

**Study on the travel needs of the
ageing passenger population at
Heathrow**

Final Report

December 2015



Tom Budd

Robert Mayer

Rich Moxon

Romano Pagliari

Contents

Contents	1
Executive Summary	3
1.1 Previous Research	3
1.2 Heathrow senior passenger data analysis	4
1.3 Stakeholder analysis.....	5
2 Background and Policy Context	7
2.1 Definitions	7
2.2 Europe	7
2.3 United Kingdom	7
3 Research Review	10
3.1 What is Ageing?.....	10
3.2 Age-related conditions	11
3.3 The ageing population, transport and mobility	13
3.4 The ageing population and tourism	17
3.5 The impacts of an ageing population for airports and air travel	24
4 London Heathrow ageing population macro-level and market insights	31
4.1 Historic analysis of ageing population trends at Heathrow.....	31
4.2 Expected demographic trends in key Heathrow airport markets	34
4.3 Passenger experience trends of elderly travellers at Heathrow	37
4.4 Retail spending behaviour of elderly travellers at Heathrow	46
5 Stakeholder analysis method	52
5.1 Interview protocol.....	52
5.2 Interview format and structure	52
5.3 Interview sample.....	53
5.4 Conducting and analysing the interviews	55
6 Stakeholder analysis findings	56
6.2 General issues	56
6.3 Challenges	60

Study on the travel needs of the ageing population at Heathrow

6.4	Provision for Senior Passengers	63
6.5	Industry approaches to an ageing population	66
6.6	Airport-related issues.....	67
6.7	Summary	71
7	References	73

Executive Summary

1.1 Previous Research

- 1.1.1 The over 60s population around the world is increasing rapidly in both absolute numbers and proportion. The UN predicts that in 2030, 16% of the world's population will be aged over 60. The UN also predicts that nearly a third of the UK population will be aged above 60 in 2030. Presently nearly 13% of passengers using Heathrow are aged above 60.
- 1.1.2 Beyond the age of 60, there is accelerated deterioration in capabilities which can restrict mobility, confuse the senses and impair cognitive function. But there is substantial variation in the timing of these events across the population. Generally the health of senior citizens has improved markedly and will continue to improve.
- 1.1.3 Many older people are inclined to be less adaptable to new situations, particularly in unfamiliar surroundings. They often would not consider themselves disabled or having special needs and are frequently in denial about having lost capabilities.
- 1.1.4 It can be harder for the over 60s to stand for extended periods without respite and much more challenging to carry objects. Furthermore, the ability to walk longer distances without a rest or to manage stairs all decline rapidly beyond the age of 70.
- 1.1.5 Senior tourists are an important part of the tourism market; in numbers and in their expenditure. The "baby boomer" generation is affluent, healthy and shows a high travel propensity – yet is also critical with regards to service delivery. Travel frequency only starts to drop in the late 70s and early 80s.
- 1.1.6 For senior air passengers the relative importance of personal income diminishes in older age while lack of mobility, ill health and loss of travel companion become bigger influencing factors on travel propensity.
- 1.1.7 Senior passengers prefer door-to-door surface access modes, especially when travelling with luggage. They exhibit a longer dwell time in the airport, as they tend to arrive earlier. They are more likely to pre-plan shopping purchases.

1.2 Heathrow senior passenger data analysis

- 1.2.1 There has been a 24% increase in the percentage of UK resident passengers aged over 60 flying from Heathrow between 1991 and 2013 (14.7% to 18.2%). The increase with regard to non-UK leisure passengers is even more significant at 37% (from 11.5% to 15.8%)
- 1.2.2 Annual travel frequency is increasing as the proportion of senior passengers at Heathrow who had made 1-5 other air trips in the previous 12 months grew from 33% in 2004 to 38% in 2014.
- 1.2.3 The proportion of passengers aged above 60 with higher incomes increased from 33% in 2000 to 48% in 2015. The wealthiest age-range within the 60+ category are those aged between 60 and 64. In 2015, 59% earned greater than £40,000 compared to 33% in 2000.
- 1.2.4 There will be a marked increase in population ageing between 2015 and 2030 in both China and South Korea. In Europe, significant increases are expected in Germany and Italy. This is due to declining fertility rates and low levels of net migration.
- 1.2.5 The current generation of senior travellers, otherwise known as “boomers” represent a significant opportunity for airports and airlines. A large proportion are wealthy and have an appetite for travel.
- 1.2.6 ASQ survey results show a steady and considerable improvement in senior passengers’ perceptions of service quality at Heathrow since 2006. QSM results from 2009 show modest improvements.
- 1.2.7 The analysis of QSM from 2009 to 2015 data revealed little material difference in perception of service quality between senior and non-senior passengers for ease of reading flight information screens, ease of finding a seat (in departure lounge), ease of leaving aircraft, immigration/baggage waiting times and trolley availability.
- 1.2.8 From the ACI ASQ survey, Heathrow does especially well relative to the global average, Schiphol and Gatwick in terms of baggage trolley availability for senior passengers.
- 1.2.9 In walking distances, availability of washrooms, comfort of waiting / gate areas and in terms of overall satisfaction, Heathrow achieves higher ratings in 2014 compared to Gatwick and Schiphol but is positioned below the global average.

- 1.2.10 With regard to ASQ, there are three areas in which Heathrow underperforms relative to both its two key competitors and the global average and this is in security staff courtesy, ease of way-finding and in ease of making connections.
- 1.2.11 Spending on airside retail by passengers aged 55 and over is on a par with the average for all passengers. In the 65+ group, there has been a 52% growth in spend per buyer since 2007-8, the fastest rate of growth of all categories. Whilst sales penetration overall has remained quite static on average, for those aged 65+ it has increased by close to 8% over the period.

1.3 Stakeholder analysis

- 1.3.1 The ageing population, and the need to better address the requirements of senior passengers is already a key challenge for airports and air transport service providers, and is likely to become even more acute in the future.
- 1.3.2 While in some cases the issues relating to senior passengers are well understood, this has not yet been fully translated into improved service provision. This situation threatens the continued efficient, dignified and safe transition of senior passengers through airports.
- 1.3.3 While there are many reasons as to why the needs of a senior passenger may not be met in any given scenario, inadequate communication and collaboration (both in terms of quantity and type) between related parties in the delivery chain appears to be a key factor in this.
- 1.3.4 The current 'one-size-fits-all' approach of PRM regulation and provision fails to deal with the many nuanced needs of some senior passengers. This problem is particularly brought into focus where passengers have 'unseen' difficulties such as poor hearing, poor eyesight or dementia. As such, there is a need for a more detailed examination of the different characteristics, behaviours, attitudes to better understand their varied needs and requirements.
- 1.3.5 Provision for older and senior passengers remains largely short-term and tactical in nature, and often only made involuntarily in response to new legislation or regulations. It is felt that a longer term, more strategic approach to senior passengers, in combination with a greater willingness to learn from other sectors, would lead to

Study on the travel needs of the ageing population at Heathrow

significant improvement in the way airports accommodate this important demographic.

- 1.3.6 Some of our stakeholders have highlighted Gatwick's progressive approach to meeting the needs and expectations of senior passengers. However, our ASQ analysis shows that Gatwick actually performs quite poorly compared to Heathrow across a range of important service metrics.
- 1.3.7 There are strong temptations to stereotype our expectations regarding the behaviour and attitudes of senior citizens to air travel and airports. This market consists of consumers that are extremely diverse in terms of level of physical health, lifestyle and attitude. Therefore, more research is needed to extract deeper insights into the individual market segments of this important demographic group.

2 Background and Policy Context

2.1 Definitions

2.1.1 One of the challenges presented by this research is defining precisely what constitutes the demographic titled “senior citizens”. Some international agencies typically will define the age at which an individual becomes “senior” as 60 or 65, thresholds which generally correspond to retirement ages in developed societies. However whilst the CAA records age ranges of 60-64, 65-74 and 75+, for their passenger surveys, the ACI ASQ survey and Heathrow airport market research (QSM and Retail data) have slightly different age range categories: 55-64, 65-74 and 75+.

2.2 Europe

2.2.1 In 2007, European Regulation 1107/2006 was brought into effect. This ensured that air passengers were not refused boarding on the basis of reduced mobility, unless it was unsafe to do so safely and/or where the type of aircraft made it physically impossible to carry these passengers¹. The second stage of the regulation, enacted in July 2008, brought in passenger rights to assistance from EU airports at no additional charge. This included passengers flying into the EU from elsewhere.

2.2.2 In the regulation, ‘Passengers with Reduced Mobility’ (PRM) is used to describe the broad group of “disabled persons and persons of reduced mobility whose mobility is reduced due to physical disability (either sensory or locomotory, temporary or permanent), intellectual disability/impairment, as well as any other disability, or age.”

2.3 United Kingdom

2.3.1 The regulation represented a significant change in air transport policy. As well as introduced statutory rights for passengers with reduced mobility to access air travel for the first time, it also shifted the emphasis of responsibility of care for such passengers away from airlines towards airport operators. Prior to 2007, airlines had (largely successfully) provided assistance to their own passengers based on the requirements of voluntary service commitments and the best practice recommendations outlined in the earlier iteration of

the DfT Code of Practice². Under the new regulation, airports were made responsible for providing assistance for passengers from their point of entry/exit to the airport site all the way to/from the aircraft seat.

- 2.3.2 In the UK in 2008, the Department for Transport revised its Code of Practice relating to 'Access to Air Travel for Disabled Persons and Persons with Reduced Mobility'³. While it is noted that older age and disability are linked, the code of practice does not address the needs of older and ageing passengers specifically.
- 2.3.3 In 2010, the Civil Aviation Authority (CAA) conducted a review on the implementation of the EU Regulation 1007/2006. Based on consultation with airlines, airport operators, related passenger groups and other stakeholders, a series of recommendations were made. These included the need for improved communication and provision of information on the part of airports, airlines, tour operators and travel agents to passengers with reduced mobility. In turn, it was hoped that this would "*capture passenger needs at booking and ensure these are effectively passed on to the airport*" and to guarantee that "*passengers can make informed choices about journeys.*"
- 2.3.4 Under the Civil Aviation Act (2012), the CAA was granted powers to provide information to users of air transport to assist them in comparing services and facilities. As part of these new 'information duties', UK airports and airlines were tasked to include key information pertaining to disabled passengers and those with reduced mobility on their company websites. This information included guidance on issues such as wheelchair assistance, information for visually impaired passengers, travelling with assistance dogs, those with learning disabilities, contact details and guidance on how to make a complaint.
- 2.3.5 In 2014, the Civil Aviation (Access to Air Travel for Disabled Persons and Persons with Reduced Mobility) Regulations were enacted. This granted the CAA legal authority to ensure airlines and airports comply with European Regulations relating to disabled passengers and PRMs. Ultimately, the CAA was given legal authority to sanction organisations that persistently fail to comply with the Regulation.
- 2.3.6 While there have been notable policy changes in recent years in terms of how airports, airlines and other service providers must deal

Study on the travel needs of the ageing population at Heathrow

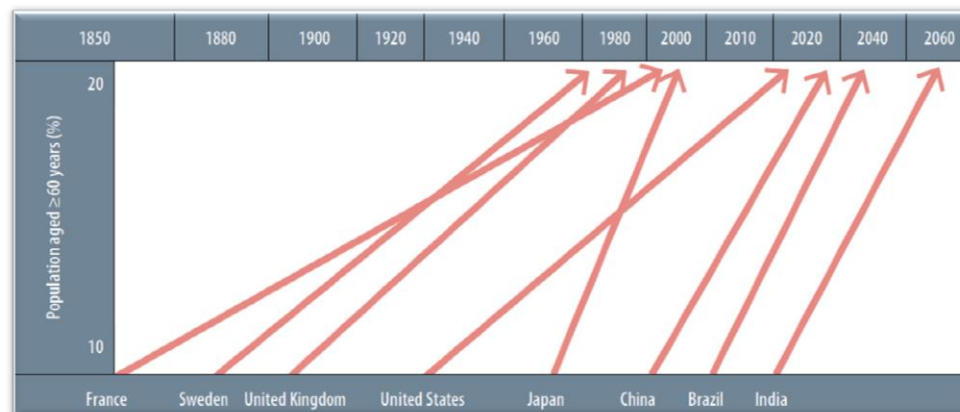
with disabled passengers and PRMs, there is seemingly little (if any) recognition from a policy standpoint concerning the needs of older air passengers specifically. While older passengers *are* perhaps more likely to require traditional PRM services than other groups, it is by no means the case that *all* older passengers fall into this category. Consequently, it is important to examine and assess the varying needs and requirements of this important demographic in greater detail, so as to ensure their needs are met.

3 Research Review

3.1 What is Ageing?

3.1.1 The ageing process is driven by a lifelong accumulation of molecular and cellular damage. This leads to age-related frailty, disability, disease and eventually to death. These changes are only loosely related to a person's age in years. So, two senior adults of the same age with similar backgrounds may have profoundly differing physical and mental capabilities because many ageing mechanisms are random in nature⁴.

Figure 1: Period required or expected for the percentage of the population aged 60 years and older to rise from 10% to 20%.



Source: World Health Authority (2015)

3.1.2 The over 60s population around the world is increasing rapidly in both absolute numbers and proportion. The current and forecast rate of population ageing is often much greater than has been seen in the past, as demonstrated in Figure 1.

3.1.3 Socio-economic development in the last half century has increased survival rates in both younger and older populations. This means that more children live into adulthood, go on to reach old age and are surviving it for longer. By 2050, all European countries, North America and China are forecast to have 30% of their population aged 60 years or over. This is currently the case in just one country in the world: Japan⁵.

3.2 Age-related conditions

- 3.2.1 Beyond the age of 60, non-communicable diseases such as stroke, heart disease, diabetes, asthma, cancer and dementia become much more prevalent. Physiological change also leads to age related reductions in sight, hearing and mobility. More than half of the population over the age of 65 experience two or more diseases concurrently⁶.
- 3.2.2 In the airport environment, this could lead to increased demand for medical services; in emergency care, 'walk-in' clinical advice/non-urgent treatment as well as pharmacies airside and landside.

Age and movement

- 3.2.3 Muscle mass (and therefore strength and stamina) decline with increasing age. This makes it harder for the over 60s to stand for extended periods without respite and much more challenging to lift and carry objects. Walking speed is also markedly reduced. Furthermore, the ability to run or to walk more than 400 metres without a rest or to manage stairs all decline rapidly beyond the age of 70 in both males and females.
- 3.2.4 Thus, elderly airport passengers face particular challenges in carrying their check-in baggage between whichever surface access mode they have chosen and check-in/baggage reclaim. They must also manage to transport their hand baggage throughout the journey. Waiting in airport queues at check-in, security and immigration can be particularly challenging and more dedicated lanes for elderly passengers may be required in the future.
- 3.2.5 Consideration should also be given to the need for seating areas to facilitate rest along walking routes. Average walking times to reach gates will rise as mean passenger age rises which might require earlier calls to gates. Prudent new development design could avoid the use of stairs and escalators and focus on high capacity banks of lifts.

Age and the senses

- 3.2.6 Age-related hearing loss varies in severity from mild to severe. It is characterised by reduced hearing sensitivity and speech understanding in environments with a noisy background. 40% of the population aged greater than 65 have a hearing loss serious enough

to impair communication.

- 3.2.7 Hearing loss is not immediately apparent in many older people and can be mistaken for symptoms of other conditions such as confusion or mental inadequacy⁷.
- 3.2.8 Elderly passengers may thus be less likely to hear PA calls at the airport. A growing proportion of passengers may be unable to understand airport staff questions or emergency instructions and it could be wise to increase staff training to enable hearing loss to be recognised without causing offence.
- 3.2.9 Age is associated with three common vision problems. A decrease in focusing ability leads to blurred near vision from mid-life onwards. Also, the lens of the eye can become opaque resulting in cataracts. Finally, age related macular degeneration causes central vision loss in those aged 55 and over. It is the most frequent cause of blindness in the elderly in high income economies like the United States and Europe^{8 9}.
- 3.2.10 Age-related changes in vision also include reduced colour and contrast sensitivity, increased lighting requirements and difficulties adapting to bright light or darkness¹⁰. Airport way-finding and signage may prove increasingly useless without greater appreciation of the needs of the elderly and age related sight loss.

Age and cognitive function

- 3.2.11 Not all cognitive function declines with age. Language features such as comprehension, reading and vocabulary remain stable throughout life. However, many older people experience a loss of short-term memory and a reduction in the speed of information processing. They are inclined to be less adaptable to new situations than younger people and are frequently in denial about having lost capabilities.
- 3.2.12 The elderly also tend to perform less well than younger adults in spatial navigation tasks, particularly in unfamiliar surroundings¹¹. They are more averse to risk and anxiety-prone in new environments, frequently leading to difficulty in making decisions. They often would not consider themselves as disabled or having special needs¹². As passengers age, airports could face a growing need to provide face to face, sensitive reassurance and support at

key processing and decision points within their facilities.

3.3 The ageing population, transport and mobility

The importance of transport and mobility for older people

“Older people are recognized as a heterogeneous population group that will have a much greater influence on the transport system in the future than it has today.”¹³

- 3.3.1 The introductory quote highlights the relevance of older people for transport systems and the necessity to include their needs in transport planning. At the same time it becomes clear that the group of older people is not homogenous. A European study showed that 85% of people aged between 65 and 74 years and 70% of 75 years and over do not feel restricted in their day-to-day mobility which enables them to participate in social and cultural activities.¹⁴
- 3.3.2 As the population in many economies is ageing, older people are also becoming more active, healthy and aspiring. Many older people also have more responsibilities in the form of jobs and caring for older or younger relatives. As a result of this, the mobility needs of older people have become more important to enable them to participate in their social and recreational network. Transport is also necessary to access shops, banks, health services etc. Mobility fosters independence and reduces the isolation of older generations. As such, transportation plays an important part in older peoples' psychological as well as physical wellbeing.¹⁵
- 3.3.3 For many older people in developed countries, the car is the main mode of transport. The current 40-59 year old generation is particularly reliant on car usage and will also have an impact on this mode of transport in future¹⁶. Older people living in rural and suburban areas are especially dependent on the car, while people living in close proximity to public transport stops (about 5 minutes walk), show a higher propensity of public transport uptake.^{17,18}
- 3.3.4 Not only is the share of older people increasing, evidence from the UK shows that also the number of older drivers is growing, particular among older women. Forecasts for 2030 show that around 80% of men aged over 70 will hold a driving license then, and over 50% (and rising) of women. In the UK, older drivers start to surrender their licenses from the age of about 70. However, even by the age of

90, only 38% of women and 25% of men (who had held a licence when they were 70) have surrendered their licences.¹⁹

3.3.5 Despite the importance of private cars for older people, public transport also plays an important role for this segment. As the group of older travellers is fairly heterogeneous, some subgroups are more likely to switch from private to public transport than others. Some segments in this group are highly dependent on public transport. Evidence from Australia suggests that particularly during peak hours, older people prefer public transport to private cars.²⁰ Yet overall it can be noted that the number of public transport-dependent older people is declining as more people, particularly women, have driving licenses.²¹

3.3.6 Bus transport by older people mainly supports shopping activities. Table 1 illustrates bus travel purpose by age group.

Table 1: Purposes of trips made by bus in the past 12 months ²²

	65 to 74	75 +
Shopping	81.4%	88.3%
Personal business	33.5%	27.0%
Visiting friends/relatives	27.6%	23.6%
Days out (e.g. visits)	15.6%	16.8%
Other	8.9%	6.4%
Other leisure trips	8.8%	9.9%
To/from work	6.9%	0.9%
To/from holiday	6.6%	1.5%
To/from school/college/uni (not accomp children)	1.0%	0.0%

Source: UK Department for Transport (2013)

3.3.7 Travel behaviour and characteristics are driven by past behaviour and habits. Therefore, it is likely that future generations show slightly different patterns than current older generations. Mobility issues, however, can have a negative impact on transport, with older people reducing their number of trips in comparison to younger transport users.²³

Addressing the needs of older people in transport

3.3.8 Transport barriers reported by older people often include the following:

- Cost of travel
- Difficulties boarding and leaving vehicles

Study on the travel needs of the ageing population at Heathrow

- Unreliability of the service
- Problem of parking cars
- Transport being confusing to use
- Cost of activities associated with transport
- No one to participate with
- Lack of time
- Need to look after dependants, homes or pets²⁴

3.3.9 Not addressing the needs of older people in transport has severe impacts on their quality of life and on their health. For example, in the UK, 800 older people fall on buses every day. While operators, (such as Transport for London) train bus drivers to address the needs of older people (e.g. giving them time to sit down before driving off, pulling in all the way to the kerb, etc.), in reality these aspects are frequently ignored. Operators often provide ramps and other equipment to make boarding and leaving vehicles easier, yet on regular occasions these are out of service.²⁵

3.3.10 In many cases, the focus of addressing the needs of older people in transport relates to providing services for current users, yet with little focus on non-users or focus on modal shift (e.g. from private to public transport).²⁶ Modal shift from private to public transport is particularly an issue for those who are and have been highly dependent on the private car. Those older people who cannot drive themselves anymore then often become reliant on family and friends to drive them and are therefore are seen in many cases as a burden.²⁷

3.3.11 To address the needs of older people and to make sure that they can safely participate in transport (especially road transport), four areas have to be covered:

- Behavioural and educational measures
- Infrastructure and road design improvements
- Vehicle design improvements
- Improvements to alternative transport options²⁸

3.3.12 A European survey of older people and experts identified seven top areas to improve older people's mobility, namely (in order of importance):²⁹

- Enforce speed restrictions

Study on the travel needs of the ageing population at Heathrow

- Well adapted vehicles in public transport
- Increased safety in public
- Improve pavements
- Adapt houses/public buildings
- Reduce costs of public transport
- Campaigning pro age

3.3.13 As shown above, the costs of public transport are a key issue for older people. In the UK and many other countries, older people benefit from concessionary travel passes that enable them to use public transport at a reduced cost. While these schemes create costs for the state, they generate benefits (e.g. health, social inclusion, access to the labour market and voluntary activities, reduced traffic congestion) that often outweigh their costs.³⁰ In England, the government's objectives of the concessionary travel schemes are:

- To increase public transport usage by older people, especially those on low incomes and those without a car.
- To improve access to basic necessities such as health care and shops for older people.
- To reduce social isolation, reduce social exclusion and maintain wellbeing for older people.”³¹

3.3.14 The concession scheme resulted in increased usage of public transport by older people, but mainly among those without cars, while there is little contribution towards a modal shift from car to public transport.³²

3.3.15 Throughout Europe, there are a range of best practice examples that focus on the mobility of older people. These include personal transport schemes (e.g. demand responsive transport, personal escorts for public transport usage), user training (e.g. how to use public transport safely, information folders for older pedestrians), information provision and travel planning (e.g. internet information for certain user groups), discounted pricing (e.g. travel passes for older users), policies covering older transport users (e.g. refresher courses) and health related transport aspects (e.g. promotion of cycling and walking).³³

- 3.3.16 In future, driver assistance (e.g. parking sensors, etc.) and perhaps even driverless cars might support the transport needs of older people.³⁴ The development of self-driving vehicles is underway. The group of older drivers is a target market for this new technology.³⁵
- 3.3.17 Addressing the needs of older passengers is not only the responsibility of transport operators, manufacturers and authorities. Also, other passengers need to respect and be aware of the needs of older travellers by vacating seats when required and helping older passengers to embark, disembark and stand up.³⁶

3.4 The ageing population and tourism

Characteristics of the older tourist

- 3.4.1 Older tourists make up a significant share of the tourism and hospitality market and with an increase in the share of people over 65, the importance of this segment (both with regard to the travelling population as well as in monetary terms) will increase.³⁷ Despite this demographic shift, older people often feel younger than their actual age (e.g. on average, people over 60 feel about 10 years younger than their physical age³⁸). While in the past the 55 to 60 age group was referred to as “younger seniors”, this group does not consider themselves as part of the “older tourist” market.³⁹
- 3.4.2 The increase in the importance of older tourists is a phenomenon that encompasses both developed and developing economies. For example, China is one of the largest tourism generating countries in the world. The “one child policy” introduced in the late 1970s has a significant impact on the age distribution with 14% of the population predicted to be over 65 by 2025.⁴⁰
- 3.4.3 Older tourists generally seek different experiences than younger tourists.⁴¹ The needs of older tourists are different, not only from a physiological perspective but also their social roles are changing with age.⁴² Yet, the group of older tourists itself is identified as very heterogeneous.⁴³ Nevertheless with increasing age, deteriorating health and immobility, this group eventually becomes more homogenous. Older groups are more concerned about health issues and are therefore less active.⁴⁴
- 3.4.4 While the needs and expectations of older tourists differ to those of younger tourists, it can be expected that the booking behaviour and

methods of younger and older tourists will become more similar. Currently, package holidays are particularly popular with older tourists. Increasing technological awareness of older travellers means that they are more likely to research and book the different components of a trip separately and therefore resemble the booking habits of younger generations.⁴⁵

- 3.4.5 In response to the heterogeneous nature of older tourists, particularly when considering the wide age range from 60 to 80+ years, market segmentation of this group is necessary.⁴⁶ For example, a study of Swiss travellers over 55 years identified three distinct segments: “Grizzled Explorers”, “Time-Honoured Bon Vivants” and “Retro Travellers”. Each group is characterised by different trip profiles and demographics. “Grizzled Explorers” are older than the other two groups, yet this group prefers long-haul destinations (America, Asia and Oceania), usually booking organised trips with tour guides and travelling up to three weeks. “Time-Honoured Bon Vivants” often stay closer to home, either travelling domestically or to Mediterranean resorts (e.g. beach or mountain holidays). “Retro Travellers” tend to visit unknown destinations in Central and Eastern Europe, mainly using trains and buses to get to their destinations.⁴⁷ While this is only one example of how the older tourism market can be segmented, it shows that this group is heterogeneous and any marketing activities towards older travellers need to understand the differences and characteristics of the different segments.
- 3.4.6 For many older people, tourism is not an activity that is undertaken in isolation. Tourism and leisure activities are interrelated, i.e. leisure activities affect tourism and vice versa. For example, art and handicraft activities, language courses and other leisure activities undertaken at home also impact on travel behaviour, both with regards to the destinations chosen as well as the undertakings during a trip.⁴⁸
- 3.4.7 Visiting friends and relatives, either in the same country or abroad, also features in older tourists’ travel patterns. Related to this is going on trips with children and grandchildren, siblings and other family and friends which is important for many older travellers.⁴⁹
- 3.4.8 The word “retirement” is frequently attached with negative associations, particularly among the “baby boomer” generation.

Instead, many people in this group see the years after their working life as a time for reflection, replenishment, learning, personal growth and development. As such, cultural and educational aspects of tourism play an important role.^{50,51}

- 3.4.9 The early retirement phase, about the first ten years after retirement, is regarded as a peak period for tourism. In this phase, tourists are still relatively agile and less affected by health concerns while having sufficient time to travel and at the same time being richer than previous generations. More recent retirees also benefit from more travel experience. Tourism plays an important role in their lives.⁵²
- 3.4.10 Probably in response to this very active segment, tourism research particularly focuses on the “baby boomers” generation, those born between 1946 and 1964, i.e. between the ages of 51 and 69 in 2015. Because of this wide age range, this group is often divided into “younger Baby Boomers” (born 1956-64) and “older Baby Boomers” (born 1946-55).⁵³
- 3.4.11 Research in Canada shows that travel expenditure rises at the age of 45 (e.g. empty nesters) and stays fairly constant until the age of about 75, however even tourists over 75 still spend more than the under 25 age group.⁵⁴ A positive relationship between tourism expenditure and age can also be found in the Italian tourism market.⁵⁵ In Spain, a popular destination for UK tourists, tourists over 64 years make up just under 10% of all international tourists, while the 45-64 group represents about a third. However, with an average spent of €1.098 per tourist in 2012, older tourists (i.e. those over 64) have the highest average tourist expenditure of all age groups.⁵⁶ Also in the UK, the age group 55+ is characterised by high holiday spending with 35% of holidaymakers in this group spending £2,000 or more per year.⁵⁷
- 3.4.12 From a UK perspective, the pension reform that went live in April 2015 means that retired people can take a large proportion of their pension pot as cash, which makes this segment even more attractive and lucrative to the tourism industry.⁵⁸
- 3.4.13 While many tourist segments have witnessed an increase in trip frequency at the expense of average trip length, older travellers show a tendency towards longer trips. This is fostered by their financial resources and lack of other obligations.⁵⁹ This can also be particularly recognised in the cruising sector, which is often

Study on the travel needs of the ageing population at Heathrow

associated with older travellers. While the cruising market is attracting a range of different ages nowadays, longer cruises (e.g. around-the-world cruises) are predominantly undertaken by older travellers.⁶⁰

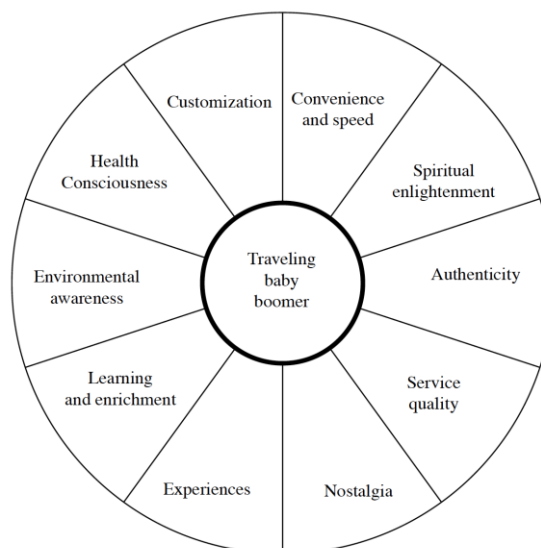
3.4.14 Travel frequency of older tourists does not drop until the late 70s and 80s.⁶¹ With increasing age, accompanied often by declining health, reduced income, taking care of relatives (e.g. grandchildren, spouses) and loss of (travel) partners, tourism participation declines - particularly tourism that requires outdoor or physical activities.⁶²

3.4.15 Older tourists cope with travel constraints, through:⁶³

- a change in tourism style (e.g. one destination, instead of several destinations on a single trip).
- a reduction in trips.
- finding substitutes (e.g. other cultural and social activities at home).
- ignoring constraints (particularly with regards to social responsibilities).

3.4.16 Figure 2 highlights key trends in tourism of baby boomers that need to be addressed by the travel and tourism industry.

Figure 2: Travel Trends of Baby Boomers⁶⁴



Source: Marketing Intelligence Planning (2010)

Study on the travel needs of the ageing population at Heathrow

3.4.17 For many baby boomers, staying healthy is an important part of their life style and also reflects in their travel behaviour. For the younger group of older travellers (i.e. under 70), better health conditions have led to an increase in certain types of niche tourism such as adventure tourism.⁶⁵

3.4.18 Baby boomers are critical customers when it comes to service quality. They are prepared to pay for higher service delivery, however their expectations are very high, both in the luxury as well as the budget segment.⁶⁶

3.4.19 Based on the characteristics of this segment, companies should focus on the following messages, when developing their marketing strategy to attract baby boomer tourists:⁶⁷

- **Emphasise youth:** Physical age does not define this group.
- **Use nostalgia:** With more life experience, this age group is particularly susceptible to messages that reflect past experiences.
- **Show how to improve boomers' lives:** The service delivery of the tourism sector needs to support the healthy lifestyle of many baby boomers.
- **Provide detailed information and tell a story:** Crude and offensive advertising should be avoided in favour of a whole story around the service.
- **Promote the experience and not the product:** Focus should be on experiential marketing, using photos that can be associated with memoires and emotions.
- **Use a variety of media:** Particularly when it comes to travelling, many older people use the internet to research and book holidays online.

3.4.20 While these expectations and trends are particularly focussed on the baby boomer generation, it needs to be born in mind that:

- The market of older travellers is heterogeneous and therefore there are different trends and expectations for each market segment within the older group.
- Any identification of trends and expectations is a snapshot of a particular moment. The market of older travellers is constantly changing, which means that continuous data flow is necessary

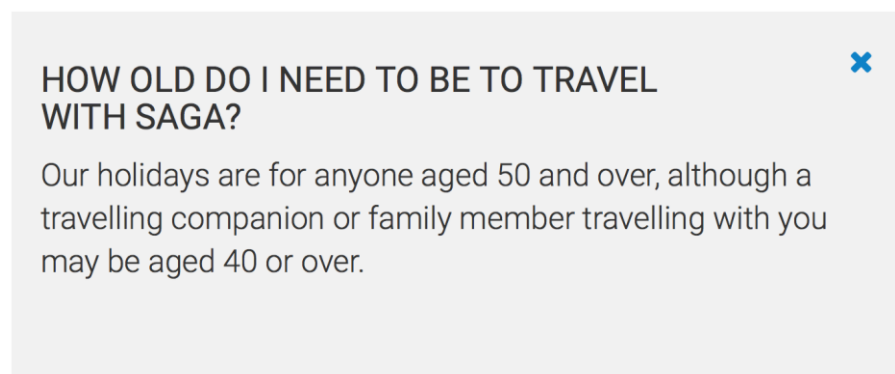
to identify developments. This might also mean the inclusion of “younger” generations in any research to identify future travel trends.⁶⁸

- 3.4.21 As mentioned previously, the cruise market shows a high focus on older tourists, while the last decade also saw a broadening of its appeal to families and younger segments. However, this has meant that many older cruise passengers now look for “adult only” cruises. Their focus is often on the quality of the service delivered. Variety is important, with on-board dining experience, discovery-style voyages, overnight stop-overs in destinations and “cruise & stay” becoming important components of cruises.⁶⁹

Tourism marketing – industry responses to an ageing population

- 3.4.22 Some organisations in the tourism industry have responded to an ageing population, either by solely specialising in the market of older travellers or by adapting their products to make them more appealing to this segment.
- 3.4.23 One of the most well-known travel companies that caters for older travellers is Saga Holidays, which focuses on the 50+ travel market (Figure 3).

Figure 3: Saga FAQ



Source: Saga (2015)

- 3.4.24 While there is an age minimum for people wanting to book with Saga Holidays, the company, both on its website and its brochures, does not actively refer to this age. The age limit is only mentioned on the FAQ pages on the website and in the “Essential Information” section (i.e. “small print”) of its brochures. As previously mentioned, many older travellers do not define themselves by their age and as such,

Saga Holidays focuses instead on the service aspects of their offerings.

- 3.4.25 Although Saga Holidays is available to tourists over the age of 50, the majority of their customers are over 65 years.⁷⁰ The company has found its niche in the market and serves it relatively well, yet is often seen as comparatively “boring” and “tired”. However, among its target market, the company has a better image and, in comparison to other tour operators, a relatively loyal customer base.⁷¹
- 3.4.26 One issue that many older travellers face relates to travel insurance. Many travel insurers will not cover tourists over 65 years, while others increase their premiums significantly for this age group. In response, some companies, such as Saga and All Clear Travel, as well as charities (e.g. Age UK), offer specialised travel insurance to the older travel market, some with no age limit at all.

Retirement migration

- 3.4.27 An important aspect of tourism of older people is “retirement migration”, i.e. “amenity seekers” who move abroad following retirement to participate in a leisure lifestyle, often in a warmer climate. A 2013 UK survey found that 63% of people who were planning to buy overseas were over 55 years old.⁷² In Europe, the British retirees constitute the largest group of retiree migrants, however similar trends are also recognisable in other Northern European countries as well as the United States. Popular destinations are the Mediterranean Coast for Europeans and the Southern States for Americans.⁷³ For example in the region of Alicante, Spain, in 2010 a quarter of the 65 years+ population is from other EU countries.⁷⁴
- 3.4.28 A 2013 survey by retirement specialist MGM Advantage (Now Retirement Advantage), suggests that 6 million UK adults are planning to retire abroad, with the top 10 destinations being⁷⁵:
1. Spain
 2. France
 3. USA
 4. Australia
 5. Far East
 6. Canada
 7. Italy
 8. South East Europe

- 9. India
- 10. Portugal

3.4.29 In the Spanish market, the economic downturn of 2008/2009 has had an impact on second home ownership of British nationals. However, signs of recovery can be identified.⁷⁶ While the economic crisis affected all age groups, British second home owners in Spain over the age of 55 showed a lower likelihood to leave Spain than those under 55.⁷⁷

3.4.30 Baby boomers who are retiring in the next 10 to 15 years will boost overseas property purchases. The majority will be resident in the London and South East region. This cash-rich segment benefits from rising equity in their UK properties.⁷⁸

3.5 The impacts of an ageing population for airports and air travel

3.5.1 While not constituting a large body of work, existing studies of older air passengers and their impacts for airports and air travel can be categorised according to three key areas or themes; trip characteristics, aspects of their travel behaviour, and the various challenges older passengers face while travelling.

Trip characteristics

3.5.2 Based on information from passengers at Amsterdam's Schiphol Airport, a study in 2006 found that older passengers were generally less likely to take long distance air journeys than younger people. However, when older passengers did travel, on average they travelled over further distances and stayed away for longer periods of time than younger people⁷⁹. Given that older passengers are less likely to be in full time paid employment, their increased time availability allows these passengers to stay away from home for longer.

3.5.3 The purpose of travel among older passengers is predominantly for leisure and visiting friends and relatives. As older passengers are less likely to be in paid employment than younger people, the role of business travel among this group is reduced, and negligible for passengers aged 75 years and over.

3.5.4 The role of city breaks for older passengers is increasing, possibly due to the increased access and availability of low fares. However, research suggests that when given a choice, older passengers

generally favour incumbent full-service carriers over low-cost carrier alternatives⁸⁰.

- 3.5.5 There is little difference between older men and older women in terms of their propensity to travel by air. This contrasts with other modes that are used for long distance travel (for example, high-speed rail) where men generally have a higher propensity to travel than women.
- 3.5.6 While personal and family income is an important determinant of propensity to travel for all age groups, its importance diminishes relative to other factors as people get older. This is to say that other issues such as physical ability and health become more influential in travel decisions as people get older.
- 3.5.7 A recent study of air passengers in the UK examined the relationship between air travel behaviour and two key life stages; having children and entering retirement. For the passengers who had or were entering retirement two distinct groups were identified those who still enjoyed air travel and those who were less inclined to travel abroad. Of those who still travelled abroad, cost was not seen as such an important factor compared to when they were younger. Some passengers said that they would be prepared to pay for a higher quality of service and to use their preferred airport. For those who no longer travelled abroad, ill-health and the loss of their travel companion were noted as key barriers⁸¹.

Travel behaviour

- 3.5.8 Older air passengers may exhibit a different 'trip preparation pattern' than younger passengers. In the study of older passengers in the UK, generally speaking, this group was more likely to book their travel over the phone or via travel agencies than online. However, in other cases, it was noted that older passenger who were able to use the Internet were adept (and crucially had the time available) to search and wait for cut-price deals and travel 'bargains' before booking.
- 3.5.9 Using data from a Taiwanese sample, a study found that older passengers favoured being dropped-off at the airport by friends or relatives over using alternative modes when traveling to and from the airport. Conversely, in the Netherlands, it was found that taxis were the preferred mode. In each case it would seem that surface

access mode choice of older passengers reflects desires for the convenience of door-to-door travel and the ease of transporting luggage afforded by these modes. In both studies, older passengers were found to be less likely to use public transport than other passengers.

3.5.10 Attitudes and perceptions of older passengers may vary from the younger passenger in terms of the value placed on different aspects of the airport experience, with a greater emphasis on ease of use and customer service. From the study of surface access mode choice among older passengers in Taiwan, the top three considerations for older passengers when choosing an access mode were 'safety', 'user friendliness' and 'the ease of storing luggage.' Conversely, for younger passengers the top three considerations were 'safety', 'punctuality', and 'no transfer needed.' The study recommended that for older passengers, airports needed to concentrate especially on providing suitable space for storing luggage.

3.5.11 Older passengers are also likely to exhibit a longer dwell time in the airport terminal than younger passengers. In the study conducted at Schiphol, on average, Dutch passengers over 50 years old spent 167 minutes in the terminal, whereas those under 50 years spent 155 minutes on average. It was noted that older passengers arrive earlier at the airport and wait longer at the gate, which was presumed to minimize uncertainty and reduce the risk of missing their flight. The same study found that older passengers were more likely to consult airport information service desks than other passengers.

3.5.12 Airport shopping behaviour may also vary by age, with research suggesting that older passengers are more likely to pre-plan their purchases than younger passengers, who are more likely to make impulse and convenience purchases⁸². Overall, older passengers may shop and spend less money than younger passengers⁸³.

Challenges

3.5.13 A major study of the impacts of ageing travellers on airports conducted in the United States⁸⁴ found that the normal effects of ageing, including muscular/ skeletal problems, respiratory conditions, and deteriorating sight and hearing exacerbate the stress affecting someone undertaking an air journey. The study identified

Study on the travel needs of the ageing population at Heathrow

four prevalent issues for older passengers; way-finding, fatigue; use of technology and equipment, and amenities. These various challenges are summarised in Table 2, arranged according to the stage of the passenger journey for which the challenge is most relevant.

Study on the travel needs of the ageing population at Heathrow

Table 2: Summary of challenges facing older passengers at airports (adapted from Mein et al. 2014).

	Departing Passengers			Arriving Passengers	
	Origin to Terminal Entrance	Terminal Entrance to security	Security to Gate and Gate to Gate	Arrival Gate to Terminal Exit	Terminal Exit to Leaving the Airport
Wayfinding	<ul style="list-style-type: none"> - Complex road signs - Differentiation between different parking zones - Identification of correct terminal 	<ul style="list-style-type: none"> - Difficulty in differentiating between terms such as 'bag-drop' and 'check-in', which may be viewed as the same thing. - Interpretation of 3D maps too confusing. 	<ul style="list-style-type: none"> - Availability of staffed information points. - Prominence of directional signs compared with commercial messages. - Hearing gate announcements by staff. 	<ul style="list-style-type: none"> - Competing signs for arriving and departing passengers. - Signs often not immediately visible after deplaning. 	<ul style="list-style-type: none"> - Confusion regarding where to wait for car park shuttle buses. - Locating the right car in large car parks.
Fatigue	<ul style="list-style-type: none"> - Difficulty of carrying heavy bags, especially when dropped-off by taxi or family/friends 	<ul style="list-style-type: none"> - Prolonged standing in check-in queue. - Lifting heavy bags onto check-in belt 	<ul style="list-style-type: none"> - Standing in security queue. - Removing/reapplying shoes, clothing and personal items at security. - Long walking distances to gate, carrying bags. - Misjudging walking distances. 	<ul style="list-style-type: none"> - Having to stand and wait for bags to arrive in baggage reclaim. - Lifting bags from baggage reclaim belts. 	<ul style="list-style-type: none"> - Uncertainty regarding arrival of onward travel. - Possible concerns about personal safety.
Use of Technology	<ul style="list-style-type: none"> - Not significant 	<ul style="list-style-type: none"> - Difficulty of using self-service check-in machines, especially for those with sight problems (i.e. instructions are often only visual, not audible). 	<ul style="list-style-type: none"> - Use of touch screen information points unintuitive. - Confusion caused by airline alliances, where the same flight may have multiple flight numbers. 	<ul style="list-style-type: none"> - Steep air bridges/steps, and changes in lighting from aircraft to terminal. - Use of self-service passport control gates. - Accidents on escalators when changing levels. 	<ul style="list-style-type: none"> - Not significant
Amenities	<ul style="list-style-type: none"> - Lack of baggage trolleys located in parking areas. - Suitable waiting areas for remote car park shuttle buses. - Lack of seating for elderly passengers who are dropped-off at the kerb while the driver parks the car. 	<ul style="list-style-type: none"> - Lack of seating for passengers waiting for friends/relatives standing in queue. - Narrow spaces in shops and food concessions. - No dedicated 'quiet' areas. 	<ul style="list-style-type: none"> - Inadequate supply, type and spacing of seating at gate areas. - Low lighting and inappropriate flooring leading to trips and falls. 	<ul style="list-style-type: none"> - Availability of toilet facilities, which may be crowded. - Size of toilet cubicles, allowing for hand luggage bags to be taken inside. - Having to wait for onward travel. 	<ul style="list-style-type: none"> - Provision of seating, heating/air conditioning and refreshments in areas where waiting for onward travel.

- 3.5.14 Way-finding challenges for older passengers relate predominantly to the difficulties associated with negotiating the complex environment of airport roads and surface access, parking facilities and terminal buildings. In some cases, way-finding terminology can be confusing for older passengers, for example the difference between ‘bag-drop’ and traditional ‘check-in’ counters may not be intuitive for older passengers, especially for those who do not travel regularly.
- 3.5.15 For passengers with poor sight, the lack of audible messages can lead to confusion and unease. Where possible, airports should provide sufficiently staffed information points in addition to self-service and traditional navigational aids. There has been some success in the use of airport volunteer ‘ambassadors’ in this regard.
- 3.5.16 While not solely applicable just to older passengers, the following criteria should be used for terminal signs:
- **Placement** – directional signs should be visible and placed near ticket-counters, check-in and other key ‘decision points.’ However, there may be conflicts between pressures to generate revenues from commercial messages.
 - **Orientation** – maps need to be orientated with the axis of the environment.
 - **Colour** – primary colours should be used and should be backlit if possible. Older passengers may have trouble discerning pastel colours and distinguishing certain colour combinations.
 - **Text size** – should be large enough to be read from a distance.
 - **Complexity** – maps should be conveyed in 2D rather than 3D, which can be confusing for users. They should also not attempt to convey too much information. ‘You are Here’ style maps are especially useful.
- 3.5.17 In terms of passenger fatigue, the main issues relate to the physical effort required for standing and waiting in a queue, lifting heavy bags, and walking long distances. Provision of suitable seating (both in terms of quantity and type) plays an important role in this. Further, motorised carts can be employed to reduce the need for long walking distances.
- 3.5.18 Challenges associated with the use of technology and equipment relate mainly to the need for older passengers to cope with the

Study on the travel needs of the ageing population at Heathrow

increasing use of automation at airports and self-service machines. There may also be difficulties with older passengers using escalators. Where possible, high occupancy lifts (or elevators) should be employed to negate this.

- 3.5.19 The design and configuration of airport amenities can be challenging for older people, particularly with regards to tightly arranged retail and food/beverage outlets. The adequate provision and layout of toilet facilities can also prove challenging, although this can be improved by making cubicles larger and provision of toilet facilities more frequent.

4 London Heathrow ageing population macro-level and market insights

4.1 Historic analysis of ageing population trends at Heathrow

4.1.1 We used detailed CAA passenger survey data supplied to us by our Heathrow project manager. This consisted of Microsoft Access files for each annual passenger survey from 1997 to 2015.

4.1.2 The CAA passenger surveys define 11 age ranges. The age ranges that are of particular relevance to this study are: 60 to 64, 65-74 and over 74.

4.1.3 There has been a 24% increase in the percentage of UK resident passengers aged over 60 flying from Heathrow between 1991 and 2013 (14.7% to 18.2%). The increase with regard to non-UK leisure passengers is even more significant at 37% (from 11.5% to 15.8%)

4.1.4 Considering all passengers at Heathrow, the proportion aged over 60 has risen from 9.9% in 2000 to 12.9% in 2014, with a marked increase between 2008 and 2010. This demonstrates the resilience of the senior market to economic crises.

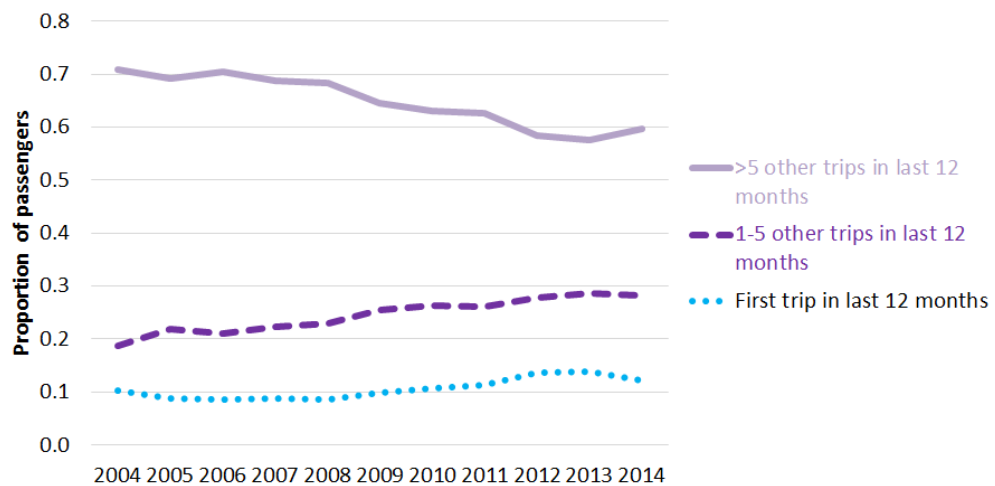
4.1.5 The rate of ageing in the UK-resident market has been more significant at Gatwick, Stansted and Luton airports, largely due perhaps to the prominence of low cost carrier services.

Trip frequency of senior passengers at Heathrow

4.1.6 We compared trip frequency for senior and non-senior passengers at Heathrow. The market was divided into three categories: first trip, 1-5 other trips and >5 other trips (all within the last 12 months).

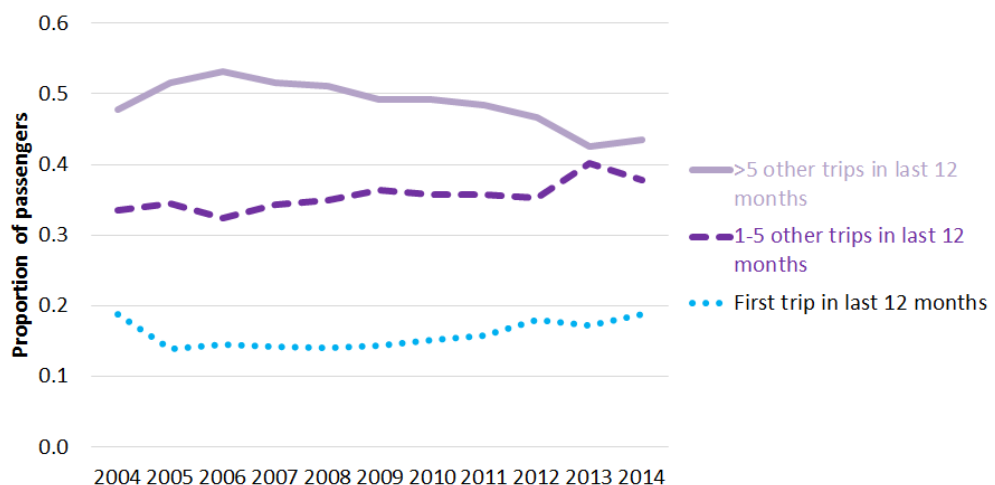
4.1.7 Figure 4 and Figure 5 show trip frequency trends for these two groups between 2004 and 2014. Whilst trends are broadly similar for both populations, the relative proportion of the three trip frequency categories differs significantly. The 1-5 other trips group currently accounts for 38% of seniors (but 28% of non-seniors) whilst the >5 other trips group is 43% for seniors and 60% for non-seniors.

Figure 4: Trip frequency of non-senior age group 2004-2014



Source: QSM data

Figure 5: Trip frequency of senior age group 2004-2014



Source: QSM data

Income of senior passengers at Heathrow

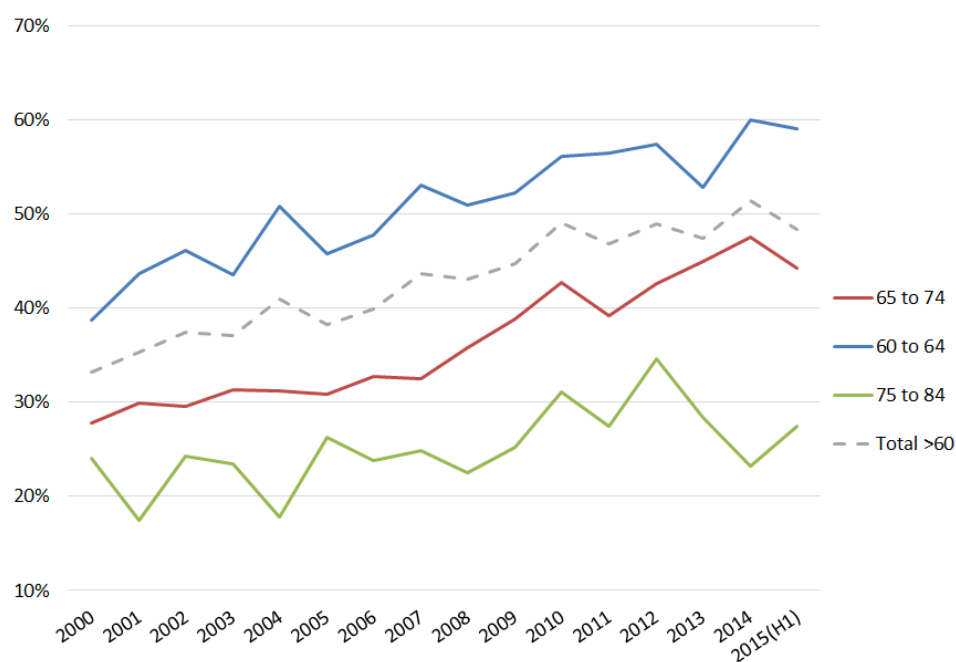
4.1.8 Using the CAA data we were able to cross-tabulate the incomes of passengers by age. The CAA surveys define 16 income ranges; with annual incomes under £5,750 representing the lowest band and annual incomes above £230,000 as the highest band. We defined a “higher income” threshold as being those whose annual income falls in the income ranges greater than the median range which was £34,500-£40,249. We were, therefore, able to obtain numbers of passengers who reported higher incomes by age range.

4.1.9 We were not able to provide more granular trends cross-tabulating on the basis of country of residence. With the exception of UK resident-only data, we could not make meaningful inferences of the data with regarding to other country of residence groups as sample sizes by age group and income were very low. The UK-resident only outputs were actually very close in magnitude to those obtained from the entire sample. The survey income question refusal rate with regard to US resident passengers (second most important country of residence group) was particularly high.

4.1.10 We were able to cross-tabulate by UK nationals and by Foreign nationals. However, again no significant difference in the statistical outputs was recorded between both samples.

4.1.11 Figure 6 below shows the proportion of passengers in three of the most senior age groups who have incomes in excess of £40,000 in each year from 2000 to 2015⁸⁵.

Figure 6: % of each senior age group with annual income greater than £40,000 2000-2015(H1)



Source: CAA data

4.1.12 The proportion of passengers aged above 60 with higher incomes increased from 33% in 2000 to 48% in 2015.

4.1.13 The wealthiest age-range within the 60+ category are those aged

between 60 and 64. In 2015, 59% earned greater than £40,000 compared to 33% in 2000.

4.1.14 For the 65-74 age range the higher income ratio increased from 28% in 2000 to 44% in 2015.

4.1.15 The number of passengers who were surveyed in the 75+ age group in each year was quite low relative to the other age ranges. This perhaps explains why there is no clear or consistent trend over the reporting period.

4.2 Expected demographic trends in key Heathrow airport markets

4.2.1 Table 3 shows the extent to which population demographics are expected to change in key Heathrow markets.

4.2.2 Japan currently has the highest percentage of its population aged over 60 (37%). The UK has 23%, behind France, Germany, Italy and Sweden.

4.2.3 The UN predicts that in 2030, 16% of the world's population will be aged over 60. The UK, Heathrow's largest market, is projected to have 28% of its population aged over 60 in 2030.

4.2.4 There will be a marked increase in population ageing between 2015 and 2030 in both China (+10 pp) and South Korea (+11pp). In Europe, significant increases are expected in Germany and Italy, both by 8 pp. This is due to declining fertility rates and low levels of net migration.

4.2.5 In 2050, it is predicted that 10 out of the 15 markets below will have greater than 30% of their populations aged over 60. Ageing will be particularly marked in Italy, Japan and South Korea. The UK is expected to have 31% of its population aged above 60.

Study on the travel needs of the ageing population at Heathrow

Table 3: % of total population aged over 60 1980-2050 in top 10 Heathrow passenger markets (plus selected Asian economies) by country of residence

	1980	2015	2030	2050
Australia	12%	20%	25%	28%
Canada	12%	22%	29%	32%
China	7%	15%	25%	36%
France	14%	25%	30%	32%
Germany	17%	28%	36%	39%
India	5%	9%	12%	19%
Ireland	13%	18%	24%	31%
Italy	15%	29%	37%	41%
Japan	11%	33%	37%	42%
S E Asia	5%	9%	15%	21%
South Korea	6%	19%	31%	42%
Sweden	19%	26%	29%	30%
UK	17%	23%	28%	31%
USA	14%	21%	26%	28%
World	8%	12%	16%	22%

Source: United Nations World Population Ageing 2015

UK market developments

- 4.2.6 Mintel published a market research report in July 2015 titled “*Baby Boomers Travel – UK*”⁸⁶. The report presents a range of insights into the leisure travel behaviour and preferences of Younger baby-boomers (currently aged 51-59) and older baby-boomers (aged 60-69)⁸⁷.
- 4.2.7 This report compares baby-boomers with the *Digital Generation* (born around 2000), *Millennials* (born between 1980-1999), *Generation X* (1965-1979) and the *Swing Generation* (born before 1945).
- 4.2.8 The key characteristics of the older baby-boomer generation are as follows:
- This demographic has significantly higher spending power than other groups. Around 50% possess levels of household wealth greater than £450,000. Many benefited from rising property prices and generous pension schemes. Spending power is also reinforced by the fact that many are mortgage and dependant-free.

Study on the travel needs of the ageing population at Heathrow

- Many of those aged over 60 are retired and will have the time to travel. Over 30% enjoyed 4 or more holidays in the last 12 months.
- Those aged over 60 also tend to take holidays that are longer in duration.
- Higher wealth or disposable income does not necessarily mean that this age group spends more than others. On the contrary, Mintel considers those aged over 60 to be “value-seeking” which means that they are not prepared to pay above-average prices for travel-related products or services.
- For many aged over 60, exploration and discovery are especially important travel motivations. However, this needs to be combined with a high degree of comfort in what Mintel refers to as “flash-packing” rather than “back-packing”.
- Cottage holidays both in the UK and in Europe followed by European cultural city breaks remain the most preferred holidays for those aged over 60. However, there is growing appetite for travel to more adventurous and / or exotic destinations.
- Travel frequency declines and preferences change as travellers reach the “swing generation” age-group (aged 70+). However, in contrast to previous senior generations, many current baby-boomers expect to either maintain current or increase annual travel frequency in the next 10 to 15 years. This commitment, however, needs to be treated with a degree of caution as many will be at risk of the onset of reduced mobility and other major illnesses. Nevertheless this does indicate a high appetite for future air travel.
- The majority of this age group are seeking to escape from technology while on holiday. However, a third wants to feel connected.
- Mintel have segmented the baby-boomer market into four cluster groups: the independently-minded active adventurers (26%), beech-boomers focussed on rest and recreation (25%), gently-active location lovers (21%) and hassle-free tourers who are more pre-disposed to package / organised tours.

4.2.9 When the current *Generation X* (born between 1965 and 1979)

reach the age of 60-65, it is unlikely they will face similar favourable life-style conditions as the current baby-boomer demographic. It is possible that current *Generation X* will be required to retire later in life and with less generous pension provision. Overall, they are likely to enter their 60s with less favourable financial and life-style circumstances which may affect their future demand to travel.

4.2.10 The *Financial Times* recently published a special report on some important demographic changes emerging in the UK⁸⁸. They compare the median incomes of those aged 65-69 with those aged 20-24 over the period 1961 to 2013. Their research clearly indicates a widening inter-generational gap between both demographics. In 1961, the median income for those in the younger demographic put them in the 66th percentile of the UK national income distribution in contrast to the 60 to 65 age group, whose medium income was in the 29th percentile. By 2013, the situation has been completely reversed. The senior demographic benefits from full employment, relatively cheap housing and generous pension provision, whilst the disposable incomes of the younger group becomes increasingly constrained by rising debt levels and a lack of affordable housing.

4.3 Passenger experience trends of elderly travellers at Heathrow

ACI ASQ Analysis

4.3.1 We obtained ACI ASQ survey statistics for each year between 2006 and 2014. This dataset contains survey responses from all 250 participating airports.

4.3.2 Passengers were invited to rate a wide range of airport services across a 5-point Likert scale (1 = poor to 5 = very good). The following 8 key service areas were selected because based on our research review, we believe that they are of particular relevance to the airport experience of senior passengers:

- Baggage trolley availability
- Courtesy of security staff
- Ease of way-finding in the terminal
- Walking distance in the terminal
- Ease of making flight connections
- Availability of washrooms
- Comfort of waiting / gate areas

Study on the travel needs of the ageing population at Heathrow

- Overall satisfaction with all airport services

4.3.3 We compared the responses of senior passengers at Heathrow in each year with:

- Seniors at Gatwick
- Seniors at Schiphol
- The global airport average of seniors
- Non-seniors at Heathrow

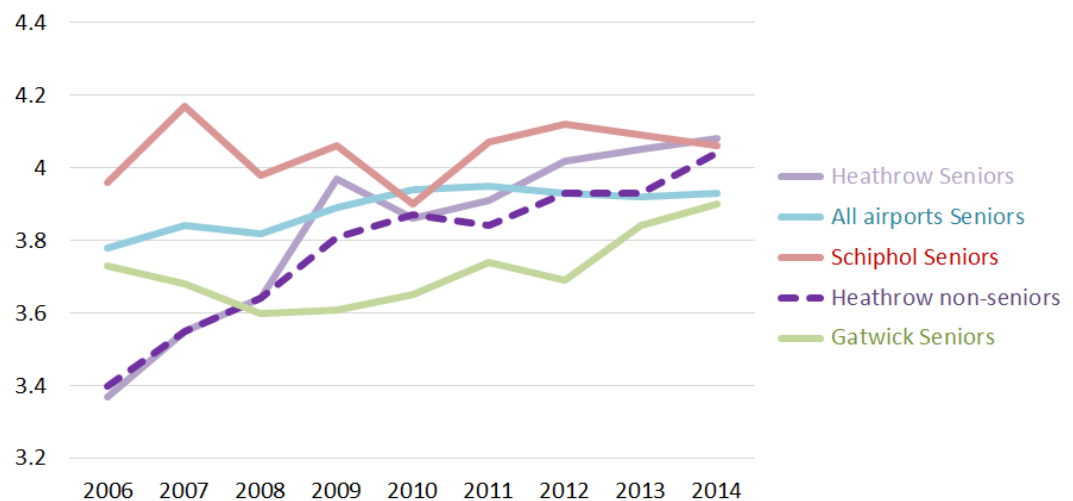
4.3.4 We defined senior passengers as those responding in the ASQ age range categories: 55-64, 65-75 and 76 and over.

4.3.5 Figure 7 compares baggage trolley availability between our passenger samples over the reporting period. For our Heathrow seniors, there is consistent improvement in perceptions of trolley availability since 2006. This service attribute was performing particularly poorly in 2006 compared to the other airports. By 2015, trolley availability for seniors was rated highest at Heathrow compared to the both the global airport average and to its two competitors.

4.3.6 According to Figure 8 there is a marked and consistent improvement in the Heathrow seniors rating for security staff courtesy over the period. By 2014, the gap between Heathrow and Schiphol had narrowed considerably. However, the seniors rating for Heathrow remains below that achieved at Gatwick and the global average.

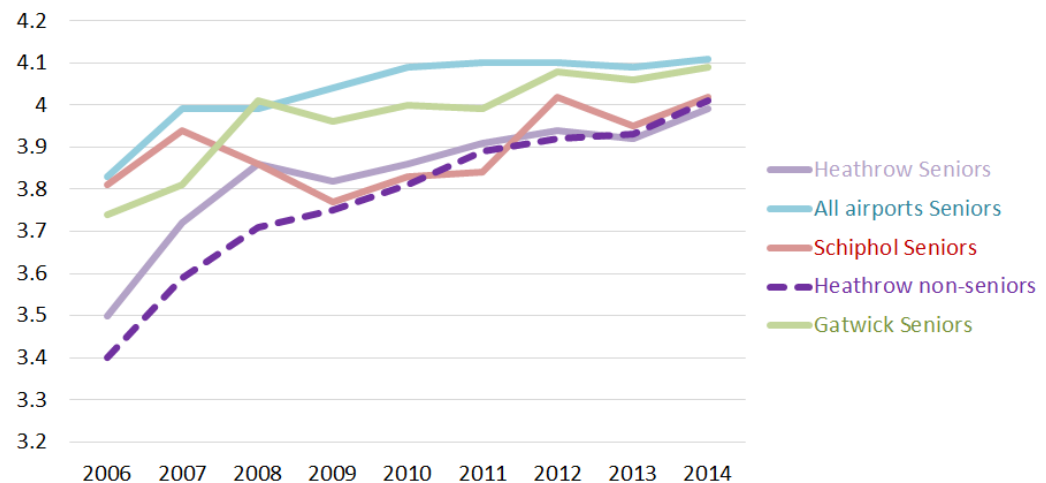
Study on the travel needs of the ageing population at Heathrow

Figure 7: ASQ Average rating for baggage trolley availability 2006 to 2014



Source: ACI ASQ surveys 2006 to 2014

Figure 8: ASQ Average rating for security-staff courtesy 2006 to 2014

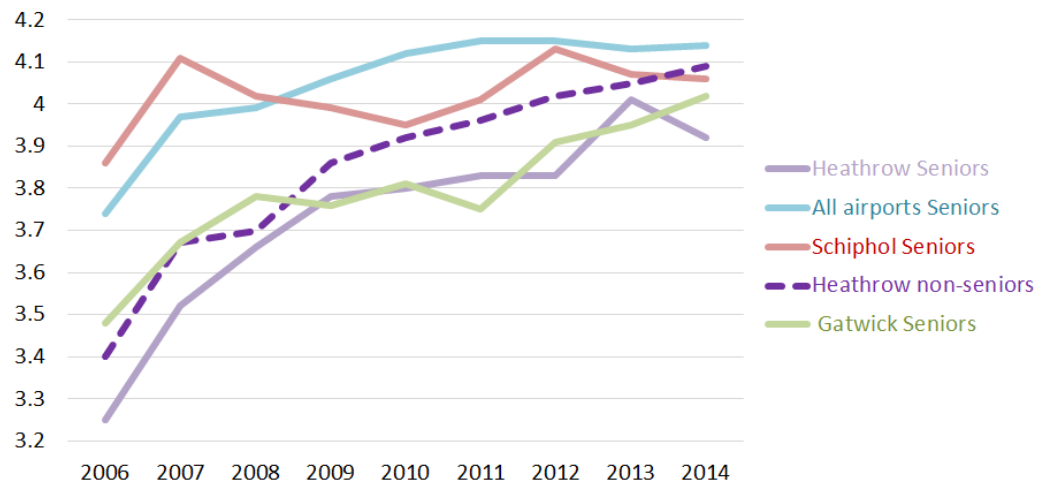


Source: ACI ASQ surveys 2006 to 2014

4.3.7 Way-finding can be particularly challenging for senior citizens, especially in large complex terminals. Again there has been a steady and consistent improvement in way-finding ease at Heathrow amongst both seniors and non-seniors. Naturally seniors rate ease of way-finding at Heathrow lower than non-seniors. The global airport average is higher because this includes many smaller airports with less complex terminals. Whilst way-finding for seniors has improved, it is still below that experienced at both Gatwick and Schiphol and there appears to have been a marked deterioration between 2013 and 2014

Study on the travel needs of the ageing population at Heathrow

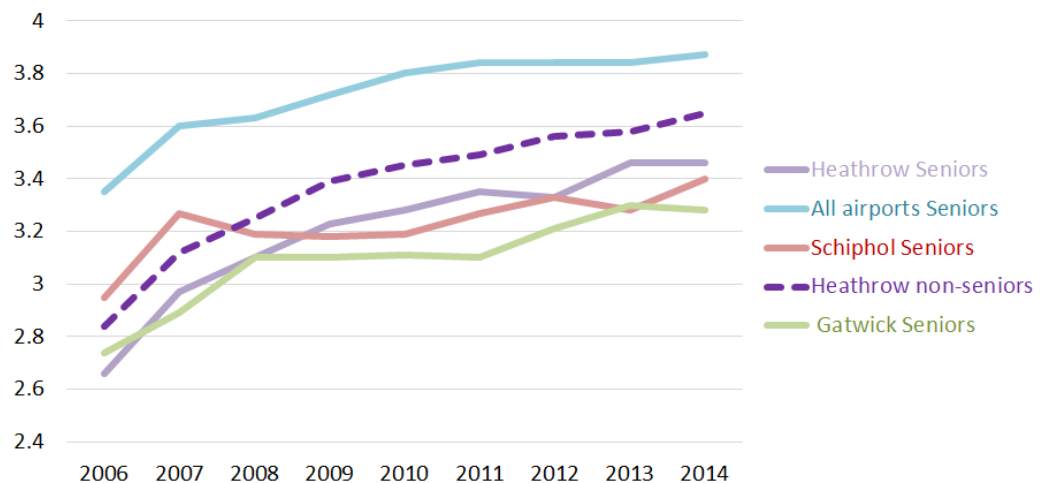
Figure 9: ASQ Average rating for ease of terminal way-finding 2006 to 2014



Source: ACI ASQ surveys 2006 to 2014

4.3.8 Senior passengers can find long terminal walking distances quite challenging. Major hubs will be at a disadvantage compared to smaller airports. Single-terminal Schiphol, with its long walking distances between gates, performs particularly poorly in this regard. Multi-terminal Heathrow actually performs quite well, recording a consistent improvement over the period 2006 to 2014.

Figure 10: ASQ Average rating for ease of walking distances 2006 to 2014



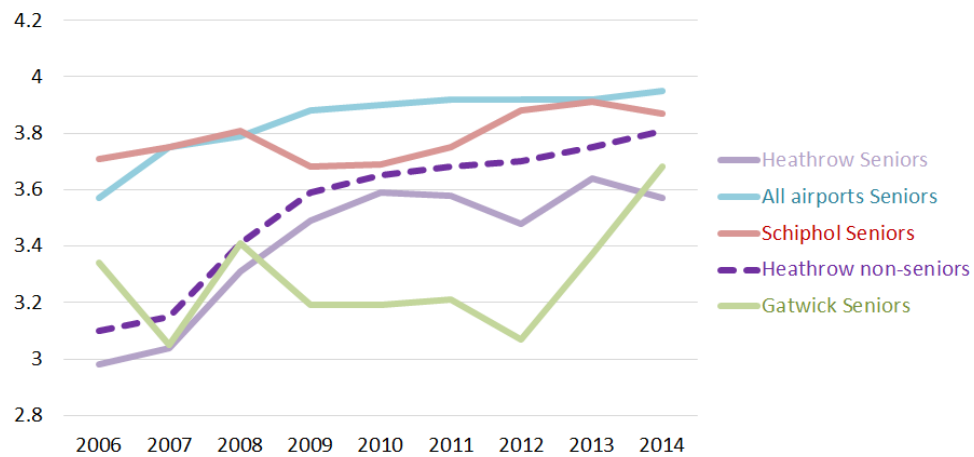
Source: ACI ASQ surveys 2006 to 2014

4.3.9 Figure 11 shows the average rating for ease of making connections for transfer passengers. Schiphol's one-terminal, designed to facilitate transfers for the KLM hub and spoke network, provides it with some natural competitive advantages in meeting connecting

Study on the travel needs of the ageing population at Heathrow

passenger needs. At Heathrow, there has been an improvement in how seniors rate the ease of transferring at Heathrow but this was limited to the period 2006-2010. Since 2010 there has been no improvement. Gatwick, in contrast has done quite well achieving a higher rating compared to Heathrow in 2014.

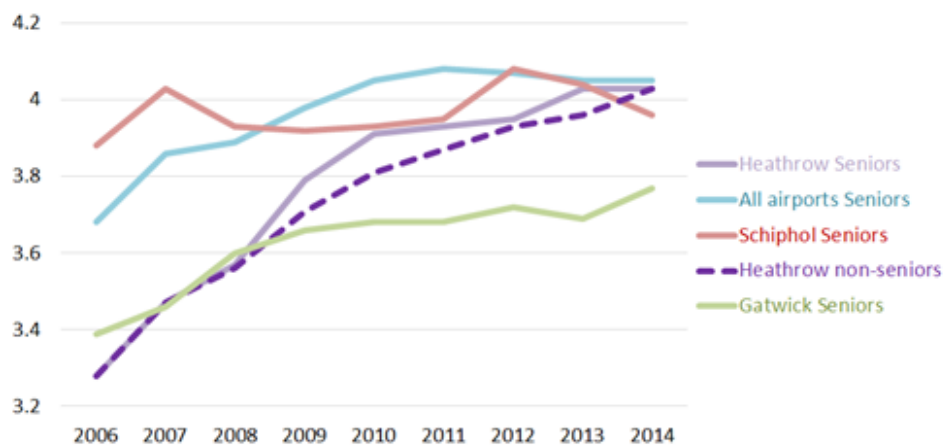
Figure 11: ASQ Average rating for ease of making connections 2006 to 2014



Source: ACI ASQ surveys 2006 to 2014

4.3.10 Figure 12 shows how passengers rate the availability of washrooms. For senior passengers, Heathrow improves consistently during the period to the extent that by 2014, satisfaction levels are on a par with the global average and have exceeded those experienced by seniors at both Schiphol and to a much greater extent at Gatwick.

Figure 12: ASQ Average rating for availability of washrooms 2006 to 2014



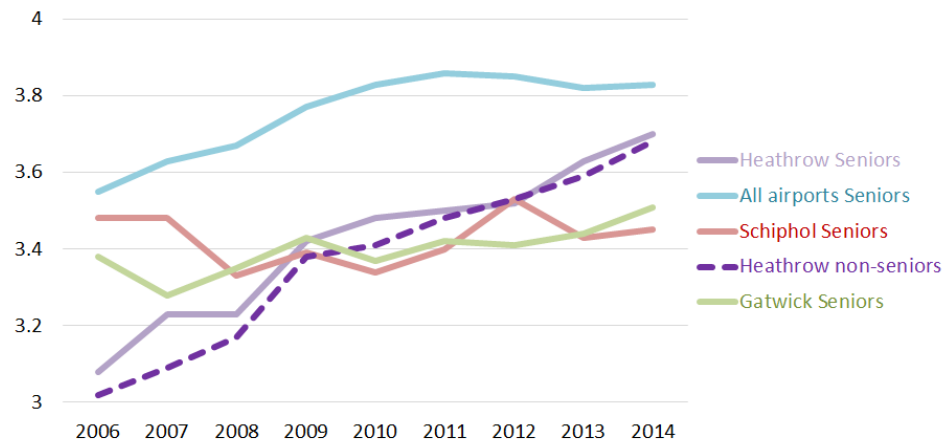
Source: ACI ASQ surveys 2006 to 2014

4.3.11 For some seniors, the comfort of waiting and gate areas is an

Study on the travel needs of the ageing population at Heathrow

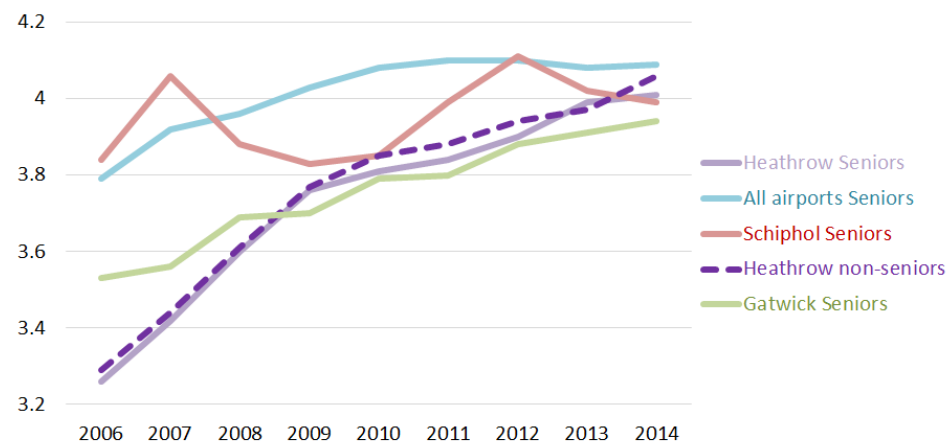
important element of their passenger airport experience. Again, like all measures, there has been a marked and consistent improvement at Heathrow for both seniors and non-seniors. By 2014, Heathrow has exceeded both Gatwick and Schiphol in waiting area comfort by a considerable margin; achieving a rating of 3.7 compared to 3.51 and 3.45 respectively.

Figure 13: ASQ Average rating for comfort of waiting / gate areas 2006 to 2014



Source: ACI ASQ surveys 2006 to 2014

Figure 14: ASQ Average rating for overall satisfaction 2006 to 2014



Source: ACI ASQ surveys 2006 to 2014

4.3.12 According to Figure 14, in terms of how senior's rate our airports generally in terms of overall satisfaction, Heathrow, again achieved year-on-year growth to the point at which in 2014, overall satisfaction was higher compared to both Gatwick and Schiphol.

4.3.13 Heathrow does especially well relative to the global average,

Study on the travel needs of the ageing population at Heathrow

Schiphol and Gatwick in terms of baggage trolley availability for senior passengers.

- 4.3.14 As far as walking distances, availability of washrooms, comfort of waiting / gate areas and in terms of overall satisfaction are concerned, Heathrow achieves higher ratings in 2014 compared to Gatwick and Schiphol but is below the global average.
- 4.3.15 There are three areas in which Heathrow under-performs relative to both its two key competitors and the global average and this is in security staff courtesy, ease of way-finding and in ease of making connections.
- 4.3.16 It should be noted that in all 8 service provision components, there has been a marked improvement in satisfaction levels for Heathrow over the period 2006-2014. Table 4 provides a summary of Heathrow's competitive position in the 8 components of service provision.

Table 4: Summary of ASQ analysis for Heathrow seniors

Service	Competitive position of Heathrow in 2014
Baggage trolley availability	Higher than Gatwick Higher than Schiphol Higher than Global average
Security staff courtesy	Lower than Gatwick Lower than Schiphol Lower than Global average
Ease of way-finding	Lower than Gatwick Lower than Schiphol Lower than Global average
Walking distances	Higher than Gatwick Higher than Schiphol Lower than Global average
Ease of making connections	Lower than Gatwick Lower than Schiphol Lower than Global average
Availability of wash-rooms	Higher than Gatwick Higher than Schiphol Lower than Global average (slightly)
Comfort of waiting / gate areas	Higher than Gatwick Higher than Schiphol Lower than Global average
Overall satisfaction	Higher than Gatwick Higher than Schiphol Lower than Global average

QSM Analysis

4.3.17 We obtained Heathrow Airport Quality of Service (QSM) data for 2009 to 2015 and defined seniors as those in QSM age categories of 55-64, 65-74 and over 75.

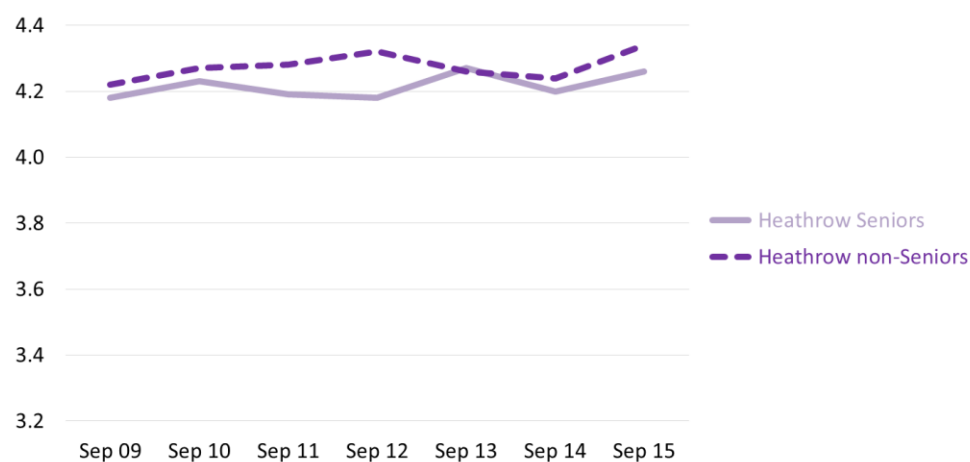
4.3.18 The month of September was chosen in each year for trend analysis to avoid peak leisure or business travel months and to reflect a month known to be significant for senior travel at other airports.

4.3.19 Survey questions were chosen for analysis according to areas that may have presented a particular challenge for senior passengers not covered by the ACI ASQ data:

- Ease of reading flight information screen
- Ease of finding a seat (in departure lounge)
- Ease of leaving the aircraft
- Immigration waiting time
- Baggage reclaim waiting time
- Trolley availability (arrivals)

4.3.20 Seniors' perceptions of service quality in each area were compared to non-seniors and the results are shown in Figure 15 to Figure 20.

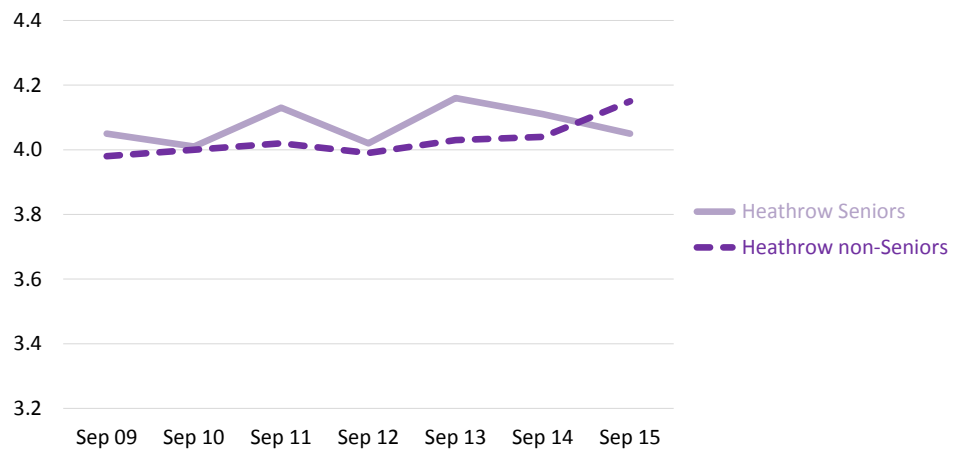
Figure 15: QSM rating for ease of reading flight information screen 2009-15



Source: QSM Data

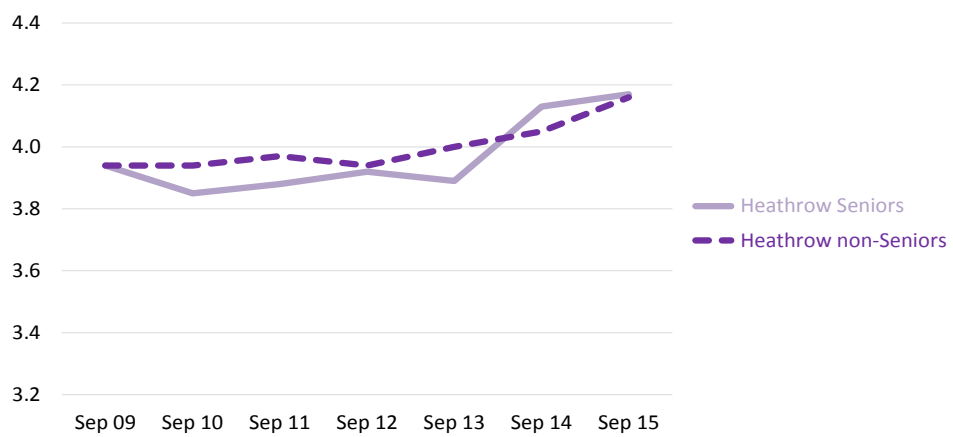
Study on the travel needs of the ageing population at Heathrow

Figure 16: QSM rating for ease of finding a seat 2009-15



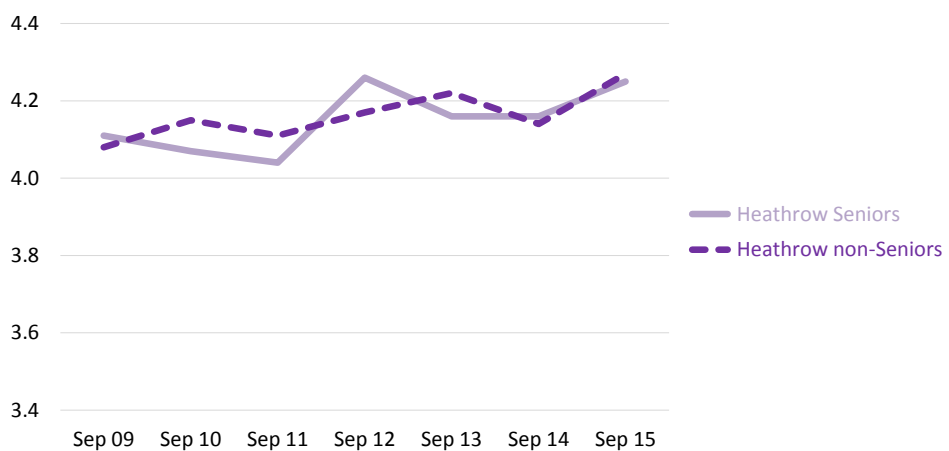
Source: QSM Data

Figure 17: QSM rating for ease of leaving aircraft 2009-15



Source: QSM Data

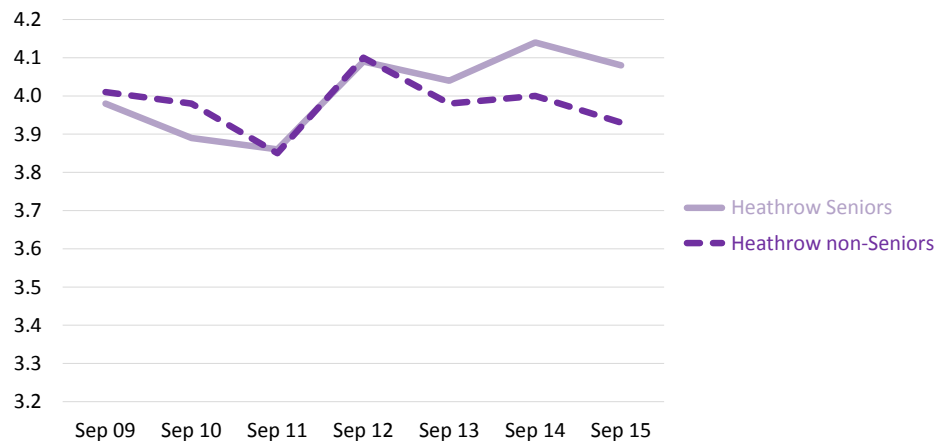
Figure 18: QSM rating for immigration waiting time 2009-15



Source: QSM Data

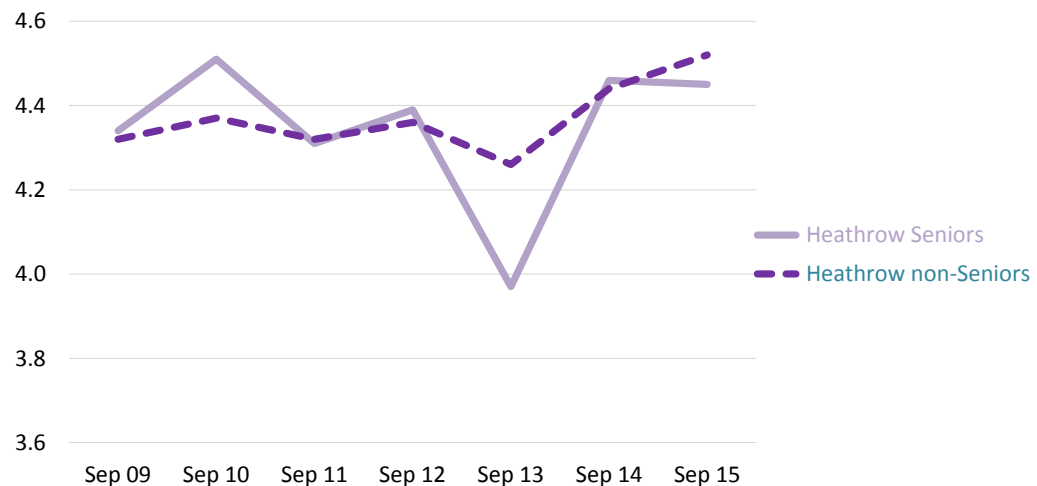
Study on the travel needs of the ageing population at Heathrow

Figure 19: QSM rating for baggage reclaim waiting time 2009-15



Source: QSM Data

Figure 20: QSM rating for trolley availability 2009-15



Source: QSM Data

4.3.21 There is little consistent and material difference between non-seniors and seniors in the perception of ease of reading flight information screens, ease of finding a seat, ease of leaving aircraft and baggage reclaim hall waiting time. Notably, both populations also show an improving trend in scores over time.

4.3.22 Seniors seem to have been more patient regarding immigration waiting time since 2013 and seem to have a more exaggerated view of trolley availability than non-seniors.

4.4 Retail spending behaviour of elderly travellers at Heathrow

4.4.1 In assessing the airside retail spending behaviour of our senior

passengers, we received data on the following indicators from the airport:

- Proportion of passengers who visited either a retail or F&B unit
- Proportion of passengers who bought / consumed a product in either a retail or F&B unit (sales penetration)
- Average airside retail spend per buyer
- Average airside retail spend per passenger

4.4.2 The data was segmented into the following age ranges; all ages, under 25, 25-34, 35-44, 45-54, 55-64 and 65 and over. We received data for each financial year between 2007-8 and 2014-15.

4.4.3 Within each age range and financial year, the data was also segmented by destination (All, UK, other EU, non-EU).

4.4.4 We have chosen to focus on two variables; % of passengers who buy (sales penetration) and average spend per buyer.

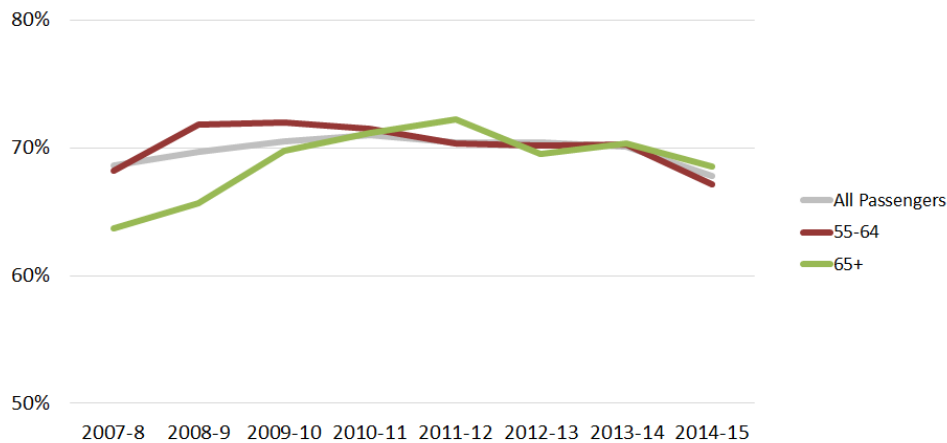
% of passengers who buy

4.4.5 According to Figure 21, when comparing sales penetration over the period by age group for passengers on flights to all destinations, we find a narrowing of the sales penetration rates. Indeed sales penetration remains broadly unchanged for all passengers. Interestingly for those aged 65+, sales penetration rates changed from being below average in 2007-8 to slightly above average in 2014-15. There is no significant difference between the 55-64 age group and the average over the period.

4.4.6 Whereas the trend for passengers travelling to non-EU destinations is very similar to that shown in Figure 21, for Figure 22 (EU destinations) we have a quite different evolution of sales penetration amongst our age groups. The age range 55-64 remains largely stable. However, for those aged 65+, there is a consistent increase in sales penetration throughout the period to the point where by 2014-15 the ratio is higher compared to the average and the 55-64 age range.

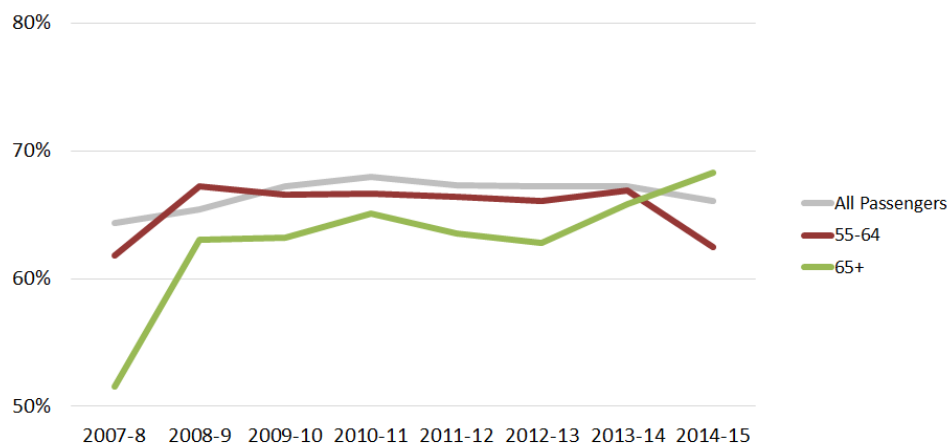
Study on the travel needs of the ageing population at Heathrow

Figure 21: % who buy from at least 1 retail or F&B unit by age 2007-8 to 2014-15 (for flights to all destinations)



Source: Heathrow Airport

Figure 22: % who buy from at least 1 retail or F&B unit by age 2007-8 to 2014-15 (for flights to EU destinations)



Source: Heathrow Airport

- 4.4.7 For passengers on flights to UK destinations shown in Figure 23, the sales penetration rates of our more senior demographic age ranges is generally below average. Over the period there is a decline in the 55-64 group, whilst for the 65+ the sales penetration rate remains broadly the same in 2014-15 compared to 2007-8.

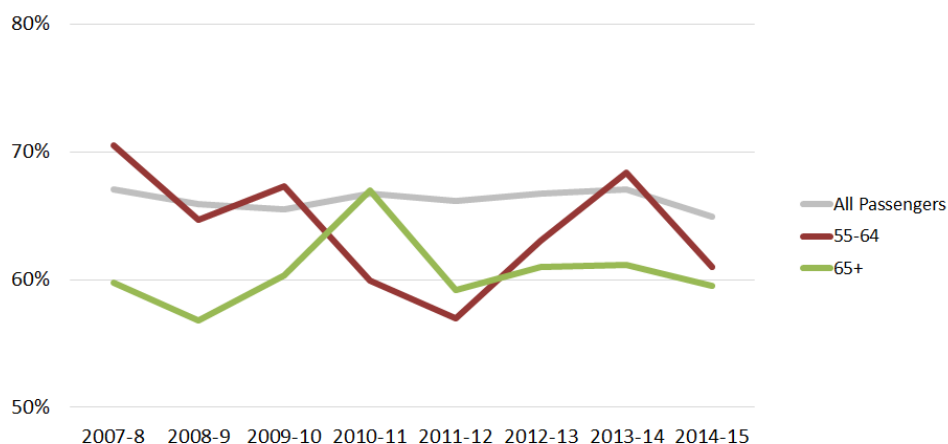
Average sales per buyer

- 4.4.8 Figure 24 compares the average spend per buyer between our demographic groups over the period. For most of the period, there is a rise in spend up to 2012-13. From this point onward, there is a fall in the average for all passengers and for those in the 55-64 age-

Study on the travel needs of the ageing population at Heathrow

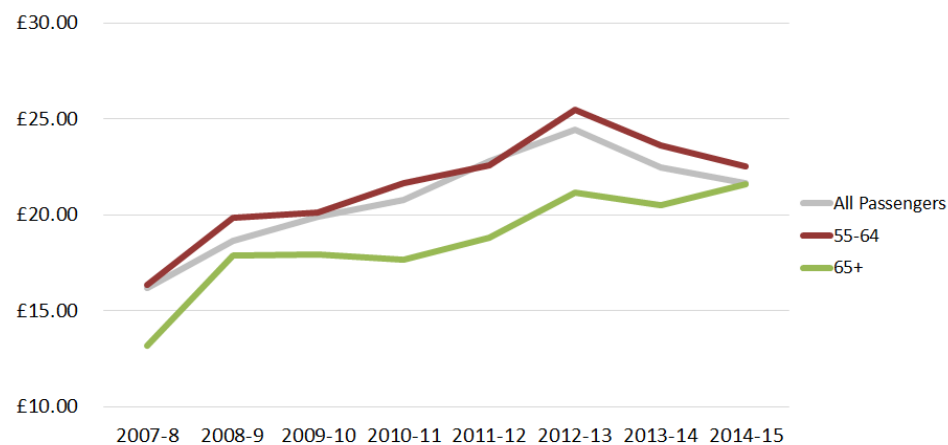
group to 2014-15. The decline in spend is perhaps largely attributable to the strengthening of sterling, Terminal 5 refurbishments and the movement of airlines to Terminal 2.

Figure 23: % who buy from at least 1 retail or F&B unit by age 2007-8 to 2014-15 (for flights to UK destinations)



Source: Heathrow Airport

Figure 24: Average airside retail sales per buyer by age group (flights to all destinations)



Source: Heathrow Airport

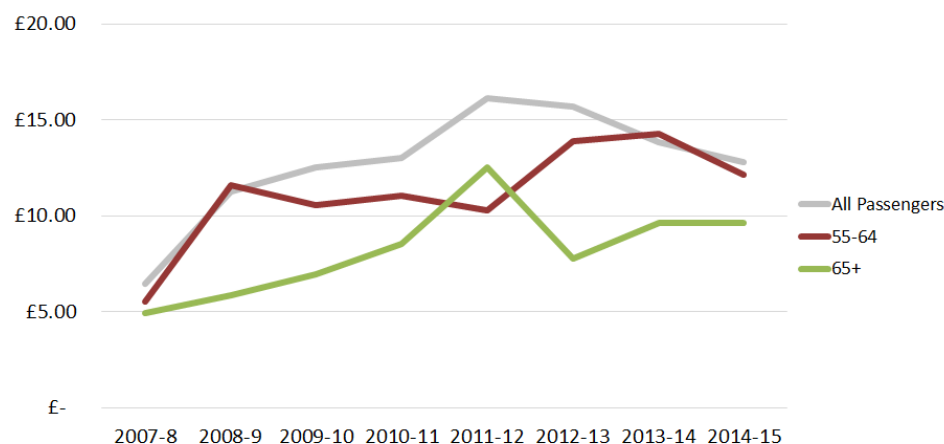
4.4.9 Interestingly for our 65+ group, there is convergence in the earlier period and then under-performance from 2008-9 to 2013-14. By 2014-15, average sales per 65+ buyer converges with the average for all passengers.

4.4.10 We find a very similar trends when analysing passenger spend on flights to both other EU and non-EU destinations. With regard to the domestic market, there is generally faster growth in sales per

Study on the travel needs of the ageing population at Heathrow

passenger in the 55-64 age group compared to 65+. What is particularly unusual is a particularly sharp increase between 2010-11 and 2011-12 followed by a sharp reduction in 2012-13.

Figure 25: Average airside retail sales per buyer by age group (flights to UK destinations)



Source: Heathrow Airport

4.4.11 Table 5 provides a summary of spend per buyer and sales penetration data for 2014-15 covering all age ranges.

Table 5: Average spend per buyer and sales penetration rate by age group (flights to all destinations) in 2014-15

	Average spend per buyer	% growth since 2007-8 ¹	Sales penetration rate	% growth since 2007-8 ¹
All passengers	£31.97	+35%	68%	-1.13%
Under 25	£22.79	+18%	67%	+2.49%
25-34	£29.58	+31%	69%	-2.42%
35-44	£35.31	+31%	69%	-0.86%
45-54	£39.28	+54%	66%	-3.63%
55-64	£33.56	+40%	67%	-1.55%
65 +	£31.49	+52%	69%	+7.55%

Source: Heathrow Airport

4.4.12 In terms of spend per buyer, 55-64 passengers spend more than the average and are the third highest spenders of all categories. 65+ spend just below the average but their spending has grown the fastest, up 52% since 2007-8. In terms of sales penetration, all age

¹ Nominal terms (no adjustment for inflation)

Study on the travel needs of the ageing population at Heathrow

ranges are broadly similar. However, the 65+ group have achieved much higher growth in sales penetration since 2007-8.

5 Stakeholder analysis method

5.1 Interview protocol

5.1.1 The following section reports the findings from a series of interviews conducted with key industry stakeholders and subject matter experts on the issue of ageing populations, senior air travellers, and air transport. The purpose of these interviews was to build on key themes and findings developed from the literature review and macro-trends and market insights sections of the report, address any questions that arose from this process, and to provide an industry relevant up-to-date perspective of these issues. Practitioners are valuable units of analysis because they influence policymaking and provide an easily accessible and in-depth source of information. As a result, eight interviews were conducted with practitioners from a range of disciplines and backgrounds relating to air transport and older people.

5.2 Interview format and structure

5.2.1 A semi-structured interview format was selected for the interviews. This enables information to be collected around a set of predetermined topics, but also affords the interviewer the flexibility to address themes considered to be of particular importance, tailor the interview to the specific candidates, or even explore topics that were not originally intended for inclusion.

5.2.2 Interview questions were based around four main categories; general issues, the varying needs and requirements of seniors, role specific issues, and future perspectives. General questions sought to elicit views on the likely impacts of an ageing UK population and past trends. Questions were then included to assess the various challenges faced (and posed) by older passengers in an air transport context. Participants were then asked questions specific to their role in order to provide a variety of perspectives on the issues at hand. As these roles varied considerably across the sample, this section of the interview schedule was afforded the greatest flexibility. Lastly, participants were asked to provide an indication of likely future developments as well as make recommendations as to where the air transport industry could learn from other sectors in terms of provision for older passengers. A summary of the interview schedule is shown

Study on the travel needs of the ageing population at Heathrow

in Table 6.

Table 6: Interview schedule

Category	Questions
General issues	<p>Could you please briefly outline your job title and describe what the role entails?</p> <p>What do you feel are the main impacts of an ageing population for UK society?</p> <p>How, if at all, do you think the travel patterns of older people have changed in the last 25 years</p> <p>How, if at all, do you think the propensity to fly among older people has changed in the last 25 years?</p>
The varying needs and requirements of senior passengers	<p>Why do you think some older passengers find travelling by air challenging?</p> <p>How are passenger needs communicated to airports and air transport service providers?</p> <p>In your opinion, what are the opportunities older passengers can provide for airports and providers of air transport?</p>
Role specific questions	<p>How does an ageing population affect you and your role?</p> <p>Does your organisation make any special provisions for elderly passengers?</p> <p>How would you describe the way the air transport industry currently serves the needs of older passengers?</p> <p>From a planning or strategic perspective, as an organisation do you address issues concerning the needs of older passengers any differently from other groups?</p> <p>Could you describe the way in which your company addresses issues concerning older passengers?</p> <p>How, if at all, is responsibility for dealing with older passengers defined in your organisation?</p>
Future developments	<p>Where, if at all, do you think airports and air transport providers could learn how to meet the needs of older passengers better than they currently do?</p> <p>If you were to give a new airport advice about how they should meet the needs of their older passengers, what would you say?</p>

5.3 Interview sample

5.3.1 Key personnel were identified using a combination of online searches and snowball sampling, whereby respondents that had already been identified helped to recruit additional subjects by

suggesting further possible candidates from their own contacts and acquaintances. It was considered important that participants were drawn from a variety of backgrounds and disciplines in order to provide a range of perspectives on the issues at hand. Each participant had significant experience and knowledge of key issues relating to older passengers, and/or airport management and air transport. In total eight interviews were conducted with a total of 10 participants.

- **Geraldine Lundy** is passenger accessibility manager for Virgin Atlantic Airways. In her role she is responsible for compliance in regard to disability legislation. Her role is to make sure that customers who need extra care can travel safely and comfortably (incl. anxious passengers). This role does not focus on age but encompasses anyone that needs extra care.
- **James Freemantle** is Consumer Enforcement Manager at the UK CAA. His role covers the enforcement of EU regulation 1107/2006 in UK. He has civil powers of enforcement under EU legislation and criminal powers if safety related. His remit also covers PRM attitudes and website information for PRMs. He is currently focusing on communication work encouraging PRMs and the elderly to travel.
- **Ann Frye OBE** is director of Ann Frye Ltd., a consultancy providing strategic, policy and practical advice on meeting the mobility needs of disabled and older people. She also directs Passetout Training Ltd., a not for profit company specialising in training staff working in air travel and other transport modes on complying with legal requirements and delivering good practice in meeting the needs of disabled and older people. Ann is a member of the UK CAA Consumer Panel and chairs the sub-group on disabled air travellers (PRMs) of the European Civil Aviation Conference (ECAC) and co-chairs the US Transportation Research Board sub-committee on International Activities in Accessible Transportation and Mobility.
- **Mathew Garner** is director of aviation services for Omniserve at Heathrow. His role covers the PRM service for all airlines, 400 ambassador staff as well as all inter-terminal coaching and various other smaller check-in and unaccompanied minor services for some airlines around the airport.

Study on the travel needs of the ageing population at Heathrow

- [Andrew Wright](#) is a disability specialist/advocate advising Birmingham, Glasgow, Heathrow and Stansted airports, Omniserve, Virgin Atlantic and Ryanair. He is also managing director of Accessible Travel and Leisure, the UK's leading specialist tour operator providing holidays for disabled travellers, their family and friends.
- [Helen Welch](#) is Director of Customer Insights at SAGA group. She is an experienced strategic Insight professional, focusing on all aspects of the consumer - needs, attitudes, behaviour, current and potential future, - with experience in B2B research, business planning and strategy.
- [Joe Oldman](#), is the Director of Policy at AgeUK with regard to Housing and Communities. Within this remit he has responsibility for transport issues.
- [Karen Ellis](#) is the customer relations director for Houston Airport System, which consists of George Bush Intercontinental Airport (IAH) and William P. Hobby Airport (HOU). [Ken Whittaker](#) is the customer relations manager at IAH while [Gabrielle Dirden](#) is the customer relations manager at HOU. This interview, conducted by conference call, was intended to provide an international comparison of the experiences of a large hub airport outside.

5.4 Conducting and analysing the interviews

- 5.4.1 Members of the project team conducted the interviews in October and November 2015, with each interview lasting between 45 and 90 minutes. One interview was conducted via conference call, while the remaining interviews were conducted in person, by 1:1 telephone call or by Skype. During each interview notes were taken which were used to help write up a summary of the findings after their completion. Thematic analysis was then used to identify key themes to act as the framework for further analysis.

6 Stakeholder analysis findings

6.1.1 Analysis of the interviews revealed five key categories; general issues, challenges, provision for senior passengers, the industry approach to an ageing population, and airport related issues. Findings for each category are arranged by interviewee in order to facilitate comparison between various stakeholders included in the study. In some cases interviewees did not address all topics.

6.2 General issues

Geraldine Lundy - Virgin Atlantic Airways.

6.2.1 Dealing with an ageing population is mainly an operational function within Virgin Atlantic, rather than a strategic perspective. “Medical Services” is responsible for catering to the special needs of older passengers as well as other passenger groups that need assistance. Furthermore, the customer relations department is involved when there are any complaints regarding PRMs.

6.2.2 The airline monitors the number of assistance requests (i.e. how many were ordered and how many were fulfilled), although there are data issues. The main reason for monitoring is that the service providers charge the airline. However, in many cases the airline is dependent on the numbers they receive from the service providers without the possibility to control and check them. This is particularly an issue for “non-notified” requests (i.e. where the service is not booked in advance).

6.2.3 Virgin Atlantic also logs and evaluates complaints relating to PRMs through monthly reports. Overall, the number of issues related to PRMs and older passengers has reduced over time, though these do vary according to the airport in question.

6.2.4 Virgin Atlantic’s data shows that the number of PRMs has increased overtime (both at Heathrow and Gatwick). However, the data that Virgin Atlantic receives from the service providers does not describe the age of the people who use the service. Currently some people with disabilities (incl. senior passengers with mobility problems) choose not to travel. However, with increasing accessibility to air transport and improved legislation, the number of PRMs is likely to increase.

6.2.5 The share of senior passengers and PRMs varies according to the route. High numbers are recorded on routes to/from India (particularly India – London – Los Angeles) and the Caribbean. Also a higher share of PRMs is recorded on leisure routes (mainly through LGW) than on more business-dominated routes (mainly through LHR).

James Freemantle - UK CAA

6.2.6 Many aspects of UK society are impacted by an ageing population, most notably the National Health Service and the employment market. Infrastructure is under increasing strain and more assistance is required for many people in their day-to-day lives. The government has direct involvement in aspects like the provision of train infrastructure, but its role in aviation is to put in place a climate to encourage the involvement of private operators in parallel with enforced performance measures (for example, in areas such as service quality).

6.2.7 EU regulation now provides rights for elderly and disabled passengers, and this has resulted in a big increase in the number of PRMs carried by air since 2008. The service is now more seamless than before, with greater visibility in UK airports. Infrastructure is newer with more consideration of the service provided to vulnerable people. Some airlines like Easyjet and Virgin have chosen to provide more than the required services for their PRMs. Currently, around 70% of PRMs are elderly people.

6.2.8 Propensity to travel for older people has increased significantly in the last 25 years. This change has been most marked at regional UK airports that are perceived to be smaller in scale and have a more personal nature [than larger airports]. The trend is set to continue at all UK airports although this will have an impact on operating costs in facilitating the transport of increasing numbers of elderly people, who in turn require improved assistance, and the development of service innovations like dedicated fast track security.

6.2.9 The proportion of passengers in the UK using PRM assistance is much higher than in other EU countries (around 0.5% in Germany and France compared to 1.3% in UK).

Ann Frye- Ann Frye Ltd.

- 6.2.10 The aviation industry has been slow to recognise the impact of the baby boomer (born between 1945 and 1965) bulge now entering into old age. This market segment has different needs and expectations – this is the first generation of older people who want and expect to continue travelling as they have in younger years. Travel patterns by senior passengers are changing – for example instead of going to Spain for the winter they will make trips home during their stay much more readily. A leading UK short-haul airline reports 70% growth in the 65+ market in the last 5 years. The historical trends in increased disposable income, better health and attitudinal change seen in the last 25 years will continue for the next 20 years as more of the baby boomer market reaches old age.
- 6.2.11 Most old people do not have a disability and would never consider themselves as having reduced mobility, even when this is not the case. Dementia, vision loss, hearing loss and difficulty in standing all increase with age for people aged 65+. The issue of undiagnosed dementia is very serious for lone senior travellers who can become very confused and agitated in unfamiliar surroundings. Anecdotal and media reported evidence of such passengers wandering into unauthorised or dangerous places is growing. Anyone with dementia should always be accompanied in an airport.

Matthew Garner- Omniserve

- 6.2.12 The UK is facing a time bomb of ageing population with significant impacts for the National Health Service and social care. In transport, aviation continues to play catch up to this changing demographic, and the right of airport passengers not to have to pre-book PRM services (which around 20% of PRM passengers at Heathrow do not) makes planning adequate service provision a challenge.
- 6.2.13 It is very difficult to forecast the demand for Omniserve's products at the airport because of the significant variation in the ratio of pre-booked: un-booked passengers. This can make effective and efficient staff rostering very difficult when demand can vary between 400 and 650 PRMs per day.
- 6.2.14 Between 0.8% and 1.5% of Heathrow passengers use the PRM service and around 70% of them are elderly but not classified as disabled. There is a growing aspiration to travel amongst senior

travellers who may be frail and require meeting and assistance rather than a comprehensive PRM service, but they receive the latter because of EU regulation. This is a significant issue as propensity to fly increases in this demographic.

Andrew Wright- Accessible Travel and Leisure

- 6.2.15 The number of people continuing or starting to travel as they reach old age has increased dramatically. They are fitter, more aspirational and adventurous than their predecessors. Disposable incomes have increased and travel has become easier. Charities and governments continue to encourage this trend, which is expected to continue. Life expectancy will increase further and UK society may move away from preferring home ownership in older age, which could further increase disposable incomes.

Helen Welch- SAGA group

- 6.2.16 SAGA are predicting a very robust future for the senior air travel market. Their own commissioned research shows that there has been strong growth in travel and tourism spending from senior demographics. For example, between 2002 and 2012 travel and tourism spending in the UK increased by over 50% in real terms for those aged 65-74 and by 40% for those aged over 75 years, compared to a UK household average of just under 20%.
- 6.2.17 SAGA's research also shows that according to the International Passenger Survey for 2013, older demographics make fewer holidays if mode of travel is air compared to sea. For the senior demographic, cruises remain the most preferred mode of international travel. The average age of UK cruise passengers was 57 in 2013 compared to 54 in 2008, so they too are experiencing an ageing of their main customer base.
- 6.2.18 Many researchers in the field of population ageing will inadvertently stereotype this demographic. For example, by assuming that this consumer group is generally homogenous with very similar needs, preferences and expectations.

Karen Ellis, Ken Whittaker and Gabrielle Dirdin - Houston Airport Systems

- 6.2.19 Dealing with older passengers and passengers with reduced mobility is mainly an issue for airlines and the service providers, with the

airports having relatively little involvement and influence over any issues and service provision.

- 6.2.20 Data collected at our airports does not necessarily show a significant change in the average age at the airports, with the median age being in the early 40s. Observations by the airport managers show some increase in older passengers, but no further research has been conducted on this issue. However, our airports have recorded an increase in wheelchair requests in recent years.

Joe Oldman – AgeUK

- 6.2.21 Joe Oldman's focus of responsibility is in driving and in community public transport. He referred to Anne Frye as the air transport specialist for aviation and senior citizens.
- 6.2.22 AgeUK highlight the need to prepare systems for the rise in dementia amongst senior citizens, in particular the need for appropriate staff training and for new considerations in architecture, design and street furniture to assist senior travellers. They also are advocating closer collaboration between all stakeholders.

6.3 Challenges

Geraldine Lundy - Virgin Atlantic Airways.

- 6.3.1 Some of the challenges associated with an increasingly ageing population relates to the fact that the needs of these people are not always visible (including some illnesses and disabilities). For example, dementia and other medical conditions create challenges, as these needs are not always visible and there is a danger of passengers "getting lost" at the airport if they are not looked after properly.
- 6.3.2 Current IT infrastructure creates some challenges. The MAAS (meet and assist) IATA code that was used in bookings (PNRs) is no longer in use. This means that some cases are not recorded in the booking file and some people may not receive the assistance they require. A different IATA code currently in use, "DPNA" (disabled person needing assistance), is actually aimed at "disabled passengers with intellectual or developmental disability". Booking systems also only allow 45 characters maximum to specify the type of assistance that is needed, which leads to problems in fully explaining the passengers' requirements.

- 6.3.3 Additionally, other codes such as WCHC (completely immobile passenger) do not provide the full information required. For example, can the passenger “self-transfer”? This code does not provide information about the amount or specific type of assistance required for these passengers. Industry standards therefore limit the preparedness of airlines in dealing with PRMs.
- 6.3.4 Another IT related issue is the communication between airlines, airports and service providers. Sometimes messages are “going missing”, which means that passengers do not get the service required or there is a delay in service provision.
- 6.3.5 Communication between the different actors in the air transport chain with regards to the service to PRMs is crucial. In many cases, staff of service providers do not know which passenger they are supposed to pick up or are unable to support a particular passenger because the passenger’s needs are not communicated (e.g. sending one slim member of staff to support a larger passenger can cause issues).
- 6.3.6 Another challenge stems from the increased use of technology to improve efficiencies. While many younger people are familiar and more open to try out new technology (e.g. self-tagging of bags), for many senior passengers this can create problems due to physical limitations or unfamiliarity. This can also lead to delays in the process (e.g. e-gates at immigration). With increasing technology substituting human interaction, older people might face more challenges when travelling through airports.
- 6.3.7 A particular challenge with senior passengers is that “personal pride” and fear of being excluded from travelling stops passengers from informing the airline of any assistance they need, or any medical conditions that they have. In the worst case, this could lead to a medical emergency and a diversion. Senior passengers also underestimate the impact that stress, walking distances and the cabin environment (altitude) have on their body and general wellbeing. While they might be very mobile and confident in dealing in their “normal” environment, while travelling, they might face challenges that they did not expect when travelling. Some senior passengers do not know that they have problems until they arrive at the airport. From an airline perspective it is therefore very important that passengers inform the airline about any concerns or issues. In

this respect, Virgin Atlantic has a team of nurses and medical doctors to assess passengers' conditions before they travel.

Ann Frye - Ann Frye Ltd.

- 6.3.8 Airport walking distances are a great challenge for senior passengers and unless they are frequent flyers, many are unaware of this until arriving at the airport. It can be a long trek to the gates which is not helped by poor signage, no seats en-route and unclear information about how far it actually is. A buggy (rather than full PRM service) could be of great help to them but this would need to be handled in a very sensitive way. Gatwick airport is recognising the needs of older passengers and has installed seating at 50m intervals along piers.
- 6.3.9 Loss of audible PA and some airports' policy of later calls to the gate (to maximise airport revenue) can cause anxiety and panic in older passengers.
- 6.3.10 The most difficult aspect of the air journey is the airport, and hardest process at the airport is security. This puts many older people off flying. If asked to remove shoes, they will need a seat to get them back on again. In the United States, regulation has changed to remove the requirement for passengers aged 75+ to remove their shoes. Queuing is difficult for older people and some may be unable to stand at all. High proficiency in English is very important throughout the airport, especially for handling agents. The practice of requiring all passengers to walk through stressful shopping areas after security with no alternative route is a big cause of anxiety.
- 6.3.11 Airports should consider the most appropriate way to communicate with senior passengers (this might not be the internet)! Newspapers, television, local radio and a dedicated phone line would all be useful.
- 6.3.12 There are few examples of best practice in dealing with older passengers from other transport modes, which also seem to face challenges in providing legible signage. Common issues are not providing enough seating and handling long walking distances poorly. The best airport approach in dealing with PRMs has been introduced by Copenhagen airport.

Helen Welch - Saga

- 6.3.13 It is important to recognise that our notion of retirement is changing

and in particular the dividing line between work and retirement. It is often assumed that once individuals retire, they become time rich and have unlimited flexibility in terms of how they are able to use their time. In reality some will have commitments that may restrict their ability to travel. This includes, for example, part-time employment, voluntary work, child-care commitments (grand-children) and various leisure activities.

- 6.3.14 How seniors interact with technology is also a very important issue. Declining health will affect clarity of vision, hearing and decision-making, especially in complex built environments. For example, how we read signs and hear public announcements. Senior citizens will, as they age, face limitations on the amount of information they can absorb at a single time while walking distances will also become a significant issue. In terms of airport services, SAGA suggest that demand for relaxation lounges will become quite important in the years ahead.

Karen Ellis, Ken Whittaker and Gabrielle Dirdin - Houston Airport Systems

- 6.3.15 Challenges that the airports face with regards to an ageing population mainly relate to the reduced mobility of older passengers. Examples of specific problems this can cause include some mobility carts that do not fit into elevators at Houston Hobby, while at Houston George Bush passengers need to transfer onto a train between terminals, which can also cause problems for PRMs.
- 6.3.16 Houston Hobby has an advantage when it comes to PRMs, as distances within the terminal are shorter. At Houston George Bush, the number of transfer passengers means that services for PRM are more challenging and time consuming.

6.4 Provision for Senior Passengers

Geraldine Lundy - Virgin Atlantic Airways.

- 6.4.1 There are no special provisions for older passengers at Virgin, but for passengers who need assistance. Virgin Atlantic does not differentiate between passengers based on their age, but rather based on their need for assistance. For PRMs, the airline offers buggies and wheelchair services.
- 6.4.2 The airline has offered passengers (disabled but also older

passenger with mobility issues) to try their cabin simulator to practice moving around the cabin. For example, one older passenger, who was able to walk but struggled standing up once seated, used the cabin simulator to see if he was able to get out of his seat and move around. There is some evidence that older passengers upgrade to higher service classes, particularly after trying out the cabin simulator.

- 6.4.3 Virgin Atlantic tries to get stands allocated at LHR T3 according to the number of PRMs on board (e.g. they try to get planes from DEL closer to arrivals area, to reduce walking distances and speed up the process).

James Freemantle- UK CAA

- 6.4.4 Older passengers find the journey to the airport and walking distances at the airport difficult. One UK regional airport provides additional seating and freely available wheelchairs at intervals along the walked journey to help senior passengers. Security and waiting whilst standing for many processes in departure and arrivals can put old people off flying. Anxiety about large crowds and queues is directly proportional to a passenger's immobility. Heathrow airport can be very stressful if a senior passenger has a hidden disability like hearing or vision loss. At most regional airports, lack of air bridges is a problem.
- 6.4.5 Research shows that those PRMs that do travel have similar propensity to travel as the able bodied. Similarly, if an elderly person takes the decision to travel – they will generally try it again. If not, they assume that they will struggle. This is the background to focused activity in 2016 by the CAA to promote aviation to PRMs and the elderly.
- 6.4.6 Steps are a big problem for the very old and it can generally be assumed that a passenger aged 85+ will be disabled and require undignified stair-climbers or an ambulift to board the aircraft. They will need PRM assistance at the airport but usually don't know they should book it in advance.
- 6.4.7 The needs of elderly passengers who have chosen not to fly (and their reasoning for this) are not gauged by CAA and ACI airport surveys. Also, on-line surveys might not be picked up by elderly people. It is notable that Easyjet and British Airways are setting up

advisory groups for elderly and disabled passengers.

- 6.4.8 There is scope for airports to advance their PRM services over and above the law by considering the impact of hidden disabilities (identified as a big future issue by the CAA), dementia and best practice. For example, one major regional UK airport provides children with autism a discrete but identifying wristband to ensure their sensitive treatment at security. Many thousands of wristbands have been used already. Another is considering the procurement of specialist training for staff from a dementia charity. Fast track security for PRM and senior passengers is a great idea and would speed the flow rates through channels for other passengers too.
- 6.4.9 The use of electrically driven mobility scooters is becoming a problem at UK airports and their use is set to increase significantly as passengers continue to age. They are carried free by airlines and their carriage cannot normally be refused. They take up significant space in terminals and cargo holds and must be immobilised before stowing.
- 6.4.10 The UK CAA requires that all airports with 150k+ passengers per annum provide performance data describing their PRM services. Passenger surveys to better understand the feelings and experiences of service users must also be produced and the CAA will publish a compliance report regarding this for all UK airports in Spring 2016.

Matthew Garner- Omniserve

- 6.4.11 Older passengers can take more time to pass through the various processes of departure and arrival and can feel overwhelmed at large airports. The presence of dementia and frailty must be more of a consideration for airport staff. Security is not pleasant for any passenger but especially difficult for senior passengers and PRMs and it can be hard to improve this.
- 6.4.12 A key to easing their experience is clear explanation of what will happen next in their journey, especially at security, boarding and disembarkation. A simplistic process map would help as the biggest source of complaints is from passengers left waiting and not knowing what will happen to them next, or if they have been forgotten.
- 6.4.13 At East Midlands airport, September is the busiest month for PRMs

(and thus senior travel) as retirees and those no longer looking after children take advantage of reduced fares after the school summer holidays. The 'grey pound' drives very high retail spend in duty free.

- 6.4.14 A differentiated service for senior passengers could help but if this was offered on say the British Airways website, they would have to do it for all of their served airports and routes.
- 6.4.15 Aviation could look to other industries to learn more about meeting the needs of older passengers. The hotel industry can give examples of best customer service practice whilst cruise ships and day care centres might help in meeting the specific needs of the aged whilst travelling.

6.5 Industry approaches to an ageing population

Geraldine Lundy- Virgin Atlantic Airways.

- 6.5.1 Overall, the industry so far does not serve the needs of older passengers very well. However, there are some people within organisations that try to identify the needs and find ways to improve the service. As a whole, the industry is some years behind other sectors in addressing these needs.
- 6.5.2 Developments in air transport to address the needs of senior passengers are mainly driven by legislation and bad publicity. There is very rarely a proactive approach to this. Although there are some pilot studies to improve the service for people who need assistance (e.g. offering unaccompanied minors bright lanyards – i.e. some form of visual identification), implementation for senior passengers might be difficult, as many people do not want to be labelled as needing assistance.
- 6.5.3 There needs to be more focus on industry standards to recognise and address the needs of older passengers and PRMs. It is important for airlines and airports to cooperate in order to provide a better service to passengers who require assistance. Many airlines have PRM coordinators at their hubs (e.g. British Airways and Virgin Atlantic at LHR).

Helen Welch- Saga

- 6.5.4 Not all older people are the same. Many seniors will not consider themselves as such. Great care needs to be taken to avoid

patronising customers with what would seem well-intentioned offers of assistance and care. Many senior travellers will feel younger than they are and will want to avoid being pigeonholed in the category of senior travellers. There are of course cruise customers who are less adventurous and are satisfied with relaxing in their own way. There are some customers, for example, who embark on a cruise and choose not to visit any of the port cities.

Karen Ellis, Ken Whittaker and Gabrielle Dirdin- Houston Airport Systems

6.5.5 From an airport perspective, dealing with an ageing population is not a strategic issue. Currently Houston Airport Systems does not see any need to focus on changes resulting from an ageing population. Any issues that arise are more operational than long term. Adaptations that are required might come from changes in government regulation, however currently the airports do not see any major legislative changes coming with regards to an ageing population.

6.5.6 The airports also notice that airlines are mainly guided by minimum requirements towards PRM and older passengers, rather than taking a proactive approach to the issue.

6.6 Airport-related issues

Geraldine Lundy- Virgin Atlantic Airways.

6.6.1 The needs and requirements of senior passengers is also a function of the airport. For example, some passengers order wheelchair service not because they need it at the airport of embarkation (e.g. DEL) but because of the arrival airport (e.g. LHR).

6.6.2 There are big differences between airports, with airport size being a key factor. Smaller airports seem to be easier for older people to navigate than larger airports. Having said this, even medium-larger airports (e.g. Manchester) seem to generate relatively fewer complaints regarding PRM services than large airports.

6.6.3 Some larger airports (e.g. Gatwick) seem to be better prepared than others. At Gatwick priority seating areas are well organised and are equipped with telephones which enable PRMs to contact someone in case they have any questions. At many airports, PRMs are left at special seating areas without any information or possibility to contact

service providers. Gatwick also provides flow charts “your assisted journey” which shows the PRM where in the “system” they are. According to Virgin Atlantic, Gatwick is better prepared for PRMs than Heathrow.

- 6.6.4 Virgin Atlantic recognises that at some airports the environmental conditions (heating/cooling) in the areas designated for PRMs are not ideal. It is important that the airports provide heaters (winter) and water in these areas. Particularly as many older passengers are on medication, accessibility to water is important (travelling across time zones makes it particularly challenging for people on medication, to maintain their medication schedule). Only recently have Heathrow started to provide water in the PRM waiting area in Terminal 3.
- 6.6.5 Airport layout is a particular issue from an operational perspective, which should be addressed at a planning stage. Access to elevators with buggies is necessary to speed up the processing time of PRM. At Heathrow Terminal 3 it is not possible to access elevators with buggies while at other airports this is possible and improves the handling efficiency of PRM.
- 6.6.6 Provision for PRMs needs to start at the planning phase of terminals. Access to elevators with buggies is important. Long walking distances are clearly an issue when dealing with PRMs.
- 6.6.7 An airport that generates challenges for Virgin Atlantic is their new service to Atlanta. Because of its size and different legislation between the US and the UK (e.g. what constitutes a qualified guide dog), there are some particular issues with PRMs.
- 6.6.8 Availability of resources is another key aspect that needs addressing. Resources include people (staff to support PRM), seating areas and equipment (wheelchairs, buggies).
- 6.6.9 Service delivery is a key point in catering to the needs of older passengers. Overall staff awareness of passenger needs, and attitude towards these needs, requires improvement. This includes service recovery when things go wrong.

James Freemantle- UK CAA

- 6.6.10 Legislation cannot force passengers to use assistance services and airports could consider ‘softer’ ways to make the experience of senior passengers better, like fast track security or identifying

wristbands (with appropriate staff training). One way to achieve this for airports is to look for pinch points in the system, and then try to provide a smoother service. Why not provide more seats along walking routes and encourage self-assisting by providing wheelchairs for use outside of the PRM service that do not require pre-booking? Border control special assistance lanes are also required. Baggage reclaim can be very difficult for senior passengers – porters can really help in this area.

Matthew Garner- Omniserve

- 6.6.11 The older passengers at Heathrow can provide the airport with a great opportunity for insight and we should all listen to what they have to say about their preferences and needs.
- 6.6.12 Contracts for PRM services are too short. A longer-term contract would facilitate a long-term partnership approach between an airport and PRM supplier would allow greater capital investment commitment.
- 6.6.13 Lobbying is needed to change EU regulation 1107 so that a 1:1 service is offered to those that really need it.

Ann Frye- Ann Frye Ltd.

- 6.6.14 Any airport would better meet the needs of their senior passengers by minimising distances walked, providing lots of seating along the journey and using both audible and visual information. Realistic senior walking times (not distances) to gates and toilets are required. Toilets need to be provided at gates and en-route to and from them. Reducing known causes of anxiety in senior passengers will lead to increased retail income.

Andrew Wright- Accessible Travel and Leisure

- 6.6.15 If older passengers are not frequent flyers, they can get a big shock when using an airport that is not a regional airport in the UK. The style of customer service can be much less formal and is often perceived to be friendlier at their local regional airport. Levels of overcrowding and walking distances at hubs can be much greater than they expect. The sheer scale of major airports like Heathrow can be quite over-whelming to some senior passengers. This age group may not be so Internet 'savvy', thus they might not have booked assistance in advance before realising that distances were

so vast. Such passengers may be very reluctant to ask for help once at the airport. This varies between different cultures and it is the case in some cultures that PRM assistance may be taken as a sign of status for aged relatives and friends and so the service can be abused.

- 6.6.16 Airport security can be very intimidating and older people often do not like to be frisked or hurried. Queues and crowds at security can be very intimidating for them, especially if frail and lacking confidence because of illness.
- 6.6.17 The communication of older passengers' needs to airports tends to be very on-line orientated. There is a marked move away from the former special assistance helplines. Having said this, British Airways website has been greatly simplified from the perspective of booking assistance.
- 6.6.18 Senior passengers offer airports a big opportunity in that they tend to be very loyal and will return to the same airport following a good experience, even if it is more expensive to do so. They will use airports that make them feel confident and reassured. If very frail, older passengers tend to travel accompanied by friends and relatives who also become airport customers.
- 6.6.19 The airport experience is very retail driven and hubs could become a 'destination' (or preferred transfer airport) if they were much more enjoyable to use for older people. Wider public concourses (both airside and landside) with more waiting space are needed. Walking distances need to be addressed with more travelators, buggies and shuttles. Tablet technology and ambassadors can really help.
- 6.6.20 Influence is needed to change regulation 1107 so that the PRM market is subdivided into differing levels of need that are not so focused on mobility. A more dignified and less challenging way to help an older passenger who is reluctant to ask for (and who does not need) the full PRM service needs to be found. This is more than the former 'meet and greet' type service.
- 6.6.21 Fundamentally, it is very hard to move large volumes of vulnerable people at airports without upsetting someone. But ridding airports of the blame culture that can exist between those stakeholders involved would be a positive improvement in this sense.

6.7 Summary

- 6.7.1 The stakeholder interviews built on the findings from the literature review and macro-trend and market insights earlier in the report. While the interview sample was purposefully drawn from a range of disciplines and backgrounds, during analysis of the interviews a number of areas of consensus were evident. These provide a valuable source of insight into the issue of dealing with senior passengers, and offer possible areas of focus for future work in this field.
- 6.7.2 Perhaps most evident was the degree of certainty among interviewees regarding the extent to which the role of senior passengers, and the increasing need to meet their requirements, was already a key issue and will continue to be so for the foreseeable future. In all likelihood this trend will continue and become more acute in the future.
- 6.7.3 It was also evident that while in some cases the issues concerning senior passengers were well understood, current service provision for these passengers at many airports was at best, imperfect, and at worst, failed entirely to facilitate the efficient, dignified and safe transit of these passengers through the airport. The specific reasons and drivers of this are numerous and complex, and will likely vary according to the unique configuration of the airport, the region, its market position, and the passengers it serves. Having said this, difficulties in communication between related parties in the service delivery chain seem to lie at the heart of these issues. This is important both in terms of how the passenger communicates with the airport/service provider, but also vice versa. While improvements have certainly been made in this regard in recent years, it is fair to say that there are still significant areas for improvement in terms of how the needs and requirements of senior passengers are communicated and then acted upon.
- 6.7.4 These problems are brought into focus particularly where a passenger has 'unseen' or unspoken difficulties associated with things such as poor hearing, poor eyesight, or dementia. Such instances also act to further highlight the limitations of the current 'one-size-fits-all' approach to PRMs, in that the regulation largely fails to identify and serve the more nuanced needs of senior passengers who require something other than a full PRM service. In

this regard there is a clear need for a more detailed examination of the various groups and sub-groups of older passengers in terms of their specific characteristics, behaviour, attitude and needs.

- 6.7.5 Overall, it can be seen that provision for senior passengers in air transport remains largely reactive in nature, and where changes are made these are often enacted involuntarily in response to new regulation or guidelines. There is little evidence of airports or service providers in air transport taking a more long term, pro-active strategic approach to how they deal with senior passengers. As a start, airports may do well to look at other industries and sectors for guidance in this regard. As one interviewee noted, it is fundamentally very hard to move large volumes of vulnerable people at airports, so in the longer term there is a case for a thorough reassessment, if not a total change in philosophy, about how senior passengers are viewed and planned for at airports.

7 References

- ¹ Article 2(a) of Regulation (EC), No1107/200
- ² DfT 2003 Code of Practice
- ³ DfT 2003 Code of Practice
- ⁴ A systematic look at an old problem. Thomas Kirkwood. *Nature*, volume 451, issue 7179, pgs. 644-647, 2008.
- ⁵ World report on ageing and health, WHO, 2015.
- ⁶ Ageing with multimorbidity : A systematic review of the literature, *Ageing Research Review*, Volume 10, Issue 4, 2011, pgs. 430-439.
- ⁷ Presbycusis, George Gates, *The Lancet*, vol 366, issue 9491, 2005, pgs. 1111-1120.
- ⁸ World report on ageing and health, WHO, 2015
- ⁹ Age related macular degeneration, Darren Hill, *InnovAit*, 2015, vol 8, pgs 425-439.
- ¹⁰ Implications of an ageing population for passenger terminal wayfinding and signage, Yulia Schmidt, Unpublished MSc thesis, Cranfield University, 2013.
- ¹¹ What do we know about ageing and spatial recognition? *Ageing Research Reviews*, vol 11, issue 1, 2012, pgs. 123-135.
- ¹² Impacts of aging travellers on airports, Transportation Research Board, Washington D.C., 2014.
- ¹³ Hausteijn, S. (2012). Mobility behavior of the elderly: an attitude-based segmentation approach for a heterogeneous target group. *Transportation*, 39(6), 1079–1103.
- ¹⁴ Kaiser, H.J., Kraus, B. (2007) *Mobilität für ältere Menschen – Herausforderung für die Gesellschaft*. Unpublished summary of the results of the European research project SIZE—Life quality of seniors in relation to mobility conditions
- ¹⁵ Musselwhite, C., Holland, C., & Walker, I. (2015). The role of transport and mobility in the health of older people. *Journal of Transport & Health*, 2(1), 1–4.
- ¹⁶ Musselwhite, C., Holland, C., & Walker, I. (2015). The role of transport and mobility in the health of older people. *Journal of Transport & Health*, 2(1), 1–4.
- ¹⁷ Hausteijn, S. (2012). Mobility behavior of the elderly: an attitude-based segmentation approach for a heterogeneous target group. *Transportation*, 39(6), 1079–1103.
- ¹⁸ Truong, L. T., & Somenahalli, S. V. C. (2015). Exploring frequency of public transport use among older adults: A study in Adelaide, Australia. *Travel Behaviour and Society*, 2(3), 148–155.
- ¹⁹ Mitchell, C. G. B. (2013). The licensing and safety of older drivers in Britain. *Accident Analysis & Prevention*, 50, 732–741.
- ²⁰ Truong, L. T., & Somenahalli, S. V. C. (2015). Exploring frequency of public transport use among older adults: A study in Adelaide, Australia. *Travel Behaviour and Society*, 2(3), 148–155.
- ²¹ Hausteijn, S. (2012). Mobility behavior of the elderly: an attitude-based segmentation approach for a heterogeneous target group. *Transportation*, 39(6), 1079–1103.
- ²² Department for Transport, 2013a. Public attitudes towards buses. Available from: <https://www.gov.uk/government/publications/public-attitudes-towardsbuses-march-2013>
- ²³ Mackett, R. (2015). Improving accessibility for older people – Investing in a valuable asset. *Journal of Transport & Health*, 2(1), 5–13.

- ²⁴ Mackett, R. (2015). Improving accessibility for older people – Investing in a valuable asset. *Journal of Transport & Health*, 2(1), 5–13.
- ²⁵ Age UK London (2011). On the buses: Older and disabled people’s experiences on London buses.
- ²⁶ Musselwhite, C., Holland, C., & Walker, I. (2015). The role of transport and mobility in the health of older people. *Journal of Transport & Health*, 2(1), 1–4.
- ²⁷ Haustein, S. (2012). Mobility behavior of the elderly: an attitude-based segmentation approach for a heterogeneous target group. *Transportation*, 39(6), 1079–1103.
- ²⁸ O’Hern, S., & Oxley, J. (2015). Understanding travel patterns to support safe active transport for older adults. *Journal of Transport & Health*, 2(1), 79–85.
- ²⁹ Kaiser, H.J., Kraus, B. (2007) *Mobilität für ältere Menschen – Herausforderung für die Gesellschaft*. Unpublished summary of the results of the European research project SIZE—Life quality of seniors in relation to mobility conditions
- ³⁰ Mackett, R. (2014). Has the policy of concessionary bus travel for older people in Britain been successful? *Case Studies on Transport Policy*, 2(2), 81–88.
- ³¹ Mackett, R. (2014). Has the policy of concessionary bus travel for older people in Britain been successful? *Case Studies on Transport Policy*, 2(2), 81–88.
- ³² Mackett, R. (2014). Has the policy of concessionary bus travel for older people in Britain been successful? *Case Studies on Transport Policy*, 2(2), 81–88.
- ³³ Marin-Lamellet, C., & Haustein, S. (2015). Managing the safe mobility of older road users: How to cope with their diversity? *Journal of Transport & Health*, 2(1), 22–31.
- ³⁴ Musselwhite, C., Holland, C., & Walker, I. (2015). The role of transport and mobility in the health of older people. *Journal of Transport & Health*, 2(1), 1–4.
- ³⁵ KPMG and CAR (2012). *Self-driving Cars: The Next Revolution*. KPMG and the Centre for Automotive Research. <http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/Documents/self-driving-cars-next-revolution.pdf>
- ³⁶ Age UK London (2011). On the buses: Older and disabled people’s experiences on London buses.
- ³⁷ Hyelin Kim, Eunju Woo, Muzaffer Uysal, *Tourism experience and quality of life among elderly tourists*, *Tourism Management*, Volume 46, February 2015, Pages 465-476
- ³⁸ Boksberger, P. E., & Laesser, C. (2009). Segmentation of the senior travel market by the means of travel motivations. *Journal of Vacation Marketing*, 15(4), 311–322.
- ³⁹ Chen, S. C., & Shoemaker, S. (2014). Age and cohort effects: The American senior tourism market. *Annals of Tourism Research*, 48, 58–75.
- ⁴⁰ Tretheway, M. and Mak, D. (2006). Emerging tourism markets: Ageing and developing economies. *Journal of Air Transport Management*, 12, 21-27.
- ⁴¹ Tretheway, M. and Mak, D. (2006). Emerging tourism markets: Ageing and developing economies. *Journal of Air Transport Management*, 12, 21-27.
- ⁴² Chen, S. C., & Shoemaker, S. (2014). Age and cohort effects: The American senior tourism market. *Annals of Tourism Research*, 48, 58–75.
- ⁴³ Nimrod, G. (2008). Retirement and tourism Themes in retirees’ narratives. *Annals of Tourism Research*, 35(4), 859–878.
- ⁴⁴ Chen, S. C., & Shoemaker, S. (2014). Age and cohort effects: The American senior tourism market. *Annals of Tourism Research*, 48, 58–75.
- ⁴⁵ Mintel (2014). *Holiday Planning and Booking Process - UK - November 2014*

Study on the travel needs of the ageing population at Heathrow

- ⁴⁶ Chen, S. C., & Shoemaker, S. (2014). Age and cohort effects: The American senior tourism market. *Annals of Tourism Research*, 48, 58–75.
- ⁴⁷ Boksberger, P. E., & Laesser, C. (2009). Segmentation of the senior travel market by the means of travel motivations. *Journal of Vacation Marketing*, 15(4), 311–322.
- ⁴⁸ Nimrod, G. (2008). Retirement and tourism Themes in retirees' narratives. *Annals of Tourism Research*, 35(4), 859–878.
- ⁴⁹ Nimrod, G. (2008). Retirement and tourism Themes in retirees' narratives. *Annals of Tourism Research*, 35(4), 859–878.
- ⁵⁰ Howe, N. and Strauss, W. (2007), "The next 20 years. How customer and workforce attitudes will evolve", *Harvard Business Review*, Vol. 85 Nos 7/8, pp. 41-52.
- ⁵¹ Simon Hudson, (2010), "Wooing zoomers: marketing to the mature traveler", *Marketing Intelligence Planning*, Vol. 28 Iss 4 pp. 444 - 461
- ⁵² Nimrod, G. (2008). Retirement and tourism Themes in retirees' narratives. *Annals of Tourism Research*, 35(4), 859–878.
- ⁵³ Mintel, 2015 boomers
- ⁵⁴ Tretheway, M. and Mak, D. (2006). Emerging tourism markets: Ageing and developing economies. *Journal of Air Transport Management*, 12, 21-27.
- ⁵⁵ Bernini, C., & Cracolici, M. F. (2015). Demographic change, tourism expenditure and life cycle behaviour. *Tourism Management*, 47, 191–205.
- ⁵⁶ IET (2012), Instituto de Estudios Turísticos. Encuesta de Gasto Turístico (Egatur), Movimientos Turísticos en Fronteras (Frontur). Retrieved 30 September 2015 from IET. Website: <[http://www.iet.tourspain.es/es-ES/estadisticas/frontur/Anuales/Movimientos%20Tur%C3%ADsticos%20en%20Fronteras%20\(Frontur\)%20y%20Encuesta%20de%20Gasto%20Tur%C3%ADstico%20\(Egatur\)%202012.pdf](http://www.iet.tourspain.es/es-ES/estadisticas/frontur/Anuales/Movimientos%20Tur%C3%ADsticos%20en%20Fronteras%20(Frontur)%20y%20Encuesta%20de%20Gasto%20Tur%C3%ADstico%20(Egatur)%202012.pdf)>.
- ⁵⁷ Mintel (2015). Holiday Review - UK - March 2015
- ⁵⁸ Mintel (2014). Holiday Planning and Booking Process - UK - November 2014
- ⁵⁹ Alén, E., Nicolau, J. L., Losada, N., & Domínguez, T. (2014). Determinant factors of senior tourists' length of stay. *Annals of Tourism Research*, 49, 19–32. <http://doi.org/10.1016/j.annals.2014.08.002>
- ⁶⁰ Walker, J. R. & Walker J. T. (2011). *Tourism: Concepts and Practices*. Pearson Education, Upper Saddle River.
- ⁶¹ Focalyst (2007), "The sky's the limit: travel trends among the baby boom generation & beyond", Focalyst Insight Report, Focalyst, Washington, DC.
- ⁶² Nimrod, G. (2008). Retirement and tourism Themes in retirees' narratives. *Annals of Tourism Research*, 35(4), 859–878.
- ⁶³ Nimrod, G. (2008). Retirement and tourism Themes in retirees' narratives. *Annals of Tourism Research*, 35(4), 859–878.
- ⁶⁴ Simon Hudson, (2010), "Wooing zoomers: marketing to the mature traveler", *Marketing Intelligence Planning*, Vol. 28 Iss 4 pp. 444 - 461
- ⁶⁵ Simon Hudson, (2010), "Wooing zoomers: marketing to the mature traveler", *Marketing Intelligence Planning*, Vol. 28 Iss 4 pp. 444 - 461

- ⁶⁶ Simon Hudson, (2010), "Wooing zoomers: marketing to the mature traveler", *Marketing Intelligence Planning*, Vol. 28 Iss 4 pp. 444 - 461
- ⁶⁷ Simon Hudson, (2010), "Wooing zoomers: marketing to the mature traveler", *Marketing Intelligence Planning*, Vol. 28 Iss 4 pp. 444 - 461
- ⁶⁸ William T. Faranda & Sandra L. Schmidt (2000) Segmentation and the Senior Traveler: Implications for Today's and Tomorrow's Aging Consume, *Journal of Travel & Tourism Marketing*, 8:2, 3-27,
- ⁶⁹ Mintel (2015). Cruises - UK - October 2014
- ⁷⁰ Mintel (2015). Beach Holidays - UK - January 2015
- ⁷¹ Mintel (2010). Package Holidays - UK - July 2010
- ⁷² Mintel (2014) Boomers look to realise overseas property dreams - 3rd January 2014
- ⁷³ Gibler, K. M., Manuel Casado-Díaz, J., Angeles Casado-Díaz, M., Rodríguez, V., & Taltavull, P. (2009). Late life second move housing choices of international retiree migrants. *International Journal of Housing Markets and Analysis*, 2(2), 190–210. <http://doi.org/10.1108/17538270910963117>
- ⁷⁴ Huete, R., Mantecón, A., & Estévez, J. (2013). Challenges in Lifestyle Migration Research: Reflections and Findings about the Spanish Crisis. *Mobilities*, 8(3), 331–348.
- ⁷⁵ Retirement Advantage (2013). <http://newsroom.retirementadvantage.com/nations-favourite-retirement-hotspots-revealed/>
- ⁷⁶ Mintel (2014) Boomers look to realise overseas property dreams - 3rd January 2014
- ⁷⁷ Huete, R., Mantecón, A., & Estévez, J. (2013). Challenges in Lifestyle Migration Research: Reflections and Findings about the Spanish Crisis. *Mobilities*, 8(3), 331–348. <http://doi.org/10.1080/17450101.2013.814236>
- ⁷⁸ Mintel (2014) Boomers look to realise overseas property dreams - 3rd January 2014
- ⁷⁹ Georggi, N. L., and Pendyala, R.M (1999). Analysis of long-distance travel behavior of the elderly and low income. *Transportation Research Circula*, E-C026
- ⁸⁰ O'Connell and Williams, 2005
- ⁸¹ Davison, L., and Ryley, T. (2013). The relationship between air travel behaviour and the key life stages of having children and entering retirement. *Journal of Transport Geography* (26), 78–86
- ⁸² Jin-Long Lu, 2014. Investigating factors that influence passengers' shopping intention at airports- Evidence from Taiwan, *Journal of Air Transport Management*, 35, pp72-77.
- ⁸³ Airneth. The impact of ageing on aviation, Airneth Report 3, 2006
- ⁸⁴ ACRP (2014). Impacts of aging travellers on airports, ACRP Synthesis 51.
- ⁸⁵ 2015 data is from surveys conducted in Q1 and Q2
- ⁸⁶ Mintel (2014). Baby Boomers Travel – July 2014
- ⁸⁷ Based on internet survey. Sample consists of 1792 internet users aged 16+ and 974 internet users aged 51- to 69.
- ⁸⁸ Financial Times (Feb 23, 2015). No country for young men-UK generation gap widens