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Auto-mobility, community connections and independence in later life

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'Ageing in Place:
Independence and communities'

Mobility and health and wellbeing

Mobility and health and wellbeing

- Being mobile in old age is linked to quality of life (Schlag et al. ,1996).

- In particular, giving up driving is related to
  – a decrease in wellbeing
  – an increase in depression and related health problems, including feelings of stress, Isolation and
  – increased mortality

  (Edwards et al., 2009;Fonda et al., 2001; Ling and Mannion, 1995; Marottoli, 2000; Marottoli et al., 1997; Mezuk and Rebok, 2008; Musselwhite and Haddad, 2010; Musselwhite and Shergold, 2013; Peel et al., 2001; Ragland et al., 2005 Windsor et al. 2007; Zieglar and Schwannen. 2013).

- Ex-drivers who depend on others for a lift nearly twice as likely to go into long-term care, as compared with older people who were still driving (Marottoli, 2000).
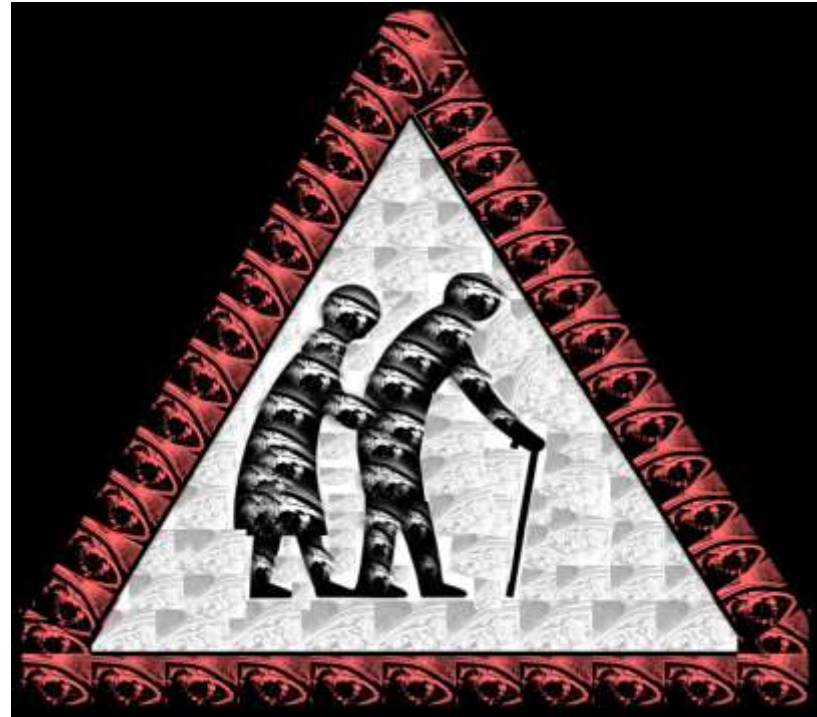
Who?

- **Factors associated with early driving cessation include older age :**

- females (e.g., Braitman & Williams, 2011; Chipman, et al., 1998; Dellinger, et al., 2001; Gallo, et al., 1999; HakamiesBlomqvist & Wahlström, 1998; Weeks, et al., 2013)

- Those from lower socio-economic groups (e.g. Rabbitt et al., 1996)

- Those from BME groups (e.g. Choi and Mezuk, 2013)

- lower car use frequency already earlier in life (Hakamies-Blomqvist & Siren, 2003; Musselwhite and Haddad, 2010; Musselwhite and Shergold, 2013; Rabbitt, et al., 1996)

- problems in health and cognitive function (e.g., Anstey et al., 2006; Ball et al., 1998; Brayne et al., 2000; Dellinger et al., 2001; Edwards et al., 2008; Persson, 1993; Rabbitt et al., 1996; Sims, et al., 2007; Trobe, et al., 1996)

- decreased psychological well-being (Anstey et al., 2006).

- support of family and friends, both practically and emotionally (Musselwhite and Shergold, 2013)

Why?

- Matching of needs, desires and expectations of individuals about and from life

- Within a hypermobile society
  - People live further away from their communities and networks
  - Increased mechanisation has gradually allowed this to happen
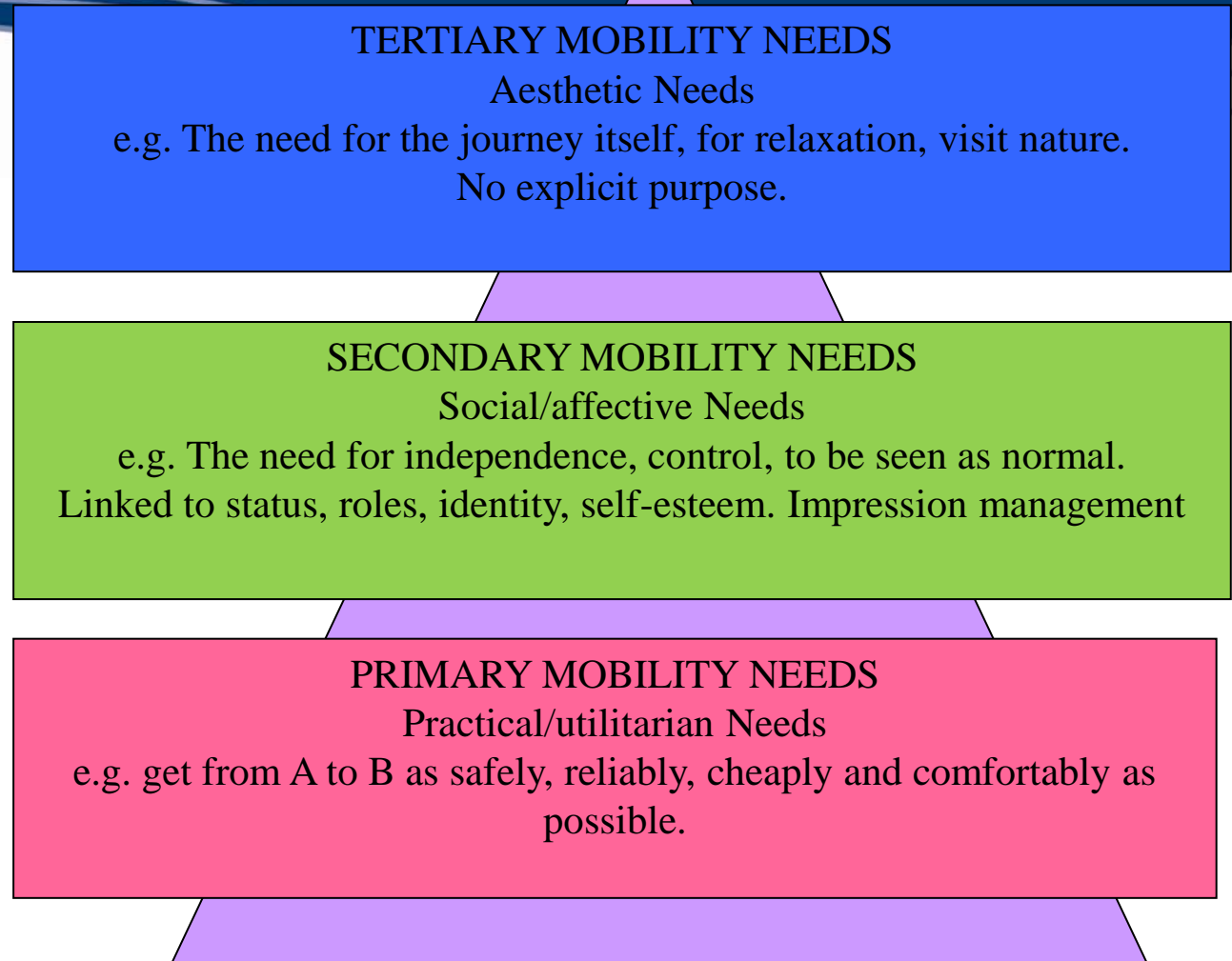 - Geared around the car
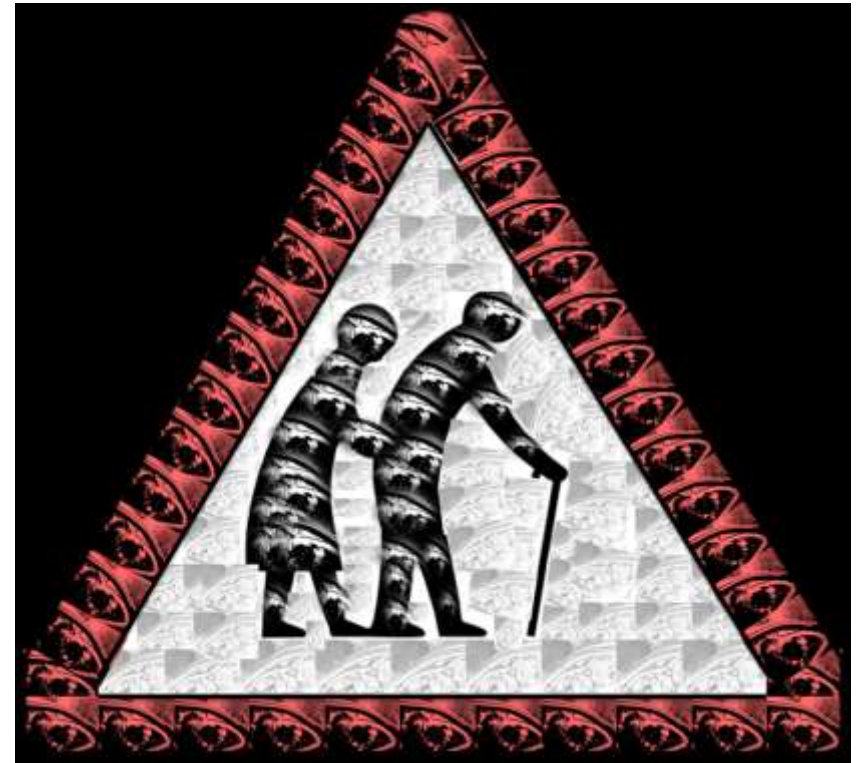
But:-
Do you need to use a car in later life to stay connected, healthy and well?
Are there positive stories of mobility in later life?

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Connectivity: People and Places Older people's need to travel

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Needs for travel

TERTIARY MOBILITY NEEDS
Aesthetic Needs
e.g. The need for the journey itself, for relaxation, visit nature.
No explicit purpose.

SECONDARY MOBILITY NEEDS
Social/affective Needs
e.g. The need for independence, control, to be seen as normal.
Linked to status, roles, identity, self-esteem. Impression management

PRIMARY MOBILITY NEEDS
Practical/utilitarian Needs
e.g. get from A to B as safely, reliably, cheaply and comfortably as
possible.

Source: Musselwhite, C. and Haddad, H. (2010). Mobility, accessibility and quality of later life. *Quality in Ageing and Older Adults*. 11(1), 25-37.
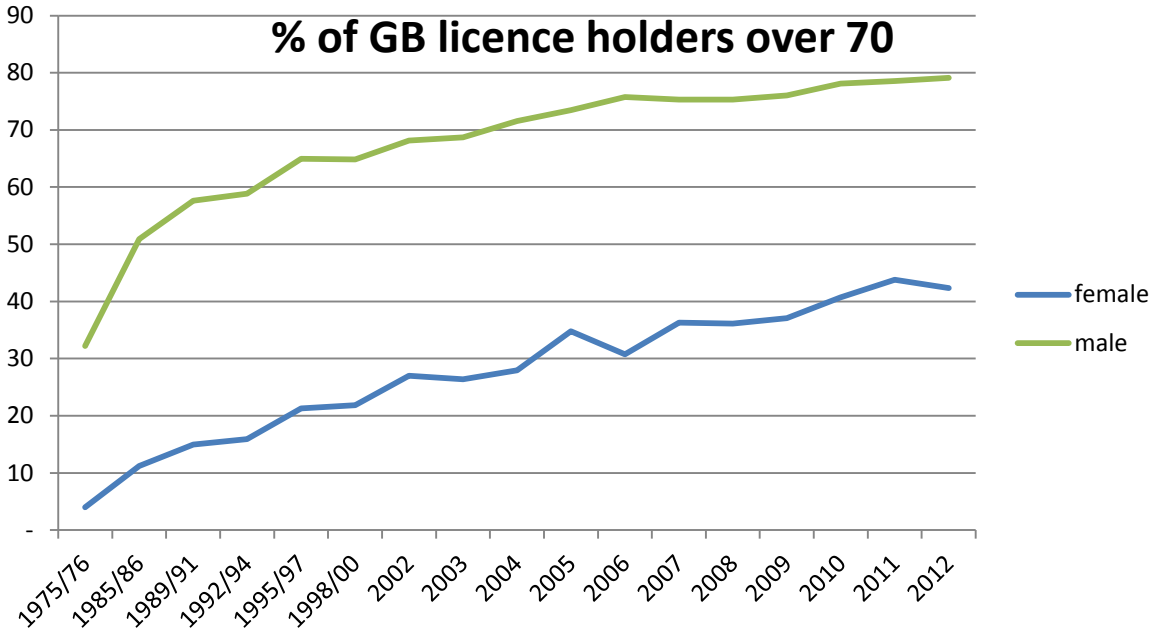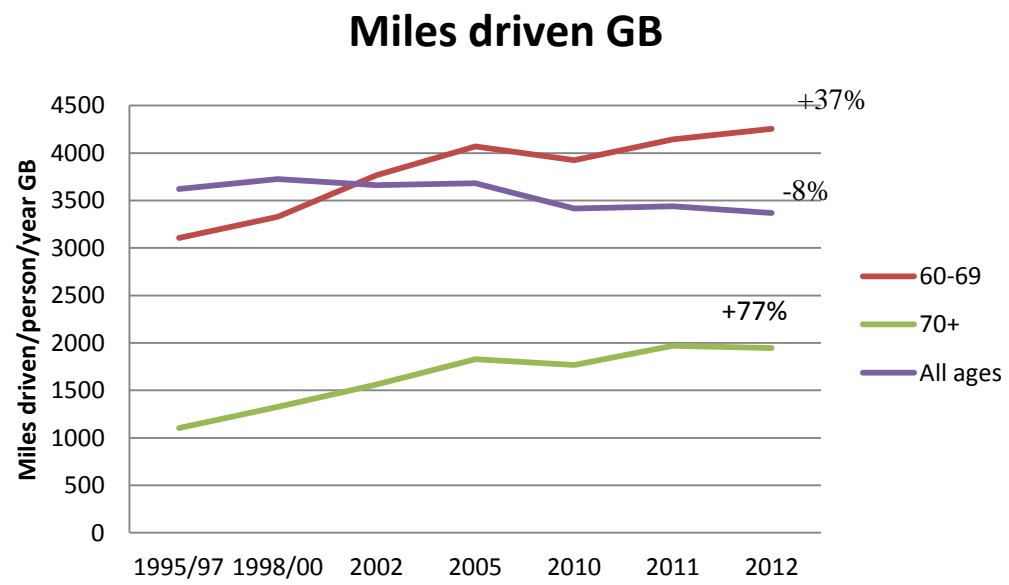
Older people are more healthy and active as a cohort than ever before and as such are also more mobile (Tomassini, 2004).

Increasing hypermobile society, where services, shops, work and families are increasingly dispersed
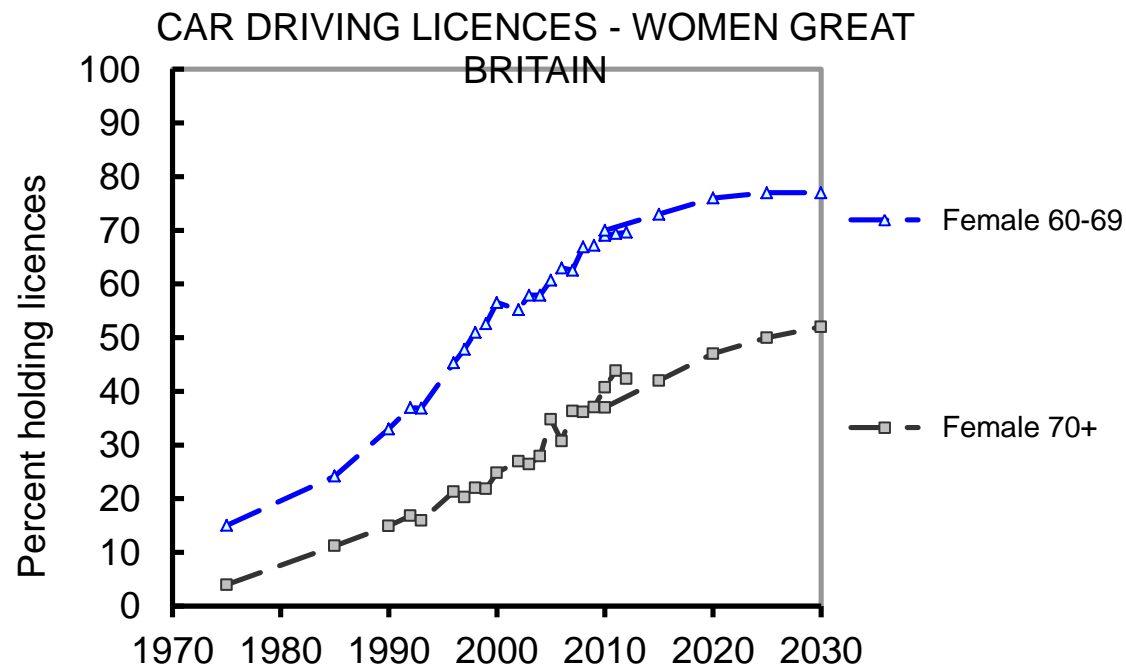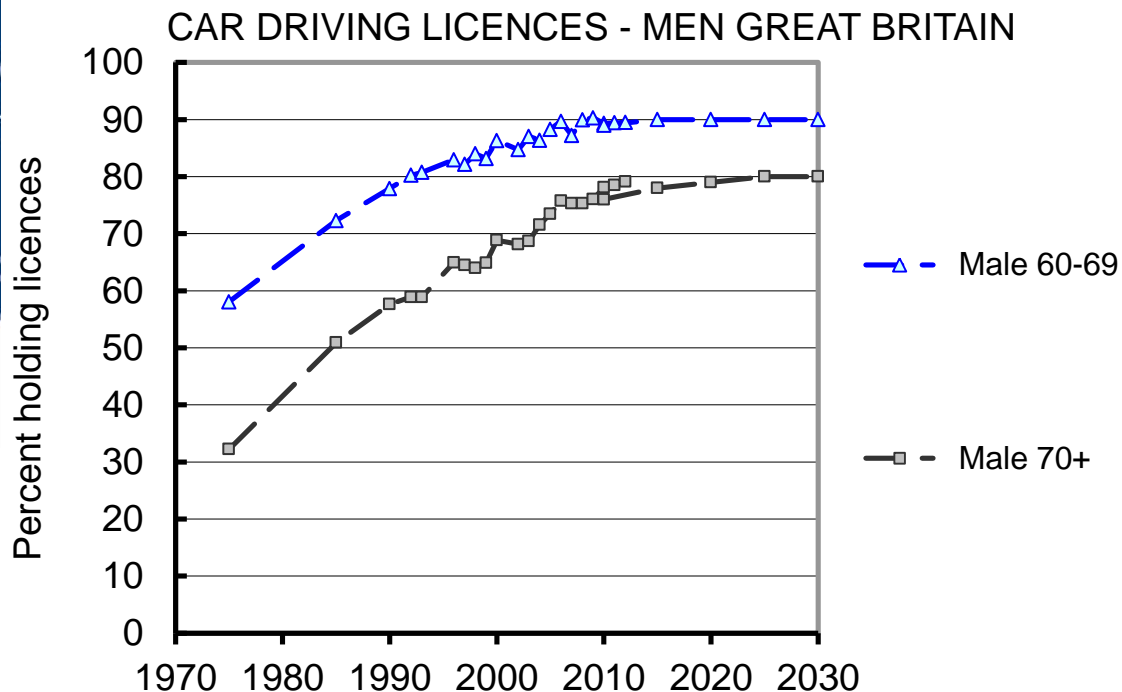
Increasingly reliant on the car

% of GB licence holders over 70

Growth in % **licence holders** over 70 years

Miles driven GB

More **miles** driven per person

- Estimate of 10,000,000 drivers over 70 by 2030

- But is it necessary?

CAR DRIVING LICENCES - MEN GREAT BRITAIN

Male 60-69
Male 70+

CAR DRIVING LICENCES - WOMEN GREAT BRITAIN

Female 60-69
Female 70+

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% reporting easy to access

Legend:
- 65+
- 25-64
- 16-24

Categories (top to bottom):
- Your place of work
- A pharmacy or chemist
- A castle or other heritage site
- Local schools
- A cultural or recreational facility
- A library
- Civic amenity sites
- Recycling facilities
- Public transport
- Dentist
- Shopping facilities

X-axis: - , 20.0, 40.0, 60.0, 80.0, 100.0
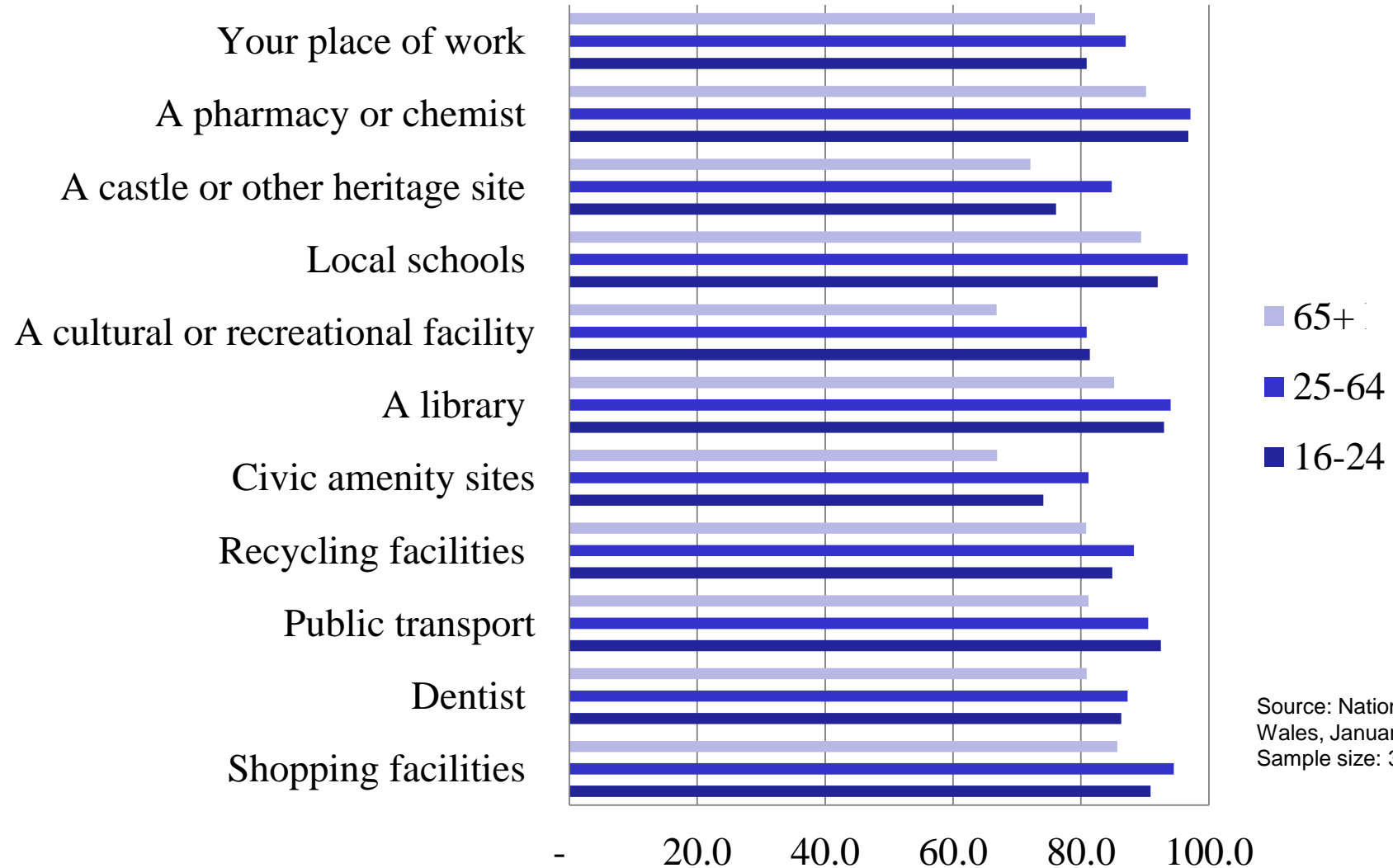
Source: National Survey for Wales, January - March 2012
Sample size: 3,500

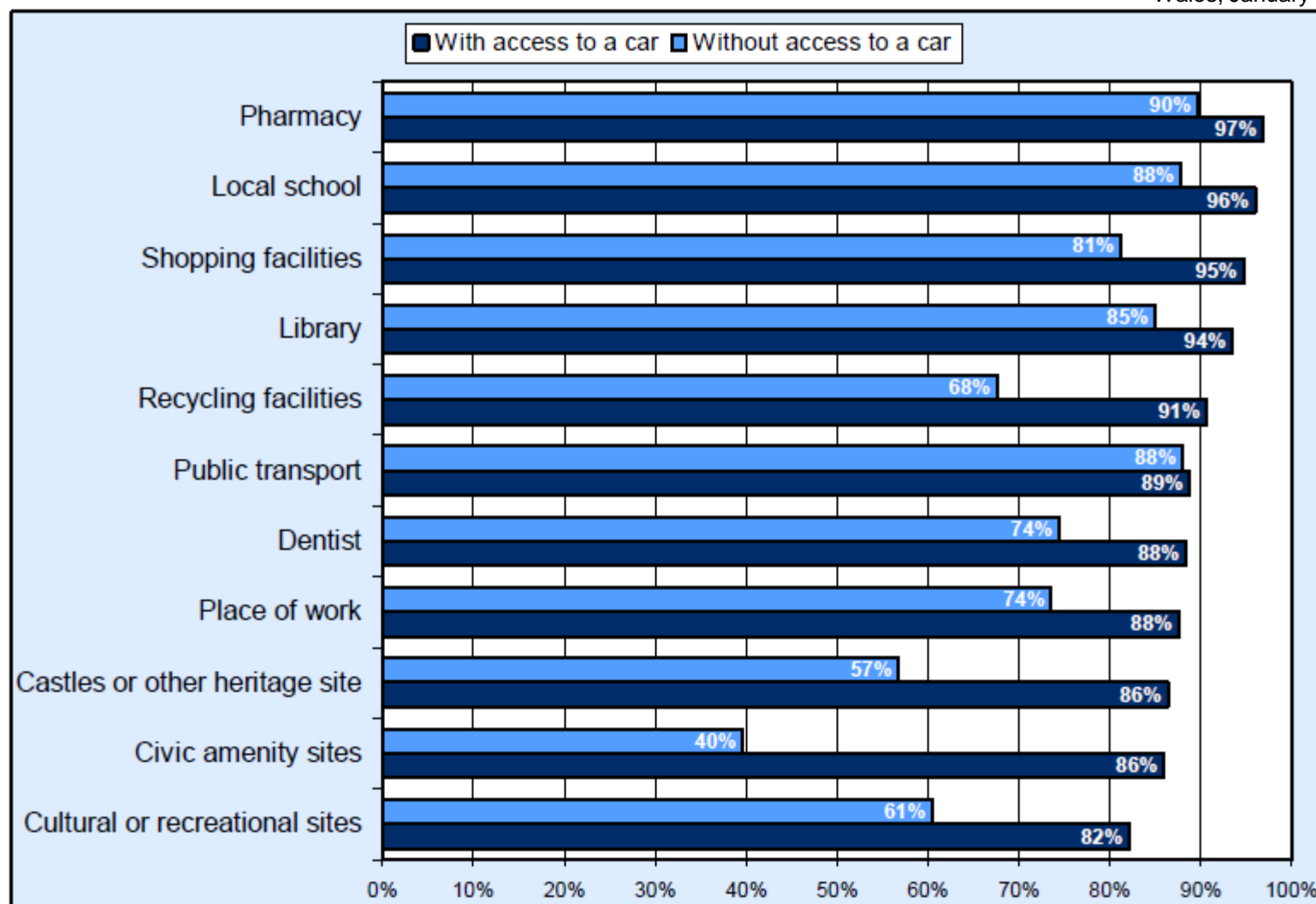# PRIMARY MOBILITY NEEDS
Practical/utilitarian Needs
e.g. get from A to B as safely, reliably, cheaply and comfortably as possible.

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Particular issue around not having a car

Chart legend: ■ With access to a car ■ Without access to a car

Facility	Without access to a car	With access to a car
Pharmacy	90%	97%
Local school	88%	96%
Shopping facilities	81%	95%
Library	85%	94%
Recycling facilities	68%	91%
Public transport	88%	89%
Dentist	74%	88%
Place of work	74%	88%
Castles or other heritage site	57%	86%
Civic amenity sites	40%	86%
Cultural or recreational sites	61%	82%

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- Those with **mobility difficulties** make 36% fewer trips
  - Especially those 70 years+ (Nat Travel Survey GB, 2012)

- 39% of 70 years+ had problems walking or using a bus,
  - (4% for those aged16-49) (DfT, 2010a)

- 11% of people with a **long-term illness** found it difficult to get to/from GP surgery,
  - 2% for those without a long-term illness. (Nat.Survey Wales, 2013)

- **Availability of services**: c.79% take up statutory bus concession (c.50% in rural areas)

- 76% of people felt **safe** on public transport after dark.
  - Older people felt less safe than younger people and women felt less safe than men. (Nat.Survey Wales, 2013)

A reduction in mobility can result in an increase in isolation, loneliness and depression and an overall a poorer quality of life.

"You can't ask other people to take you out for "a drive". They'd think you'd lost their senses. Anyway they have got better things to be doing with their time, then ferrying me about just for the sake, like"
(female, gave-up driving at 80)

TERTIARY MOBILITY NEEDS
Aesthetic Needs
.g. The need for the journey itself for relaxation, visit nature, use and test cognitive skills

On giving-up driving this level of needs is adversely affected
Not so easy to ask for discretionary travel

"It's hard to explain I suppose. You just don't seem like you belong. I suppose yes there are feelings that you might be ready for the scrapheap now. The first step to it, you know"
(Male, given-up driving at 76)

SECONDARY MOBILITY NEEDS
Social/affective Needs
. The need for independence, control, to be seen as normal.
d to status, roles, identity, self-esteem. Impression management

On giving-up driving this level of needs is adversely affected
Isolation, no longer part of society, no longer feel normal

"*Well Dorothy and David from number 3 take me shopping every week, we all go, we have a bit of a time of it you know, it's a kind of outing. I never expected that.* "*(*Female, gave-up driving at 80)

PRIMARY MOBILITY NEEDS
Practical/utilitarian Needs
g. get from A to B as safely, re...bl...b...l......f......bl...
pos...

On giving-up driving –
this level of need is usually me...
- friends
- accessible transport
- public transport
- teleshopping?

Source: Musselwhite, ... (2010). Mobility, accessibility and quality of later life. *Quality in Age...*

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Successful stories

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	LONG TERM 7(2m; 5f)	SHORT TERM 8 (4m; 4f)	REACTIVE 6 (6m; 0f)
1st stage **Trigger**	The trigger is associated with external social events	Respected family member	Health condition Keys taken by relatives
2nd stage **Info Gathering**	**Meticulous planning** (no near-by family and friends or fiercely independent)	**Don't gather much information, at all** (Trail and error ; Rely on lifts; Reciprocation)	**They were not actively searching for information** (All had relied on others to tell them about walking and using public transport. That type of transport is not for them)
3rd Stage **Consolidate**	Largely trial and error. Enjoy a challenge	Supportive family&friends	Bitter and angry

HIGHER QoL		LOWER QoL
"I've re-discovered my local area. Which is great. I forgot what the village has to offer. In fact I think it is better than a few years ago. But not using the car has forced me to use more local things." (female, 75) *"The bus out is a real bit of fun. I go on it with friends... and we have a day out" (female, 70)*		*"I don't go to football no longer. I'd need to change buses and can't be doing with the palaver" (male, 85)*

Musselwhite, C.B.A. & Shergold, I. (2013). Examining the process of driving cessation in later life. *European Journal of Ageing.* **10(2),** 89-100
Parkhurst, G., Galvin, K., Musselwhite, C., Phillips, J., Shergold, I., Todres L. (forthcoming) Beyond Transport: Understanding the Role of Mobilities in Connecting Rural Elders in Civic Society in Hennesey, C., Means, R., Burholt, V., (Eds). *Countryside Connections: Older people, Community and Place in Rural Britain.* Policy Press, Bristol.

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You don't have to use a car but it helps if...

There is a **safe public** realm for walking

There is a **desirable** public realm for walking

Quality public transport is provided

Alternatives consider the immediacy of the car

People's local community is desirable

There are replacements on the Internet to reduce actual mobility

You live in an urban area?
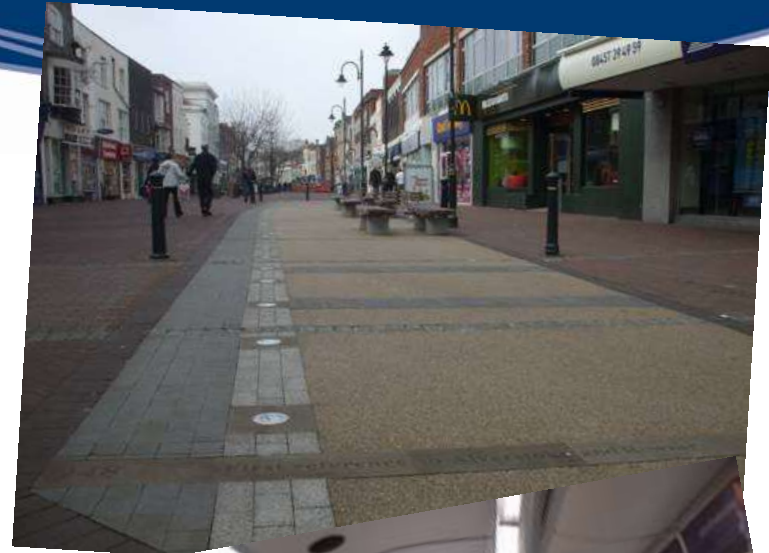
There is a safe public realm for walking

Literal   Pedestrian

Over 60s in GB	GB
Population	22.04%
Pedestrian mileage	19.05%
Killed	**40.62%**
Serious	21.01%
Slight	12.23%
All	14.94%

Figure 2.8b Rates per journey for casualties killed and seriously injured (KSI) as pedestrians and car drivers - men and women - Britain 2008
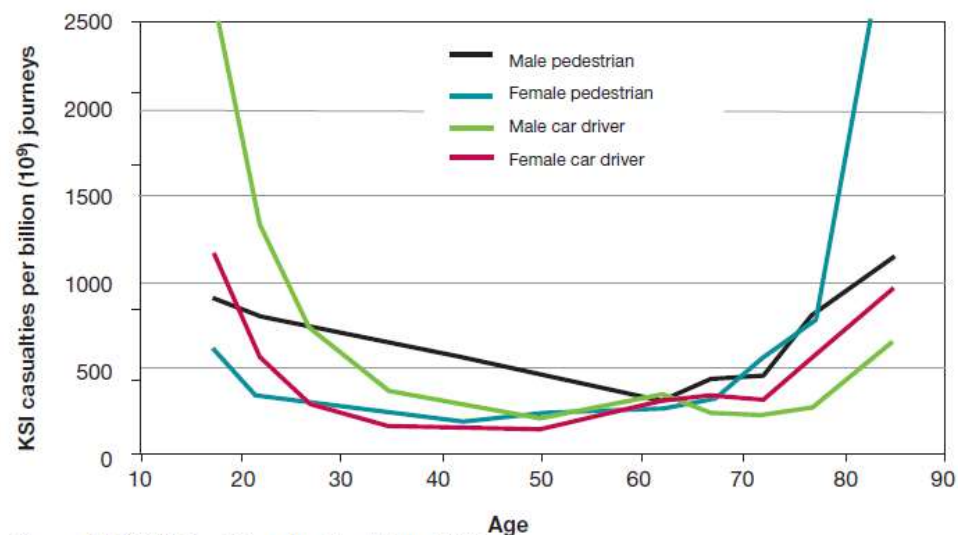
Source: DfT (2009) Road Casualties Great Britain 2008

Figure 2.1b Percentage of casualties aged 80 and over – Britain 2008

4.6% population aged 80 and over
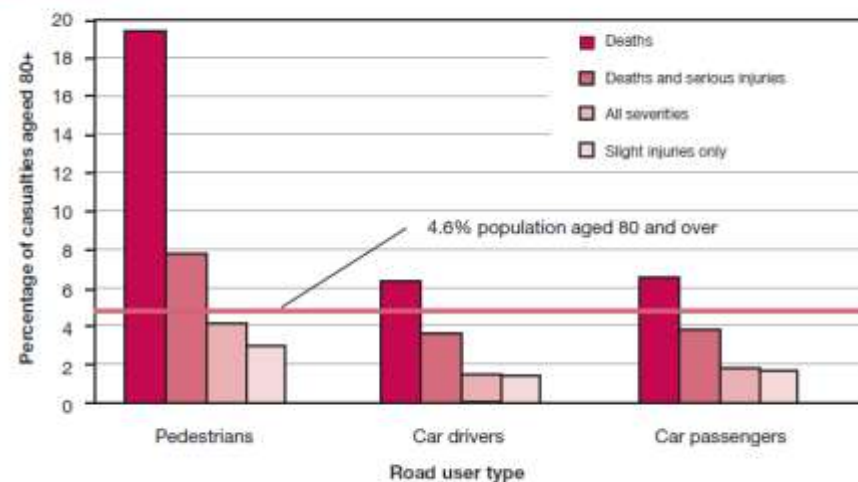
Source: DfT (2009) Road Casualties Great Britain 2008

There is a desirable public realm for walking

Literal

Pedestrian

Mean = .95
Std. Dev. = .216
N = 365

DfT Minimum crossing speed 1.22m/s (88% not walking fast enough!)
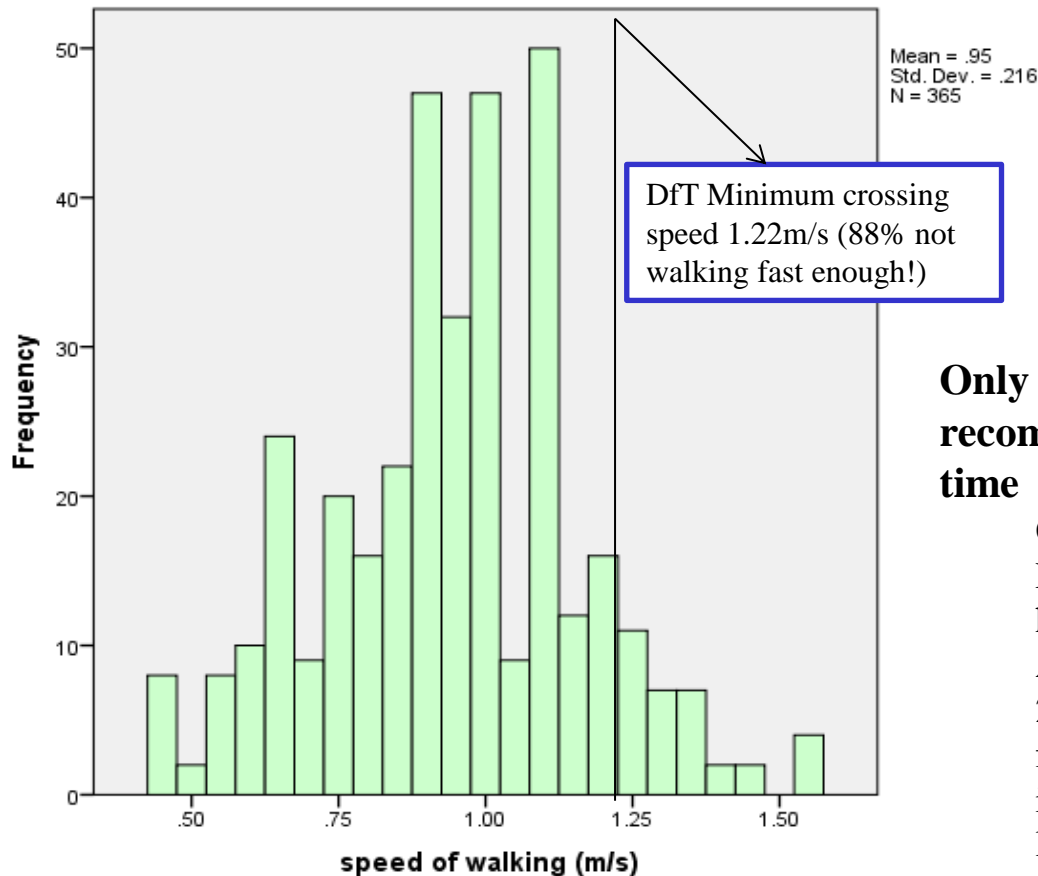
Only 11% walk as fast or faster than DfT recommendations for pedestrian crossing time

Only 6% of females

Faster if higher socio-economic background, healthy and confident

Agrees with previous research (Asher et al., 2012, Newton and Omerod, 2007).

fear of not being quick enough to cross the road is known to restrict people leaving the home or limit their accessibility when out and about (IDGO 2013; Lord et al., 2010; Zijlstra, 2007).

Musselwhite, C.B.A. (2014). Environment-person interactions enabling walking in later life Proceedings of the 46th Annual UTSG Conference, Transport Operations Research Group, Newcastle University, 6th January

There is a desirable public realm for walking

TERTIARY TRAVEL NEEDS
Aesthetic Needs
Pleasantness/desirability of neighbourhood open spaces (trees, plants, waterscapes)
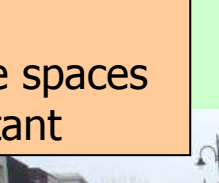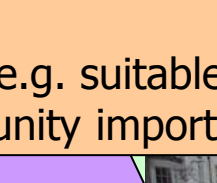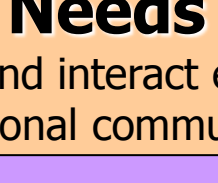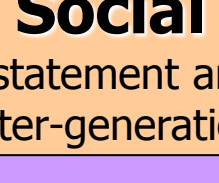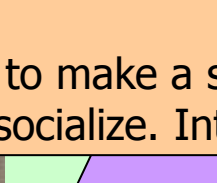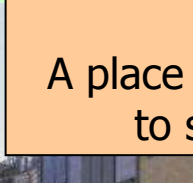
SECONDARY TRAVEL NEEDS
Social Needs
A place to make a statement and interact e.g. suitable spaces to socialize. Inter-generational community important

PRIMARY TRAVEL NEEDS
Practical Needs
Large, open, un-crowded, low level of noise. Lack of nuisance. Well maintained paths for movement. Facilities and amenities.

Objectives of Urban Design

Solutions (after Mitchell and Burton, 2006)

Distinctive and aesthetically pleasing – somewhere you want to go and spend time – feel you want to be there

Safe space – feel you are safe there

Accessible space. Sharing space – feel you have room to move, space to dwell for safe interactions with other users

Legible place. Psychological attachment and legitimacy - feel you should be there

CABE & DETR (2000) *By Design* :Urban design in the planning system:towards better practice

| Character |
| Continuity and Enclosure |
| Quality of the public realm |
| Ease of Movement |
| Legibility |
| Adaptability |
| Diversity |

Quality public transport is provided

Literal

Bus use

- Consider practical accessibility issues
- Consider social and aesthetic elements
- Need to know
  - the norms
  - Informal
  - formal

Older people's concerns with bus travel (after Musselwhite 2010; Musselwhite and Haddad, 2007)

Formal information
Alternative transport provided locally
Timetable of buses
Location of bus stops
Walking area
Real time information
Informal information
Does the bus leave when it says it does?
Ease of carrying shopping/luggage on a bus?
Ease of getting a seat on a bus?
State of the pavements for walking?
Provision of benches, formalised crossing areas, toilets etc.
Feeling of safety using transport/walking?
Attitude of bus driver

Problems	% 70yo+ who agree
Personal security in evening & night	79.8
Public transport running late	68.3
Having to wait	68.0
Difficulties carrying heavy loads	66.3
The possibility of cancellations	66.0
Behaviour of some passengers	63.5
Lack of cleanliness	53.8
Having to be out in bad weather	53.8
Having to change transport	53.3
Difficulties travelling where I want to	50.0
Difficulties travelling when I want to	48.1

Ten most frequent barriers for respondents aged over 70 years, with the proportion of that age-group who reported each as a 'problem' (after Gilhooly, et al. 2002)

Potential

- Metz (2000)
  - Use if necessary
  - Drive few miles but keep car despite cost
  - *"potential travel - knowing that a trip could be made even if not actually undertaken"* is an important element of mobility. (pg 150)
- Davey (2007)
  - the possible need to travel at short notice to respond to family emergencies, or "journeys 'on a whim' for pleasure or aesthetic enjoyment". (pg. 50)
- Andrews (2011) – free bus pass
  - it works someway to creating a sense of freedom and independence for travel unconstrained by financial burden.

I kept my driving licence, there is no reason why I shouldn't.... but I consider that my reflexes aren't good enough for driving, I don't need to drive, she can drive, but I kept my driving licence in case there was an emergency and I had to drive" (Male 80s)

"....it is actually a social thing because you meet up with people and you can sit there and admire the view on the way. It's like being chauffeur-driven on the bus. You can stop for coffee and sandwiches... I haven't done it myself. (Male late 60s)

There are replacements on the Internet to reduce actual mobility

Virtual

Webcams

Virtual Environments

**TERTIARY TRAVEL NEEDS
Aesthetic Needs**
The need for relaxation, visit nature, test cognitive skills

Least awareness

Social networking

**SECONDARY TRAVEL NEEDS
Social Needs**
The need for independence, control, status, roles

Shopping online

E-health

Tele-working

**PRIMARY TRAVEL NEEDS
Practical Needs**
Make appointments, access shops and services, work

Most awareness

Potential

- Increase in technology and networking
- Increased accessibility
- Increased use – buying, talking, making friends, "visiting", watching, interacting
- Own time

Challenges

- What is missing from the "virtual" world compared to "reality"?
  - Touch, smell, sense, continuity, impression managed, staged
  - Informal, random, chance meetings
- Equal access?

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"I will order stuff on the Internet rather than going to town to buy it, so I don't make that journey and it is just so much simpler on the Internet. Somebody else comes and drives and delivers it to your door (Male 60s)."

"I certainly see more of my grandson because of Skype (Female 60s)."

"If I couldn't get to places..., although I've got a computer, I would stagnate. Because I like the social aspect of things. And I like the different characters you come across and it stimulates your thinking and makes life worthwhile to be able to go out and meet others (Male 70s)"

Parkhurst, G., Galvin, K., Musselwhite, C., Phillips, J., Shergold, I., Todres L. (forthcoming) Beyond Transport: Understanding the Role of Mobilities in Connecting Rural Elders in Civic Society in Hennesey, C., Means, R., Burholt, V., (Eds). *Countryside Connections: Older people, Community and Place in Rural Britain.* Policy Press, Bristol.

I would miss not getting out and about. But look at the view from my garden of the fields. Look at it. If I really couldn't go out again I'd be a lot more better off than other people and other people in urban areas (Po2).

Dunroamin

'As far as I am concerned, I have spent 40 years of my life overseas anyway so I have no desire to go to these places or to move around" (Male Dyfed)

"look out my window don't you think I am very privileged.... people have got pictures like that hanging on their walls...I sit by here and I see the changing seasons and the sunrise on it...." (Female 80s)
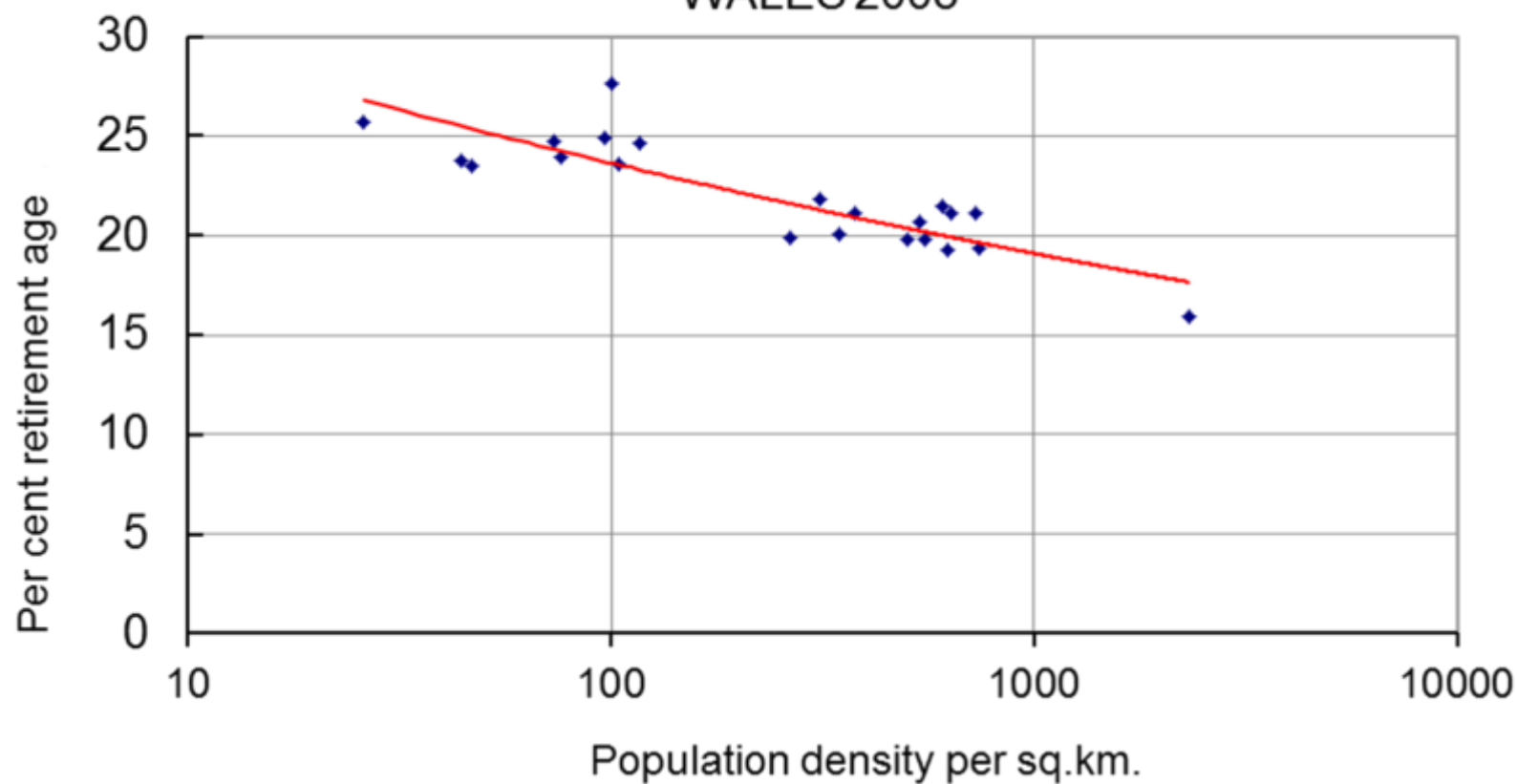
Parkhurst, G., Galvin, K., Musselwhite, C., Phillips, J., Shergold, I., Todres L. (forthcoming) Beyond Transport: Understanding the Role of Mobilities in Connecting Rural Elders in Civic Society in Hennesey, C., Means, R., Burholt, V., (Eds). *Countryside Connections: Older people, Community and Place in Rural Britain.* Policy Press, Bristol.

Needs for travel Rural area

Rural provision

Imaginative/Dunroamin'

e.g. ... and

e.g. The ne... ... as normal.
Linked to status, ...ssion management

e.g. ge... ...ly as

PRI... ...EDS

Sporadic alternative provision, distances to overcome, loss of local shops

Musselwhite, C. and Haddad, H. (2010). Mobility, accessibility and quality of later life. *Quality in Ageing and Older Adults*. **11(1),** 25-37.

You live in an urban area?
Not necessarily!

Urban provision

TERTIARY MOBILITY NEEDS

e.g. T...se and

Seen as discretionary

Needs for travel urban area

SEC... EDS

e.g. The nee... Linked to stat...en as normal. ...on management

e.g. ...as

Good proximity to services, variety of alternatives to the car

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Musselwhite, C. and Haddad, H. (2010). Mobility, accessibility and quality of later life. *Quality in Ageing and Older Adults*. **11(1),** 25-37.

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Conclusion

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- to be mobile is to participate in society

- movement may not have an explicit, conscious purpose

- there are physical and mental health benefits to maintaining walking, cycling and public transport

- **All of these are important to quality of life and wellbeing in later life**

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Recommendations

1. Recognising the importance of travel beyond the need to get from A to B – role for policy and practice to embrace the social and aesthetic needs

2. Recognising the importance of considering the need for giving-up driving early-on in life and the need to give-up gradually and ensuring locus of control stays with the individua;

3. Making alternatives physically accessible but also psychologically desirable

4. Helping people learn the norms associated with travelling by other means than the car

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