and education from other road users and pedestrians, which lead to issues of exclusion.

Using feedback from the interviews with local governments, a summary of best practice solutions in response to specific issues was created. It highlighted the importance of regular accessibility audits, community education and including people with lived experience in the consultation, planning and development process. Based on the device user feedback from the survey, a summary of improvements to make public spaces more accessible to mobility device users was made. It highlighted the importance of considering mobility device users in every aspect of the development and planning process, as small changes can make a huge difference to the user experience.

Overall, it is clear that issues of access and inclusion exist for users in many areas of everyday life. There is a clear disparity between the experience of a pedestrian with a full range of mobility, and one who uses a mobility device. As the population of Australia grows and ages, an increasing rate of people will be using electric mobility devices going into the future. It is essential fixing these issues is given a high priority in a planning and policy framework to ensure users are not overlooked and discriminated against.

8 References

Australian Government. 2010. “Disability (Access to Premises — Buildings) Standards 2010.” https://www.legislation.gov.au/Details/F2010L00668.

Australian Human Rights Commission (AHRC). 2014. Advisory Notes on Mobility Scooters in Registered Clubs, June 2014. https://humanrights.gov.au/our-work/disability-rights/projects/mobility-scooters-registered-clubs.

Australian Institute of Health and Welfare (AIHW). 2018. Older Australia at a Glance, September 2018. Cat. No: AGE 87. https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/summary.

Australian Institute of Health and Welfare (AIHW). 2019. “People with disability in Australia 2019: in brief.” Government of Australia. https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia-in-brief/contents/how-many-experience-discrimination.

Council on the Ageing Western Australia (COTA). 2018. “Submission to the Senate Rural and Regional Affairs and Transport References Committee: Inquiry into the need for regulation of mobility scooters.” https://www.cota.org.au/wp-content/uploads/2018/03/COTA-Submission-to-Senate-Rural-and-Regional-Affairs-and-Transport-References-Committee-on-Mobility-Scooters-March-2018-FINAL.pdf.

Department of Transport: Driver and Vehicle Services. (DoT: DVS). 2015. Vehicle Safety and Standards Information Bulletin Motorised Wheelchairs Information for Users. Government of Western Australia. https://www.transport.wa.gov.au/mediaFiles/licensing/lbu_vs_ib_115.pdf.

Disability Services Commission (DSC). n.d. Section Two – Legislation, Codes and Standards. Government of Western Australia. http://www.disability.wa.gov.au/Global/Publications/For%20individuals%20families%20and%20carers/legislation.pdf.

Government of Western Australia. 2018. Equal Opportunity Act 1984. Government of Western Australia. https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc_41630.htm/$FILE/Equal%20Opportunity%20Act%201984%20-%20%5B07-f0-02%5D.html?OpenElement.

Isaacson, Michal and Dov Barkay. 2020. “Mobility scooters in urban environments: A research agenda.” Journal of Transport & Health 18: 1-6. https://doi.org/10.1016/j.jth.2020.100917.

Jang, Sharon W., Ben Mortenson, Laura Hurd & R. Lee Kirby. 2020. “Caught in-between: tensions experienced by community mobility scooter users.” Disability & Society 35 (10): 1577-1595. DOI: 10.1080/09687599.2019.1696749.

May, Esther, Robyne Garrett and Alison Ballantyne. 2010. “Being mobile: electric mobility-scooters and their use by older people.” Ageing & Society 30 (1): 1219–1237. DOI: 10.1017/S0144686X10000334.

Mobility HQ. 2021. “Benefits of Mobility Scooters.” Mobility HQ. https://www.mobilityhq.com.au/blog/our-blog/mobility-scooters/benefits-of-mobility-scooters/.

Mortenson, W. Ben and Jenny Kim. 2016. “Scoping review of mobility scooter-related research studies.” Journal of Rehabilitation Research and Development 53 (5): 531-540. https://pubmed.ncbi.nlm.nih.gov/27898156/.

National transport Commission (NTC). 2019. Barriers to the safe use of motorised mobility devices: discussion paper, October 2019. Australian Government. https://www.ntc.gov.au/sites/default/files/assets/files/NTC%20Discussion%20Paper%20-%20Barriers%20to%20the%20safe%20use%20of%20motorised%20mobility%20devices.pdf.

Ontario Human Rights Commission (OHRC). n.d. Racism and racial discrimination: Systemic discrimination (fact sheet). France: Queen's Printer for Ontario. http://www.ohrc.on.ca/en/racism-and-racial-discrimination-systemic-discrimination-fact-sheet#:~:text=Systemic%20discrimination%20can%20be%20described,perpetuate%20disadvantage%20for%20racialized%20persons.

Recharge Scheme Australia. 2016. "RECHARGE Scheme™ services." https://www.rechargescheme.org.au/recharge-scheme.

Research Institute for Disabled Consumers (RIDC). n.d. "Class 2 and class 3 mobility scooters." RIDC. https://www.ridc.org.uk/features-reviews/out-and-about/choosing-wheelchair/mobility-scooters/class-2-and-class-3-mobility.

Rural and Regional Affairs and Transport References Committee Commonwealth of Australia (RRATRCCA). 2018. "Need for regulation of mobility scooters, also known as motorised wheelchairs." Australian Government. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/MobilityScooters.

Equal Opportunities Commission
(08) 9216 3900
eoc@eoc.wa.gov.au
www.eoc.wa.gov.au