



# PROJECT UPDATE

Developing an effective  
method to evaluate  
the application of Universal  
Design in the built  
environment

DEAKIN

# PROJECT UPDATE:

Developing an effective method to evaluate the application of Universal Design in the built environment.

As populations around the world grow and diversify in age, ability, and cultural background, urban policy and planning strategies increasingly endorse Universal Design of the built environment. But how is Universal Design understood and implemented? And how do we know if it is being done effectively?

## The Research Team

### School of Health and Social Development

Ms Valerie Watchorn, Principal Researcher

Dr Danielle Hitch

A Prof Patsie Frawley

Ms Kathryn Aedy, Research Assistant

### School of Architecture and Built Environment

Ms Susan Ang

A Prof Richard Tucker

### Industry

Ms Cathryn Grant, Architecture & Access

## Methodology

- Deakin University ethical approval received
- Detailed review of Universal Design literature and evaluation tools from the past 10 years conducted
- Anonymous online survey developed with rating scales, multiple choice, and open-ended questions
- In-depth interviews with built environment industry professionals, academics, government officials and building users, including people who experience disability
- Quantitative and qualitative analysis of survey findings and interview transcripts

**2017 - A multidisciplinary team at Deakin University gather stakeholder input to capture how Universal Design of the built environment is understood, applied and evaluated in Australia and around the world**

## The Survey Respondents

- 157 anonymous survey responses received from across Australia (83%) and internationally (17%)
- 52% female and 46% male, 2% unstated
- 18 - 60+ years of age. The largest proportion (41%) over 55 years

Figure 1. Experience with disability

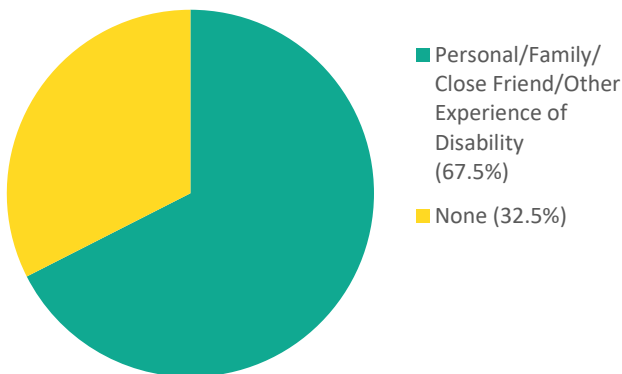
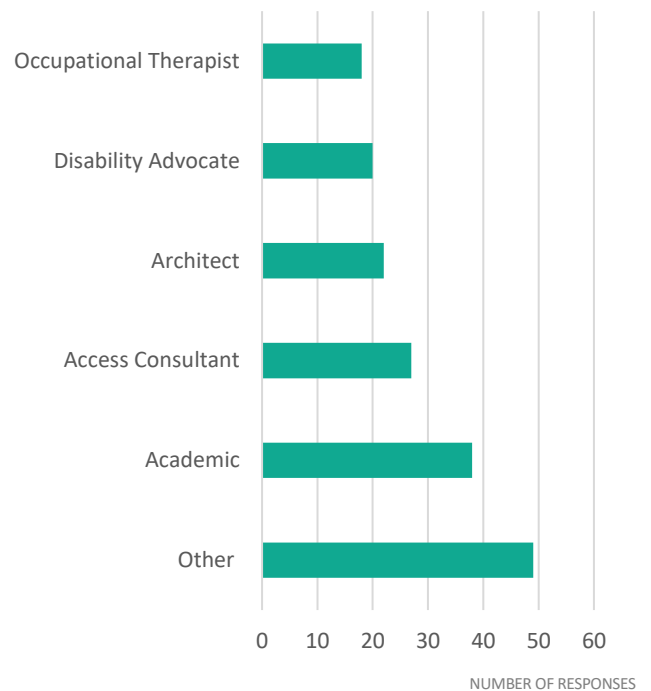


Figure 2. Respondents by occupation (number)

Participants could select multiply roles, the most frequently selected groups are shown below.



## The Survey Findings

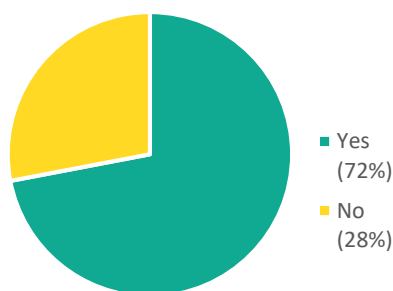
Figure 3. Current knowledge Sources (number)

'Where did you acquire your current knowledge about Universal Design of the built environment? Please select all that apply.'



Figure 4. Past involvement

'Have you been involved in applying Universal Design to the built environment?'



- When asked to indicate the type of buildings to which Universal Design had been applied, the most frequently cited building type was *university*, followed by *healthcare facility*, whilst the least cited building type was *restaurant* and *place of worship*.
- 85% of respondents rated the evaluation of Universal Design application as "extremely important."
- In contrast, only 36% had actual Universal Design evaluation experience
- 51% said Disability Advocates/Representatives should be involved Universal Design evaluation, but in practice they are often not

## The Interview Findings

- Over half of survey participants volunteered to be interviewed
- 32 interviews conducted by Phone, Skype, or face to face
- 5 participants submitted written responses to interview questions
- 7 interview participants were based internationally (USA, Sweden, Turkey, UK)
- Through coding of interview transcripts, the *Application and Evaluation of Universal Design in the Built Environment (AEUD-BE) Grounded Theory* has emerged

## What's Next?

### Publications / Presentations

Exploring the current discourse around Universal Design in the Built Environment

Stakeholder and key informant validation of Grounded Theory

How Universal Design is understood across participant demographics

Contradictions between how stakeholders believe Universal Design should be applied and evaluated, and what is actually happening in practice

### Development of Tools and Theory

Co-design of a multi-method Universal Design evaluation tool to be piloted and user-tested

Further development and testing of the *Application and Evaluation of Universal Design in the Built Environment (AEUD-BE) Grounded Theory*

If you would like to participate in further stages of this research, please contact:

Principal Investigator, Valerie Watchorn, School of Health & Social Development, Deakin University

[valerie.watchorn@deakin.edu.au](mailto:valerie.watchorn@deakin.edu.au)

For a more detailed version of this project summary, contact:

Cathryn Grant, Architecture & Access

[cgrant@archaccess.com.au](mailto:cgrant@archaccess.com.au)



Thank you to everyone who has generously given their time and expertise to participate in the survey and / or interview elements of this project

## Acknowledgements

This project was made possible by funding provided by Deakin University School of Health and Social Development and the substantial support and partnership provided by Architecture & Access. Project support has also been received from the Department of Sport and Recreation Victoria and HOME a transdisciplinary research hub at Deakin University.

## Limitations

Research was limited by a project timeframe of less than a year, and a primary focus on public buildings. The need for further research on inclusive housing is acknowledged.