Better planning for car ownership and well-being in old age

This briefing of the literature seeks to connect the body of knowledge around the significance of car ownership in achieving well-being for older people to those making particular decisions that may impact on car ownership among older people, in particular, those living in specialised accommodation.

It examines from a social and psychological perspective the impact of loss of car ownership on the sense of well-being for older people and considers the policy and practice responses to an ageing society, including the delivery of policies in relation to planning for transport health, housing and social care. With some useful examples of local practice, it concludes that these wider policy matters should be given equal weight when determining the level of car parking to be provided in retirement developments.

Written by Nigel Appleton, Contact Consulting, for the Housing Learning & Improvement Network
Background

This review of the literature seeks to connect the body of knowledge around the significance of car ownership in achieving well-being for older people to those making particular decisions that may impact on car ownership among older people, particularly those living in specialised accommodation.

Attitudes toward car ownership and use by older people among planners and commissioners of specialised accommodation have largely been shaped by high level concerns for the environmental impact of the ownership and use of motor cars. There has been a general assumption that seeking a reduction in car ownership and use among older people by restricting parking spaces within new retirement developments will deliver a public good. This briefing examines evidence that would balance that imperative by examining the impact of loss of car ownership on the sense of well-being for older people that is central to policy responses to an ageing society.

The evidence from the literature on the interaction between car ownership and well-being among older people is reviewed, recognising both practical and psychosocial factors. Inhibitions among older people in embracing public transport as a complete alternative to car ownership and limitations to the extent to which improvements to public transport will overcome those inhibitions are recognised.

The generational effect arising from the expansion in car ownership in the 1950s and 1960s, when those now entering old age were in their teens and twenties, is noted: many in the rising generation of older people take car ownership to be normative. Others who have enjoyed positive experiences of public transport are approaching old age having adopted a lifestyle that is not car-dependent.

The particular circumstances of London are briefly reviewed, reflecting a sub-literature dealing with transport policy in capital.

The briefing concludes that the laudable desire to reduce car dependence needs to take account of broader practical and psychosocial needs among older people if they are to achieve that well-being which is crucial to the delivery of policies in relation to planning for health, housing and social care. These broader concerns should be given equal weight when determining the level of car parking to be provided in retirement developments.

Introduction

There is a substantial literature dealing with older people and driving, much of it concerned with considerations of safety as older drivers experience declining physical or cognitive function and failing eyesight. Within the literature on Quality of Life and Well-Being in old age there is some examination of the influence mobility in general, and car ownership in particular, may exert. The body of research documented in the literature seems to have had little impact on practical decision making by planners and commissioners of specialised housing for older people. This review of the literature seeks to connect that body of knowledge to the particular issue of decisions that may impact on car ownership among older people.

Whilst wishing to ensure that parking provision is adequate to contain parking by residents, staff and visitors within the site of any proposed development planners have generally sought to exert downward pressure on spaces provided for cars parked by residents. There is an implicit assumption that by restricting or, in extreme cases, excluding provision for the parking
of cars by resident older people, their ownership and use of personal transport will be reduced. Transport Plans, submitted in support of planning applications for new developments of specialised housing for older people, generally seek to mitigate the perceived need for car ownership among older residents through provision of a dedicated mini-bus service or car sharing schemes.

Corporate commitments to reducing the environmental impact of mass car ownership, linked to assumptions about the reducing need for access to personal transport as people age, have been the main drivers for this approach. Thornton et al. sought in their study in 2011 to understand the circumstances of different “segments” of the population, three of their nine proposed segments describe the economic and personal circumstances of older people. The context for the research was the aspiration to reduce CO$_2$ emissions from personal travel.

Measures that seek to reduce emissions by reducing car use have often been pursued without adequate regard for the other issues that surround the choices people make in relation to car ownership and use, as noted by Lucas and Jones:

> Current policy debates on the need to reduce car use in order to meet the recently announced CO$_2$ emission targets (Climate Change Act 2008) do not fully consider the impact that this might have on people’s lifestyles and livelihoods, especially those who have limited travel alternatives.

Guidance has been offered to planners by the Planning Officers Society and the Retirement Housing Group in a joint publication of 2003 that urged flexibility in recognising that different styles of provision might need different approaches. This reflected an appreciation that different styles of retirement housing were intended for differing populations of older people:

> Government advice on the approach to car parking is provided in PPG3 and PPG13. Some local authorities may have parking guidance for different types of retirement housing. Whilst developers should seek advice from LPAs about their approach to car parking it is also important that the LPA takes account of specific data and information retirement house builders have relating to their developments. LPAs should apply flexibility to the way they determine parking levels, so that they relate specifically to the nature of the development in the light of local circumstances, particularly the availability of local facilities and proximity to public transport.

> Due to the varied nature of retirement housing it is recommended that LPAs express car-parking requirements as a range rather than as a single standard.

The Supplementary Planning Document (SPD) issued by Gosport Borough Council in February 2014 addresses parking requirements in a variety of situations but seeks to reflect the variety of circumstances that may characterise developments intended for occupation by older people. The guidance within the document notes that higher dependency among the intended residents of a scheme may suggest a reduced level of demand for resident parking spaces.

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1 Thornton A, Evans L, Bunt K, Simon A, King S and Webster T (2011) Climate Change and Transport Choices, Department for Transport
4 www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjv7Nb_ejLAhUKZRoKHToSAXkQFggcMAA&url=http%3A%2F%2Fwww.gosport.gov.uk%2FEasySiteWeb%2FGatewayLink.aspx%3FAllId%3D30608&usg=AFQjCNGn4-Yd57Uk8RCjXTuGGcx3vnhZg
but a possible requirement for a higher level of parking provision for staff. It is suggested that applicants seeking approval for developments intended for older people will need to provide details of the care needs to which they intend to respond and include these within their Design and Access Statement, their Transport Assessment or other documents forming part of their application. The SPD offers specific ratios, moderated by the levels of frailty expected among future residents. For example, accommodation intended predominantly for frail older people may require one space for every four units. By contrast retirement housing offered for those living completely independently may require 0.5 to 1.2 unallocated spaces per unit. The guidance carries the caveat that each case will need to be assessed in the light of particular circumstances, including the characteristics of the intended residents. This is a helpful example of an approach that comprehends the variety and complexity of accommodation designed to meet the needs of an ageing population.

The justification for measures that would limit the ability of older residents to maintain their ownership of a car, by limiting car parking provision within retirement housing developments, tends to rely on a purely functional view of the part access to personal transport plays in the life of an older person. This approach looks at the functional purpose of a car journey and identifies alternative transport modes that would, in the view of those making the analysis, serve as well.

In this paper we look at the issue of continuing car ownership in the broader perspective of well-being in old age. The concept of “well-being” has become established as central to thinking about a sustainable response to the ageing of the population. Encompassing a number of domains: physical and mental health, social integration, financial adequacy, and so on; well-being is recognised as not just an aspiration for older people but that which will mitigate the negative impact of an increasingly ageing society. Cast negatively, it is suggested that an absence of well-being among older people will lead to unsustainable demands on health and social care services, and increase requirements for institutional styles of care.

Public policy has favoured the development of housing based forms of provision as preferable to the traditional institutional forms in offering an alternative to those who do not wish to remain, or are unable to remain, in general housing. Specialised housing, in its various forms: Age Restricted Housing, Sheltered Housing, Retirement Housing, Enhanced Sheltered Housing, Extra Care Housing, will offer different levels and styles of care and support but will have common features of design. These will reflect or extend the concept of “Lifetime Homes” in emphasising accessibility and flexibility to enable the maintenance of independence and the capacity to offer an appropriate context for changing patterns of care delivery as needs change. The intention is to enhance well-being and extend the capacity for independent living so that transfer to more institutional settings, such as a Registered Care Home is delayed or avoided and recourse to health and social care services is reduced and episodes of in-patient care minimised.

In this strategy, endorsed by successive governments and explicitly adopted by almost all local authorities, encouraging well-being is crucial if it is to succeed. Well-being is a fluid concept, shaped by the individual circumstances, aspirations and resources of each older person. What will encourage and support the sense of well-being in one person may be quite different to the factors that will be relevant to securing well-being for another. In this paper we look at the evidence from the literature of the role that car ownership and consequent continuing access to personal transport has on the well-being of some older people.
Well-Being and Quality of Life in Old Age

The articulation of the concept of well-being in old age and its relevance to public policy has grown out of a growing interest in quality of life in older age and the concept of ageing well.

*Interest in Quality of Life and ageing, and maintaining independence among older people, has been fuelled by policy concerns to reduce public expenditure on pensions, health and social welfare provisions, and by higher expectations in society of achieving and maintaining a “good life”.... public policy is increasingly likely to be concerned with enabling older people to maintain their mobility, independence, their contribution to society, and to respond effectively to the challenges of older age.*

This emphasis on Quality of Life and the sense of well-being that is fundamental to achieving it reflects shifting assumptions and more optimistic models of old age. Emphasis has moved away from a negative paradigm of old age and towards a positive view of old age as a natural component of the life span. The earlier negative assumptions saw ageing, and the increasing ageing of the population as essentially problematic:

*With the earlier, negative ‘pathology’ model, a main focus of social and clinical research, particularly in Europe, encompassed issues of dependency, poverty, service use and care needs, declining physical and mental health. This was at the expense of enablement, rehabilitation, prevention and cure.*

The concept of well-being has been embraced in a raft of policy documents from successive administrations over the past fifteen years, as Ward et al (2012) have recognised:

*Well-being has become an important focus for health and social policy in general, and in relation to older people in particular. Well-being has been linked to ideas about ‘active ageing’ (The National Framework for Older People DH, 2001) as well as independence (Opportunity Age DWP, 2005). The connection between well-being and independence was reinforced in the social care Green Paper, Independence, Well-Being and Choice: our vision for the future of adult social care in England (DH 2005).*

The Coalition Government continued in the same direction of travel and these foundation concepts of supporting independence and encouraging well-being are integral to the Care Act 2014. Whilst ideas on delivery may change as the new administration moves forward it seems unlikely that the fundamental role of promoting well-being will cease to be embedded in policy assumptions, as evidenced by the recently updated Care Act guidance.

Commentators are keen to emphasise the heterogeneous nature of the older population and the desirability of re-calibrating our perceptions of what old age means for individuals and therefore for a society that is itself ageing:

*There is a greater heterogeneity among older people, which population figures and projections camouflage. There is also increasing awareness that physical and mental decline are not an inevitable part of the third and fourth ages. Indeed there is no consensus about what constitutes “old”. Any categorization by age obscures the diversity of older*
people, physiologically, psychologically and socially. Although it is important not to get the association between disability and advanced old age out of perspective, most older people in their 60s and 70s are independent, engage in everyday activities without major restrictions, and most report they are happy and satisfied with their lives... While for some, older age will be a time of increasing dependency and loss of control, for others it will be a period of personal fulfilment.

The study of ageing was given impetus by post-war health and social policy concerns regarding demographic changes, and by a political economy which regarded an ageing population as problematic.\textsuperscript{10}

One of the leading influences on our contemporary understanding of ageing and the life of older people, Professor Alan Walker\textsuperscript{11}, argues for a concept he calls “political economy of old age” in order to explain what he terms the “social creation of dependency”. This is the creation of dependency among older people by restricting their access to those societal resources that would allow them to maintain a continuity of engagement and established lifestyle.

In the developed world, Quality of Life has been equated with perceived well-being, namely the extent to which pleasure and happiness, and ultimately satisfaction with life, have been obtained.\textsuperscript{12}

In their contribution to the 2004 collection of studies, “Growing Older – Quality of Life in old age”, Gabriel and Bowling\textsuperscript{13} identify eight themes that form the foundation for a good quality of life in old age:

- Good social relationships with family, friends and neighbours
- Good home and neighbourhood (safe, good facilities including transport)
- Positive outlook and psychological well-being
- Activities/hobbies (performed alone).
- Good health and functional ability
- Social roles and engaging in social and voluntary activities (with others)
- Adequate income
- Independence and control over one’s life

Most of the literature indicates that social relationships and activity per se appear to confer health benefits through psychological pathways. In support of this, there are long-established associations between social participation and/or support and feelings of security, self-esteem and hence self-mastery, especially, if relationships are reciprocal.

However, the ability to make full use of personal freedom in older age is partly dependent on financial status, health and physical mobility, place of residence and the social capital of the local area.\textsuperscript{14}

\textsuperscript{10} Bowling A. (2005) Op cit
\textsuperscript{11} See for example Walker A (1981) Towards a political economy of Old Age, Ageing and Society 1: 73-94
\textsuperscript{12} Bowling A (2005) Op cit
\textsuperscript{13} Gabriel Z & Bowling A (2004) Quality of Life in Old Age from the Perspectives of Older People, in Walker A and Hennessey H G Growing Older – Quality of Life on old age.
Can public transport be a universally appropriate solution to the transport needs of older people?

Whilst public transport might theoretically offer an alternative Higgs and colleagues report a range of reasons offered by the older people participating in their studies why public transport is not an acceptable alternative.

*Barriers to the use of public transport can stem from people’s increasing frailty as they get older, combined with the characteristics of the transport itself. ¹⁵*

Wilson gives an account of the reasons offered by the respondents in her study why car ownership was seen to be a superior solution to other transport options:

*There are no good substitutes for a car at present, which is the main reason why it is so crucial for the maintenance of independence and autonomy. Even the best bus service which stops anywhere on request, is quite regular and passed close to home, is of little use to those who cannot get on and off a bus. ¹⁶*

Kreitzman makes a similar point:

*There is a maxim that individuals have disabilities which society turns into handicaps. In regards to transport it might be better to widen the scope of the word disability, which suggests physical and/or mental incapacity, and replace it with inability. Individuals may be handicapped in terms of how they function in their daily lives because they are unable to utilise the existing transport systems to access those activities in which they wish to participate due to perhaps physical or cognitive dysfunction, or it may be that they cannot use the systems for other reasons; because they cannot afford to, or are not informed, or are fearful, or whatever.¹⁷*

We may question how significant a factor experiencing difficulties with personal mobility are in encouraging older people to favour car ownership: what proportion of older people experience difficulty sufficient for it to affect their capacity to walk to a bus stop for example? Whilst not altogether a satisfactory proxy, because of the different routes to eligibility, the Blue Badge Scheme does illustrate the way in which age and substantial difficulties with personal mobility are related. In England 15.55% of people in the cohort 70-79 years of age and 27.97% of those eighty years of age or more held a Blue Badge in 2012/2013. The following table shows how steeply the proportion rises in relation to age.

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¹⁷ Kreitzman L (1996) *Licenced to Drive at 85? A report on the Mobility Needs of Older People in the Next 25 years. Help the Aged*

¹⁸ Bespoke table from the Department for Transport Statistical Division, based on the National Transport Survey 2012 & 2013, two years combined to achieve a better sample size. Tabulated June 2015
Table One

<table>
<thead>
<tr>
<th>Age group</th>
<th>% in age group holding a Blue Badge</th>
<th>% in age group not holding a Blue Badge</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>0.59</td>
<td>99.41</td>
</tr>
<tr>
<td>20-39</td>
<td>0.698</td>
<td>99.302</td>
</tr>
<tr>
<td>40-59</td>
<td>2.928</td>
<td>97.072</td>
</tr>
<tr>
<td>60-69</td>
<td>7.65</td>
<td>92.35</td>
</tr>
<tr>
<td>70-79</td>
<td>15.551</td>
<td>84.449</td>
</tr>
<tr>
<td>80+</td>
<td>27.973</td>
<td>72.027</td>
</tr>
<tr>
<td>All</td>
<td>4.185</td>
<td>95.815</td>
</tr>
</tbody>
</table>

On this evidence personal mobility, restricting the distance that can be walked to or from the mode of transport to access facilities increases substantially and rapidly as individuals pass through old age.

Higgs sets out the ten most frequent barriers for respondents aged over 70 years with the proportion of that age group who reported each problem:

Table Two

<table>
<thead>
<tr>
<th>Problems</th>
<th>% aged over 70 who agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal security in evening and at night</td>
<td>80</td>
</tr>
<tr>
<td>Public transport running late</td>
<td>68</td>
</tr>
<tr>
<td>Having to wait</td>
<td>68</td>
</tr>
<tr>
<td>Difficulties in carrying heavy loads</td>
<td>66</td>
</tr>
<tr>
<td>The possibility of cancellations</td>
<td>66</td>
</tr>
<tr>
<td>Behaviour of some passengers</td>
<td>64</td>
</tr>
<tr>
<td>Lack of cleanliness</td>
<td>54</td>
</tr>
<tr>
<td>Having to be out in bad weather</td>
<td>54</td>
</tr>
<tr>
<td>Having to change transport</td>
<td>53</td>
</tr>
<tr>
<td>Difficulties travelling where I want to go</td>
<td>50</td>
</tr>
<tr>
<td>Difficulties travelling when I want to</td>
<td>48</td>
</tr>
</tbody>
</table>

Kreitzman reports a similar set of reasons why older people may be reluctant to use public transport:

> Many reasons are given for not using public transport by motorists of 65+ but in the main the reasons are confined to carrying heavy shopping and therefore the need for a car or because the public transport service is not suitable in terms of the routes covered and the frequency and punctuality of the service.

20 Kreitzman (1996) Op cit
The respondents to the study reported by Higgs were reluctant to engage with the issues that would arise when they could no longer have access to their own transport and this impacted on their whole approach to ageing with a consequent impact on their sense of well-being:

> Anticipated problems with getting about, including having to give up driving, were associated with negative perceptions of old age, so that most people said they could not bring themselves to actively plan for such eventualities.\(^{21}\)

Fielder underscores the point that barriers to the use of public transport by older people are not simply physical and encourages planners and providers to consider the cognitive and psychological constraints alongside the physical ones.

> “Particular barriers are less crucial to most older people than the overall effort/stress of a trip”\(^{22}\)

Kreitzman sets out the way in which the changing circumstances of the individual as they pass through old age may alter the acceptability of alternative modes of transport:

> As we grow older, our ability to choose between different transport modes to achieve our primary goals changes. Walking may lose some of its attractions on a cold, wet, November day in an urban street with uneven pavements. Train interchanges which require ascending and descending flights of stairs are no fun for disabled people nor for those with shopping bags or push-chairs for that matter.

> While this is true for all people, it is more relevant for older people. What they can do, what they can participate in, becomes as much a function of their ability to use the available transport system as are their desires.\(^{23}\)

This is consistent with the findings of other studies which reflect the impact of a sense of independence on well-being in old age. Retaining independence and autonomy in one's lifestyle is a strongly held value, as Gabriel and Bowling report:

> Over two thirds of respondents emphasised the importance of retaining their independence for their Quality of Life. In this context, being able to walk and having good mobility was mentioned by just over a quarter as being important to them. They said they wanted to avoid the boredom and monotony of a life confined indoors through immobility, and wanted to continue to be able to do things for themselves such as shopping and household tasks. Avoidance of dependence on others was a commonly held value.\(^{24}\)

A significant proportion linked this perception directly to the ownership of a car and the ability to act independently that this gave:

> Sixteen percent described how having a car gave their lives quality, as it meant they did not have to rely on public transport or on lifts from other people and could be independent. Fourteen percent who were unable to drive or did not have access to a car felt this detracted from their Quality of Life by decreasing their independence.\(^{25}\)

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The generational effect of past expansion in car ownership

The linkage made by older people between independence and Quality of Life with car ownership is consistent with the findings of many older studies of car use by older people, such as that conducted by Hopkin for the Transport and Road Research Laboratory of the Department of Transport in 1981. This recognised that the rising generation of older people, then in early old age, would have a different style of life and level of expectation in relation to car ownership than those who were then, almost twenty-five years ago, in more advanced old age.

Since younger elderly people are more likely to have owned a car than older people, it might be expected that younger elderly people would have developed a style of life that relied more on car travel, and would therefore travel more frequently by car, than older people.\(^\text{26}\)

Hopkin recognises that the increase in car ownership that occurred in the late 1950s and early 1960s will have contributed to a distinct shift in experience and therefore expectations. Increased car ownership through that period has the consequence that those who were in their teens or early 20s in that period are more likely to have held a driving licence throughout their adult lives than the cohorts that preceded them. They therefore assume car ownership to be normative.

The rate of car ownership has not been constant, within the overall growth which saw the number of vehicles registered rise from 8,000 for the whole of Britain in 1900 to around 21 million by 2000, the period of sharpest increase is seen in the 1950s and 1960s.

The boom in car ownership occurred in the 1950s and 1960s. Car ownership in London quadrupled between 1950 and 1970 as standards of living rose and car prices fell.\(^\text{27}\)

As a consequence, we recognise a generational effect in that the majority of people now moving into old age have lived their whole adult lives with access to a car, and for many, car ownership. They carry with them that car ownership and car use is a normal feature of their lives.

Lucas and Jones observe:

\begin{quote}
Car ownership and car use have continued to grow and extend across the population since the late eighties and are now embedded into most aspects of daily life in Britain.\(^\text{28}\)
\end{quote}

They recognise a ‘ratchet effect’ leading to increasing car dependence as the period over which a car is owned and used increases:

\begin{quote}
Car reliance and dependence tends to grow over time. There is a ‘ratchet effect’, in which people start substituting cars for trips where there are modal alternatives, but they become locked into car use as these transport alternatives are cut back due to reduced levels of use, and people become attracted to other, car-based, destinations. It becomes increasingly difficult for them to return to their pre-car travel patterns, and so they are less responsive to increases in fuel prices or to policies to encourage reductions in car use.\(^\text{29}\)
\end{quote}

\(^{26}\) Hopkin JM (1981) The Ownership and Use of Cars by Elderly People, Transport and Road Research Laboratory

\(^{27}\) Exploring 20th Century London – car ownership www.20thcenturyLondon.org.uk/car-ownership


Some older people, living in inner urban areas, may have had a more substantial experience of public transport that meets their functional needs to such a level that their emotional and psychological attachments to car ownership have been diminished. As these people move through old age their experience may dilute the intensity of demand to continue car ownership for as long as possible. They will join those older people, principally from lower income groups and of non-Western European nationality, for whom public transport has always been the only form of transport available to them.

That there may be a generational effect at work here is highlighted by Lucas and Jones:

*Among drivers aged between 16-29 years of age, a reduction in the number of miles travelled has been recorded. However, the 70+ age group has been responsible for offsetting these figures by travelling further and more often in recent years.*

These changes, which are likely to be restricted to urban areas well served by frequent, accessible and affordable public transport, will take time to take hold among older people. In the overwhelming majority of locations, and for the immediate to medium term future, most older people will experience loss of access to a car as a diminution.

The conclusions set out in Hopkin (1981) place access to a car in a key position in relation to older people maintaining independence:

*This study of car availability and use among the elderly has shown that after walking, the car is the mode of transport most frequently used by the elderly, although there are large variations in car availability and use between different groups of elderly people. ... Differences in car availability and use between different groups of elderly people lead to differences in levels of opportunity for reaching various facilities.*

The study of car use and transportation needs among older people in Lincolnshire by Ward, Somerville and Bosworth highlighted the particular difficulties faced by older people in rural areas. Among those participating in the study few had accessed public or community transport and the majority seemed unsure about availability and eligibility. The consequences in social isolation and declining quality of life for those not able to maintain private transport is well documented in the report.

Whilst the situation found in Lincolnshire may be typical of most rural areas, and indeed of outer suburban areas where accessing public transport may involve a long walk to the nearest stop, the situation in inner urban areas will often be different. In Inner London, in particular, public transport may be more available although, as we shall see, that does not necessarily mean that it is accessible and acceptable to older people.

### The situation in London

Whilst the arguments to support the maintenance of car ownership in old age for those living in rural and outer suburban areas may rest on grounds of practicality: the relative paucity or inconvenience of public transport alternatives, this is much less true in the major conurbations and inner urban areas. In London, for example, the arguments for restraining car use are powerful. In addition to concerns for pollution and environmental impact of current levels of

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car ownership there is the immediate and practical concern for the approach of gridlock. There are reported to be 2.6 million cars in London and 54% of London households have at least one car.\textsuperscript{33} This headline figure for average levels of car ownership across London disguises an enormous variation, largely between inner and outer London boroughs:

\textit{Car ownership (households with access to a car) varies substantially across London: at a borough level it ranges from 26\% in Islington to 75\% in Richmond Upon Thames, outer London boroughs generally seeing higher levels than inner London boroughs.}\textsuperscript{34}

In guidance issued as “Minor alterations to the London Plan” in March 2016\textsuperscript{35} the Mayor of London’s strategic approach to the provision of car parking spaces in new developments is made clear:

\textit{The Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.}

Within the document, the consideration to be given to the availability of public transport options in determining the appropriate number of parking spaces is recognised and particular reference made to differences that may arise between inner and outer London boroughs.

The particular needs that disabled people may have for access to private transport is identified:

\textit{This policy recognises that developments should always include parking provision for disabled people. Despite improvements to public transport, some disabled people require the use of private cars.}

It is suggested in the document that the application of the indicative standards set out in the document for provision of car parking in residential developments needs to be flexible, and sensitive to the circumstances of the development and its location.

The need to take account of the issues that arise from an ageing population within London in relation to specialised housing are to be found in “Housing Standards, Minor alterations to the London Plan” in March 2016.\textsuperscript{36}

\textit{Boroughs should undertake assessments of the short and longer term supported housing needs of vulnerable and disadvantaged groups, taking account of the wide range of requirements which will arise as London’s population ages, the importance of continuity of care, and access to family and friendship networks as well as statutory responsibilities for care}

This is underpinned by the linkage between the provision of appropriate housing for older people and addressing the acute need for family sized housing in London spelt out in the “Ageing London” report from the Mayor’s design Advisory Group.\textsuperscript{37}

\textsuperscript{34} Roads Task Force – Technical Note 12 (2014) Op cit
\textsuperscript{37} Ageing London: How do we create a world-class city to grow old in? – Good Growth Agenda 3 Mayor’s Design Advisory Group https://www.london.gov.uk/sites/default/files/mdag_good_growth_agenda_-_ageing_london_interactive.pdf
As our population ages, it will become increasingly important not to overlook the value in addressing housing choices for older people as a key component of the wider provision across the city. By getting this right, we can ease the pressure across the spectrum and achieve an intergenerational mix within communities that will be key to maximising the ability for older Londoners to remain as active participants in civic life, tackling social isolation as we all get older.

In elaborating their recommendations the group propose a new Use Class for housing designed to meet the needs of older people and include specific reference to the provision of “good storage and car parking” within such developments.

A new use class could be one way of unlocking innovation in housing for older people in central urban locations. This use class would sit between the current C2 (care homes, nursing homes) and C3 (general housing needs) and offer flexibility at borough level in terms of S106 and CIL requirements to help ensure good schemes for older people are viable. It would also ensure that Local Plans make specific reference to the provision of consumer choice in housing for older Londoners, as something distinct from the wider housing choice requirements. Indeed, the Further Alterations to the London Plan only refers to housing for older people in terms of the provision of ‘specialist accommodation’ - we need to broaden this definition and embed into policy. Qualities that would define any new use class should be investigated, but would likely include: housing which is located in places where older people want to live, larger housing units – fewer rooms but generous with good storage and car parking – and homes which are more suitable for older people to live in long term, including ensuring homes are fuel-efficient and mobility friendly.

Age is another major variable in car ownership among Londoners with higher rates among men than among women, rising from the age of qualification to drive to peak in the 55-59 age group before gradually declining. The following table shows levels of ownership among older Londoners, extracted from the graph contained in the Task Force analysis.

### Table Three: % of older Londoners with access to a car by age and gender

<table>
<thead>
<tr>
<th>Age</th>
<th>60-64</th>
<th>65-69</th>
<th>70-74</th>
<th>75-79</th>
<th>80-84</th>
<th>85+</th>
</tr>
</thead>
<tbody>
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<td>Men</td>
<td>60</td>
<td>65</td>
<td>55</td>
<td>48</td>
<td>39</td>
<td>26</td>
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<tr>
<td>Women</td>
<td>44</td>
<td>37</td>
<td>28</td>
<td>20</td>
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<td>7</td>
</tr>
</tbody>
</table>

Whilst the table shows a steady decline with age levels of ownership for men remains substantial through their seventies and into their mid-eighties. Whilst the average level for women is lower and declines at an earlier age it is substantial to the mid-seventies. The reasons for the differential and the gradual decline are complex: household composition, income and declining sight and cognitive acuity all play a part.

Whelan, Crockett and Vitouladiti suggest living environment and housing tenure may be key variables alongside car costs, parking management strategies, public transport level of service and accessibility in estimating future levels of car ownership.

38 Ageing London Op cit
39 Author’s underlining
40 Roads Task Force – Technical Note 12 (2014) Figure 3
Influences on levels of car ownership

Research into the growth in car ownership and the factors that influence the rate at which new cars are acquired and old ones scrapped suggests that the main influence on the rate of increase is the overall economic climate. If this is the case then attempts to depress the increase in car ownership through constraints such as restricting parking spaces have a Canute like quality:

The car parc\(^{42}\) has risen from 19 million in 1971 to over 31 million in 2007, an average growth rate of 3% per annum. The increase in individual years has reflected economic conditions; during the 1973-1978 period after the first oil shock and during the early 1990s recession growth was less than \(\frac{1}{2}\)% per annum.

Despite these fluctuations, the trend of increasing car ownership is quite clear and if growth continues on the same linear basis by 2020 there will be over 37 million cars in the UK. More optimistic (sic) projections, based on accelerating population growth suggest there could be 44 million cars by then.\(^{43}\)

The greater mobility observed within the population of older people, with its concomitant maintenance of car ownership, contributes to the continuing upward trend, as Musselwhite explains:

Most of the increase in travel among older people is as a car driver. The percentage of over 70 year olds holding a drivers licence in Great Britain has grown from 15% in 1985 to almost 54% in 2009, with males increasing from 34% to 76% and females 4% to 37% in that time.\(^{44}\)

This rise is expected to continue, and it is predicted that 10 million people over 70 in Great Britain will have a driving licence by 2050.\(^{45}\)

Fielder concurs, finding that the travel intensive life-style characteristic of the rising generation of older people is likely to influence their behaviour in old age:

“Car ownership of senior people will increase during the coming years. This is due to the fact that the middle aged people of today probably will maintain their mobility behaviour in old age ("Ageing of travel intensive lifestyles") It also expects that mobility levels (i.e. number of trips and distances) will increase within the next years".\(^{46}\)

Car ownership and Quality of Life in old age

The limitations to the ability to walk longer distances that comes with increasing age makes access to good transport alternatives increasingly important in maintaining independence; as Bowling makes clear:

Access to a car or good public transport is necessary to enable people to travel more than a short distance away from home. ..... Access to transport played an important role in people’s emphasis on their continued independence, especially from those with problems of physical mobility.\(^{47}\)

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\(^{42}\) The “car parc” is the total number of cars available in the UK.

\(^{43}\) Leibling S (2008) Car Ownership in Great Britain, RAC Foundation for Motoring

\(^{44}\) Musselwhite (2011) Successfully giving up driving for older people, Centre for Transport and Society, British Society of Gerontology & International Longevity Centre

\(^{45}\) Box et al (2010) Maintaining safe mobility for the Ageing, RAC Foundation

\(^{46}\) Fielder (2007) Op Cit

Where public transport is not perceived as adequate or appropriate then car use becomes more of an imperative for those older people seeking to maintain their independence. Bowling reports the importance attributed to car ownership among the one thousand respondents to the Quality of Life Survey jointly commissioned by the Economic and Social Research Council and the Medical Research Council:

Accordingly, a common theme among respondents was that their independence was due to being able to continue driving, and being able to afford to run a car and pay for petrol. This enabled them to travel to places more quickly and comfortably than on public transport, and avoid carrying heavy shopping, especially when they were frail or ill. This recognized need also led to fears about how they would cope if they had to stop driving.48

Musselwhite summarises the linkage that has been established in past studies between car ownership and quality of life for older people:

The importance of mobility has been linked to life satisfaction and quality of life for older people and giving-up driving in later life can be very painful and have devastating consequences in terms of mental and physical health and is strongly correlated with an increase in depression and loneliness.49 Unsurprisingly, the need to give-up driving is coupled with great anxiety for older people.50

In reporting the outcome of their study in 2000, Macintyre and his colleagues showed that access to a car was seen by people as an enabling factor, in terms of giving them greater freedom, life satisfaction, self-esteem, mastery and making them feel safe.51 They found that people with access to cars reported that they had more freedom than those who usually travelled by public transport.

Higgs and his colleagues, reporting on four studies within the ESRC Growing Older Programme, report the importance of car ownership for both men and women. The activities that are mentioned as being facilitated by access to a car have a striking correlation with those elements identified by Gabriel and Bowling as constituting the foundations of quality of life in old age:

For both men and women, having a car is important for maintaining independence – the ability to shop, visit, enjoy leisure facilities, help with grandchildren, attend hospital appointments, and so on.52

Higgs et al cite the study by Ginn that draws attention to gender inequality in access to a car driven by reduced financial resources for women living alone in old age:


49 Musselwhite references Schlag et al 1996 Transportation for the Elderly: Towards a User-friendly Combination of Private and Public Transport, IATSS Research, 20 (1); Fonda et al 2001 Changes in driving patterns and worsening depressive symptoms among older adults, Journal of Gerontology; Social Sciences 56B(6), S343-S351; and Ling and Mannion 1995 Enhanced Mobility and Quality of Life for Older People: Assessment of Economic and Social Benefits of a Dial-a-Ride Service, in proceedings of the Seventh International Conference on Transport and Mobility for Older and Disabled People, Vo1, DETR, UK

50 Musselwhite C (2011) Op cit


Car ownership varies fundamentally by gender – all groups of older women without a partner are disadvantaged compared with men and married women. Although we can expect the gender division of car ownership to lessen for future cohorts in later life women may still lack the financial resources to run a car.\textsuperscript{53}

The variations in different sections of the older population are highlighted by Hjorthol in his study that drew its empirical evidence from a Norwegian nationwide study with 4,723 respondents.

The analysis reveals great differences between groups; especially between men and women, but also between different age groups and by different place of living. The special transport offered by the local authorities is seen as insufficient, and with increasing age a great deal of older people have low mobility and an uncovered transport need that reduces their life quality.\textsuperscript{54}

The centrality of car ownership to the shaping of lifestyle in old age and thus its contribution to the perceived quality of life is identified in two of the four studies reported by Higgs and his colleagues:

Convenience, flexibility, and comfort were the most mentioned benefits of car ownership, and for some people having access to a car was seen as a life-line because it enabled them to get out of the house. Car ownership was seen as allowing a “fuller life” or as a means of extending the range of viable accessibility; indeed some respondents in the latter study (Study Four) suggested that “you build your life round the car”.\textsuperscript{55}

The findings of Wilson make a similar point:

There was no doubt that, in the eyes of car owners and former owners, the car was the most important item contributing to their independence. Most were men and those who had given up the car regretted it intensely. Their ability to act autonomously in simple matters like going to the shops, helping others, or getting the washing done was dependent on the car. As one who was still in part-time work said he ‘would rather be dead than not have the car’.\textsuperscript{56}

In a more recent study, Musselwhite links the increasing numbers of people living into old age and remaining relatively physically able with what he terms “an ever increasing hypermobile society”:

Not only is the population of older people in many Western countries growing at a significant rate, the amount of travelling older people do is rapidly increasing. Older people are more healthy and active as a cohort than ever before and as such are also more mobile. This is coupled with an ever increasingly hypermobile society, where services, shops, work and families are increasingly dispersed, linked only by increasing the distance travelled.\textsuperscript{57}

Nordbakke and Schwannen draw on a study of the extent to which older people believe that their needs for out-of-home activity participation remain unsatisfied:

\textsuperscript{54} Hjorthol R, Transport resources, mobility and unmet transport needs in old age. Ageing & Society (2013)
\textsuperscript{55} Higgs et al (2005) Op cit
\textsuperscript{57} Musselwhite C (2011) Op cit
“Such transport related factors as holding a driving license and subjective judgements of public transport supply shape the level of unmet needs for out-of-home activity.”

The study concludes that:

“Policy makers seeking to raise well-being above a minimum threshold of what counts as a decent life should enhance older adults ability to drive in old age and car availability, lower the distance to public transport stops, and improve the connectivity of public transport offers to destinations.”

Car sharing as a possible mitigation for expanding care ownership among older people

It has been suggested that one means by which the level of car ownership among older people might be mitigated is by increasing the incidence of “car clubs”. In their report of 2004, Cairns and colleagues provide a helpful summary of how such clubs operate:

“The basic idea of a car club is that people can have access to a car in their neighbourhood without having to own it. Typically, car club members pay an annual membership fee to an operator (in the order of £100-£200) who provides and maintains a range of vehicles in their neighbourhood. Members then pay by the hour and mile when they use a vehicle. Some operators prefer to charge a higher hourly rate and do not ask for a membership or mileage fee. The combined costs of membership and use are intended to be cheaper than personal car ownership, for car owners who do not do a high mileage, and to encourage the adoption of relatively diverse personal transport strategies.”

In a subsequent publication Cairns provides a summary of the provenance and current extent of the car club model:

“The concept of car clubs was imported into the UK from Switzerland and Germany in the late 1990s. (At about that time, they also took off in North America.) The first formal UK car club began in Edinburgh in 1999. Since that time, despite some hiccups, there has been exponential growth. According to Carplus, a charity supporting ‘a rethink in car use’ (including the development of a national network of car clubs), there were approximately 32,000 members of car clubs in the UK in December 2007, 64,000 by December 2008, 113,000 members by February 2010 and 146,000 members by November 2010. Globally, the World Car Share Consortium estimates that there are over 1,000 cities where car clubs are established. Zipcar, a US-based organisation that is currently the world’s largest car club company (and which recently bought Streetcar, the UK’s largest company) has approximately 400,000 members.”

The financial benefits of accessing a vehicle for private use by membership of a car club had been qualified in earlier work by Bonsall for the DTLR and Motorists Forum:

“Membership of a car club would result in financial savings for people who would otherwise own and run a new/newish car, but whose annual mileage is low. …..

Car clubs cannot compete in terms of cost with ownership of an old car for which the

58 Nordbakke S & Schwannen T, Transport, unmet activity needs and well-being in later life: exploring the links. (2014)
60 Accessing Cars – different ownership and use choices, Cairns S, 2011, RAC Foundation
Depreciation is minimal. This will make it difficult to achieve the environmental benefit to be gained by persuading owners to scrap inefficient/polluting vehicles.”

Bonsal seems to suggest that car clubs will not provide a solution for those whose continued ownership of a car is frustrated by rising costs:

“Car clubs might reduce social exclusion by offering access to a car to people who do not currently own one. However, this potential benefit is likely to be elusive for two reasons: firstly because car club membership is not cheaper than ownership and use of an old car and secondly because the disadvantaged groups are not likely to be easy to serve (insurance costs, sparse population, culture, inability to raise the required deposit).”

Whatever reservations may have been expressed in this early evaluation planners have embraced the model of car club as a means of encouraging a reduction in dependence on car ownership, citing a wide range of benefits from such a trend from reduction in atmospheric pollution to limiting space needed for vehicle parking. There is particular interest in the incorporation of such schemes into new residential developments. The 2015 revision of good practice guidance from Carplus draws on case studies to illustrate the advantages of car clubs, and identifies the planning tools that can be used to encourage their incorporation in new schemes.

In this, as elsewhere in the literature, the primary target is seen to be people of working age and there has been little or no attention paid to the applicability of such schemes to developments intended for older people.

The functional and psychosocial need for continued car use

Kreitzman reports that, especially for those 75 years of age or more, the major purpose of car journeys was to meet the basic need to shop for groceries:

Most of the journeys currently made by older people are for grocery or personal shopping. Among women and men over 75, nearly two thirds of their journeys are for this reason.

Older motorists are more likely to regard their car as essential than younger ages and this is particularly the case in relation to grocery shopping with 33% saying the car was essential.

Whilst it may be argued that in the intervening period on-line grocery shopping and home delivery will have mitigated this requirement access to on-line shopping and its acceptability is lower among older people than younger cohorts of the population.

Lucas and Jones also established through analysis of national attitude surveys, and their own focus groups, people said that grocery shipping was the main trip they couldn’t make without a car.

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63 Car Clubs in property developments – Carplus good practice guide, 2015
64 Kreitzman L (1996) Op cit
It is clear that the benefits perceived as flowing from car ownership are more than practical:

*It seemed that a decision to give up driving could be made harder by other aspects of driving mentioned by many, such as enhanced self-esteem, status, social role and identity, retaining a valued skill and the ability to offer lifts and be of service to others. Hardly surprising the prospect of giving up the car is anticipated with a deep sense of loss.*

Subsequent studies have validated that conclusion and are listed by Musselwhite in his 2011 report:

*It is increasingly recognised that the importance of being mobile and in particular the importance of driving a car for older people is associated with wider psychosocial issues into account. Recent research has highlighted the importance of affective and psychosocial needs as motivation for car driving, including identity, self-esteem, autonomy and prestige.*

In other work, Musselwhite has identified that driving a car can be used for impression management, to show other people aspects about the self:

*Older people tend to use ownership and use of a car as something that shows they are still part of everyday society. The viewpoint is that an individual who is engaged actively in society is likely to own and use a car.*

The study by Vella-Brodrick and Stanley recognises that transport mobility influences the way in which individuals experience old age both in relation to functional capacity, but also of psychosocial dimension such as inclusion and self-worth.

*Transport mobility provides increased opportunities for individuals to undertake fundamental tasks beyond the home environment, such as going to work and purchasing essential goods. Moreover, transport mobility may also play an important role in helping to satisfy inherent psychosocial needs which are deemed necessary for well-being, such as relating well with others, feelings of competence and mastery, and heightened autonomy.*

Summarising the findings of the responses of 435 participants from their study undertaken in Melbourne, Australia, they report:

*Support was found for a full mediation model, whereby transport mobility predicted subjective well-being through the mediating variables of environmental mastery, positive relations with others and self-acceptance. Thus, the impact and benefits of transport mobility extend to psychosocial factors related to well-being.*

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68 Musselwhite C (2011) Op cit


70 The significance of transport mobility in predicting well-being Dianne A. Vella-Brodrick, Janet Stanley *Transport Policy* Volume 29, September 2013, Pages 236–242

71 Ibid
The commitment of older car owners to maintaining their access to personal transport is evidenced by Kreitzman (1996) in reporting his survey results:

_The perceived loss of freedom is cited by 64% of 60-74 year olds and 68% of those over 75. Flexibility and independence are essential components of car travel, whether such attributes are realised or not. Travellers are willing to pay a great deal for this perceived flexibility, even when public transport may offer faster journeys at less cost._

**Car ownership and older people living in specialised accommodation**

Whilst the overwhelming majority of older people live in general housing, around ten percent live in some form of specialised accommodation. At the higher end of the spectrum this will be a Registered Care Home providing either personal care or personal and nursing care. At another point in the spectrum there is sheltered housing, a model of modified communal living that balances the privacy and independence of an individual dwelling with a range of communal facilities and activities. This is the most common model of specialised accommodation for older people with around half a million units for rent or sale in England. In the past thirty years a model that preserves the benefits of individual accommodation but delivers flexible patterns of support and care as the needs of the individual change has become increasingly prevalent with currently approximately fifty thousand units in England.

Whilst these models of specialised accommodation respond to a range of needs among older people, from mobility difficulties, through loneliness and isolation to a need for personal care, the emphasis has increasingly been upon maintaining an environment in which independence and engagement is maintained.

Thus sheltered or retirement housing and Extra Care is not to be confused with Registered Care; although some of the personal circumstances to which they respond may be similar the lifestyle they encourage is quite different. While it may be a safe assumption that only a small minority of residents of a Registered Care Home will maintain their ownership of a car that assumption will need modification in relation to other forms of specialised accommodation for older people.

There is little published evidence about car ownership and use among older people living in Extra Care accommodation for example. An unpublished study commissioned by McCarthy and Stone reviewing thirteen of their early Assisted Living schemes asked residents about car ownership. Of three hundred and ninety respondents one hundred and forty nine reported that they owned a car that was kept on site and a further twelve owned a car kept elsewhere. One hundred and seventy one respondents held a current driving licence and one hundred and thirty nine reported that they drove regularly.

All but thirty five of the respondents were seventy five years of age or more, and around half were eighty five years of age or over. This private study suggests that in this Extra Care style accommodation a substantial proportion of the residents maintained their ownership and use of a car.

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72 Kreitzman L (1996) Op cit
One tabulation of car ownership and parking provision in Extra Care schemes provides details of ten schemes managed by Housing 21 and three by the North Yorkshire Partnership. The majority of schemes comprise around forty units with a range from twenty-four to ninety-eight. Car ownership among residents is surprisingly low, some schemes recording no car owners at all. Only thirty-four car owners are recorded for the aggregate total of five hundred and sixty-five units tabulated.

The ratio of parking spaces to units of accommodation varies widely in a range from one parking space to every two units to one to every five units; with most being in the range of one parking space to 2.4 to 3.4 units. Staff numbers were significant in estimating parking needs and all schemes reported that parking spaces provided were often full.

When considering what level of car ownership may be anticipated attention should be paid to the profile of intended residents, both at first occupation and subsequently, bearing in mind the evidence reviewed here about the practical and psychosocial significance of car ownership for people into advanced old age.

**Those who make policy and those who are impacted by it**

Those who make policy will generally not yet have entered old age; they may feel that they know how they will wish to live in old age, perhaps from observation of their parents or other older relatives, or by projecting their current thinking forward. Kreitzman demonstrates the fallacy of that approach:

> Asking what we might want for ourselves in twenty or more years hence is a usual starting point when thinking about the future. It implies a view of ageing within an individual which is incremental and preserves a continuity of the individual. While we can talk to some extent about the integrity of the self, the actual personality of an individual and their views and behaviours changes substantially. So much so that various writers have talked of multiple selves or the succession of selves. The idea here is that someone who is eighty is not someone who is fifty but thirty years on. Rather, it is almost as though we are talking about completely different individuals. Furthermore the utility of mobility in itself may be changed by the conditions in which it operates.

> The utility an individual places on an act at a given age is not necessarily any guide to the value that same individual, say thirty years on, will place on the same act.

The research reviewed in this paper speaks clearly of the importance attached to car ownership and access to personal transport by older people themselves. Kreitzman's words suggest that it will be unsafe for those who are not yet in old age to presume to know what is right for the current cohorts of older people, or even to judge what they will require as they themselves move through old age.

**Conclusions**

The importance of sustaining well-being in old age is recognised not just in the research literature but also in legislation and guidance. If the negative economic and social impacts of an ageing society are to be mitigated, particularly in relation to demand for health and social care services, then that well-being which supports independence and a quality of life in old age is crucial. The importance of well-being in maintaining both physical and mental health is clearly documented.

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75 [http://planning.northwarks.gov.uk/portal/servlets/AttachmentShowServlet?ImageName=265515](http://planning.northwarks.gov.uk/portal/servlets/AttachmentShowServlet?ImageName=265515)

76 Kreitzman (1996) Op cit
Whilst the maintenance of a sense of well-being and of quality of life in old age depend upon a wide range of factors, ready access to transport in general, and car ownership in particular, are shown to be positively linked to well-being.

In part this is a functional linkage: car ownership facilitates the performance of various tasks from shopping to maintaining contact with friends and family. Whilst ready access to frequent, accessible and affordable public transport may provide an alternative for some of these tasks it is unlikely to meet all such requirements for all older people.

We have shown that the impact of loss of car ownership and access to private transport is significant at levels other than the purely functional. Car ownership carries powerful significance for older people and loss of the status of car owner carries the risk of negative consequences in self-image, self-confidence and mental well-being.

Whilst car ownership among older people has been shown to decline as they age, the sudden or premature enforcement of such a change will be viewed negatively by older people and may dissuade them from making an appropriate and timely move to more suitable accommodation.

If the aspirations of public policy are to be met: that is that an increasing proportion of older people should make a timely move to accommodation that will flexibly respond to their changing needs as they pass through old age, then such housing based developments will need to respond to the whole lifestyle expectations of older people. These include not just comfortable, accessible and appropriate accommodation with access to support and care when needed, but also the ability to sustain as much of their chosen lifestyle for as long as possible. As this review of the literature has demonstrated that will, for a substantial proportion of older people, include maintaining their access to a car to be used at their discretion.

In seeking to deliver the wider public good that arises from encouraging older people to make a timely move to appropriate retirement housing, commissioners of housing with care should consider the provision of an appropriate level of car parking realistically. What is realistic may be determined, in part, by local factors and they may consider levels of car ownership amongst the target population for whom the development is intended.

Clearly many older people may have given up car use before they reach the point where they would actively consider a move to housing with care and for others cessation of car use for reasons of health or the costs of car ownership may be a prompt to make such a move. For some who may be less wedded to their car making a move and giving up car use simultaneously will be fine. For others it will remain an inhibition that frustrates a move that would otherwise be in the interests of the individual and of the public good.

The laudable desire to reduce car dependence needs to take account of broader practical and psychosocial needs among older people if they are to achieve that well-being which is crucial to the delivery of policies in relation to Health, Housing and Social Care. These broader concerns should be given equal weight when determining the level of car parking to be provided in retirement developments.

**Note**

The views expressed in this paper are those of the author and not necessarily those of the Housing Learning and Improvement Network.
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