Dementia Alliance International
Environmental Design Special Interest Group

Consultation and consideration for the Scottish Government

Guidance on Inclusive Design for Town Centres and Busy Streets

Submission from: Dementia Alliance International (DAI) Environmental Design Special Interest Group (EDSiG)

Submitted by: Martin Roberston, EDSiG Co-chair, on behalf of the DAI EDSiG and membership of people with dementia.

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About DAI

Dementia Alliance International is a registered 501(c)(3) charity registered in the State of Texas USA, with ECOSOC status as a Disability Persons Organisation (DPO) at the UN. Our mission is to provide support globally for people with dementia, and to advocate for services, improved quality of life and the human rights of all people living with dementia, in the community and in residential care (nursing homes). Our vision is a world where all people are valued and included.

Notably, for this submission, Dementia Alliance International is the only NGO exclusively representing people diagnosed with any type or cause of dementia of any age globally, who are also people with disabilities with equal human rights and disability rights to all others including access to the Convention on the Rights of Persons with Disabilities (CRPD) and the Optional Protocol to the Convention Against Torture (OPCAT). DAI is therefore the only organisation exclusively representing people living with dementia and the only global independent voice of people diagnosed with dementia.

About DAI ED-SiG

The DAI Environmental Design Special Interest Group (ED-SiG) comprises DAI members together with technical experts, including architects, dementia advisors, accessibility experts, and health professionals drawn together to support the development and application of an international consensus on the key aspects of designing enabling environments for people living with dementia. Current ED-SiG members are from North America, Latin America, Europe, Africa, Asia, and Australia, and include eminent researchers, architects, clinicians, advocates, and administrators. Most importantly the views and experiences of people living with dementia are central and mediate those of the technical experts.
About This Response

In responding to the Scottish Government's call for consultation for Guidance on Inclusive Design for Town Centres and Busy Streets, the Environmental Design Special Interest Group (ED-SiG) of Dementia Alliance International has compiled a response of key considerations from their members. This occurred through email and online discussions and a drawing together and checking of key responses led by the Steering Committee.

ED-SiG members contributing to this submission

Europe
Dr Quirke, Martin, Lecturer in Dementia, Ageing & Design and former Senior Architect at Dementia Services Development Centre for Environment, Dementia and Ageing, University of Stirling, United Kingdom

Mr Roberston, Martin, Co-chair of EDSiG and person living with dementia and co-researcher, Scotland

Asia
Ms Ong, Emily, Co-founder of EDSiG and Alzheimer Disease International (ADI) Board Member with lived experience, Singapore

Australia
Prof Fleming, Richard, Hon. Professorial Fellow, Faculty of Science, Medicine and Health, University of Wollongong, Australia
Dr Liddle, Jacki, Associate Professor and Occupational Therapist, The University of Queensland and Princess Alexandra Hospital and The University of Queensland, Australia

Dr Sun, Joanna, Dementia Care & Design, Wicking Dementia Research & Education Centre, University of Tasmania

Key issues raised by ED-SiG members

1. **Lack of Engagement and Feedback from People with Dementia**: While there is mention of engaging with local communities and stakeholders, there is no specific mention of engaging directly with individuals living with dementia and their caregivers to gather feedback on design proposals. Including such engagement processes could ensure that the designs meet the actual needs of people with dementia. Given the high number of people living with dementia in Scotland (approximately 90,000), with a significant portion (65%) residing in the community (Scottish Government, 2024), it may be ideal for the Inclusive Design Working Group to collaborate or include a representative from a Scottish dementia peak body. This collaboration would ensure the perspectives and needs of people living with dementia, their families and care partners utilising these spaces are directly incorporated into the working group's efforts to promote inclusive design.

2. **No Explicit Mention of Dementia**: The new guidelines do not explicitly mention individuals with dementia or outline specific design considerations to address their unique needs. Including a section dedicated to dementia-friendly design principles would highlight the importance of considering this demographic.
We recommend the addition of the following key additional considerations when considering people living with dementia in inclusive environments.

Using Mitchell and Burton's work (Mitchell and Burton 2010) as a guide suggests some other weaknesses:

3. **Familiarity and Legibility:** While the new guidelines emphasize clear, unobstructed pedestrian corridors, they do not specifically address the importance of familiarity and legibility in the design for people with dementia. Incorporating design elements that are familiar to and easily understood by people with dementia can help reduce confusion and enhance their ability to navigate urban spaces.

4. **Distinctiveness:** The guidelines could benefit from a more detailed discussion on the use of distinct features within town centres and busy streets. For individuals with dementia, distinct landmarks and easily recognizable features can aid in navigation and orientation.

5. **Wayfinding/ Dementia-Friendly Wayfinding Systems:** The guidelines lack specific recommendations for implementing dementia-friendly wayfinding systems, such as the use of non-complex, high-contrast signage with large, clear fonts and symbols, which are useful for helping people with dementia navigate public spaces.

Public space participation can aid people living with dementia with the retention of semantic memory (Blackman et al, 2007). The recommendations have been very feasible in the support of encouraging mobility, providing levelled surfaces, clear and unobstructed corridors and footways as well as regular seating. To create a more supportive environment for people with dementia navigating town centres, it's crucial to consider the overall route planning. A designated route should be clear and easy to follow, with visually accessible signage utilising high contrast colours, large fonts, and potentially symbols for increased clarity (Gan et al., 2022).
Minimising exposure to confusing elements like excessive signage or cluttered environments is also important. Integrating essential amenities such as libraries, community centres, parks, and grocery stores directly into the route promotes social interaction and fulfils daily needs. Strategically placed landmarks, public art installations, or other visually distinct points of interest can further support navigation. Preserving heritage structures where feasible provides familiar landmarks for comfort and orientation. Encouraging a moderate level of variation in building facades can offer visual cues without overwhelming individuals with dementia. By implementing these considerations, town centres can become more accessible and supportive environments for people with dementia, their families, and care partners.

6. **Safety and Comfort**: While safety is generally addressed, the guidelines could further emphasize the creation of safe and comfortable environments specifically tailored to the needs of people with dementia. This includes considerations for minimizing environmental stressors such as loud noises or crowded areas, which can be overwhelming for someone with dementia.

7. **Psychosocial aspects**: Management strategies to mitigate environmental stress brought about by traffic noise and uncertainty at crossings should be included to reduce anxiety and stress for the individuals (Gan et al., 2022). Extended crossing times, improved crosswalk visibility, improved signage for vehicles in high traffic areas can help to encourage a reduction in speed and sound in town centres.
Recommendations

Specific additional recommendations to support people living with dementia to participate in their local environments have also been made to each principle:

**Principle 1:** Being inclusive mean everyone can use the busy roads or streets confidently without feeling inadequate and excluded. It is a fundamental principle.

**Principle 2:** The participation of the people should be part of design process and various engagement approaches must be used to ensure everyone can participate and not limited by their disabilities or conditions. Instead of linear, an iterative process would be useful in getting people to improve and refine the outcome continuously. Building relationships so that people feel confident in making recommendations will support this engagement to be meaningful and not token.

**Principle 3:** It is essentially crucial that information is accessible and comprehensible in plain language because only then people of diverse abilities can make informed decisions and suggestions. It may be meaningful to also engage with people within the environments that are under focus. People (who are attempting to engage in the environments) may be well placed to provide detailed and specific feedback that could be embedded within design principles.

**Principle 4:** Including diverse stakeholders is about "leaving no one behind" which makes the initiatives or changes sustainable. Importantly efforts need to be made to include people who cannot use the environments currently and may be increasingly invisible to those engaged in the process because of this.
**Principle 5:** It is enabling people to exercise their rights embedded in the Universal Declaration of Human Rights and the CRPD.

**Principle 6:** A clear separation is needed not only to cater users with visual impairment but also for those with different types of hearing loss. It is vital that the needs of different users be explored in situ. Tactile paving may be vital for people with vision impairment, but make environments more cognitively challenging and may make wheeled mobility devices difficult. Making environments safe and welcoming also means that the environment is not confusing, and that it is clear how people should use the environment, even if they are visiting for the first time.

**Principle 7:** It is important to have sufficient width so older people who need others to support them can walk side by side. There should be resting benches in between the pedestrian walkway. Pedestrian corridors should consider weather, light levels and feelings of safety for users. They need to support wayfinding.

**Principle 8:** Allowed time for crossing the road should be tailored to specific needs. An older person will require longer time to cross compared to someone on wheelchair. Clear communication about crossing time may support judgement about time for crossing at controlled crossing. Technology, such as the Green Man + scheme in Singapore may support responsive crossing times (LTA, 2024). Older pedestrians may be particularly vulnerable with road crossings (and may be newly reliant on walking and public transit following driving cessation). They may not be able to tolerate long walking distances to reach safe intersections.

**Principle 9:** Any temporary road diversion or street closure for repair should be clearly marked and sufficient directional arrows are provided to guide those with intellectual and cognitive
disabilities. Where possible technology based and analogue wayfinding supports should be updated to reflect the temporary change.

**Principle 10:** There is no one right approach or solution and thus, revisiting the design after it has been implemented is important to making it functional inclusive. It is important to review the impact of designs at different times of year and with diverse groups to identify unintended consequences. Where a local area is successful in enabling diverse populations to participate in the community, these lessons could be shared and incorporated in other areas. However, monitoring for impact will still be required.
References


