who is ageing in what place? a classification of england

Richard Dunning, Les Dolega and Andrea Nasuto discuss a new classification of the variety of places in which we are ageing a tool that could help in coming to a better understanding of neighbourhood demographic characteristics and the likely needs of local populations

We're getting older. Statistics about the median age of national populations have less longevity than the people themselves. Local statistics present a starker picture: for example, the average age of people in rural villages and dispersed settlements in England is 46 and has been increasing at a significantly faster rate than the average age in urban areas for decades.1 Place matters in describing the population's age.

The average age of our housing stock is getting older too. Half of the housing stock in England is over 50 years old, and 20% is over 100 years old. In Blackpool, 78% of the stock is over five decades old, while in Huntingdonshire 73% of the stock has not yet had its 50th birthday.² Place matters for understanding housing.

The structures of our built environment are ageing too. New Towns are not so new. Suburbia has seen generations come and go. Infrastructures age; some are updated, some are replaced, and yet others are left to dwindle and decay. Service types change, but not always at the same speed as needs, meaning that they can age faster than the populations they serve.

We argue that the ageing population, who are often viewed as a homogenic group, exhibit diverse socio-economic characteristics, health status, digital engagement, and mobility, which underpins unique needs and challenges. To better serve us, as we age, it is essential to understand these differences at a small geographic level. Town and country planning must surely be concerned with the coincidence of an ageing population and the ageing structures

which support those lives—particularly where people want to age in place.

That people want to choose where and how they age in place has been well researched.3 There is now a substantial and supportive case study literature on successful examples of ageing-in-place communities and on lessons to be explored in the design of homes, outdoor spaces, neighbourhood structures. service location and many other facets which influence the quality of life through the ageing-inplace process. However, there has been less research on the spatial distribution of the ageing population, particularly linked to the variation in environments they live in-effectively the types of ageing in place. Over the last couple of years, we have been working on a project for the Nuffield Foundation to construct a classification of older people in England which seeks to address this knowledge gap.4

The changing demographic character of the country represents a significant challenge for planning. Developing places that are suitable for residents to 'age in place' is key, but older people are not a homogenous group, nor are the places in which they live. To understand variations in the population of older citizens the research team developed the ageing-in-place classification (henceforth, AiPC), which allows for a more detailed understanding of the specific characteristics, needs, expectations and aspirations of different older people and the places in which they live. Using secondary data at fine spatial scales and geospatial algorithms, we

Table 1
AiPC hierarchy and cluster names

Supergroups		Groups
1	Struggling, more vulnerable urbanites	1.1 Disadvantaged single households1.2 Struggling white British1.3 Terraced mix, relative stability
2	Multicultural central urban living	2.1 Inner-city diverse living2.2 Peripheral constrained diverse living
3	Rurban comfortable ageing	3.1 Rural comfortable ageing3.2 Ageing in the affluent fringe
4	Retired fringe and residential stability	4.1 Retired country and coastal living4.2 Comfortable rural/suburban ageing workers and retirees4.3 Constrained semi-rural ageing and retirement
5	Cosmopolitan comfort ageing	5.1 Cosmopolitan family ageing5.2 Coastal later-aged retirees5.3 Cosmopolitan ageing

Source: The authors

classified England's population of adults aged 50+ into five 'supergroups' and 13 subsidiary groups (see Table 1).

The AiPC helps to explore the geography and characteristics of the ageing population and the environments they live in, with clear spatial variation between the clusters.

In Supergroup 1, 'Struggling, more vulnerable urbanites', areas that are predominantly located in major urban centres of the Midlands and Northern England were identified. These areas tend to suffer from income deprivation, have low digital engagement, and have above-average likelihood of being in socially rented accommodation.

Supergroup 2, 'Multicultural central urban living', comprises mostly city-centre urban areas with people struggling with income levels and living in overcrowded conditions. This is also the youngest group and the most ethnically diverse, with good access to amenities and health services.

On the other hand, Supergroup 3, 'Rurban comfortable ageing', is the oldest group, living predominantly in rural or rural/urban fringe areas. This cluster is characterised by better health and the highest digital engagement, while their access to amenities is among the lowest.

Supergroup 4, 'Retired fringe and residential stability', occupies largely suburban areas, with the majority of the residents being retired white British. They tend to live in under-occupied houses, and this group is the most stable in terms of residential mobility.

Lastly, Supergroup 5, 'Cosmopolitan comfort ageing', is mostly spatially distributed within Greater London and the South East of England. This cluster groups areas that have higher-than-average house values and the highest proportion of working population.

Our research considered the utility of AiPC in relation to three thematic areas: housing, neighbourhoods, and society. These three research themes were used to evaluate spatial variation in service accessibility across the geo-demographic classification and the extent to which implementing our AiPC classification can enhance small-area estimation of loneliness and housing satisfaction for an ageing population. Here, we focus on the neighbourhood characteristics.⁵

Ageing in place is most likely to be successfully achieved in neighbourhoods where residents can meet the majority of their regular needs such as groceries, healthcare or leisure within a 20-minute return travel time of their residence. This concept has recently gained in importance and visibility—and it's fair share of antagonism—across the western world under the 15-minute city or 20-minute neighbourhood concept. However, more limited mobility in older-age people, alongside rural areas being often a more preferable location choice for older people, may mean that the concept of the 20-minute neighbourhood is a smaller geographical area than has popularly been thought.⁶

We used the Liverpool City Region area as a case study to map services that correspond to the World Health Organization's six determinants of active ageing (from 2007):

- economic determinants;
- health and social services;
- behavioural determinants;
- personal determinants;
- physical environment; and
- social determinants.

The time taken to walk to the nearest of each of these types of services was then mapped against the location of dwellings. This allowed us to see

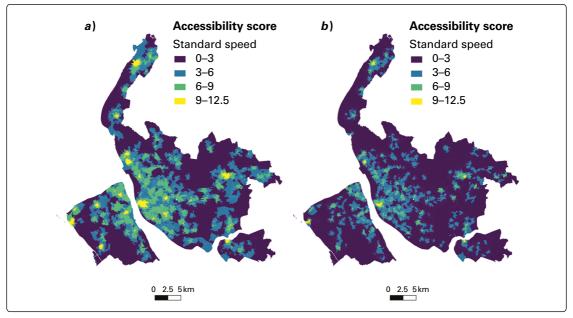


Fig. 1 Maps showing the accessibility score for 'Standard walking speed' and 'Reduced walking speed' groups of people aged 50 years and over in the Liverpool City Region

Source: The Authors

how many services could be reached within a 10-minute walk for each of the AiPC groups. We mapped this for a walking speed of 1.2 metres per second and a reduced walking speed of 0.9 metres per second to mimic the reduction in speed which corresponds to functional (not chronological!)

Fig. 1 shows how access to services by foot varies across the Liverpool City Region when we consider a slower walking pace common to older citizens. We note that the maximum score found in the study area is 12.5, a value well below the theoretical high point of 18, which could be reached when all service categories needed are accessible in a 10-minute walk. This means that in the Liverpool City Region the availability of basic services within a 10-minute walk ranged from approximately 69% to 0%.

For visualisation purposes, four classes can be distinguished in Fig. 1:

- **0–3**, corresponding to areas with very low access;
- 3–6, corresponding to areas with low access;
- 6-9, corresponding to areas with high access; and
- 9–12.5, corresponding to areas with very high access.

Only a few very high-access areas, coloured in vellow, are visible in the left-hand panel of Fig. 1. accompanied by more extensive coverage of highaccess areas shown in green, where people have at least half of the service categories accessible to them in a 10-minute walk. When the score is computed for people with reduced mobility (the right-hand panel of Fig. 1), a striking reduction in

yellow (very-high-access) and green (high-access) areas is noticeable.

We can visualise this reduction in relation to the AiPC supergroups to express the differential impact of a reduced walking speed. The two 'violin' plots in Fig. 2 on the next page shows the distribution of household accessibility within each group (the wider the plot, the more households). In Fig. 2a it i s apparent that 'Multicultural central urban living' (Supergroup 2) older households are likely to have more services accessible to them than is the case for 'Rurban comfortable ageing' (Supergroup 3) households for an average walking speed (1.2 metres per second). For the same two groups, with a reduced walking speed, the average number of services they can access decreases—but not close to evenly: 'Multicultural central urban living' drops from 7 to 5.5; 'Rurban comfortable ageing' drops from 4 to 1.5. Place matters.

The conclusion is that while it is well documented that rural and urban fringe areas, often preferred by ageing communities, tend to have lower accessibility to essential services, it is actually reduced mobility that poses a significant challenge for this demographic in otherwise well served neighbourhoods. When an adjusted walking speed is used, to illustrate the difference between older residents with lower mobility, there is a major reduction in the number of services that the population can access, but the most significant reduction is not even between groups. This may have implications for decisionmakers regarding the density and mixed-use character of developments and may encourage a

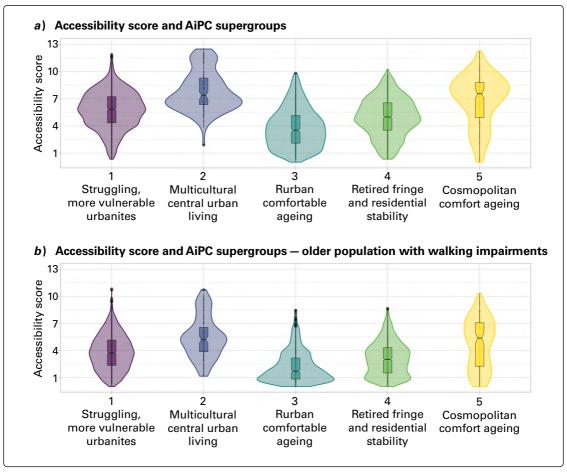


Fig. 2 The impact of reduced walking speeds on accessibility by AiPC supergroup Source: The Authors

fuller understanding of what the 20-minute city means for an ageing population.

Ageing in place is going to increasingly matter as the population ages, however variegated. The AiPC tool is one option to help planners think about the neighbourhoods that they are responsible for and the demographic characteristics and likely needs of the populations that they serve. Diversity in ageing matters. Diversity in place matters. Equity in facilitating ageing in place matters—but it is an unequal challenge.

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Notes

Statistical Digest of Rural England. 1 — Population. Department for Environment, Food and Rural Affairs, Mar. 2023. https://assets.publishing.service.gov.uk/ government/uploads/system/uploads/attachment_data/ file/1142169/1_-_Population.pdf

- 2 Council Tax: Stock of Properties, 2021. Valuation Office Agency, Sept. 2021. www.gov.uk/government/statistics/ council-tax-stock-of-properties-2021
- See, for example, JL Wiles, A Leibing, N Guberman, J Reeve and RES Allen: 'The meaning of 'aging in place' to older people'. The Gerontologist, 2012, Vol. 52(3), 357-66. https://academic.oup.com/ gerontologist/article/52/3/357/580905
- 4 The research team changed through the project. It included Dr Fran Darlington-Pollock, Yuanxuan Yang, Professor Alex Lord, and the authors. More details of the project can be found on the Nuffield Foundation website, at www.nuffieldfoundation.org/project/ older-people-in-england-geography-of-challenges-andopportunities
- 5 The full AiPC map can be found at https://mapmaker.cdrc.ac.uk/#/ageing-in-place-classification
- See R Dunning, A Calafiore and A Nurse: '20-minute neighbourhood or 15-minute city?'. Town & Country Planning, 2021, Vol. 90, May/Jun., 157-59 for a discussion of the 20-minute city concept