

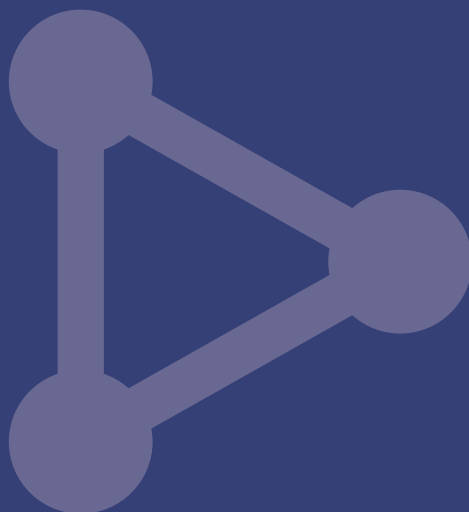
## **Policy Implication 7.1**

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# **Connectivity will be increasingly crucial to the health and wellbeing of the ageing population.**

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It should be considered in a holistic way which includes physical mobility, transport, the built environment, the virtual world and the physical virtual intersection.



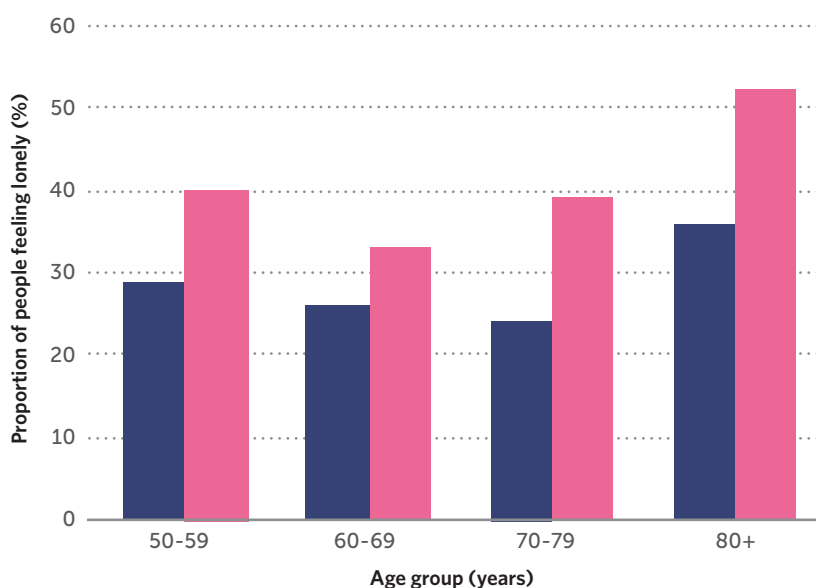
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 **Foresight**

A large proportion of older people 'feel lonely some of the time or often', with the oldest being most likely to feel this way.



*The proportion of people feeling lonely some of the time or often by age group and gender in the UK 2009-2010*



Gender: ● Men ● Women

Source: ILC (2015) The links between social connections and wellbeing in later life



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 Foresight

7.1a

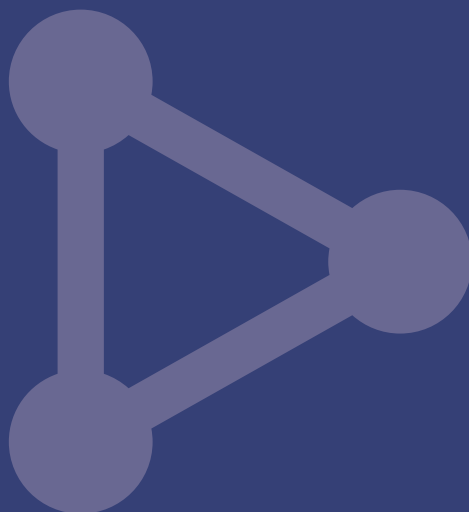
## Policy Implication 7.2

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# Different age groups have particular challenges remaining well-connected.

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Transport and other mobility policies should be sensitive to this diversity and to the growing numbers of older people living in rural and semi-rural areas.

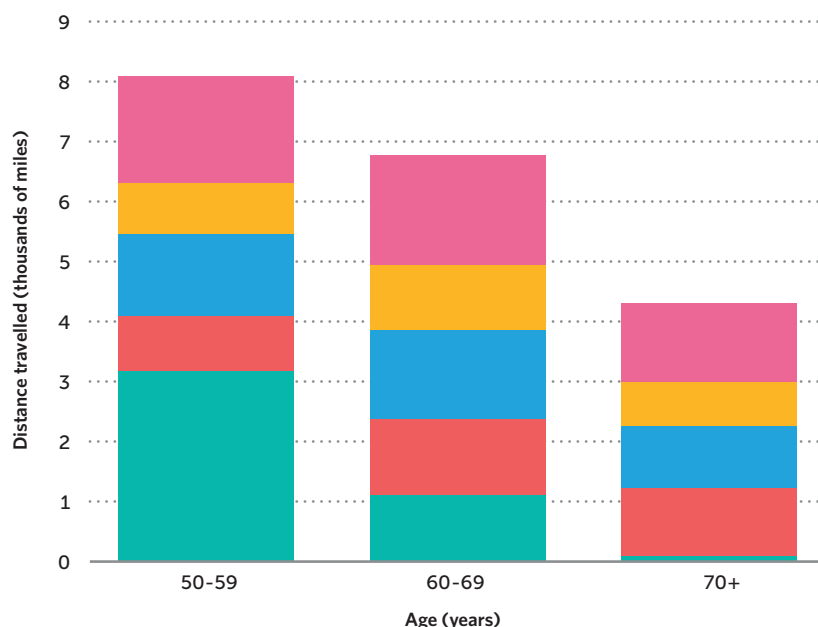


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 Foresight

# Travel habits change over the life course, with method and distance travelled changing.

 *Miles travelled per person per year by age and purpose, England, 2014*



**Purpose of travel:**

 Commuting/business
  Shopping
  Visit friends
  Holiday
  Other

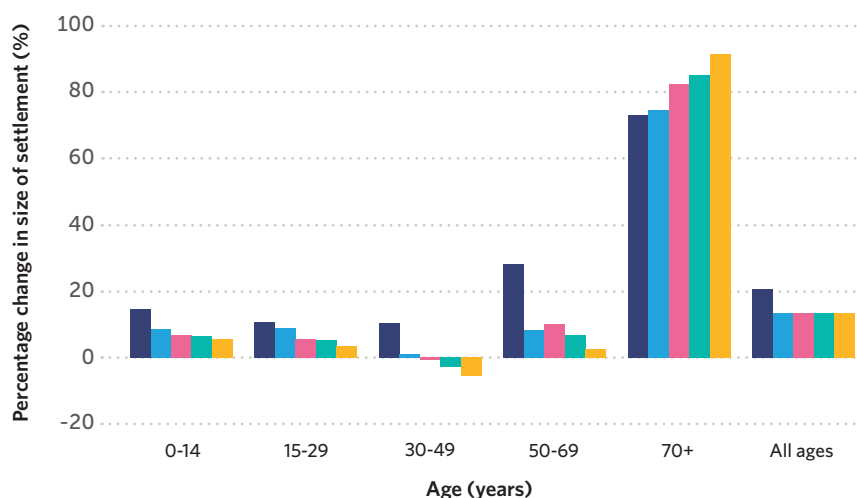
**Source:** ONS (2015) Travel by age and gender (NTS06)



# All parts of the UK are ageing but the effect will be most pronounced in small towns and rural areas.



## Projected percentage change in size of age groups, 2012-2037 for five settlement types, UK



### Settlement type:

● Major Cities 
 ● Large Cities 
 ● Small Cities 
 ● Large Towns 
 ● Small Towns and Rural

Source: Champion, T. (2015) Foresight evidence review



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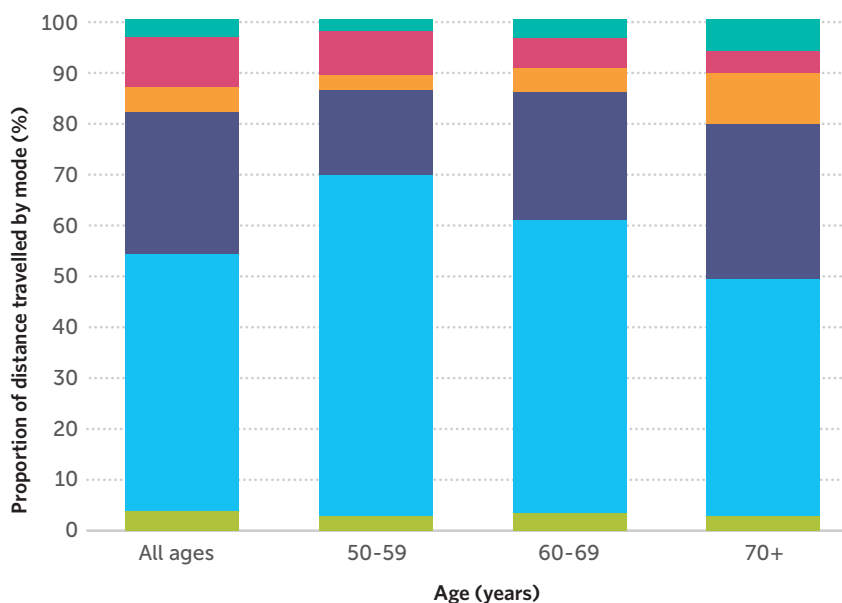
Foresight

7.2b

# As people enter older age groups they become more dependent on other people for transport



*Proportion of distance travelled per person per mode of transport by age group, England, 2014*



**Transport mode:**

● Walk/Cycle 
 ● Car Driver 
 ● Car Passenger 
 ● Bus 
 ● Rail 
 ● Other

**Source:** ONS (2015) Travel by age and gender (NTS06)



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**Foresight**

7.2c

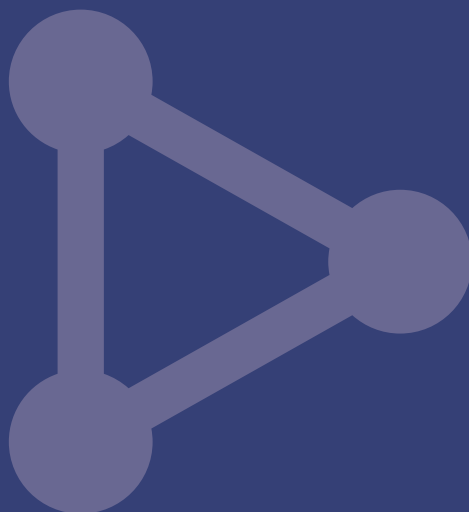
## Policy Implication 7.3

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**Design of the built environment can enable older people to access their neighbourhood and surrounding areas, leading to increased activity levels, better health, and improved quality of life.**

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The built environment is most likely to facilitate this if it is underpinned by inclusive design, and considers the needs of all users.



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Factors throughout a journey, from planning to arrival, determine how it is experienced and how likely a person is to repeat it. For example, inclusively designed buses are less likely to be used if the pavement next to the bus stop is poorly maintained and does not allow easy access.

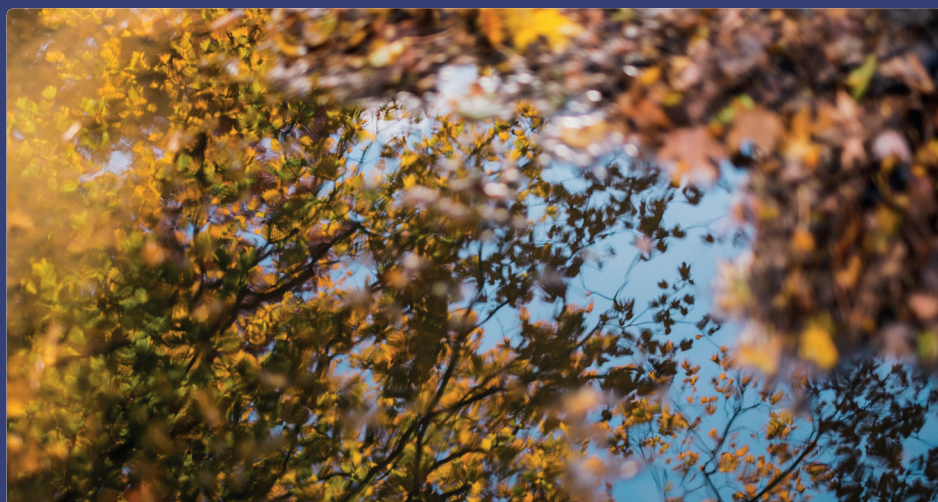


**Source:** DCLG (2011) Lifetime neighbourhoods





Older people report various factors that impact on access to their wider neighbourhood including lack of seating and public toilets, the condition of pavements, lack of provision of local shops, fear of crime, fear of going out after dark, lack of space for community activities, and major roads acting as barriers



**Source:** Southway Housing Trust (2013) Old Moat: Age-friendly Neighbourhood Report



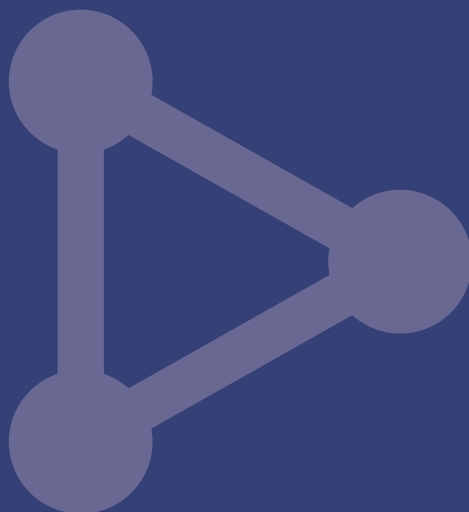
## Policy Implication 7.4

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**Technology can help to provide the solutions to challenges faced by the ageing population, and help to realise the benefits of longer lives.**

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Barriers that need to be addressed include a lack of skills and access, high cost, and older people's assumptions about technology's usefulness and affordability.



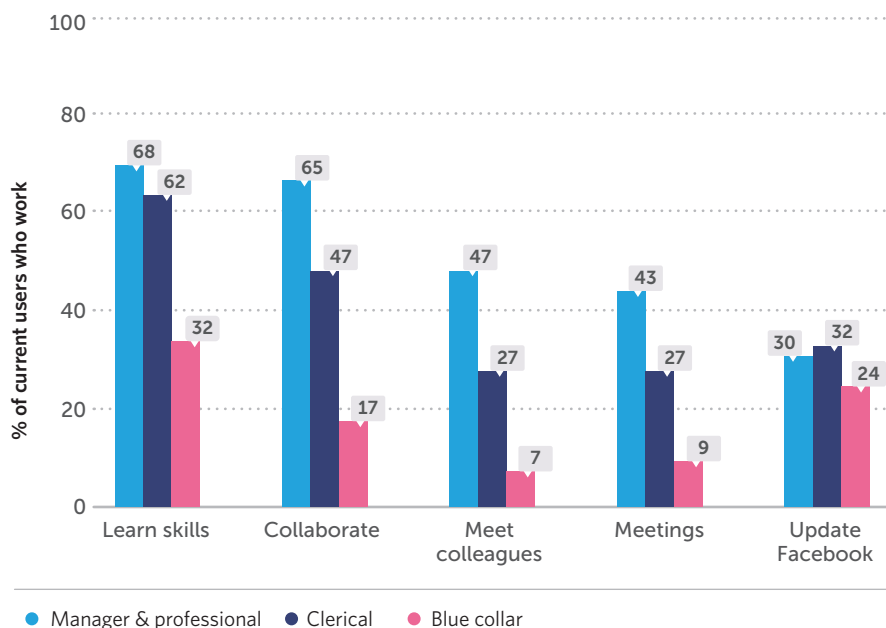
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 **Foresight**

# Different socio-economic groups have different levels of internet use at work.

If Information and Communications technology skills become increasingly necessary in more jobs in future, individuals may need to up skill.

## Internet activities at work by occupation



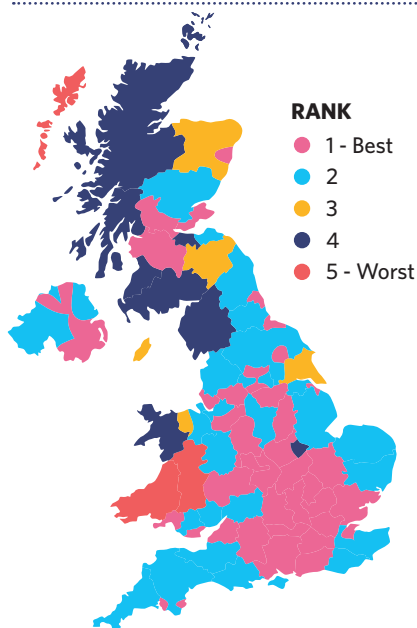
**Source:** Oxford Internet Surveys (2013) Cultures of the Internet: The Internet in Britain



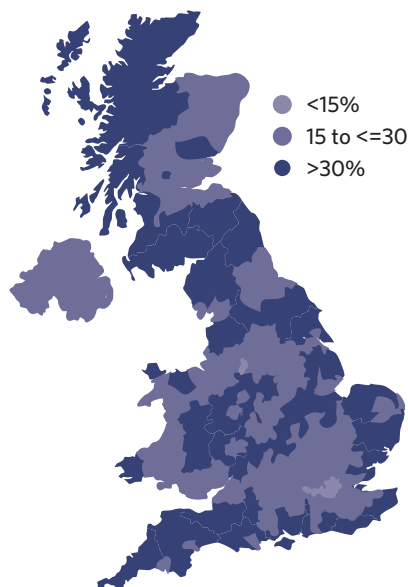
In areas such as mid-Wales and West Scotland, older than average populations coincide with areas with poor Internet connectivity.



**UK Fixed Broadband Map 2013**  
showing overall broadband  
performance by administrative  
authority



**Projected proportion of  
population aged 65 and over  
in UK local authorities, 2037**



**Sources:** Ofcom (2013) UK Fixed Broadband Map | ONS (2014) Subnational population projections for England: 2012-based



# Older people disproportionately live in rural areas which often have poorer levels of internet speed.

## Areas in England with highest rates of access to less than 2 Mbits/s, 2013



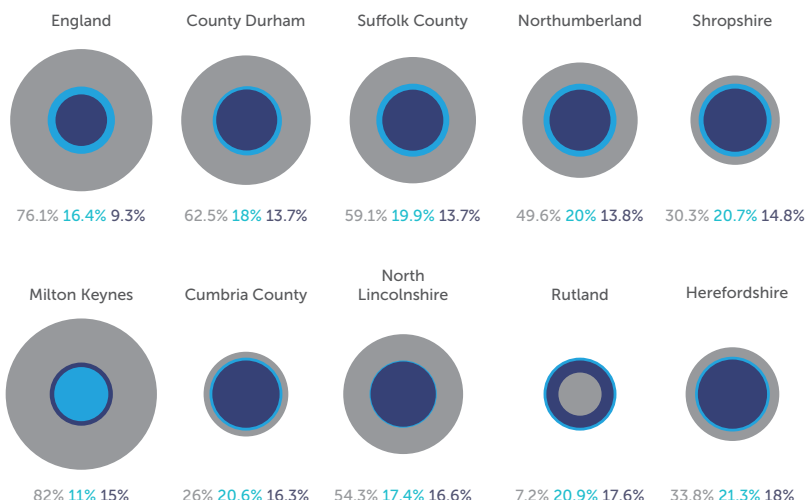
% of population with available Next Generation access (NGA)



% of population who have modem sync speeds less than 2.2 Mbit/s



% of population 65 years +



**Source:** Ofcom (2013) UK Fixed Broadband Map | ONS (2013) 2011 Census: Population and household estimates for the United Kingdom, March 2011

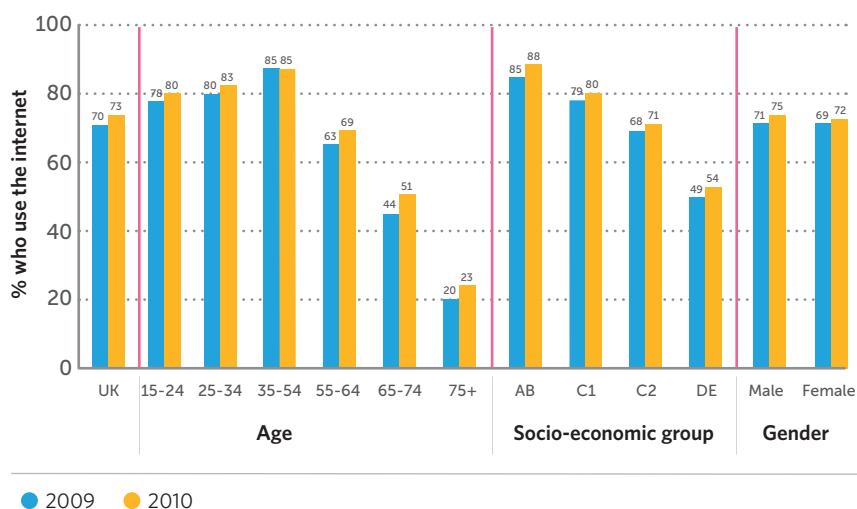


# There is a “digital differentiation” in access and uptake in the population associated with age, socio-economic status, gender and disability.

Differences in access/uptake may reduce benefits of technology to older people, but also may reduce benefits throughout the population.



## *Home internet access, by age, socio-economic group and gender*



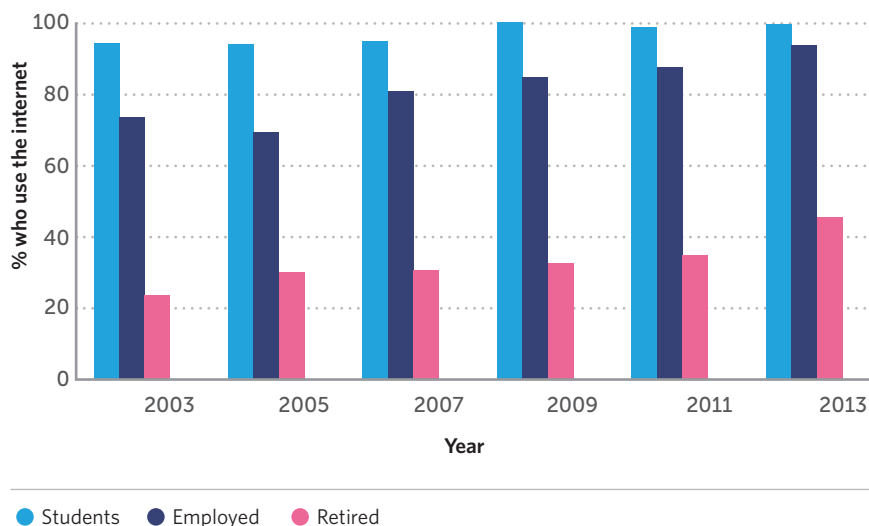
Source: Nominet Trust (2011) Ageing and the use of the internet



# ICT use is increasing in older age. Generational differences may remain, but their nature may alter.

Differences in access/uptake may reduce benefits of technology to older people, but also may reduce benefits throughout the population.

## Use by lifestage

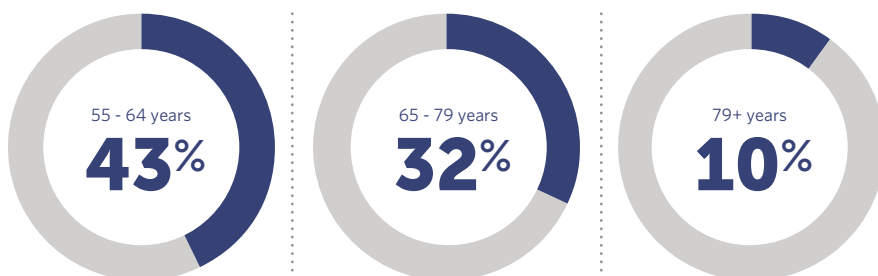


**Source:** Dutton, W. H., and Blank, G. (2013) Cultures of the Internet: The Internet in Britain, Oxford Internet Survey Report



# Retired people do not always use ICT because it is not perceived as relevant to their lives.

% of participants in one study who agreed that "new technologies are very useful"



However, this perception may change because of both the cohort effect and changing technology applications.

Smart phone use in the **over-65** group grew from **2 to 17% between 2010 and 2014**.



**Source:** Ofcom (2015) Adults' media use and attitudes: Report 2015 | Damant, J. and Knapp, M. (2015) Foresight evidence review

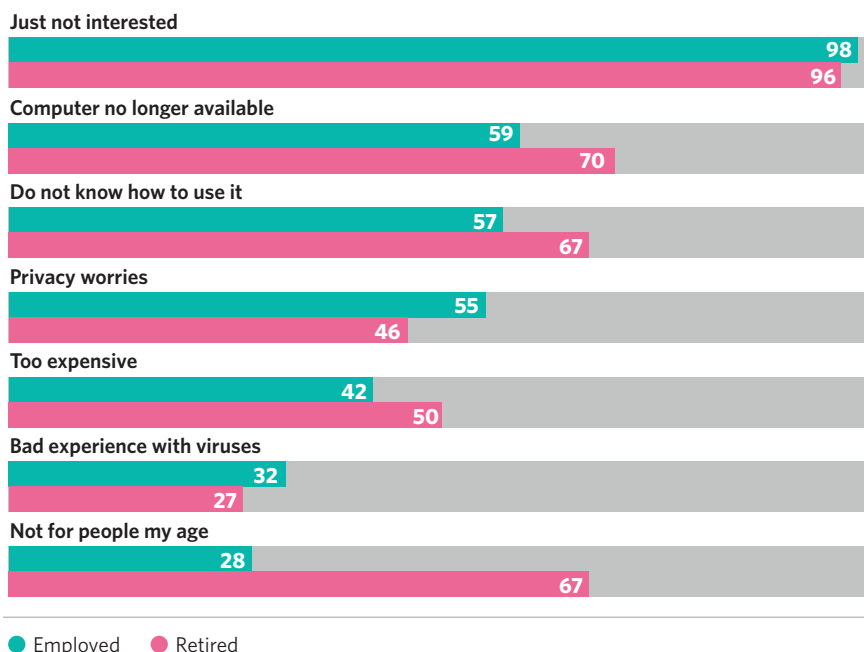




Perceptions of utility of ICT are fundamental in determining usage throughout the population, but there are factors which are particular to older people.



### *Reasons non-users do not use the internet by lifstage*



**Source:** Oxford Internet Surveys (2013) Why do some people not use the Internet?



# Technology can be hard to access or perceived as hard to access.

## Examples include:

Fonts, layouts and colours of web-based applications of some telemedicine systems.

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Insufficient “reach” of certain monitoring and community alarm systems (confining adults to restricted areas within their own homes).

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Bulky, cumbersome and awkward wearable alarms.

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Confusing telecare services; or the poor sound quality of audio equipment posing problems for people with hearing impairments.

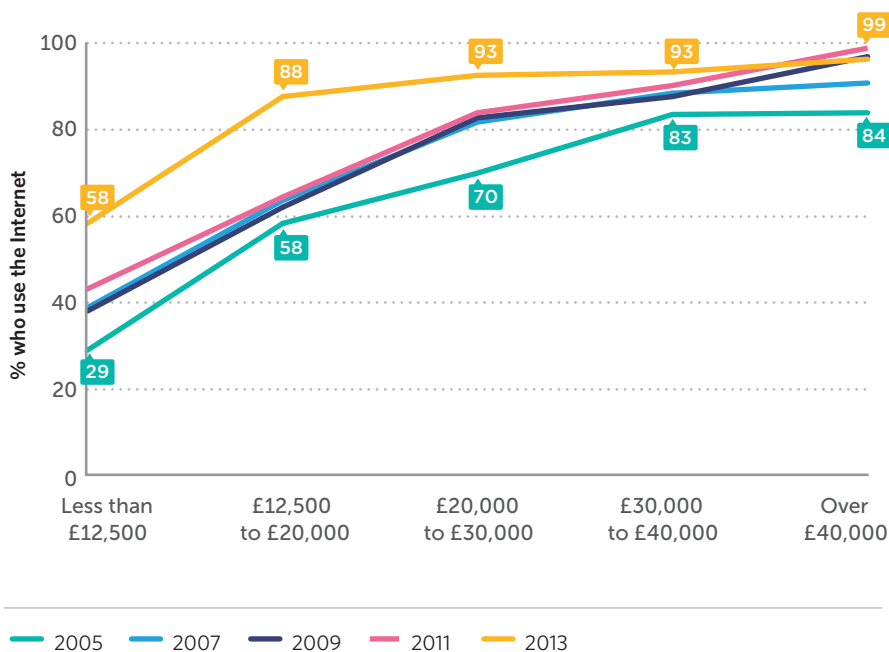


**Source:** Damant, J., and Knapp, M. (2015) Foresight evidence review



# ICT use and ownership are positively correlated with household income.

## Use by household income

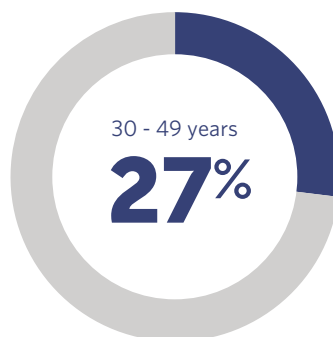
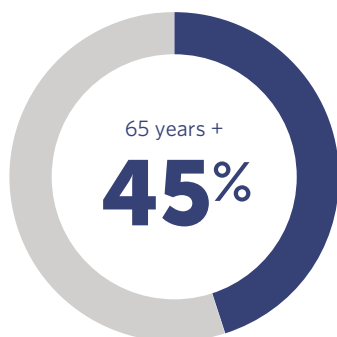


Source: Oxford Internet Surveys (2013) Cultures of the Internet: The Internet in Britain



## Affordability and perceptions of affordability are often rooted in long-established spending patterns and consumer behaviour.

Many older adults, regardless of income, perceive ICT to be a luxury and express or reveal a reluctance to spend money on items that need continual updates and maintenance.



**45%** of people aged 65 years and older with the **highest income-levels** had the **lowest levels of general consumption expenditure**, compared to **27%** of people aged 30 to 49 years.

**Source:** Damant, J., and Knapp, M. (2015) Foresight evidence review | AgeUK (2010) The Golden Economy

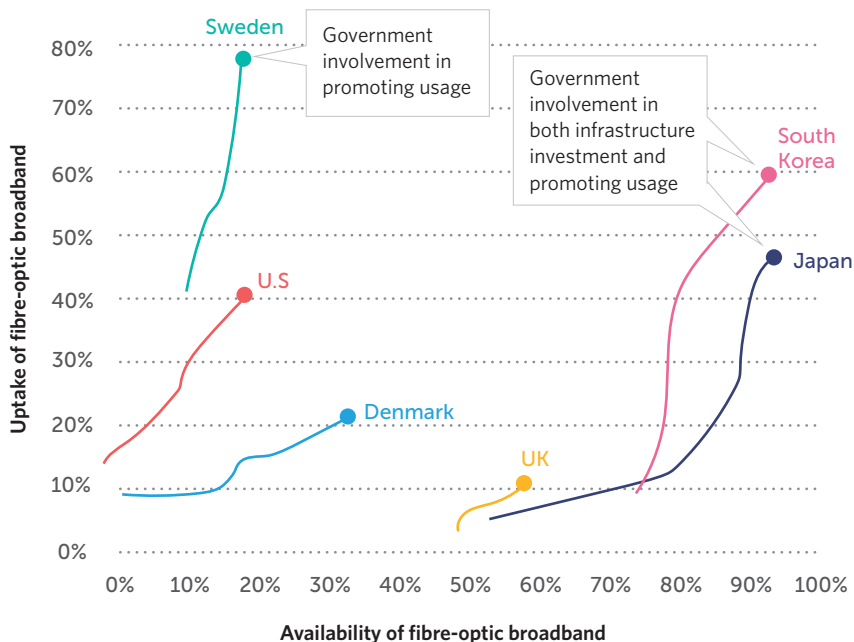


# Technology is market-led in the UK.

Despite fibre-optic broadband being available to over 50% of the UK since 2003, by 2012 **the uptake for fibre-optic was only about 10%.**

The same figures for South Korea in 2012 were over 90% availability and about **60% uptake.**

## Country examples of fibre-optic rollout, 2003-2012

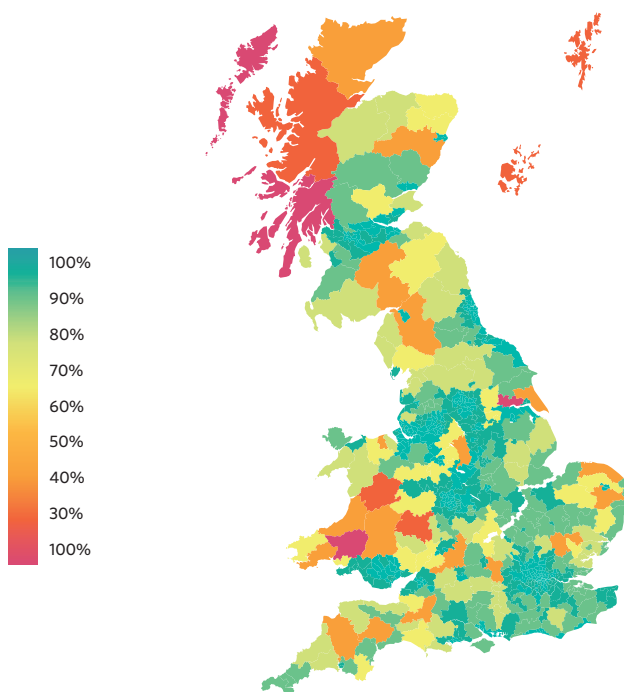


Source: PricewaterhouseCoopers (2012) "This is for everyone": The case for universal digitisation



# There are geographical disparities in access to high-speed Internet across the UK.

## ▶ *Superfast broadband coverage*



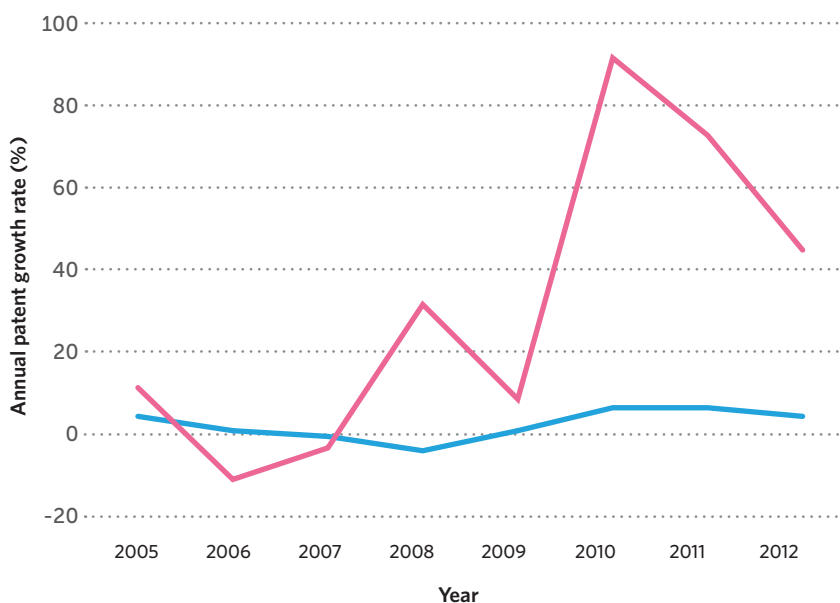
**Source:** Thinkbroadband (2015) Superfast Broadband Coverage



# There has been an increasingly rapid pace of technological change.



*Annual growth of patents granted for all technologies and new generation of ICT, 2005-2012*



— All technologies — New generation of ICT

**Source:** OECD (2015) OECD Science, Technology and Industry Scoreboard 2015



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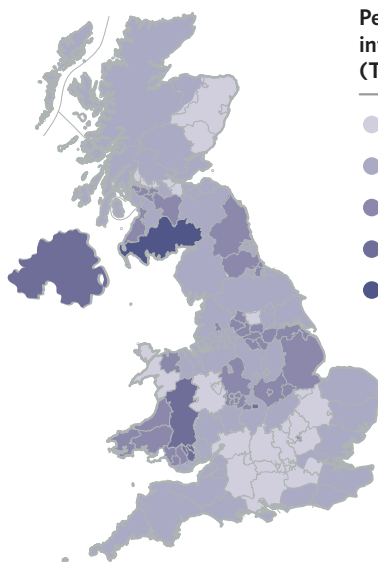
 **Foresight**

7.4m

Across all ages there is 'digital differentiation' in technology uptake within cohorts, with geographical location a factor.



### Percentage of internet non-users



Percentage of internet non-users  
(Total number of areas = 122)

- 4.8 to 9.9 (33)
- 10.0 to 14.9 (52)
- 15.0 to 19.9 (29)
- 20.0 to 24.9 (7)
- 25.0 to 29.2 (1)

Source: ONS (2014) Internet Access Quarterly Update



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🔗 Foresight

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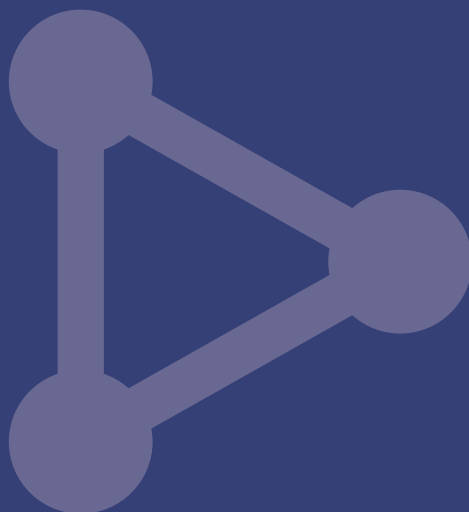
## Policy Implication 7.5

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**Virtual connectivity is increasingly likely to enable physical mobility with a range of benefits for social connections, health, wellbeing and safety.**

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However, there are still likely barriers to the full realisation of these benefits.

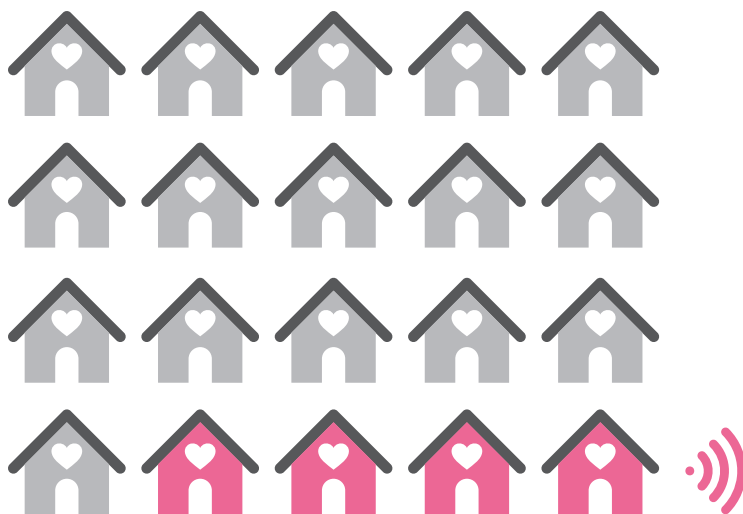


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 Foresight

## Care homes have particularly poor internet access.

Of over 20,000  
care homes in the UK



**only 4,178 (about 25%)  
provide access to the internet**

**Source:** Damant, J., and Knapp, M. (2015) Foresight evidence review



Autonomous vehicles have the potential to increase safe transport across the life course and prolong independent travel later in life.



**Source:** Ormerod, M. et al., (2015) Foresight evidence review





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