

VDD Studio submission

Parliament of Australia Senate Inquiry:

**Delivery of outcomes under the
National Disability Strategy 2010-2020
to build inclusive and accessible communities.**

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INTRODUCTION

Can communities be considered inclusive, or accessible, or participatory, if significant cohorts of society are excluded? Can communities be created or prosper when, for people with disabilities, the majority of the existing built environment is difficult to access.

Responding to Parliament of Australia Senate Inquiry *Delivery of outcomes under the National Disability Strategy 2010-2020 to build inclusive and accessible communities* this submission specifically addresses the following: (adapted from Inquiry's Terms of Reference):

1. the planning, design, and regulation of the built environment, including: commercial premises, housing, public spaces and transport infrastructure, and
2. innovations towards improving the accessibility of the built environment.

In light of the above, VDD Studio puts forward the following recommendations:

RECOMMENDATIONS

RECOMMENDATION 1

Design Universally

Parliament of Australia, through the appropriate channels, advocates for:

- A) mandatory competency in Universal Design in (Australian) Architects' registration processes, and
- B) introduction of Universal Design into all built environment curricula, including professional development.

RECOMMENDATION 2

Parliament of Australia, through the appropriate channels, continues to strengthen accessibility legislation and writes Universal Design into all (federal level) built environment policies.

RECOMMENDATION 3

Understand the Existing Built Environment

Parliament of Australia, through the appropriate channels, advocates for local councils (and others) to adopt innovative accessibility assessment processes such as: *Universal Mobility Index* (UMI), *Advanced Access Auditing Methodology* (AAAM) and *Accessible Carparking Auditing Methodology* (ACAM) to better understand the (in)accessibility of the existing built environment.

RECOMMENDATION 3

Work Together

Parliament of Australia, through the appropriate channels, advocates for the conscious building of meaningful collaborative partnerships between: people with disability, their representative organisations, policymakers, academia, built environment professionals, and the commercial world.

In support of these recommendations we provide the following commentary.

BACKGROUND

People with disabilities and/or mobility impairments are not a fringe group on the periphery of society. The 2015 Survey of Disability, Ageing and Carers (SDAC) revealed that: one in five people self-identified as having a disability, for those over 65 living in Tasmania the incidence of disability rises to 55%, and Australia-wide the incidence of disability amongst older persons living in cared accommodation, at 96.5%, is almost universal (<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0>). Babies are dependent on others for mobility and playground and sports injuries are common. Mobility impairments are a fact of

life. It is therefore puzzling that so much of the built environment has been designed to suit only a portion of society, the temporarily able-bodied; the needs of a large minority are given little thought by designers, planners and other built environment professionals.

This ongoing lack of an accessible and inclusive built environment constrains the autonomy of people with disability, restricting them from participating in various economic, cultural, and communal life activities as well as compromising their ability to complete daily chores. In the past the built environment has not been held accountable for people with disability' reduced access to socio-economic life and its contribution to increased dependence on family or carer support.

HOLISTIC APPROACH NEEDED

UNIVERSAL DESIGN

Design Education

Designing built environments to be usable by everyone, to the greatest extent possible regardless of age, ability, or status in life, is generally regarded as Universal Design. Internationally, built environment designers have increasingly adopted inclusive and accessible design, that is, Universal Design, enabling greater degrees of independent living for people of varying ages, genders and abilities. Take-up in Australia, however, is not so positive. On behalf of City of Melbourne, Green and Jackson (2008) ran a built environment focus group with architects, planners, builders and construction engineers, in 2008. It was revealed that none of the professions had any experience of universal design at trade, undergraduate, post-graduate or continuing professional education levels. More recently, 'Across Urban Design, Planning and Architecture, no major built environment design program on offer at undergraduate or postgraduate level in Australia in 2015 contains Universal Design, Designing for Disability, Inclusive Design, People-centred Design or the like as a core course' (Jackson and Green 2016). Furthermore, competency in Universal Design (or 'Accessibility' in general) is not mandated in (Australian) Architects' registration processes. Therefore, within Australia's building design professions understanding of Universal Design is extremely sketchy, tending to result in compliance-based, minimum-standards outcomes.

Accessibility Regulation and Policy

Mostly by the stick of new, coercive building and planning regulation rather than consensus on the need to universally design, the accessibility of the newly built Australian built environment is improving. Nonetheless, proponents of Universal Design argue that today's built environments are still artificially creating a class of special needs users who, by definition, require (costly) special provisions. Such provisions are usually achieved by retrofitting; this is neither cost-effective nor sustainable. Therefore, Universal Design advocates seek to go beyond regulatory accessibility standards by utilising design principles that increase access for everyone. Aligned with international conventions and global agreements such as the UNCPRD and the New Urban Agenda (adopted at UN Habitat III held in Quito Ecuador 2016), the Government of Victoria, through Sport and Recreation Victoria, has released *Design For Everyone: A Guide To Sport And Recreation Settings*, advocating Universal Design. The Victorian State Disability Plan 2017-2020 also specifically flags Universal Design as an essential ingredient in improving built environment accessibility. To hasten Australia-wide adoption, reference to Universal Design in government policy at the federal level is critical.

In light of the above, in the quest toward inclusive, accessible communities where people with disability can fully participate, Universal Design education needs to be addressed, particularly within built environment professions. In addition, legislative requirements for built environment accessibility must be further enhanced and inclusion of Universal Design in relevant federal government policy must be increased.

UNDERSTANDING THE EXISTING BUILT ENVIRONMENT

Conventionally, non-collaborative, technical, compliance-based access audits undertaken by 'experts' are used to interrogate the accessibility of the existing built environment, particularly at the individual building scale. The technical Standards applied have not necessarily been informed by the lived experience of people with disability. Although internal accessibility is a very healthy and necessary component of any building, staying within the confines of the indoor environment precludes any holistic assessment of the complexity of the travel chain. Consideration of the building alone risks such buildings becoming isolated islands of accessibility within a travel chain 'sickness' of unknown infrastructural and other built environment barriers.

Addressing the shortcomings of available accessibility auditing tools three innovative, participatory and/or collaborative, accessibility assessment methodologies have been developed. In differing ways, the *Universal Mobility Index* (UMI), *Advanced Access Auditing Methodology* (AAAM) and *Accessible Carparking Auditing Methodology* (ACAM) all illuminate how barriers to mobility within the built environment discriminately constrain the autonomy of people with disability.

at Neighbourhood scale: UMI

Journeys across the built environment are complex travel chains involving navigation of different types of buildings as well as varying infrastructure such as footpaths, roads and transport modalities. A holistic approach to the complex multifactorial interaction between human mobility needs and the built environment is therefore required. No method of measuring the overall accessibility of the built environment, at the neighbourhood scale, is currently in wide-spread use. Consisting of two main components, the Built Environment Component and the Policy Environment Component, the UMI is appropriate for such a task. The UMI is an inclusive participatory process empowering people with disability to determine assessments of barrier severity and prioritisation, based on their own lived experience. Input from Disabled Peoples Organisations is also sought in respect to the inclusion of people with disability' opinions in policy making processes affecting the built environment. *An Introductory Theoretical and Methodological Framework for a Universal Mobility Index (UMI) to Quantify, Compare, and Longitudinally track Equity of Access across the Built Environment* was published in Journal for Disability Policy Studies in 2011 (Green 2011).

In 2011, the UMI process was successfully piloted in Kensington, an inner-Melbourne neighbourhood, Victoria. In terms of the lived experience of people with disability it was found that Commercial Buildings (commercial premises) scoring '0.38' (where fully accessible maximum score equals 1.00) and Private Dwellings (housing) scoring '0.42' were the least accessible sectors of the built environment, within Kensington Site assessors (all people with disability) unanimously agreed that Infrastructure (within the public realm) was the most important built environment sector. Worryingly though, within Kensington, Infrastructure only scored '0.56' (Jackson and Green 2013). Currently, further UMI trials are programmed for 2018 (Jackson 2017). Assessing existing conditions aids in understanding the accessibility of the built environment. Therefore, adoption of the UMI by government and non-government organisations would help to address: the current fragmented nature of current access considerations across the built environment, and the exclusion of people with disability in the policy process that shapes this environment.

at Precinct scale: AAAM

AAAM, developed by Visionary Design Development Pty Ltd, is an inter-disciplinary collaborative process involving accessibility assessment by built environment professionals with varying knowledge practice perspectives. AAAM has been successfully implemented in Moreland, an inner-north municipality of Melbourne. The project, *Accessing Moreland: Glenroy Major Activity Centre and Shopping Strip Renewal Program Access and Mobility*

Audit, commissioned by Moreland City Council audited and analysed the accessibility of 50 strip shopping centre precincts. According to AAAM analysis parameters findings included that: overall (across all precincts) the combined Accessibility Score averaged '0.41', and within the Infrastructure category, the Footpaths element at '0.68' was the best performer while the Wayfinding element was the worst at '0.25'. (Again, fully accessible maximum score equals 1.00.) Conclusions were drawn, rectifications recommended and accessibility improvements prioritised. Knowledge gained through utilisation of the AAAM process would benefit Local Governments' Urban Renewal Programs, Place Making Strategies, Integrated Transport Outcomes and Asset Management.

at Infrastructure Element scale: ACAM

People with disabilities often find themselves excluded from public space, including public transport, due to accessibility issues. Those who are ambulant often cannot walk far nor carry routine weekly shopping purchases. The resultant reliance on private vehicles has historically been accommodated through the provision of Disabled Parking along with permits issued by local government authorities. Such schemes have evolved organically with little, if any, input from people with disabilities.

Urban design with its current emphases on walkability, sustainability, cycling promotion and 'shared' space, rarely considers accessible parking, relegating it instead to the domain of traffic engineers who often have no experience of disability. Moreover, accessible parking is the forgotten concern in traffic engineering, with no guidance regarding quantity and very general comments about position. The current Australian Standard for on-street parking is AS 2890.5 – 1993, pre-dating both AS 1428 Design for Access and Mobility suite's current version (published 2009) and contemporary accessibility knowledge practice.

Therefore, how should the transportation infrastructure needs of disabled permit parking holders be accommodated within current inner-city urban design movements that favour 'street activation' and 'active transport'? Again, investigation of existing conditions aids understanding. ACAM, also developed by Visionary Design Development Pty Ltd, was first applied in 2014. The project, *CoPP Disabled Parking Review*, commissioned by the City of Port Phillip audited and analysed the accessibility of on-street, council-controlled disabled carparking within CoPP's commercial precincts. Each of the 150 on-street disabled parking locations investigated (200 carparking bays in total) was rated under a Complexity categorisation system. Although no locations were judged currently acceptable, minor modifications at 29 locations would render them acceptable. This, however, leaves 121 locations (over 80% of those reviewed) requiring substantial modification or complete relocation to achieve the intended degree of accessibility for *accessible* carparking. A further iteration, investigating both on- and off-street council-controlled disabled parking was undertaken within the municipality of Moonee Valley in 2015, revealed similarly worryingly deficient results (Visionary Design Development Pty Ltd 2015).

As outlined in Jackson and Green's (2015) conference paper, *Accessible Parking: are users voices heard within the Built Environment sphere?*, Best Practice Accessible Parking on-street bays whether 'parallel' or 'angle' require more physical space per bay than is current practice. Larger, more accessible, 'buffer' spaces are also required immediately around them. This, particularly in urbanised environments, greatly impacts the traffic engineering-urban design interface. However, current urban design knowledge practices appear to not be attuned to the vehicular requirements of people with disabilities. Users unequivocally want an increased quantity of accessible parking bays; augmented availability of which will translate to positive economic outcomes and enhanced social inclusion. Providing greater numbers of accessible bays also has the consequence of reducing the available space for standard parking. The exclusively signed nature of 'disabled parking' should lead to reduced traffic volumes thereby achieving sustainable/ active transport/ shared space aims. However,

this correlation must be made explicit to avoid being overlooked. Urban design must acknowledge increased quantities of accessible parking as an integral requirement of policies, strategies, plans and guidelines.

Various innovative accessibility assessment methodologies, applicable to differing scales of the built environment, have been outlined above. Projects presented indicate that much of the existing Australian built environment is likely to be inaccessible to people with disability. In order to work towards attaining inclusive, accessible communities, in which people with disability can fully participate, it is imperative to understand the existing (inaccessible) built environment. To gain such understanding, analysis of data gathered directly from in-the-field accessibility assessment of the existing built environment, is essential.

WORKING TOGETHER

Understanding the lived experience of people with disability is fundamental. The knowledge practice of disability studies is concerned with the in(ex)clusion of people with disability from political, economic, civic and social activities. Inequitable physical access across the built environment is a primary causal factor of exclusion of people with disability. This should be of great concern to all built environment professionals and policymakers. Therefore, Built Environment and Policymaking knowledge practices should actively seek to draw upon the experience and expertise already extant within Disability Studies.

In order to achieve inclusive, accessible communities in which people with disability can fully participate, disciplinary boundaries, distinctions between theory and application, and dependence on regulatory compliance along with institutional difference between academia, the commercial sphere, and government need to be transcended. Working together consciously building collaborative partnerships will lead to built environment professionals, policymakers, people with disability and DPOs becoming more familiar with others' experiences and knowledge practices.

CONCLUSION

An inclusive, accessible community recognises benefits to the well-being of all its members by supporting engagement and participation in life, work and play at a local level. Historically however, and exacerbated by an inaccessible built environment, people with disability have faced a degree of social, civic, economic and institutional exclusion within the community sphere.

Policymakers and built environment practitioners and designers of urban infrastructure must work together to rise above the 'afterthought, retro-fit, compliance' mindset to accept the challenge of invisible accessibility, integrated from the outset. Knowledge and application of the seven Principles of Universal Design, embedded through more targeted university curricula, enhanced continuing professional development, and strengthened through policy and legislation, will improve accessibility outcomes. However, 'desktop design' is insufficient. Policymakers and Built Environment professionals must engage directly with people with disability to ensure that the voices of users are heard and translated into real outcomes. Furthermore policymakers and built environment professionals must not wait to be asked but must seek out opportunities to make themselves aware of people with disability' needs and desires through meaningful engagement.

REFERENCES

Australian Bureau of Statistics (ABS) 2015, *4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings*, Key Findings (including subpages)
<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0> (accessed 27 April 2017)

Government of Victoria 2016, *Absolutely Everyone: State Disability Plan 2017-2020*, published by the Victorian Government, Melbourne.

Green, R. (2011). An Introductory Theoretical and Methodological Framework for a Universal Mobility Index (UMI) to Quantify, Compare, and Longitudinally track Equity of Access across the Built Environment. *Journal of Disability Policy Studies* **21**(4): 219-229.

Green and Jackson () 2008, *The Social and Economic Benefits of Businesses and Service Organisations providing Universal Access to Premises*, Consultancy Report (unpublished) commissioned by City of Melbourne.

Jackson, MA & R Green 2013, Achieving an Accessible Healthy Community: Assessing Accessibility in the Built Environment, in *Proceedings of the 50th International Making Cities Livable Conference. Portland, OR, USA, 2013*. <http://www.livablecities.org/conferences/50th-conference-portland/abstracts#Jackson>

Jackson, MA & R Green 2015, Accessible parking: are users voices heard within the built environment sphere? In RH Crawford and A Stephan (eds.), *Living and Learning: Research for a Better Built Environment: 49th International Conference of the Architectural Science Association (ANZAScA) 2015*, pp.113–122. The Architectural Science Association and The University of Melbourne.

Jackson 2017, *Improving Built Environment accessibility via participatory assessment: the role of the Universal Mobility Index?* (Working title of PhD in progress, Deakin University)

Sport and Recreation Victoria 2015, *Design For Everyone: A Guide To Sport And Recreation Settings*, <http://sport.vic.gov.au/design-for-everyone-guide>, Government of Victoria.

Visionary Design Development Pty Ltd 2012, *Accessing Moreland: Glenroy Major Activity Centre and Shopping Strip Renewal Program Access and Mobility Audit*, Consultancy Report (unpublished) commissioned by Moreland City Council.

Visionary Design Development Pty Ltd 2014, *CoPP Disabled Parking Review 2014*. Consultancy Report commissioned by City of Port Phillip, *CoPP Disabled Parking Review SUMMARY* and accompanying priority list adopted by Council and published,
<http://www.portphillip.vic.gov.au/disabled-parking.htm>

Visionary Design Development Pty Ltd 2015, *Accessible Parking Review and Strategy Development*, Consultancy Report commissioned by Moonee Valley City Council, Report, including recommendations, adopted in full by Council, 24 November 2015.

Committee CE/1, Parking Facilities 1993. *Australian Standard AS 2890.5 – 1993 Parking facilities Part 5: On–street parking*, published by Council of Standards Australia.

Committee ME-064, Access for People with Disabilities, *Australian Standard AS 1428 Design for Access and Mobility* suite, published by SAI Global, 2009 version.