

Inclusive Design for Getting Outdoors

Researching how the design of streets and neighbourhoods can make a difference to older people's wellbeing and quality of life.

**Do gardens
matter?**

The role of
residential
outdoor space

There is growing evidence that well-designed outdoor spaces can enhance the long-term health and wellbeing of those who use them regularly.

At I'DGO (Inclusive Design for Getting Outdoors), our aim is to examine what this means for older people. When we think about **lifelong** access to and enjoyment of neighbourhood environments, we place older people at the heart of the sustainability and regeneration agendas. But is this reflected in current policy? And does the latest 'best practice' in the design of outdoor spaces really meet the needs of all users?



Findings to date

The first phase of I'DGO, which involved over 770 people aged 65+, demonstrated the importance of outdoor environments in people's lives.

Those we talked to said they went out into their local neighbourhood very frequently, most often on foot (regardless of season). The main reasons they gave were to socialise, exercise, get fresh air and experience nature. We found that environments that make it easy and enjoyable to go out can have a crucial influence on older people's activity levels, general health and overall satisfaction with life.

As part of our study, we did a physical audit of 200 residential neighbourhoods and found that a typical street contains a number of barriers to getting around as a pedestrian. These environmental features often compound personal limitations and social circumstances, as well as fears about crime and heavy traffic. We looked at them in tandem with the preferences of 200 older people, who told us what detailed design features they see as being beneficial to getting outdoors. We discovered that there are certain neighbourhood characteristics that impact positively on older people's wellbeing regardless of location or density, including plentiful greenery, safe and distinct routes for cyclists and pedestrians and a distorted grid (gridiron street layout but with T junctions and winding streets).



Collectively, the research gave rise to a suite of guidance documents, including ***The Design of Streets with Older People in Mind*** and ***Lifelong Access to Parks and Public Open Spaces***.

What we are looking at now

Progress on the next phase of research – I'DGO TOO – is well underway, supported by the Engineering and Physical Sciences Research Council.

This involves the work of four leading research centres: the Edinburgh-based OPENspace; SURFACE and the Centre for Health, Sport and Rehabilitation Sciences Research at the University of Salford; and the WISE (Wellbeing in Sustainable Environments) research unit at the University of Warwick.

Collectively, we are placing a critical focus on the way in which sustainable design policies and practice influence 'everyday' outdoor environments for older people: an area where evidence is currently lacking. We know from the first phase of I'DGO what the *likely* benefits will be but also where certain design features may actually create problems, especially if badly maintained. Our ultimate aim is to influence age-friendly, sustainable design approaches at a range of scales, from the places in and around people's homes to local neighbourhoods and wider urban environments. >>



>> One of the key areas in which current best practice may present both benefits and barriers to older people is in the preference, among policy makers and developers, for high-density urban housing. Typified by mid-to-high rise apartment blocks, this type of development is the backbone of contemporary regeneration projects; be they entirely residential or mixed use. According to Lord Rogers of Riverside in *Towards an Urban Renaissance* (1999), building to higher densities is a truly sustainable urban planning solution: enabling the widespread re-use of brownfield land and the rejuvenation of city centres while offering enhanced spatial and environmental efficiency. In the UK in 2005, building densities averaged 40 dwellings per hectare.

It is often claimed that high-density living is positive for older people because it allows easy access to services, facilities and public transport, provides opportunities for social interaction and frees residents from the burden of looking after a large house or garden. However, there is no real evidence to confirm that this is the case, especially with regard to the use of both private and shared outdoor spaces. Indeed, ten years since the publication of *Towards an Urban Renaissance*, the effect that high-density development has had on residential outdoor space is not yet fully understood. While people often cite their garden as their “favourite place”, there is very little research examining how different types of residential outdoor space impact on wellbeing, especially at different densities of development. This is despite the fact that such spaces account for around 25% of the UK’s urban environment and are often widely used by older people.

With specific reference to the wellbeing of older residents, I'DGO is seeking to determine the pluses and minuses of high-density housing developments and the types of residential outdoor spaces older people generally prefer. This is with the ultimate aim of identifying how best to design different types of residential outdoor spaces in ‘urban renaissance’ projects so that older people can gain maximum benefits from them. We have dedicated a core part of I'DGO TOO – the element undertaken by the WISE team at the University of Warwick – to this investigation, which we hope will have widespread practical application among the planning and design communities, as well as a lasting impact upon policy makers.

What do we want to know?

We want to know how – and to what extent – different types of residential outdoor space impact on the wellbeing of older users.

We also want to understand how these typologies evolve, in response to the design and density of new development, again with an emphasis on the people they serve. Our focus is not solely on recreational spaces – be they paved or green – but includes functional sites, such as parking spaces and utility areas. Given our specific interest in high-density housing, we deal at detailed level with private, semi-private and public areas and elevated features such as balconies and walkways, as well as those at grade.



Why I'DGO matters to me

I have been engaged with older people's issues since my days as a care home assistant in the mid-1970s. In recent years, I have developed this passion through academic research, with a particular focus on older people and the built environment. I have been involved with both phases of I'DGO; an important progression from my PhD at Oxford Brookes University, which was concerned with dementia-friendly design. I consider our research to be extremely significant at a time when the UK government is attempting to address both the needs of an ageing population and sustainable development.



Dr Lynne Mitchell PhD MRTPI



What do we currently understand about residential outdoor space and the wellbeing of those aged 65+?

WISE has identified that little research has been done in this area to date, but some existing policy and guidance *does* yield clues as to what features of residential outdoor spaces might be important for older people's wellbeing.

Working with an international panel of experts and other partners, we have reviewed the available literature, discussed its implications and created a seven point summary of the factors most likely to have an impact. In each case, the term ROS is used to refer to residential outdoor space:

- The type of ROS e.g. shared or private garden, parking space, balcony, storage space etc.
- The amount of ROS i.e. the total area including each different type
- The form or layout of ROS, e.g. its general shape, its location in relation to the property and how it is oriented
- The detailed design of ROS e.g. whether it is green or paved, what type of planting there is etc.
- The nature of ROS boundaries e.g. fences, walls, hedges
- The nature of ROS thresholds e.g. whether there is direct or indirect access from a communal stairwell, shared hallway, private front or back door etc.
- The views of ROS from inside the home

In tandem, after reviewing standardised measures of wellbeing, we have identified ways in which being in – or being able to see – a favourite residential outdoor setting could impact positively on an older person, again producing a point-by-point summary:

- Satisfaction from being able to use the space for practical activities, such as hanging out washing, growing food, storing property, maintaining vehicles and parking
- Enjoyment from being able to use the space for leisure activities, such as entertaining visitors, sitting outside, gardening, keeping pets or feeding wildlife
- Pleasure from the appearance of the space and the way it enhances the dwelling
- Relaxation and comfort
- Enjoyment from social interaction with neighbours and passers-by and feeling part of the community
- Wellness from gaining exercise and having access to fresh air



I have a one bedroom flat in sheltered accommodation. I have a little patio with pots which I enjoy very much and like to plant my own flowers because it is a small space and doesn't entail much work.



How we are conducting our research

As we are interested in the different types of outdoor spaces to be found around the home, and their impact on wellbeing, we want our participants to think about a range of settings, include those not currently available to them.

This has had a big influence on how we talk to people and gather information. Our chosen method is a self-completed questionnaire, which is closely tied in with the 'factors and outcomes' identified by us and our partners through literature reviews. Developed and tested through pilot drafts, this questionnaire comprises five key parts:

Current experience of residential outdoor space. In this section, we ask respondents about the outdoor environments they currently have access to day-to-day. We want to know if these spaces conform to a particular type (or mixture of types), what form they take and how easy it is to access them from the home. We also look at their usability, in terms of what kind of activities they can accommodate and when. On a more subjective level, we ask respondents how satisfied they are with their residential outdoor space, what is positive and negative about the places available to them and how they are affected by factors such as privacy, upkeep etc. It is important to note, in this instance, that barriers to using an outdoor setting can be perceived as well as physical.

What an ideal residential outdoor space (ROS) would look like. This section is almost entirely subjective on the part of our respondents, though – in answering it – they may draw on earlier experience of other residential outdoor environments. Again we want to measure factors such as type, form, access and usability: asking people to imagine how best a ROS could support their needs.

Views from the home. This section deals with a purely visual response to residential outdoor settings and asks questions about respondents' current and ideal environments. We want to know how important views are to older people, how satisfied they are with their existing circumstances, how they would define the character of the view currently available to them and what an ideal ROS would look like, from their perspective.

Wellbeing in the home and locale. In this section, we gauge people's satisfaction with their home, immediate neighbourhood and quality of life. On a self-rated basis, we measure how satisfied older respondents are with their current domestic circumstances, how healthy and independent they perceive themselves to be and whether they feel part of a community.

Personal and household data. This section is given over to facts such as: the type and tenure of dwelling; the living accommodation and floor level(s) available; length of residence; size of household; the number of children who live in or visit the home; and the gender, age, socio-economic status and ethnicity of the resident(s).



Who we are talking to

We are aiming for a total of 4,000 respondents to our cross-sectional survey and hope that around 50 of the older people questioned will be willing to participate further in our research through in-depth 'walk along' interviews.

Our goal is to obtain a mix of participants which reflects the natural diversity of the UK's older population and the types of development they live in. In addition to talking to residents of age-specific housing – such as retirement homes and sheltered accommodation – we want to hear from older people who remain in 'ordinary' domestic settings, both social and privately owned. We are also focusing on different forms and densities of residential development: high-density 'urban renaissance' housing (completed from 1999 onwards); and more traditional, lower-density contexts.

Our survey is UK-wide in scope and it is important for us to obtain responses from as many regions as possible. We also want to examine the different patterns of development within each region: urban; suburban; and rural. By talking to residents in low, medium and high-rise buildings, we aim to capture a range of residential outdoor space typologies. We also want to know how much residential outdoor space is available to each respondent, whether on an exclusive or shared basis.

A truly inclusive research process

As the survey is being administered by post, we are anticipating a response rate of around 20-25%. We have therefore had to identify 16,000 UK addresses: aiming for roughly equal numbers of respondents from the following five main categories:

- Age-specific private housing
- Age-specific social housing
- Non age-specific private housing post 1999
- Non age-specific social housing post 1999
- General 'other' housing pre 1999

To keep the research as focused as possible, we have initially targeted developments by our partners, including Places for People, English Courtyard Developments and the Peabody Trust. For age-specific housing (including sheltered accommodation), we have made extensive use of www.housingcare.org, a web-based resource led by the Elderly Accommodation Counsel (EAC). We have used Google Earth and Ordnance Survey Digimap tools to examine the characteristics of each development; recording the number of addresses within each of our five categories.

Our questionnaire has been designed to apply to all age groups, so that non age-specific households can return responses (the data being used for a PhD study by team member Amanda Griffin).



I like my outside space because it is mine and at the moment I can do what I want to do.



What we've achieved and learned to date

The data collection element of our research began with a pilot study. This involved residents in Dalry, Edinburgh who live in tenement dwellings of mixed tenure. 549 questionnaires were distributed, with a response rate of 17%.

Of the 93 respondents in the pilot study, 68% ranked "sitting and relaxing" as one of the four most important purposes of their residential outdoor space (ROS). The other most popular attributes of ROS were: an attractive environment (47%); space to hang out washing (41%); and space for visitors (38%).

Asked what factors prevented them from using their outdoor space, respondents commonly cited: lack of privacy; poor maintenance; and unattractiveness.

These preliminary findings suggest that having access to residential outdoor space contributes to wellbeing and quality of life through physical, aesthetic, social and practical means and that good design and maintenance play an important role in enabling older people to take advantage of these gains.

Further to the pilot study, questionnaires have been sent out on a phased basis. To date, response rates are as follows:

- Age-specific private housing – 21%
- Age-specific social housing – 16%
- Non age-specific private housing post 1999 – 18%
- Non age-specific social housing post 1999 – 14%
- General 'other' housing pre 1999 – 15%

What happens next?

Through the questionnaires, we are gauging respondents' interest in helping us to further understand how they view and use their residential outdoor space (ROS).

This phase of the research, undertaken post analysis of the questionnaires, will involve up to 50 participants and a more in-depth style of enquiry. We will go out to people's home environments and conduct 'walk along' semi-structured interviews about current and ideal ROS scenarios. The researcher and participants will also take photographs of their outdoor environments and sketch features of external spaces (both actual and desired).

The I'DGO TOO study on the implications of high-density urban housing for residential outdoor space is being undertaken by the WISE (Wellbeing in Sustainable Environments) research unit at the University of Warwick.

Our team comprises: Professor Elizabeth Burton; Dr Lynne Mitchell; and Amanda Griffin.

We are grateful to a network of high-profile partners drawn from government, industry and the charity sector, many of whom helped to identify the 16,000 households included in our study. They include: the Peabody Trust; The Orders of St John Care Trust (OSJCT); the Homes and Communities Agency (formerly the Housing Corporation); English Courtyard Developments; the Royal Institute of British Architects (RIBA); the International Longevity Centre (ILC-UK); PRP Architects; Elwood Landscape Design; Places for People; and the independent consultant, Steve Ongeri.

About us



I'DGO is built around a core group of international academics in three leading research centres: the Edinburgh-based OPENspace; SURFACE at Salford; and the WISE (Wellbeing in Sustainable Environments) research unit at the University of Warwick.

We are funded by the Engineering and Physical Sciences Research Council and play an active role in its flagship knowledge transfer consortium, KT-EQUAL (www.equal.ac.uk).

Our focus is on identifying the most effective ways of shaping outdoor environments inclusively. We support the needs and preferences of older people and disabled people, always seeking to improve their independence and overall quality of life.

Our multi-disciplinary consortium is a virtual centre of excellence, involving a wide range of partners engaged in older people's issues. We use innovative research tools and 'joined-up' quantitative/qualitative methods.

We are committed to maximising the accessibility of our research; our findings have already had a significant impact on the decision makers and designers who influence our built and natural environments.

For further information on the I'DGO TOO residential outdoor space study, please contact: Professor Elizabeth Burton by telephone +44 (0)24 7657 4233 or email e.burton@warwick.ac.uk

For information on all three I'DGO TOO projects, please get in touch with: Máire Cox by telephone +44 (0)131 221 6055 or email m.cox@eca.ac.uk



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