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Harold Samuel Research Prize (HSRP) 2019/2020

# Public and Commercial Attitudes to Disability in the Built Environment

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[Tech DD Ltd / University of Reading]



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# Contents

Acknowledgements	2	<b>5. Discussion</b>	59
Executive Summary	6	5.1 Legislation	59
Glossary of Terms	8	5.2 Compliance	60
<b>1. Background</b>	9	5.3 Accessibility	49
<b>2. Literature Review</b>	10	5.4 Value and Funding of Inclusivity	64
2.1 Introduction	10	5.5 Summary	67
2.2 Defining Disability	11	<b>6. Conclusions and Recommendations</b>	69
2.3 Historical Context	12	6.1 Public Attitudes to Disability in the Built Environment	69
2.4 Demographics	17	6.2 Commercial Attitudes to Disability in the Built Environment	69
2.5 Showcasing Disability	19	6.3 Inclusivity – An Obligation or Opportunity?	69
2.6 Legal Framework	20	6.4 Recommendations	70
2.7 Real Estate Investment, Service Provision and Disabled Access	24	6.5 Next Steps / Further Research	71
2.8 Summary of Existing Literature	28	Appendix A - References	72
<b>3. Research Design / Strategy</b>	31	Appendix B - Questionnaires	75
3.1 Public Attitudes	32		
3.2 Demographics	32		
3.3 Access to the Built Environment	33		
3.4 Responsibility for Access Provision	33		
3.5 Commercial Attitudes	33		
3.6 Professional Demographics	34		
3.7 Experiential Understanding of Accessibility	34		
3.8 Commercialisation of Accessibility	34		
<b>4. Data Analysis</b>	37		
4.1 Public Attitudes to Disability in the Built Environment	37		
4.2 Commercial Attitudes to Disability in the Built Environment	49		
4.3 Overall Emerging Themes	33		
	57		





# Executive Summary

The Equality Act 2010 and London Paralympics in 2012 have been instrumental in raising public awareness of disability in the UK. With 1 in 5 people classed as disabled there is a likelihood that most, if not all of us will be directly or indirectly engaged with this in our lives.

Disability is not something that occurs every 4 years but is an everyday issue affecting millions of people. There appears to be a disconnect between general public attitudes towards disability and those actually encountering access barriers, due to a lack of inclusivity during their normal day to day activities.

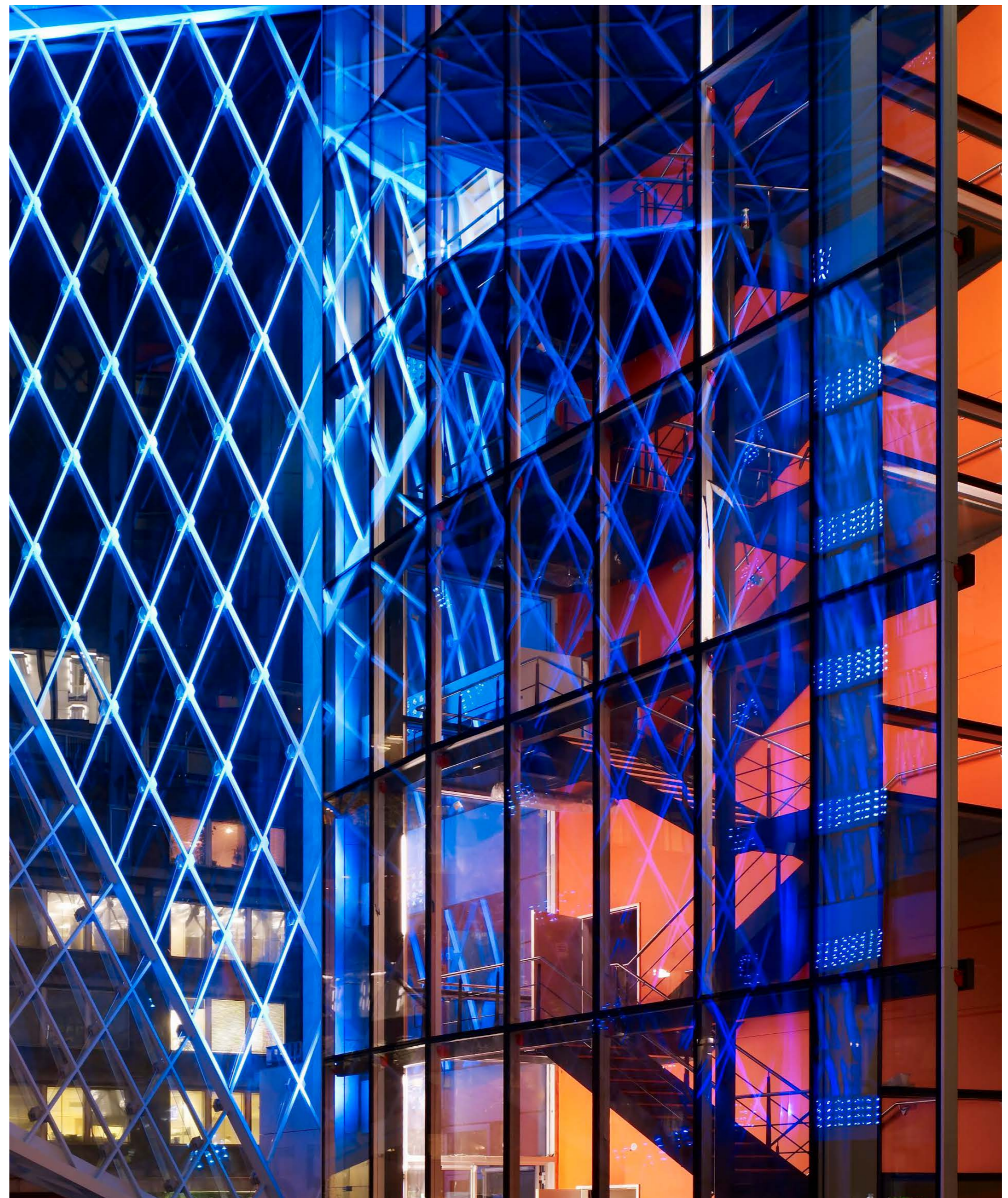
The key organisations who can make a tangible difference to inclusivity in the Built Environment are service providers, property owners, investors and advisors. This research concerns public and commercial attitudes to accessibility, seeking to establish any alignment with current public perception and to look into the barriers to inclusivity that exist within the built environment.

Despite overwhelming awareness of The Equality Act 2010, this research has identified a perception gap between disabled and non-disabled users of commercial properties. Simply, those without a disability believe commercial properties are more accessible than they appear to those with a disability; the gap widens further with the opinion of property professionals. Allied to this there is an apparent under representation of those who recognise as having a disability amongst property professionals, indicating a lack of experiential understanding in what constitutes an inclusive environment.

While property professionals believe goods and services are largely accessible to those with a physical or mental impairment, more than half of them appear unsure or not convinced that the current legislation concerning access is sufficient. There is also the notion that a commercial property can comply with building regulations concerning accessibility, yet still not be fully accessible to those with a disability. This questions the current criteria for accessibility and the definition of a 'reasonable adjustment' in the provision of access.

Overwhelmingly there is a recognition that there is commercial value in providing a fully accessible built environment. The suggestion that funding for this could come from a voluntary increase in payment for goods by all members of society is rejected by those with a disability. Furthermore, it is recognised that the responsibility for funding adaptive alterations rest with building owners and service providers.

The presence of a legal framework for more than 25 years preventing discrimination of those with a disability from accessing goods and services has provided a 'stick' to enforcement. This appears to have had limited impact but in contrast events such as the Paralympics has done significantly more to highlight issues of accessibility and inclusion. Adopting 'opportunity over obligation' and recognising the commercial value of inclusivity is another approach to engender or enhance a 'carrot' over 'stick' approach to providing accessibility in the built environment.





# Glossary of Terms

BBC	British Broadcasting Corporation British Standard
BS	British Standard
CIC	Construction Industry Council
CIOB	Chartered Institute of Building
CSDPA70	Chronically Sick and Disabled Persons Act 1970
CSR	Corporate Social Responsibility
DDA95	The Disability Discrimination Act 1995
DDA05	The Disability Discrimination Act 2005
DWP	The Department of Work and Pensions
EA10	The Equality Act 2010
EU	European Union
GDP	Gross Domestic Product
NHS	National Health Service
RICS	Royal Institution of Chartered Surveyors
ISO	International Organisation for Standardisation
UK	United Kingdom
UN	United Nations
USA	United States of America
WHO	World Health Organisation
WW1	World War One
WW2	World War Two



## 1 Background

It is hard to conceive that in 2017 there should be a report titled "*Being disabled in Britain; A journey less equal*" (Equality and Human Rights Commission) considering this was 5 years after the 2012 Paralympics in London. This event which was widely recognised as being the most successful Paralympics of all time, setting legacy goals specifically to reduce discrimination and improve opportunity for those with a disability (Gov.UK, 2015).

It is widely acknowledged that disability is a global issue which is prevalent in all walks of life irrespective of wealth, culture, custom and race. Historically in the UK there is evidence of persecution and discrimination to those with a physical or mental impairment. Despite this, there has always been aspects of society willing to reach out and offer help.

It was not until the latter part of the 20th Century in the UK that disability was formally recognised in a legal context and it has been 25 years since the much-heralded *Disability Discrimination Act*. This legislation placed an obligation on commercial property owners as well as those delivering goods and services to make these reasonably accessible to those with disability.

Despite the presence of a legal framework, enhanced public awareness and high-profile sporting events

showcasing disability it is perplexing that those with a physical or mental impairment still feel discrimination. This is evident in research undertaken by the charity Scope (2018) which shows a widening of the 'perception gap'.

While the 'perception' of disability may be considered subjective, legal obligation should be far more objective. Prescriptive guidance exists to direct commercial organisations and service providers to deliver accessibility. Despite this, there appears insufficient evidence detailing the commercial benefit of an accessible built environment.

This research was undertaken to establish specifically both public and commercial attitudes to disability in the built environment. In particular, it has addressed the current trends in accessing goods and services to establish if these are really fully accessible to those with a disability. Parallel to public attitudes, this research questioned the commercial value of providing an accessible environment to assess the potential impact of any incentive that provides an above minimum level of compliance. It has investigated responsibility and options for funding the necessary adjustments to commercial properties.

## 2 Literature Review

### 2.1 Introduction

Disability has no 'boundaries' as it does not differentiate between rich and poor or those within the different sectors of society. It crosses the 'frontiers' of age, race, gender, culture and religion. Globally disability is defined and recognised in accordance with the United Nations and World Health Organisation, although the treatment and support of those with disability varies significantly between countries, cultures and even individuals.

The UK may be considered to have a progressive approach to disability and this is recognised within The Equality Act 2010. According to the Act; disability is defined as "*physical or mental impairment that has a 'substantial' and 'long-term' negative effect on a person's ability to do normal daily activities*" (Gov. UK, n.d.). The Equality Act also places an obligation on service providers to make 'reasonable adjustment' to ensure they do not discriminate against those with disability. It therefore appears an obvious requirement for those supplying goods and services, from premises within the built environment, to make the necessary adaptive changes to their properties. However, the legal framework is relatively new and as such, is the subject of ongoing legal cases which should begin to shape the application of the law. The term 'reasonable adjustment' has a degree of ambiguity for auditors, designers and users, this too is the subject of legal interpretation which will be developed as challenges are made under the legislation.

There are a large amount or legal prescriptions associated with the design, planning, construction and occupation of the built environment but relatively little is devoted to the provision of access for those with disability. Approximately 1 in 5 people in the

UK are disabled (Papworth Trust, 2016) and it is not surprising that within the category of those considered pensioners, over 40% identify as having a physical or mental impairment. Disability has the potential to affect everyone either directly or indirectly even more so with age. Prior to the Equality Act 2010 the provision of access to the built environment was governed by The Disability Discrimination Act 1995 which was revised in 2005. Effectively there has been 25 years of 'progressive' legislation obliging service providers to facilitate access and it is not unreasonable to question why those with disability should still struggle to access goods or services on a daily basis.

Presently public perception or attitudes to disability appears to be changing with the much-heralded success of the Paralympics held in London in 2012. The "*We're the Superhumans*" trailer for Channel 4's coverage of the 2016 Rio Paralympics was watched 23 million times on Facebook alone within the first 5 days of going live (Kahleeli, 2016) and is evidence that there as huge public interest in disability sports. Despite this, it's not wholly clear what public perception exists concerning perhaps the more mundane, everyday issues affecting those with disability.

Contradicting the appearance of positive public attitude to disability, as encompassed with the Paralympics, are the 'struggles' of those living with disability on a daily basis. Disability is not a once every 4 years occurrence and the report titled "*Being disabled in Britain; A journey less equal*" (Equality and Human Rights Commission, 2017) that suggests there remains significant short comings with the provision of fully inclusive environments.

## 2 Literature Review

Contained within the report is a statement from the Chair describing those living with a disability are treated as "*second-class citizens*". This indicates that despite all the positive publicity and 'warmth' towards disabled athletes. It does not appear to have filtered down into the wider disabled community. There appears a disconnect between a 'one nation' approach to inclusivity in sport and the more general needs of the disabled for the accessibility of goods and services within the built environment.

This Literature Review has established why the life of those living with disability have a "*journey less equal*". It has established the definitions of disability to contextualise the demographics of those identifying as disabled. In order establish the progress or journey to an inclusive environment has been necessary to analyse the existing body of knowledge detailing the levels of historical and current perception or support for disability. Finally, this literature review has analysed the existing legal provision for providing accessibility as well as commercial attitudes to inclusivity within the built environment.

### 2.2 Defining Disability

#### 2.2.1 Global Definition of Disability

Recognising the various attempts to define disability; the Council of Europe concludes that there is no universal definition but it does explicitly refer to that adopted by the World Health Organisation (WHO). This indicates that disabilities are impairments limiting activity and participation (WHO, n.d.). The WHO definition of disability goes further explaining than this as "*a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives*". This definition

of disability also identifies the significance of environmental and social barriers within society as a contributing factor.

Disability is a global issue and accordingly the United Nations (UN) has adopted a definition within the Convention of Human Rights, Article 1 (2006) as "*those who have long term physical, mental, intellectual or sensory impairments*". *The definition goes on to recognise that disability prevents "normal day-to day activities" and "may hinder their full and effective participation in society on an equal basis with others."* The use of the word 'equal' in the context of service provision is a strong standpoint when compared to the stance of the Equality Act 2010 which obliges a 'reasonable adjustment' to facilitate inclusivity.

In line with the European Council's assertion that there is no universal definition of disability the European Union (EU) explicitly refers to case law determined by the Court of Justice. Accordingly, this definition includes an impairment that is "*long-term*" and which, in the field of professional life, "*hinders an individual's access to, participation in, or advancement in employment*".



## 2 Literature Review

### 2.2.2 UK Definition of Disability

Currently in the UK The Equality Act 2010 defines disability as either a “*physical or mental impairment*” which must have a “*substantial long-term effect*” on a person’s ability to carry out “*normal day-to-day activities*” (Gov.uk, n.d.). This Act was not the first attempt to formalise the definition of disability as The Disability Discrimination Act 1995 (DDA95) was the first piece of bespoke legislation aimed specifically at the provision of inclusive environments. The DDA 1995 was revised in 2005 and then repealed in 2010 to make way for The Equality Act which encompasses the wider coverage of a series of protected characteristics including disability. The definition of disability under the Equality Act 2010 has been adopted for the purpose of this research although it should be noted that this effectively is a medical definition of disability as opposed to a social definition which is eluded to by the WHO and the UK charity Scope.

Universally the definitions of disability recognise that this is something that is not temporary but long term and ultimately limits, restricts or prohibits participation in normal day to day activities. It is necessary to contextualise this into the different disabilities and how this applies to building owners, service providers and users. Current attitudes to disability and inclusion are perceived to have evolved over the past fifty years (Fleck, 2019). However, in reality there are many historical references to disability in the UK for hundreds of years and it is interesting to see how attitudes appear to have evolved from the early benevolent approach of society to current assertive attitudes of individuals regarding equal rights.

### 2.3 Historical Context

#### 2.3.1 Medieval England (1050-1485)

Historical reference has been made to the sick and those with impairments in Medieval England (Historic England, n.d.) with many terms including “*leper*”, “*lame*”, “*lunatick*”, “*natural fool*” and “*creple*” used to describe this. At this time the power and influence of the Church was such that disability was seen in contradicting terms. For some it was seen as being a form of punishment for sin, for others a sense of purgatory or suffering on earth making them closer to death and ultimately heaven. A sense of shame on those with disability meant that they were shunned and often looked after by friends or family although the uncared for resorted to begging. Ironically it was the Church through monks and nuns who cared for the disabled and sick with a sense of Christian duty. During this period Historic England note that a network of hospitals and Almshouses appeared for the care of the sick, disabled and elderly.

Echoing the notion that disability has little ‘respect’ for wealth, culture or religion, the King of England between 1483-1485 was Richard III who had a deformed spine as a result of “*scoliosis*” (University of Leicester, n.d.). Shakespeare’s observation of the King in his play Richard III includes the description of the king as “*Deformed, unfinish’d*” and the play portrays his frail reign. This is one of the earliest references to disability appearing in a text ‘published’ within the public domain.

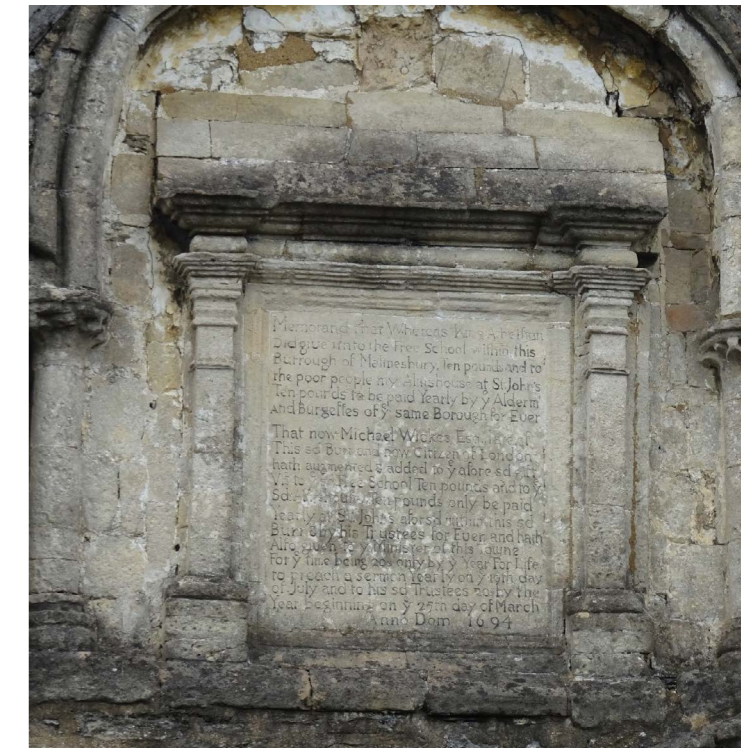


Figure 1 – Almshouse in Malmesbury (Wiltshire) Including Inscription Detailing Benevolent Donation to the poor of the Almshouse (source A.Tagg)

#### 2.3.2 Henry VIII to Victorian Britain

The influence of the Catholic church was diminished following Richard’s successor Henry VIII and his dissolution of the monasteries (Historic England, n.d.) and the support network for the provision of care for the disabled. The dissolution of the monasteries was a policy that would have the most direct impact of so many of his subjects (Rex, 2006). Accordingly, those with disability were likely to be amongst the most affected due to their reliance on the church for help.

Post Henry VIII and in 1626, a handbook for justices, of the peace advised “*The person naturally disabled... not being able to work... are to be provided for by the overseers [of the poor] of necessary relief and are to have allowances proportional*” (Branson and Miller, 2002). This perhaps was one of the more formal, ‘published’ attempts address disability with a structured ‘policy’ as opposed to the benevolent, ‘Christian’ approach adopted by the Catholic church. Advances on the sentiments alluded to by Branson and Miller (2002) are evident during the 17th, 18th and the early 19th centuries. There is evidence of changing attitudes and accordingly those with disability were observed to have experienced a

misfortune as opposed to a punishment from God. As such, those with disability received a level of charity and were cared for in hospitals. This new found approach to recognising and providing care for those with disability, public opinion was going to change again towards the end of the 18th Century. The industrial revolution and construction of civic buildings including hospitals resulted in public opinion that the institutions were the ‘right place’ for disabled people although it is acknowledged that probably less than 10,000 people amongst a population of nine million resided in institutions (Historic England, n.d.).



## 2 Literature Review

It is acknowledged that the 19th Century saw a boom in buildings designed for people with disability and it was reported in The Builder Magazine 1892 of groups of buildings befitting a town located in the adjacent secluded countryside which were asylums (Historic England, n.d.). There appeared an eagerness in the Victorian era for the disabled to populate workhouses in an attempt to prevent those “shirkers and scroungers” disguising themselves as handicapped and receiving financial assistance and aid whilst remaining at home (Historic England, n.d.). As detailed by Historic England (n.d.), the Poor Law Amendment Act of 1834 encouraged the industrious effort to construct and fill asylums and workhouses up and down the country

### 2.3.3 The Twentieth Century

Post WW1 an estimated 8 million soldiers returned home permanently disabled after the conflict and of these, two million were British Servicemen (Cohen, 2001). Along with a requirement to construct ‘homes fit for heroes’, as detailed in a speech by Lloyd George the day after Armistice Day, “*attitudes had to change*” (Historic England, n.d.). Accordingly, changes made to the building and development of housing (Hasted, 2016). The plight of living with a disability in post-war Britain was recognised by the lead architect and town planner T H Mawson. He was instrumental in the development of disabled ‘friendly’ properties, stated that life was a “*struggle on the part of the crippled man with those who are able-bodied*” (Mawson, 1918). Employers were encouraged to take on disabled ex-servicemen and they were housed in specific properties from single cottages to entire bespoke villages (Historic England, n.d.). Parallel to this, civilians with disability were encouraged to live in rural colonies.

Despite the perceived advances in attitudes to disability post WW1, this was undermined by the growth in populism of the eugenics movement in the late 19th Century and early 20th Century. In 1930, Julian Huxley, Chairman of the Eugenics Society wrote “*every defective man, woman and child is a burden*” (Historic England, n.d.). It is not known if such a forthright view reflected what was widely felt in society at that time. It’s a reminder that there are often polarised positions of opinion in respect of many social economic issues and disability is one of these.

The 1940’s and 1950’s saw significant advances in the recognition and treatment of those with disability. Post WW2 there appeared a revolution in progressive legislation with the introduction of the 1944 Disability Employment Act. This was also an important period in history concerning the welfare state and the ‘birth’ of the National Health Service (NHS) in 1948. One of the founding principles of the NHS was that free health care for everyone and the NHS is still in existence today and essentially offers health care free at source, with the current governing principles including to “*make sure nobody is excluded, discriminated against or left behind*”. being that “*It is available to all irrespective of gender, race, disability, age, sexual orientation, religion, belief, gender reassignment, pregnancy and maternity or marital or civil partnership status*” (Gov.UK, 2015). This very statement embodies the spirit of true inclusivity and aligns in principles contained within The Equality Act 2010.

According to Historic England (n.d.) disabled people did not remain passive in the 1940s and 50s with the formation of the charity SCOPE in 1952 a driving force for change. Inspired by the civil rights movement in the USA in the 1960’s and 70’s,

## 2 Literature Review

disabled groups in the UK were empowered to act against inequality, discrimination and poor access. This was triggered from having seen the success of activists in the USA in achieving social and political change. Accordingly, a “*‘social’ rather than ‘medical’ model of disability emerged*” (Historic England, n.d.) and this emanated from a ‘ground breaking’ publication Fundamentals of Disability published by The Union in 1976. According to the late Professor Mike Oliver (“*The father of the social model of disability*” [Campbell, 2019]), the founder of Disability and Society explained that with this publication it became apparent that it was society and not an individuals’ impairment that disables. This inspired people to take action to change the law (Scope, 2015).

Described as the “*Magna Carta for this disabled*” (BBC,2010) The Chronically Sick and Disabled Persons Act 1970 (CSDPA70) was seen as being an influential piece of legislation in the drive for equality. Occurring at a time of significant ‘change’ in attitudes towards disability, the CSDPA70 included for the following provision:

- Education and support at home.
- Access to public buildings.
- Disabled badges.
- Representation on public bodies.
- Segregation in hospitals.
- War pensions.

Evolving out of CSDPA70 was the Disabled Persons Act 1986 (DPA86) which placed further emphasis on the assessment of disabled people in regard of their needs for care (BBC.2010). The surge or swell in momentum for disability rights saw protests on the streets in the UK akin to the 1960s civil rights demonstrations in the US with many disabled protesters risking arrest (Scope, 2015) in the early

1990s. They clamoured for their right to equality and to an end of perceived discrimination.

The first bespoke legislation directly dealing with discrimination associated with accessibility was The Disability Discrimination Act 1995. This set a clear definition of disability and more importantly obliged commercial building owners or service providers to ensure their goods and services were accessible. Building Regulations Part M has since been seen as the default position regarding minimal legal compliance although it should be acknowledged that building regulations are primarily concerned with approved standards for new build and renovation. As a consequence, discrimination against disabled people has been legally enforceable for over 20 years. Since October 2004, those in charge of buildings with public access have had to undertake reasonable measures to ensure the provision of access to those with disability.

Lord Chris Holmes concluded that despite legal provision being in existence for 20 years, many disabled people are still excluded from full participation in society (Equality and Human Rights Commission, 2017). This was further echoed by The Women and Equalities Committee who stated in their 2017 Report that disabled people still face challenges as basic as trying to access “*public and commercial buildings without step free access*”. Accordingly, questions need be asked as to why this can still be the case after more than 20 years of legal application and an apparent positive change in public awareness to disability.

Importantly during a period where disabled athletes have had the highest possible profile with the 2012 and 2016 Paralympics, this has coincided with austerity in the UK. Triggered by the banking crisis



## 2 Literature Review

of the late 2000s and subsequent recession, the UK government undertook a radical reform of the social welfare sector. As a consequence of government cost saving the Disability Living Allowance was replaced by the Personal Independence Payment. This has evoked controversy with claimants requiring constant review and assessment. Some have argued that this is a backwards step in Government policy, whilst others have argued it is necessary to bring the [then] current £12 billion spent on benefits under control (Independent, 2013). According to the Motor Neurone Disease Association (MNDA) the disabled are hardest hit by reform. In their online article dated the 16th July 2019 and as a review of research funded by the Three Guineas Trust they claim that “*Disabled people are four times worse off financially than non-disabled people as a result of welfare reform.*”

The real implication of welfare cuts appears evident in data published by the Joseph Rowntree Foundation (2020) which show an initial decrease in disabled poverty rates from 37% in 1999/00 to 28% in 2011/12.

This has currently risen to 30% in 2017/18 which is reversing the trend. In contrast the poverty rates for families without disability is 19 percentage points lower which is evidence of a significant ‘gap’ directly related to disability. Helen Barnard, writing for the Joseph Rowntree Foundation in 2019 detailed that there is gap established to represent 3/10 disabled persons living in poverty compared to 2/10 non-disabled persons. The presence of the term ‘gap’ is not uncommon in the context of comparisons between disabled and non-disabled persons, this is explored further in the Disability perception gap – report (Scope, 2018) which is discussed later in this report. Concerning the historical context of disability in the built environment it has been established that disability has been documented for many centuries. There is evidence that those with disability have received care and support in varying degrees although currently there appears polarising arguments that not enough is being done to recognise and support disability in the community in the 21st Century. To understand the significance

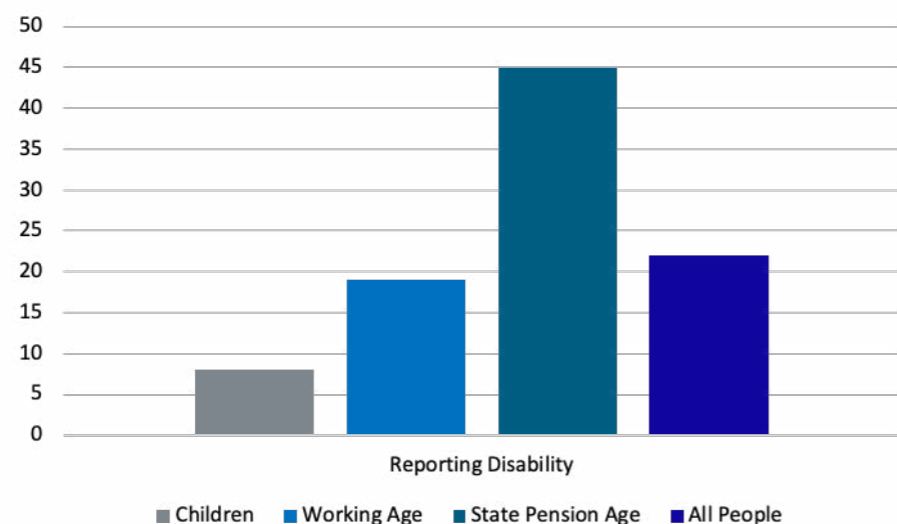


Figure 2: Percentage of UK Population Reporting Disability 2016/7 (DWP, 2018)

## 2 Literature Review

of this research it is necessary to understand the prevalence of disability within the UK population.

### 2.4 Demographics

According to the Department for Work and Pensions (DWP) more than 1:5 people in the UK reported a disability in 2016/7 which amounts to 13.9 million people and equates to 22% of the population (DWP, 2018).

This is an overall increase of 19% from 2013/4 (11.9 million) with the largest increase coming in the working age and state pension age categories. The stand out figure is that nearly half of all state pension aged people (45%) have a reported disability. Alternative literature sources such as Dixon et al (2018) report a figure of 30% as those who recognise as being disabled. This is significantly higher than the UK government statistics and there is nothing in the report analysing the in more detail the data concerning this. It does however suggest some potential variation to the actual numbers of the UK population who recognise as having a physical or mental impairment.

Looking further at the DWP report (2018) data within the state pension age; 61% of people above the age of 80 report a disability while of those aged 65-69; 35% reported disability [Figure 3].

Concerning the types of reported disabilities; mobility at 51% is the largest and compared to 2014/5, mental health has increased by 20%. According to the survey data the percentages of reported disabilities has remained largely the same since 2014/5 [Figure 4].

Considering the overall percentage of the UK population reporting disability is 22% it was necessary to analyse any regional variations. According to the DWP (2018) the regions reporting the highest percentage of disability are Wales (25%), the Northeast (25%) and the East Midlands (25%). The region reporting the lowest percentage of disability is London (15%). {Figure 5}

The existing demographic data indicates the reported incidence of disability increases with age and particularly above the state pension age. Concerning those with disability, it has been noted the notion of increased levels of poverty amongst those with disability and it was also necessary to consider the prevalence of **disability and poverty** in the older population (Hancock et al, 2016). These 2 factors are important when considering that this research has established funding sources for accessibility. This included establishing whether those accessing goods and services (irrespective of disability) are willing to pay extra to contribute to funding access.

While those aged 65 and above have a higher incidence of disability, within the working age category; those reporting disabled are just under 1:5. This is important regarding the provision of inclusivity in the work place as also obliged under The Equality Act 2010.

Concerning the different recognised disabilities (DWP 2018), the most prevalent reported disabilities relate to mobility and stamina / breathing / fatigue. This may be in line with age related reporting of disability but this cannot be extrapolated from the published DWP data.



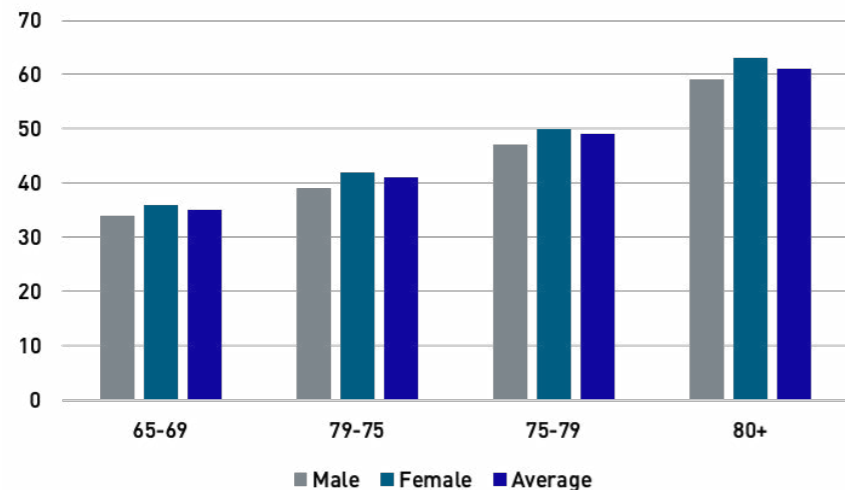


Figure 3: Percentage of State Pension Age Reporting Disability (DWP 2018)

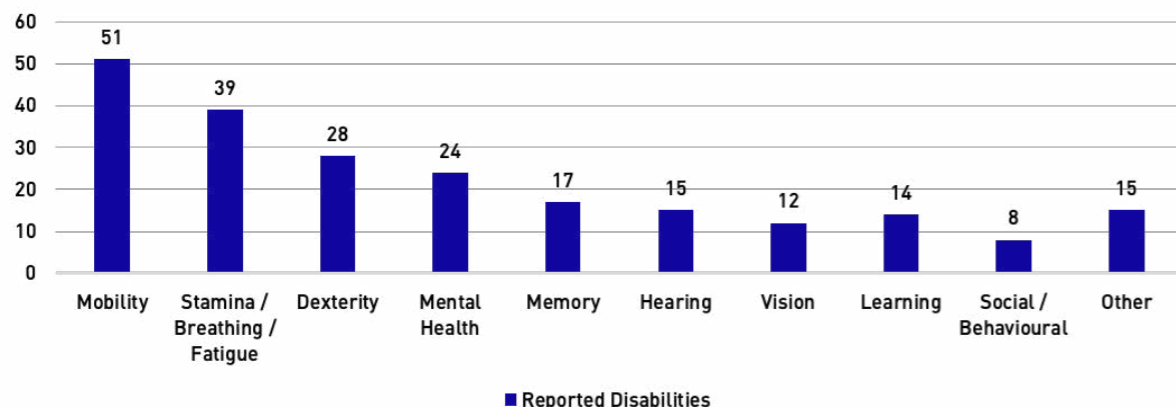


Figure 4: Percentage of UK Population Reporting Disability 2016/7 (DWP, 2018)

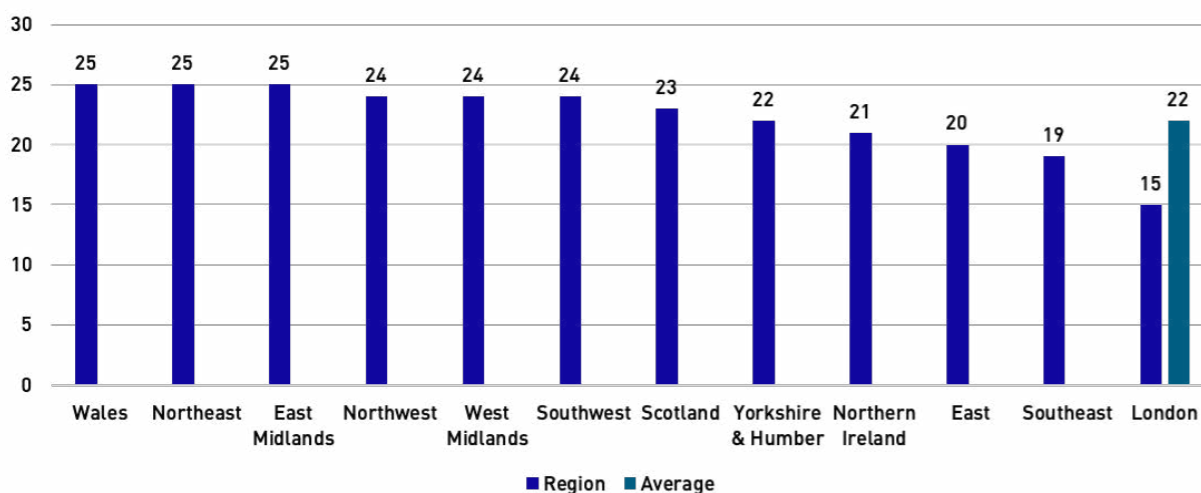


Figure 5: Regional Percentage of Population Reporting Disability

## 2 Literature Review

The reporting of disability appears to show no significant regional variation with the exception of London and the SE where the combined regional average is close to 18% which is significantly lower than the national average (22%). It's not clear why there could be such regional variation other than perhaps a higher density of younger work aged people residing in London and the SE.

In conclusion a national average relating to 22% disability of the population would appear to suggest that this may lead to a positive attitude to the need for inclusive provision and a resonance with the overall positivity experienced with high profile events such as the Paralympics.

### 2.5 Showcasing Disability

The Paralympic Games were formed in 1948 to involve wounded veterans in the London Olympics. Originally named "the Stoke Mandeville Games", the Games changed to a format which we now know as the "Paralympic Games" in 1960 (International Paralympic Committee, n.d.).

The 2012 London Paralympic Games was a landmark event for disability sport, it has also been hailed as the greatest Paralympic success of all time, "broken all records" (CBS News, 2012) with 2.7 million tickets sold. The commercialisation of the Games, needed for it to be financially viable, resulted in brands such as Sainsbury's and BT turning athletes into "household names" as stated by Paul Deighton, LOCOG Chief Executive (2013).

The games captured the imagination of the wider public and as a broadcasting spectacle Channel 4 paid a reported £9 million to have the rights to broadcast the Games, which was deemed a major commercial success.

However, the real success of the London Paralympics as a legacy for the perception and treatment of those with disability is debatable. The charity for the disabled, Scope, stated in 2013 that "81% of disabled people say that attitudes towards them haven't improved in the last twelve months" (Scope, 2013). This separation between public attitude to Paralympians and non-Paralympians was confirmed by Sophie Christiansen, Paralympic three-time gold medal winner highlighting the "huge gap" between societal perceptions of Paralympians and the "rest of the disabled community" (Christiansen, 2013). Furthermore, in an article written by David Blunkett (a blind former government minister) and published in The Independent this highlights the contradictions in public perception. Titled "The public's perception of disabled people needs to change – we're not just Paralympians or Scroungers", the article questions reform in the welfare state and highlights the feelings of admiration for Paralympians, contrasted with a mixture of sympathy or resentment for those receiving financial support. Telling is the discussion that public opinion sides with those 'deserving' or 'non deserving' while the voices of millions of disabled people want support to participate in their community to contribute to their own well-being (Blunkett, D, 2015).

Contradicting the views of David Blunkett that disabled people want support to participate and contribute is the perception by 75% of the population (Dixon et al.2018) who hold the view that disabled people require care some or most of the time, suggesting they are far from independent. This was expressed in the Disability perception gap – Policy report published by Scope in 2018 which also highlights the view that 32% of those with a disability feel there's a lot of prejudice against them. This is only 5% down from the 37% expressing



## 2 Literature Review

this in 2000 and is the opposite to the views of non-disabled people who feel prejudice against disabled people has dropped to 22%. This highlights the difference of perception from those experiencing disability to those observing it and is one of the many points of 'disconnection'.

The contradiction of opinion regarding the showcasing and the Paralympics and the social impact on those with disability is widely evident. From a built environment perspective, Trudi Elliot of the Royal Town Planning Institute described the 2012 Games as "*the shining example of inclusive planning and delivery*". However, Sophie Christiansen's criticism of the Games, its influence in altering public perceptions of disability was commended. Despite detailing 'the gap' between Paralympians and the disabled community Ms Christiansen described how the Games "*not only inspired a generation, it challenged the ideas of a generation*". Ms Christiansen's comments should be contextualised with the opinion of the Government, who reported that 70% of the "*British public feel attitudes towards disabled people have improved since the London Paralympic Games in 2012*" (Gov.uk, 2014).

The increased public awareness and apparent warmth to disability sport has further developed into the Invictus Games which is for disabled service personnel with the aim of showing that there is a "*life beyond disability*" (The Telegraph, 2014). The notion that disability is not limiting is reflected in the Games' slogan, "*We Came. We Saw. We're Unconquered*".

Such is the importance of these sporting events that it is stated that "*Paralympic sport acts as an agent for change to break down social barriers of discrimination for persons with a disability*" (Braye et al, 2013). This contemporary opinion is essential

in supporting the idea that the Paralympic Games successfully breaks down the barriers placed in front of disabled people as described in the Social Model of Disability (Scope, n.d.).

The high-profile coverage of the Paralympics appears to have engendered a sense of national pride or admiration for Paralympians. This is embodied by their 'superhuman' qualities along with talent and drive to overcome adversity and be the best. The existing body of knowledge appears to suggest that public opinion and admiration is reserved for the stadia or sports arenas and little spills over into the recognition of people with extraordinary adversity attempting to live very ordinary lives. There is a sense of isolation in which the general public views the achievements of Paralympians and the need of those living with disability. Historically there has been a progressive recognition and definition of disability which has been showcased on the highest possible stage. Lagging slightly behind the universal recognition of disability are the legal frameworks designed prevent discrimination and promote inclusivity within the built environment.

### 2.6 Legal Framework

#### 2.6.1 The Equality Act 2010

While there appears centuries old recognition of disability and genuine progress towards the provision of support evidenced in the early 20th Century, it was not until the end of this century that proper legislation was introduced. The current legal framework concerned with the provision of accessibility is the Equality Act 2010 (EA10). This replaced the Disability Discrimination Act 2005 (DDA05) which in itself was a revised version of the Disability Discrimination Act 1995 (DDA95). The EA10 is intended to prevent discrimination to a

## 2 Literature Review

much broader sector of society than the DDA05 and includes a list of 'protected characteristics' including age, gender reassignment, being married or in a civil partnership, being pregnant or on maternity leave, disability, race (including colour, race, nationality including ethnic or national origin), religion or belief, sex and sexual orientation.

There has been some open criticism of the decision to repeal the DDA05 and envelope this in the EA10 with the suggestion that bringing Disability Rights Commission into the Equality Rights Commission has resulted in a loss of focus on disability issues (Blunkett, 2015). It has also been suggested that it would have been better to retain the DDA05 rather than absorb this into the EA10 (Fleck, 2019). Stronger criticism of the introduction of the EA10 has been levied by UNISON as this new legislation is seen as "*weaker than the previous [legislation]*" (Unison, 2015). Specifically cited is the effect of diluting the protection offered in the original 1995 Disability Discrimination Act (DDA95), this is further examined by Hand, Davis and Feast (2012) who note that despite amendments to the 1995 Act, it was still a 'disability apart'. This infers that the DDA95 was a bespoke piece of legislation opposed to the considerably broader offering of the EA10. Unison (2015) go as far as to say that since 2010, many of the gains made under the DDA have been reversed which is quite a powerful statement. This is evident with the replacement of the term in the DDA95 (referring to discrimination) as "*less favourable*" with the more general term of "*unfavourable*" (Hand et al, 2012). Such fine nuances may be exposed as and when the EA10 is 'tested' in a court of law.

The Equality Act 2010 defines disability as either a "*physical or mental impairment*" which must have a "*substantial long-term effect*" on a person's ability

to carry out "*normal day-to day activities*" (Gov.uk, 2015). Guidance has been published by the UK Government on the terms:

- Substantial.
- Long Term.

The term "*substantial is more than minor or trivial, e.g. it takes much longer than it usually would to complete a daily task like getting dressed*" and long term equates to "*12 months or more, e.g. a breathing condition that develops as a result of a lung infection*" (Gov.uk, 2015). The definition of disability also covers progressive medical conditions such a cancer, HIV infection and multiple scoliosis. There is further government guidance on conditions not considered to be a disability and these include (HM Office for Disability Issues, 2011):

- Addiction to, or dependency on, alcohol, nicotine, or any other substance (other than in consequence of the substance being medically prescribed);
- The condition known as seasonal allergic rhinitis (e.g. hay fever), except where it aggravates the effect of another condition;
- Tendency to set fires;
- Tendency to steal;
- Tendency to physical or sexual abuse of other persons;
- Exhibitionism;
- Voyeurism.

Under the EA10 employers and service providers are not allowed to discriminate against disability, including the provision access or inclusivity for employees and users. The EA10 details the requirement to ensure that disabled persons are not disadvantaged when compared to non-disabled people on the following 3 principles:



## 2 Literature Review

- The provision, criterion or practice of the employer or service provider.
- The presence of a physical feature which causes disadvantage.
- The provision of an auxiliary aid when required.

In the context of the built environment this is most likely to relate to a physical feature and within the EA10 there should be means to remove, alter or avoid this as not to disadvantage disabled persons.

The EA10 does not explicitly list examples of reasonable adjustment and this is likely to be shaped as legal challenge occurs. ‘Recent’ legal attention under the EA10 appears less focussed on disability but more concerned with the protected characteristics such as race, gender, sexual orientation etc, this is perhaps representative of the wider human rights coverage of the act. While there has been the high-profile legal case under the EA10 concerning the accessibility of transport (Paulley

v First Group plc) there does not appear to be a similar prominent case concerning access to the built environment.

### 2.6.2 Building Regulations Part M and British Standard BS8300

Concerning the prescriptive requirements for disabled access, this is detailed in Part M of the Building Regulations – Access to and use of buildings. In most normal circumstances building regulations are applicable to new build projects as well as those the subject of renovation. A significant quantity of commercial properties is existing and Part M is applicable to renovation or the structural alteration of these as well as any alterations to the entrances, exits or fire safety. Even a material change of use means that Part M is applicable regarding access.

Despite the presence of Part M, the guide for best practice exists in the form of BS 8300, although it

## 2 Literature Review

must be noted that British Standards are not legally binding. BS8300 is considered to go above and beyond the requirements stipulated in Part M of the building regulations:

Part M of the building regulations may be considered the default reference regarding compliance. However, within the ‘Approved Document’ Part M it does explicitly indicate that compliance with Part M may not mean full compliance with The EA10 as it recognises that the EA10 requires reasonable adjustment.

The word “reasonable” is a key word utilized throughout Part M and forms the basis of Government advice in regards to disabled access in commercial property. The foreword within Part M of the Building Regulations states:

**“service providers and employers are required by the Equality Act to make reasonable adjustment to any physical feature which might put a disabled person at a substantial disadvantage compared to a non-disabled person” (Gov.uk, 2015).**

Part M elaborates on this point, advising that any buildings open to the public, such as hotels, restaurants, or shops should have “reasonable provision for people to gain access to that part from the site boundary and from on-site car parking where provided” (Gov.uk, 2015). This demonstrates a requirement for either property investors or service providers to make their property accessible to those

with disabilities. Failure to comply with the EA10 regarding reasonable adjustment may result in a claim for discrimination which is likely to result in a civil procedure and claim for damages. But as eluded to in her book “Are you an inclusive designer” (2019), Julie Fleck questions the requirement for individuals to take up cases under the EA10. She argues that only one complaint should be made before being taking up by the council to investigate as is done with noise or food hygiene complaints. This point is echoed by a report published by the House of Commons [Women and Equalities Committee] which quotes an access group and disability forum as saying it’s not easy for customers to make complaints and the “vast majority are deterred from doing so” (Women and Equalities Committee, 2017, pp 42)

Despite advising of the legal minimum requirement, Building Regulations can be open to interpretation concerning key design features. This is where BS 8300 proves its worth by giving specific advice for fittings, for example doors and handrails (see Figure 6). As a guide of “best practice”, BS 8300 gives detailed advice such as that handrails should have a dimension of between 32mm and 45mm, and that handrails should neither be excessively cold or warm to touch. British Standards also advise a recommended height of 900mm for door furniture, along with planned use of colour to ensure objects are visually clear to users.

The British Standards Institute (BSI) regularly seek to enhance and improve British Standards to ensure it continues to deliver the best advice. While Part M has improved significantly in the past 20 years it is still some way behind BS8300 (Fleck, 2019). This can be seen with the latest copy of BS 8300:2018 released in early 2018 with more than 300 pages of design advice (Fleck, 2019). This latest version features two

	Part M, Building Regulations:	BS 8300:
Self-Closing Swing Doors:	Where required to be self-closing a power-operated door opening and closing system is used.	A power-operated door – either sliding, folding, balanced or swing, which should be one of the following two types: <ul style="list-style-type: none"> <li>• A manually activated door controlled by a push pad, coded entry system, card swipe or remote-control device</li> <li>• An automatically activated door controlled by a motion sensor or a hands-free proximity reader.</li> </ul>

Figure 6 - An example of the difference in detail between Part M and BS 8300 (Gov.uk, 2015)



## 2 Literature Review

parts, with the second part, 8300-2, “relating to how to design, build and manage the built environment in a way that is inclusive” rather than aiming to retrospectively design accessibility aids to fit into a non-inclusive environment (bsigroup.com, 2018).

While British Standards remain a guide of “best practice”, failure to comply is unenforceable by law. However, violation of either the Equality Act and Part M of Building Regulations could result in legal proceedings against individuals or Company Directors. Furthermore, if a company, such as a property investor or service provider was found to be in violation of the legal prescriptions, the Company’s Directors may forfeit the protection of a Limited Liability Company. Accordingly, they may be deemed personally responsible for this breach (Davies, 2011). Despite this, there’s no evidence of significantly high-profile legal cases concerning claims made under the EA10 for failure to provide reasonable adjustment.

The legal framework for dealing with inclusivity in the built environment revolves around the definition of disability (EA10) in the context of users and the measures to provide reasonable adjustment. The minimum standards are those detailed in Building Regulations Part M but it is acknowledged that ‘reasonable adjustment’ may even be outside of that stipulated in the regulations. Since the introduction of the Equality Act 2010 there are increasing numbers of cases testing the law but so far there is little evidence concerning the test of reasonable adjustment within the built environment. This may indicate that inclusivity is high on the agenda of service providers and not a problem. Alternatively, individuals have not had the time, support or resource to bring cases. It is therefore necessary to collate evidence from disabled users unable to access goods and services as well as establish why they have not processed this further with a claim for discrimination. It is also

necessary to establish if inclusivity is a priority for service providers or property investors. Importantly it seems necessary to establish the existing levels of compliance with Part M and investors attitudes to up-grading inclusivity to BS8300. There is very little detailed in the existing body of knowledge relating to the commercial gain associated with inclusive environments.

### 2.7 Real Estate Investment, Service Provision and Disabled Access

As reported by the Construction Industry Council (CIC) on the 25th April 2017 (“Building for Equality”) and in response to a major UK Government report “Much more can be done to make the public realm and public buildings more accessible” (CIC, 2017). Included in “the public realm” are the typical buildings associated with this research, namely managed commercial buildings owned by real estate investors. The government report highlights the need to update regulations for new buildings, based on a 16-year-old standard and amending the Licensing Act 2003 to force landlords to make their properties more inclusive.

The UK Government as well as disability access groups and individuals appear to have been universally critical of the current legislation and also the uptake within the commercial built environment to providing inclusivity. The definition of commercial property is a land or buildings operated as a business (Tagg, 2018) and it can be suggested that businesses put profit above inclusivity in the terms of providing only the legal minimum.

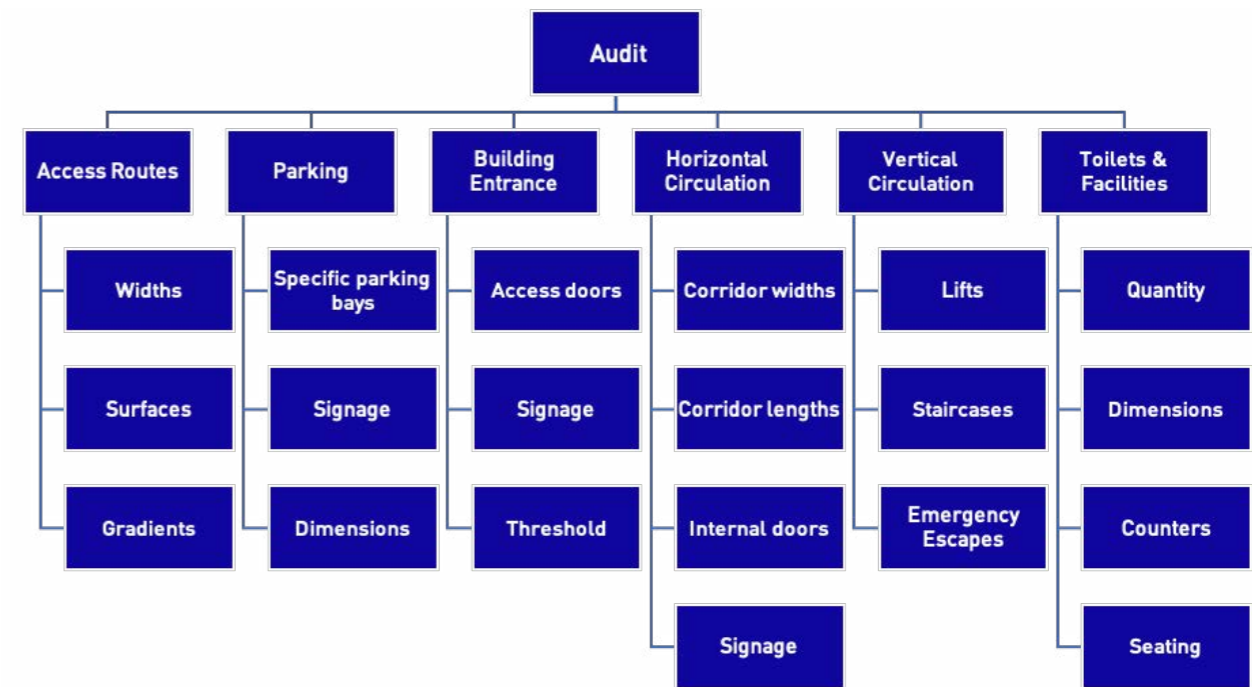


Figure 7 – Access audit criteria for commercial property (Tagg, 2018)

#### 2.7.1 Commercial Property in the UK

The UK commercial property sector is divided into 6 different sub-sectors; Office, Retail, Leisure, Public Sector, Residential and Industrial. Clearly there appears a need for accessibility provision, normally this is provided to the common parts with tenants responsible for their demise and concerns the following auditable building elements or features as illustrated in Figure 7 (Tagg, 2018):

Access to the common areas should be provided by the building owner or landlord (subject to lease conditions), individual tenants as service providers or employers may be obliged to undertake the necessary reasonable adjustment to their individual demises. Retail properties can generally be categorised as traditional high street or shopping centres (Tagg, 2018). Although the application of the EA10 should be the same regarding reasonable adjustment, shopping centres are in the main multi let properties with significant common parts which should be treated in a similar manner to offices. Individual units or shops within shopping

centres should comply with the EA10 in accordance with their function as either employers or service providers. Alternatively, ‘traditional’ high street retail properties are likely to comprise single tenant occupiers and are often accessed directly from the street. These properties should be treated as a single entity or demise for the service provider regarding accessibility.

Commercial properties within the industrial sector are largely manufacturing or warehouse and logistics. While it may appear that there is little need to inclusivity to these areas it’s important to consider that there is still an obligation placed upon the employer or service provider to facilitate this. Most industrial buildings include an administration or office area and accordingly these should seek to include disabled access provision. The leisure industry and civic buildings which are publicly accessible are amongst some of the most high-profile properties in the UK. These and also the services they provide should be fully accessible to those with a physical or mental impairment.



## 2 Literature Review

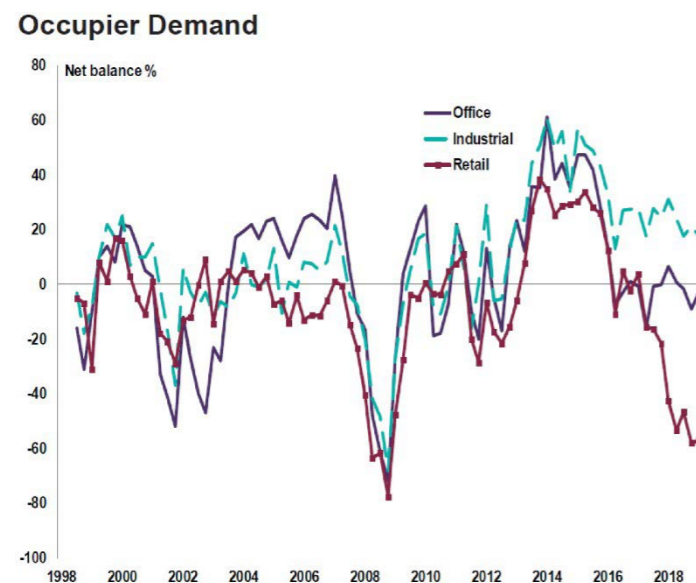


Figure 8 – UK commercial property occupier demand 2019 (RICS, n.d.)

### 2.7.2 The Value of UK Commercial Property

In 2019 the UK commercial property sector was worth an estimated £1,662 billion and contributed £101.2bn (7%) to the UK GDP (British Property Federation, n.d.). The commercial property sector might appear to be awash with investment but things are not quite so healthy with occupier demand for retail space on a progressive downward trend (RICS, n.d.) and industrial sector demand on the increase (figure 8).

A large increase in online shopping, increased high street costs and low rents has contributed to the perceived “*Death of the high street...*” as reported in the Financial Times (Evans, 2019). The counter balance of a reduction in consumer spending in high street stores has seen online sales increase significantly and in turn the demand for logistics space has increased significantly. The implications

of economic uncertainty in the retail sector may suggest that there is less available capital to invest in access provision however in contradiction to the article in the Financial Times (2019) there has been a rise in smaller boutique shops (Johnson, 2019). These more bespoke commercial businesses include tattoo parlours, hair and beauty salons as well as coffee shops. It’s estimated that these smaller niche service providers have increased by typically 40% between 2014 and 2019 as reported by the Telegraph (Johnson, 2019).

Irrespective of negative economic prosperity there is still a requirement under the EA10 for service providers to ensure reasonable adjustment is undertaken to provide an inclusive environment. In a US based report by the professional services company Accenture titled “*THE ACCESSIBILITY ADVANTAGE: Why Businesses Should Care About Inclusive Design*” the concept of “Sustainable

## 2 Literature Review

*Inclusivity*” is discussed. It is suggested that creating commercial inclusivity has tremendous opportunity and this can be achieved through the employment, engagement, enabling and empowering those with disability. The themes contained in the Accenture report were largely discussed in an article published by the Telegraph in 2017. Importantly the article quotes Farrah Qureshi (Global Diversity Practice):

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**“Diversity must be a holistic strategy that considers customers, employees and suppliers. Then it’s all about delivering”**

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There appears the potential for businesses and service providers to have a commercial edge by strategizing inclusivity. While this is not widely discussed in the existing body of knowledge it does seem evident that organisations should refrain from seeing reasonable adjustment as a legal obligation but more an added value or opportunity.

The provision of accessibility to offices is covered by the same legal requirements as retail and while there are some smaller compact low-rise office properties, many are large, medium and high-rise bespoke office buildings. The typical layout of most modern office properties is that there are central core areas devoted to common facilities such as the entrance, lift lobbies, sanitary provision and staircases. These areas are often referred to as the ‘common parts’ and dependent on the leasing arrangements these are often the responsibility of the landlord or joint ownership regarding issues such as accessibility. Within the individual tenanted areas (demise) the

tenant is often responsible for legal compliance concerning employability or service provision under the EA10.

An article by the leading property agent Savills “*Market in Minutes: UK Commercial*” (Savills, n.d.) has established a survey on “*What Workers Want*” [from their office accommodation]. It’s perhaps unsurprising that within the top 20 criteria for office workers; inclusivity is not mentioned, respondents appear to prioritise location or proximity to transport hubs etc. Accessibility in the work place is probably only an issue when there’s a requirement to accommodate those with disability in the work force or clients and customers. However over 52% of disabled people aged 16-64 are employed (Powell, 2019) and the gap between non-disabled and disabled persons in work have been reducing over the past 6 years. It’s likely that most people (knowing or unknowingly) have a colleague who considers themselves disabled. There appears potential commercial gain to engaging with disability from an employer or service providers perspective.

With investment in commercial property estimated to be worth £1,662bn (British Property Federation, n.d.) and the cost of ‘reasonable adjustment’ likely to be a very minor percentage of this, it is not known how investors or service providers view the potential cost benefit to providing inclusivity. Building regulations (Part M) provides the legal minimum standards for inclusivity although British Standard BS8300 is recognised as going above and beyond the legal minimum. As with most prescriptive requirements it does not appear to be in the nature of developers or investors in commercial property to go above and beyond legal obligation. For example; if the legal prescription requires a 30-minute fire door, then it makes no commercial sense to install



## 2 Literature Review

a 1-hour fire door as this increases cost with no perceived commercial benefit. Achieving minimal compliance while delivering profit probably works for most operations in property investment and this commercial approach is considered the norm. However, with inclusivity there is the opportunity to challenge the *'fire door approach'* and provide facilities above and beyond the legal minimum. If achieving inclusivity can provide added commercial value then this is a win-win for both investors and society.

### 2.8 Summary of Existing Literature

#### 2.8.1 Recognition of Disability

As evidenced in the existing body of knowledge, disability is universal it has a clear definition which is recognised in the UK, Europe and by the World Health Organisation. Essentially all recognised definitions deem disability to be a mental and physical impairment which effects participation in normal day to day activities. Disability affects the rich and poor as well as the young to old but the literature review has established that a significant percentage of those with disability are in the state pension age category. Put simply, disability is something that is likely to affect all of us either directly or indirectly.

Historically those with disability have been cared for by the church with a sense of Christian benevolence or by loved ones as society largely shunned them. However, post 1918 there appears a gradual acceptance of disability and the recognition to put in place more formal structures to support and empower those with disability. Running parallel to the advances in inclusivity is also the *'housing crisis'* with both timelines prompted by the post WW1 *'homes for heroes'* campaign. It may be considered that there still exists a housing crisis more than

one hundred years on and although it is not perfect, inclusivity has come a long way. There is still room or significant improvement or change but inclusivity cannot be considered to be in crisis. The perceived success of the Paralympics and in particular the 2012 games in London has done much to increase the profile of those participating. However there appears a disconnect between public perception of the *'superhumans'* and those with disability living more ordinary lives. True inclusivity involves all aspects of society from those living with disability, to the carers and those non-disabled members of society. It is important to acknowledge that disability transcends class, wealth age, race and culture. Most of us are likely to encounter disability up close at some point in our lives, therefore it is important to have an awareness and understanding beyond the events that occur every four years in the Paralympics.

#### 2.8.2 Legal Provision

Legislation exists to ensure that there is no discrimination against disability in the work place and also through the provision of goods and services. For some, this is not strong enough and it has been suggested that current legislation has been diluted by including it within broader human rights law. While disability has clear definition, the subsequent obligation to make reasonable adjustment appears open to interpretation with evidence suggesting the existing law is *'toothless'* and subsequently restrictive for those wishing to undertake legal challenge. The current legal provision appears to foster or enhance a *'checklist'* mentality where legal minimums are seen as the desirable commercial standard.

## 2 Literature Review

Evidence suggests that there is significant commercial value in providing inclusive environments and perhaps instead of looking at legal minimums it could create a commercial edge to have enhanced inclusivity for goods and service providers.

### 2.8.3 Emerging Themes from the Literature

The following themes have emerged from the review of the existing body of knowledge:

- The apparent disconnect between the public perception of Paralympians and the wider disabled community, despite perceived advances in the acceptance of disability.
- The implementation of the existing legal framework and the perceived restrictions or limitation to the legal challenge of this.
- The potential commercial benefits of inclusivity but apparent lack of desire to implement measures over and above the legal minimum.



### 3 Research Design / Strategy

The overall aim of this research was to investigate public and commercial attitudes to inclusivity in the Built Environment to ascertain if there is a commercial value to goods or service providers in its delivery.

In order to achieve this, the following research objectives were established:

- Understand public attitudes to disability and user perspectives of accessibility in the Built Environment.
- Establish the current levels of accessibility to commercial properties in the UK.
- Ascertain the attitudes to inclusivity in the built environment from those owning, leasing, advising on and delivering goods or services.
- Understand the challenges of funding accessibility.

To achieve this, it was necessary to design a research strategy to question a broad section of the public to ascertain the general 'feelings' around inclusivity. In particular, any strong desire to have an integrated inclusive society.

A more focussed analysis of commercial attitudes has been undertaken by questioning investors, agents and service providers.

The general public survey data was collected solely from an online survey provider and accordingly the respondents were anonymous. This was not targeted to any specific age groups or those with disability, however it is acknowledged that age has a significant impact on the prevalence of those identifying as having a disability. Therefore, a possible high return from the over 65s was noted to be a risk area that might influence the findings, this is further discussed later in this report.

The data collection using questionnaires was undertaken via an online survey platform which was accessed through an online link sent within an email. The questionnaires were anonymous and no personal data was requested or stored as part of this process. accordingly, this did not present any ethical challenges associated with the storage of data.

The findings of the online survey questionnaires were opened up for further discussion through semi-structured interviews intended to compliment the statistical analysis, digging deeper into the outcomes. They were undertaken with 2 key individuals allowing qualitative data to be collected from interviews held with:

- Participant 1 – An Inclusive Design Advisor with many years of experience advising on the creation of an accessible and inclusive environment.
- Participant 2 – A senior member of a UK Charity representing disability with experience in the strategic approach to accessing the built environment.

The specific individuals who were invited to participate in one to one semi-structured interviews, were instructed that they were able at any point to stop or withdraw from the interview. The collected data has been stored on a password protected computer and this will be retained for up to 1 year after completion of the research. Participants were anonymised and to close the ethical loop, they were given a copy of the initial draft findings in the discussion section of the report for review. Requested changes or alterations to the text associated with their answers or opinions were fully adopted in the final report.



## 3 Research Design / Strategy

It is envisaged that the findings of the research can be used to further establish the willingness of society as users of the built environment and investors as well as service providers, to consider pragmatic options to fund inclusivity.

The three emerging themes of the research concern public attitudes to inclusivity, current access provision to commercial properties and the attitudes of investors / service providers to inclusivity. There is good secondary data available regarding the demographics of those who identify as having a disability, although there appears to be no published information concerning current public or commercial attitudes to disability in the built environment. It was therefore necessary to collect data from the following sources:

- General public awareness of disability and attitudes to accessing the built environment (questionnaire).
- General public perception of existing access provision (questionnaire).
- Commercial attitudes to the provision of access to the built environment (questionnaire).
- Expert opinion on designing for disability and the representation of the disabled community (semi-structured interviews).

### 3.1 Public Attitudes

The principal research tool to establish general public attitudes to disability and access provision was the use of an anonymous questionnaire. This was intended to deliver quantitative data and allow descriptive statistics to aggregate the responses. It sought to establish the 'headline'

findings to ascertain the current trends or feelings of the general public towards disability and even their willingness to contribute to funding change. Accordingly, it was necessary to divide the primary data collection into 3 key sections.

- Demographics.
- Access to the Built Environment.
- Responsibility for Access Provision.

### 3.2 Demographics

The existing body of knowledge has established that 22% of the UK population (DWP 2018) report as having a disability and this is divided into the following 3 categories:

- Children (Under 18).
- Working Age (18-65).
- Pensionable Age (Over 65).

In order to ensure that the research demographics were representative of the UK population (as defined by the DWP [2018]) it was necessary to establish the age group of those participants. This formed the opening question however the survey was not directed at those under the age of 18 and only those of working or retirement age.

Following on from establishing the demographics of those who report as having a disability it was further necessary to verify the category of their disability to align with those defined by the Department of Work and Pensions (2018):

- Mobility.
- Stamina / Breathing.
- Dexterity.
- Mental Health.
- Memory.
- Hearing.
- Vision.
- Learning.
- Social / Behavioural

## 3 Research Design / Strategy

Geographic location has a relevance as the intention of the research was to be representative of the whole of the UK, therefore it was necessary to know where respondents live. They were requested to confirm this by selecting from the same list of geographic areas referred to by the DWP (2018):

- East.
- East Midlands.
- London.
- Northern Ireland.
- Northeast.
- Northwest.
- Scotland.
- Southeast.
- Southwest.
- Wales.
- West Midlands.
- Yorkshire & Humber.

### 3.3 Access to the Built Environment

The data collection sought to establish how often members of the general public access the built environment for goods and services. This was necessary to gauge the frequency of interaction between users and service providers. The response was used to lead into further questioning around whether they felt that the current built environment is an accessible or inclusive environment.

### 3.4 Responsibility for access provision

Having established the demographics of the respondents and their current experience of inclusive environments, the final section of questioning was directed to who they thought was responsible for providing this. The questionnaire asked respondents

to select from the following:

- The Government.
- The Local Authority.
- The Taxpayer.
- The Service Provider.
- The Building Owner.
- The User.

Having opened up the respondents to the concept of responsibility and paying for inclusivity, the final question aimed to establish if there is a willingness for individuals to contribute or fund this themselves. In essence it was necessary to establish if users are prepared to pay more for goods and services if this contributed to a fully inclusive built environment. Noted is the sensitive nature of the question where respondents may have felt compelled ethically to agree. Therefore, this question was structured to allow a 'ranking' of their answers gauge the strength individual responses. A copy of the public attitudes questionnaire is located in **Appendix B**.

### 3.5 Commercial Attitudes

The attitudes of the general public toward inclusivity and the built environment were answered by a series of short answers delivering quantitative data. The general public have the freedom to answer with no apparent implications or conflict of interest to their opinion. Commercial property investors, service providers and their advisors in the Real Estate sector are less likely to give a subjective but more objective opinion.



## 3 Research Design / Strategy

The essence of commercial property is to deliver a return on investment and accordingly those who own, lease and manage commercial assets may be obliged to consider the best interests of their clients or shareholders. There was a requirement to ascertain the opinions of the following 4 stakeholders in commercial property:

- [Property Owners / Investors.](#)
- [Real Estate / Property Advisors.](#)
- [Consultants.](#)
- [Property occupiers / tenants / service providers.](#)

Directed or targeted online questionnaires to the stakeholders was achieved through utilising professional contacts within the commercial real estate sector with access anticipated to be gained to primarily agents or advisors. They were asked to circulate the questionnaires to investors (their clients) and further invite tenants or service providers to take part in the survey. It was anticipated that there would a good response to the online survey although this was likely to mainly come from real estate consultants in line with most of the author's existing contacts. Paper surveys were additionally distributed to 40 services providers with a postage paid return envelope with an aim of obtaining the opinions of those delivering goods and services.

The principal lines of enquiry within the questionnaire were to establish the following:

- [Professional Demographics.](#)
  - o Are they an investor or advisor in commercial property or a service provider?
  - o Their level of experience.
  - o What sectors they operate in.

- [Experiential Understanding of Accessibility.](#)
  - o Their experience in the 'evolution' of the accessibility to commercial properties.
  - o If any one sector is more inclined to require accessibility.
  - o The current level of compliance of the properties they own or advise on.
  - o Their opinion on whether current accessibility legislation is sufficient.
  - o The perception that investors do the legal minimum.

### • [Commercialisation of accessibility.](#)

- o What commercial advantages there could be by providing full inclusivity.
- o Their opinion on who should be responsible for funding inclusivity.

### 3.6 Professional Demographics

Existing contacts in the commercial real estate sector were invited to participate in an online survey. Over 10 of the UK's leading Real Estate consultancy firms were contacted along with other independent property professionals and an online link was be distributed to building surveyors, investment surveyors and property managers. The consultancy firms were noted to be the potential gateway into real estate investors and end users. The aim was to utilise personal contacts or recommendations to introduce these firms to the research and online questionnaire.

It is acknowledged that the majority of commercial real investment funds are managed by surveying firms offering consultancy services. It is rare for the funds themselves, or asset managers, to deal with the day to day property management and managing agents are usually knowledgeable of key investment

## 3 Research Design / Strategy

strategies including access provision. It was important to establish if the respondents are owners, investor, agents or service providers in order to gauge their familiarity with the legal prescription and to see if they adopt different approaches to inclusivity. It may be suggested that investors take a 'global' approach to accessibility while agents and end users may have more experience in practical application or problem solving this.

Their level of professional experience is important and the questionnaire sought ultimately to establish if they feel there is a commercial advantage to providing inclusive environments.

It was necessary to establish the geographic regions as well as the areas or sectors of investment / operation to establish if this has an influence on the implementation of accessibility.

### 3.7 Experiential Understanding of Accessibility

Those with more relevant practice experience in accessibility are likely to have seen more changes in the adoption of early legislation and commercial approaches to inclusivity. It was important to establish any existing or future trends in this.

For those investing, occupying and advising on commercial property it was imperative in the primary data collection to establish the levels of compliance of their own properties. This can be compared against further questioning as to whether they believe current access provision legislation is sufficient.

### 3.8 Commercialisation of Accessibility

The final direction of questioning was to seek professional opinions on whether permitting full inclusivity to commercial properties has 'value' or can create a commercial 'edge' to their business operation. It was necessary to establish if there is a general understanding of the term 'reasonable adjustment' and how this is applied to commercial properties or service providers. A copy of the commercial attitudes questionnaire is located in **Appendix B.**



## 4 Data Analysis

In accordance with the research design, data was collected from the following sources:

- Online 'Public Attitudes' Survey.
- Online 'Commercial Attitudes' Survey.
- Postal 'Commercial Attitudes' Survey – Targeting Service Providers.
- Interviews with key individuals representing those with disability and designers.

### 4.1 Public Attitudes to Disability in the Built Environment

#### 4.1.1 Demographics

There were 313 respondents to the online survey which are distributed across the age categories as shown in Figure 9.

The survey response is aligned to the UK national data regarding age demographics of the population and is shown in Figure 10.

The largest variations between the data is in the 18-24, 45-54 and over 65 categories. For the 18-24 age group the relevant UK national data is categorised between 15-19 and 20-24. As under 18s were not considered in this research the 'nearest' UK statistics age category is 20-24 which does not take into include those aged 18-20. Therefore, this accounts for the difference in the baseline data collected from the survey compared to the published data. There is no known reason why the age category 45-54 is overrepresented or why the over 65s is under-represented.

When considering the relevant age categories of the survey respondents it is important to note the more generalisation of the age categories published by the Department of Work and Pensions (2018). This focusses on 3 specific age categories:

- Children (Under 18s).
- Working Age (18-64).
- Retirement Age (Over 65).

This research was intended to be representative of the UK and the data in Figure 11 illustrates where the respondents live:

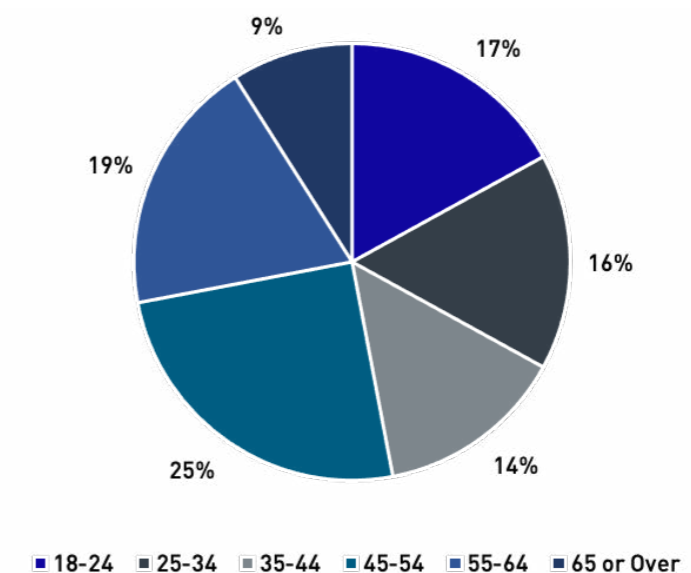


Figure 9 – Age Category of Respondents

## 4 Data Analysis

There appears some alignment between the survey data and published national data on regional population, in conclusion the survey response is sufficient to give a UK representation.

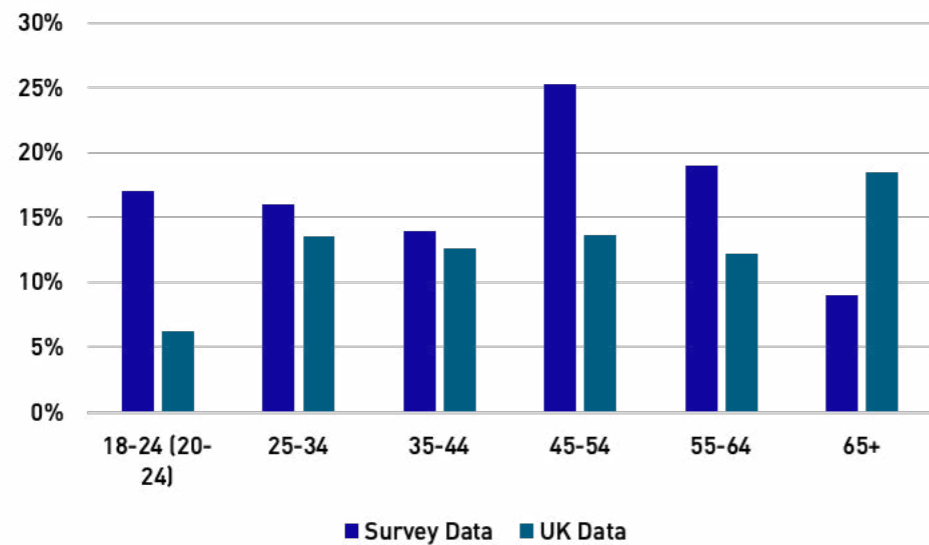


Figure 10 - Survey Age Demographics v UK Age Demographics

Respondents Region of Residence and Population Data

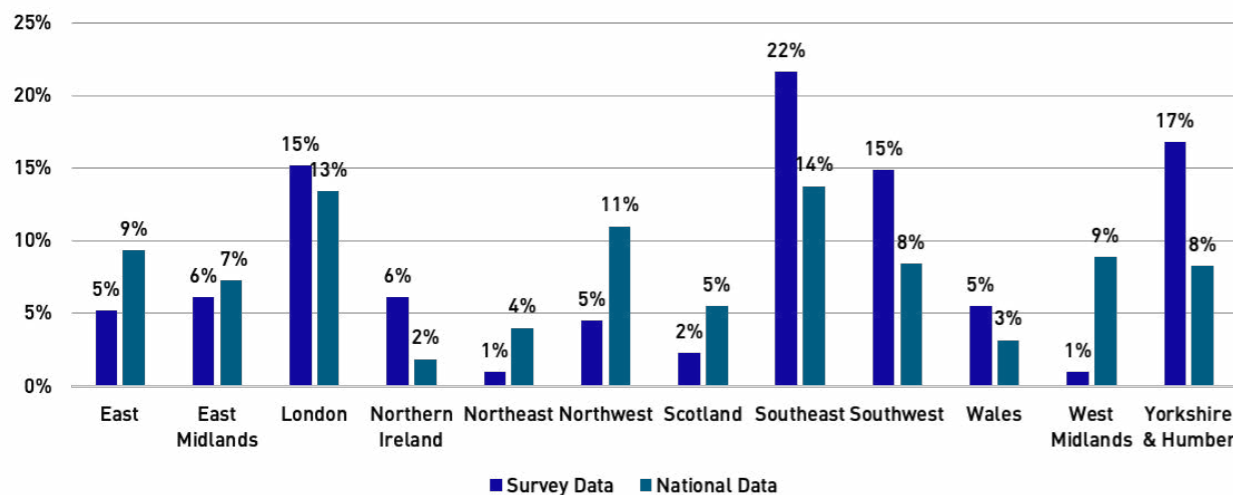


Figure 11 – Respondents Region of Residence

## 4 Data Analysis

When asked if they had a “physical or mental health impairment which has a substantial long-term effect on your ability to undertake normal day to day activities”; 32% answered Yes and 68% No. The percentage of those reporting a disability (32%) is significantly higher than the published UK Government data (DWP, 2018) but more in line with the 30% reported by Dixon et al (2018) in the Disability Perception Gap – Report published by Scope. The data concerning those who identify as having a physical or mental impairment will be examined and discussed in more detail later in this report.

Looking more closely at the survey responses concerning the actual reported disabilities it is important to note that respondents could list more than one disability, this is shown in Figure 12:

Despite the under representation of the over 65s in the survey responses, the disabilities usually associated with this age category (mobility, stamina / breathing / dexterity, memory and hearing) largely correlate to the existing data (DWP, 2018). The

standout disabilities that exceed the levels in the published data are mental health, hearing, vision and social / behavioural.

### 4.1.2 Accessing the existing built environment

Considering the online survey was made ‘live’ in the months of May, June and July 2020 it was important to take into consideration the Covid-19 virus which was present during this period. Accordingly, a UK government directed ‘lockdown’ in place during these months resulted in all but necessary journeys outside of the home for ‘key workers’ or to shop for food and collect medicines. Consequently, most of the UK general public neither visited commercial properties for leisure or work during this period to the same level or frequency as ‘pre-lockdown’. In order to establish the frequency of visits to commercial properties such as shops, offices, hotels / leisure, schools / colleges and other places for work or leisure, respondents were asked to consider their activities ‘pre Covid-19 lockdown’. This is likely to be more representative of respondent’s ‘normal’ visits

Respondent’s Reported Disabilities (more than 1 choice available)

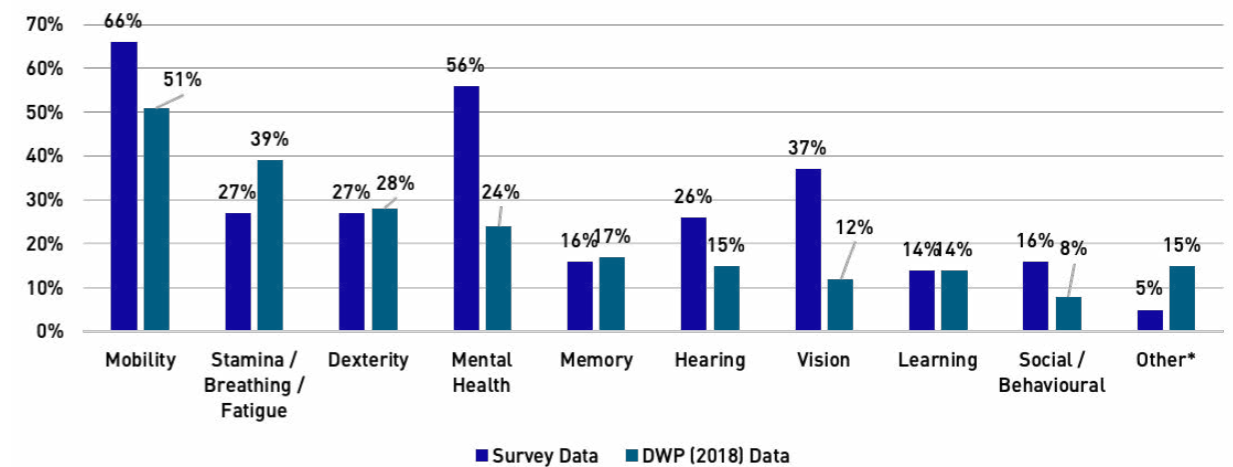


Figure 12 – Respondents Reported Disabilities



## 4 Data Analysis

to commercial properties but it does not take into account any post lock down changes that may occur, such as increased future online shopping. This data is shown in Figure 13.

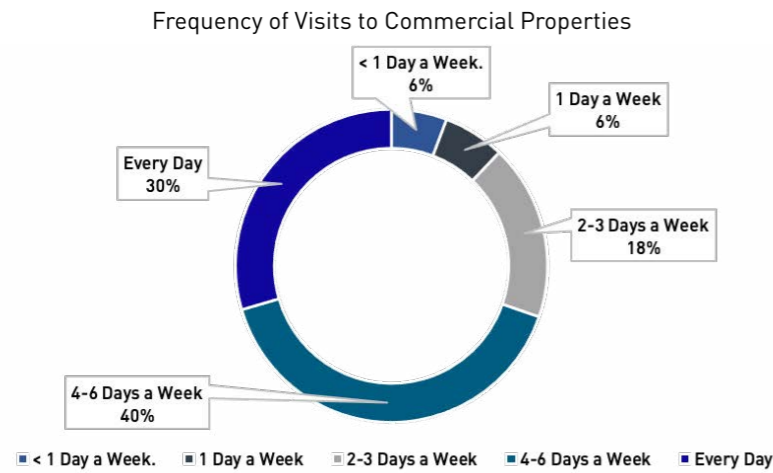


Figure 13 - Respondent's frequency of visits to commercial properties

In your experience: "commercial buildings and services providers (shops, offices, hotels / leisure, restaurants, schools / colleges etc) appear fully accessible for those with physical or mental impairments / disability"

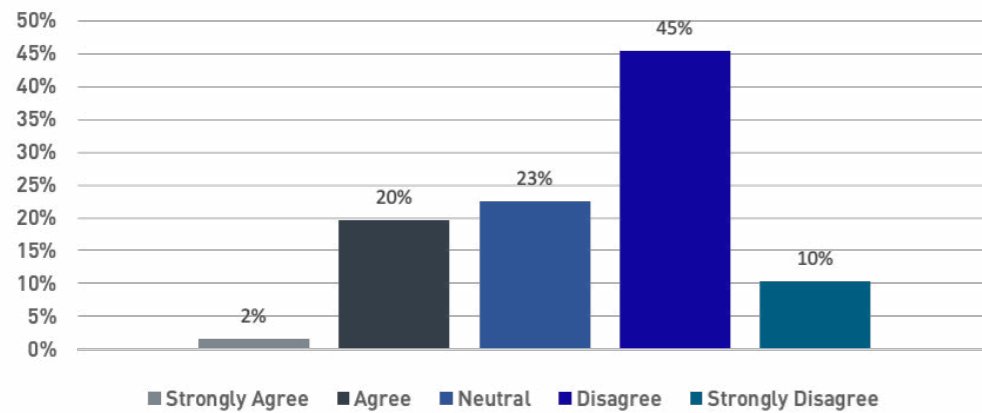


Figure 14 - Accessibility of commercial property for those with physical or mental health impairments

## 4 Data Analysis

It is evident that the majority of respondents visit commercial properties every day or more than 4 out of 7 days per week. This is important as they were also asked to give an opinion concerning current levels of accessibility to the built environment.

From the data shown in Figure 14, there is an overall majority opinion (55%) from survey respondents who disagree that commercial properties are fully accessible to those with physical or mental impairments. This compares with 22% who agree that commercial properties are fully accessible and 23% are neither agree or disagree. A neutral opinion on this specific statement suggests more inclination to commercial buildings not being accessible.

### 4.1.3 Legal Provision and Reasonable Adjustment

Key to understanding public attitudes is to gauge if there is an awareness of the legal provision governing the accessibility of goods and services. Accordingly, 90% of respondents are aware of the requirement for service providers to make "reasonable adjustment" to allow for accessibility.

When questioned further on who should be responsible for the funding reasonable adjustments it is noted that the single clear individual responsibility is that of building owners (73%), as shown in Figure 15. However, there is a sense in the data that there is also a responsibility for funding to come from both central and local government as well as the service provider.

Despite some suggestion that funding should come from the tax payer, the conclusion of data from the public attitudes survey is that building owners should be responsible.

### 4.1.4 Funding of Accessibility

When asked if the current levels of funding for accessibility are sufficient, the majority of respondents (62%) selected the answer the funding is not sufficient. Only 8% answered that it is sufficient and 30% or respondents were 'unsure'. The earlier sections of the 'public attitudes' survey established that the majority of respondents undertake widespread visits to publicly accessible

Who should fund the necessary adjustments to provide accessibility? (more than 1 choice)

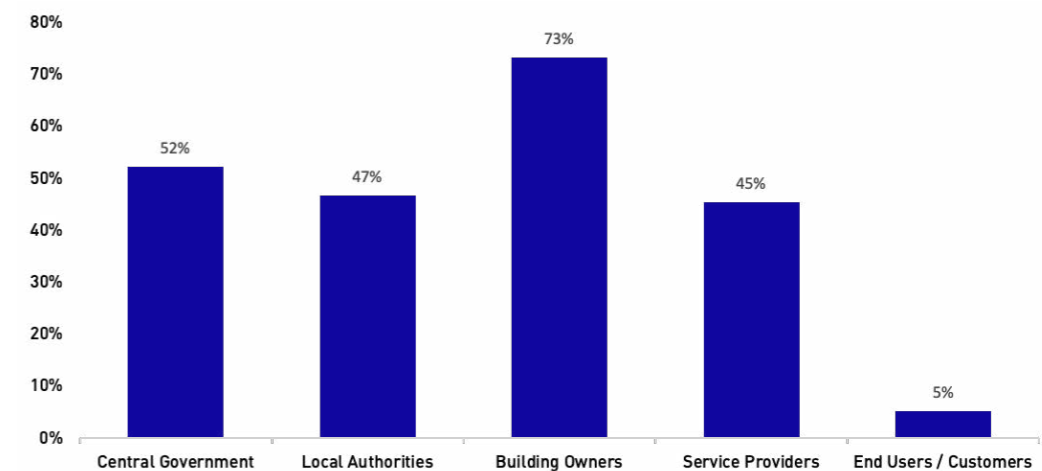


Figure 15 - Funding for Accessibility

## 4 Data Analysis

buildings, they also have a recognition of the legal requirement to provide access. Furthermore, it is acknowledged that commercial buildings are not fully accessible with underfunding evident. Therefore, respondents were asked if they are willing to contribute or pay more for goods and services to help fund accessibility. The results are shown in Figure 16:

Of the respondents, 160/313 (51%) rated above a 6, therefore were in agreement to contribute or pay more for goods and services. A rating of 5 and below indicates a position of non-agreement with the overall average rating being 5.49. This indicates a slight minority favouring this method of providing funding for accessibility. However, it should be noted that the survey did not specify the mode of contribution such as government taxation or an increased sales price, this lack of information may have affected the answers.

### 4.1.5 Public Attitudes Survey – Emerging Themes / Summary

The initial findings of the public attitudes survey have identified the following key issues:

- Higher ratio of respondents recognising as having a physical or mental impairment compared with current national data.
- A significant majority of respondents (70%) visit / access commercial buildings or service providers between 4 and 7 days a week.
- More than half (55%) of respondents do not agree that commercial properties and service providers are fully accessible.
- There is an overwhelming majority of respondents (90%) who are aware of the legal requirement to provide accessibility and a significant indication that building owners / service providers be made responsible for funding alteration. However, there appears only limited majority willing to contribute to access provision as an “add on” to payment for goods and services.

On a scale of 1 to 10: where 1 is the lowest and 10 is the highest; rate your agreement with the following statement: “I would be prepared to pay or contribute something extra for my goods and services to help fund the accessibility of commercial building

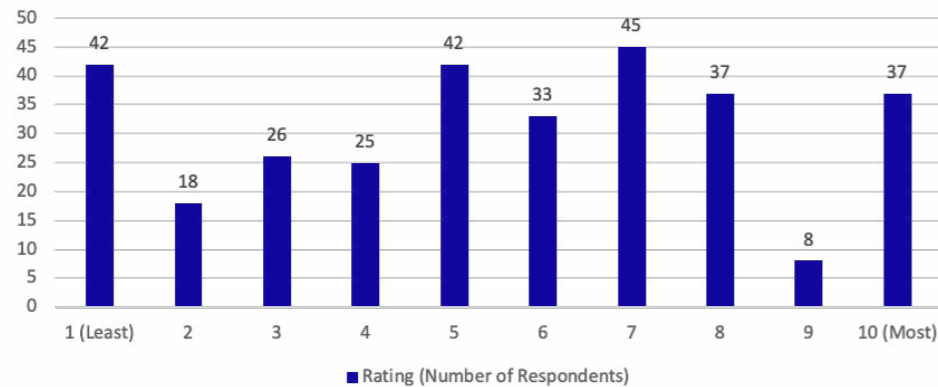


Figure 16 – ‘Willingness’ to Contribute to Funding Accessibility

## 4 Data Analysis

The survey response (18 to 65+) has shown that those identified as having a disability account for about one third (32%) of the overall survey demographic compared to 22% (DWP 2018), as shown in Figure 17. However, it should be acknowledged that the published DWP data (2018) includes children with a disability, who account for 6% of the population and therefore reduces the overall (average) level of disability to 22%. It is important to look in more detail at the breakdown of disability per age group:

The survey data for disability amongst the general age categories is significantly higher when compared to the existing national data (DWP, 2018). This is possibly due to the survey being made available to the University of Reading staff disability network although it is not possible to verify individual responses to corroborate this. Furthermore, concerning the over 65s, these are likely to be in their late 70s or early 80s as this is the typical age of those invited to take the survey. Accordingly, disability in the over 80s is 61% (DWP, 2018) which is more in line with the findings of the data. These are the likely reasons for

the relatively high levels of recorded disability in the survey data. Despite the survey data being different to the DWP data (2018), there is some alignment with data in the Disability perception gap – policy report (Dixon et al, 2018) published by Scope. This identified 30% of respondents to their survey recognising as having a disability.

It is evident in the data collected that the age is inversely proportional to the frequency at which respondents visit commercial properties and access goods or services, as shown in Figure 18. There may be an assumption and general perception that younger people are more likely to be more socially and physically mobile when compared to those over 65, this is apparent also in the data.

When looking further at the correlation of those who identify as being disabled and the frequency at which they visit commercial properties, as in Figure 19, it is evident that this is also a significant factor.

Percentage Reporting a Disability

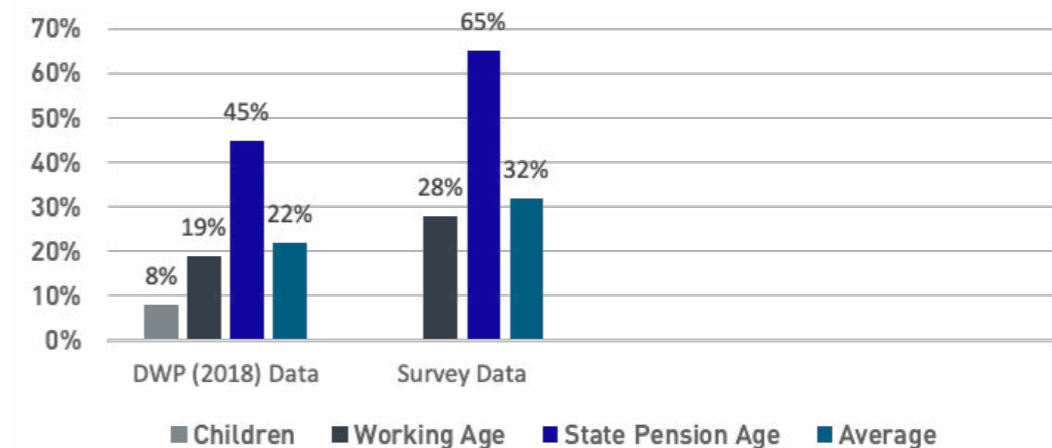


Figure 17 – Survey Response of Those Recognising as Having a Physical or Mental Impairment



# 4 Data Analysis

It is broadly evident that those who identify as having a physical or mental impairment visit commercial properties less frequently than those who do not have a disability. Further analysis of the data has identified

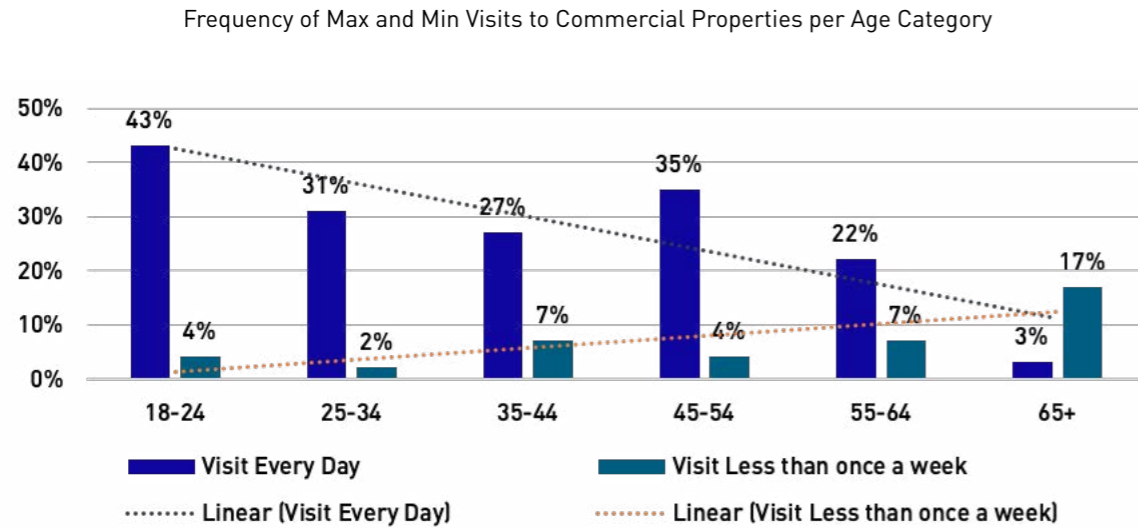


Figure 18 – Age Categories and the Frequency of Visits to Commercial Properties

Frequency of Visits to Commercial Properties - 'Disabled' V 'Non-Disabled'.

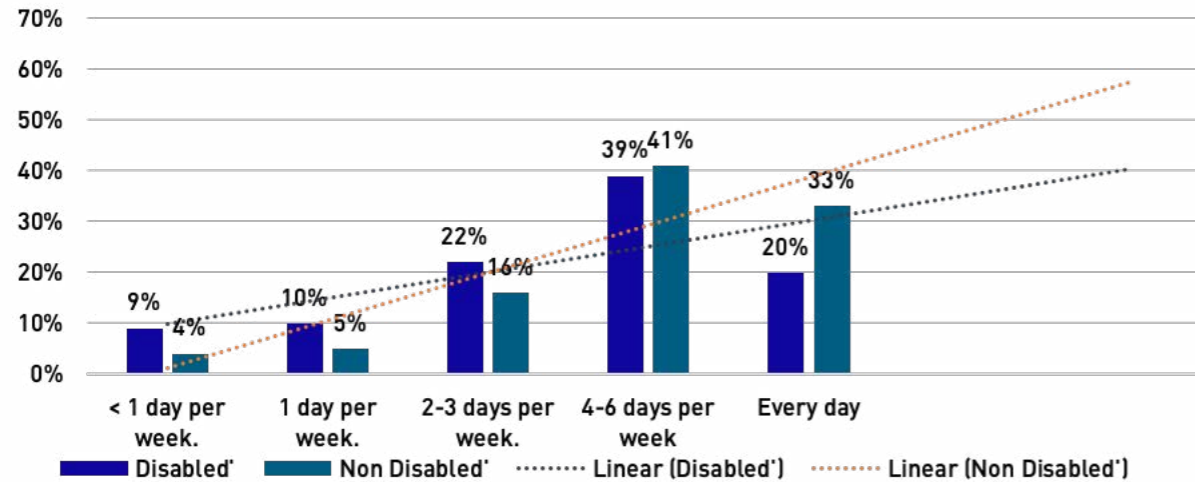


Figure 19 – Comparison of Frequency of Visits to Commercial Properties for Those With and Without a Disability

# 4 Data Analysis

those with mobility and memory health impairments (9% and 13% of respondents respectively) have a higher incidence of visiting commercial properties less than once a week. However, respondents in the age category of 65+ and who identify as having a disability visit commercial properties less frequently than any other demographic, as shown in Figure 20.

Concerning the current provision of accessibility to commercial properties or goods and services, 55% of the respondents do not agree that these are fully accessible. Looking deeper into the data per age category, as shown in Figure 21, it is evident that in the younger age category, 18-24; there is less variation across the agreement / disagreement scale and the highest agreement percentage, 39%, in any age category.

Figure 22 shows that respondents who identify as having a physical or mental impairment overwhelmingly disagree (73%) that commercial buildings and service providers are fully accessible. While those without physical or mental impairment also disagree, to a lesser extent (48%).

Analysing the responses of those with a physical or mental impairment further, and examining each type individually, per category of disability, has established that those with physical impairments (mobility, stamina / breathing, dexterity as well as hearing impairments) have expressed marginally more disagreement that commercial properties and goods or services are fully accessible. It appears to be less of an issue for those with mental impairments. This difference may be due to those with a physical impairment identifying physical barriers when accessing the built environment.

### 4.1.6 Reasonable Adjustment

Noted is a high level of public awareness of the need for building owners and service providers to make reasonable adjustment with 90% of the respondents acknowledging this. A large number of respondents (73%) also acknowledge that building owners should be responsible for funding the implementation of reasonable adjustment. Deeper analysis of the data concerning funding shows that the age category of

Frequency of Visits to Commercial Properties: Working Age v 65+ and 65+ with disability.

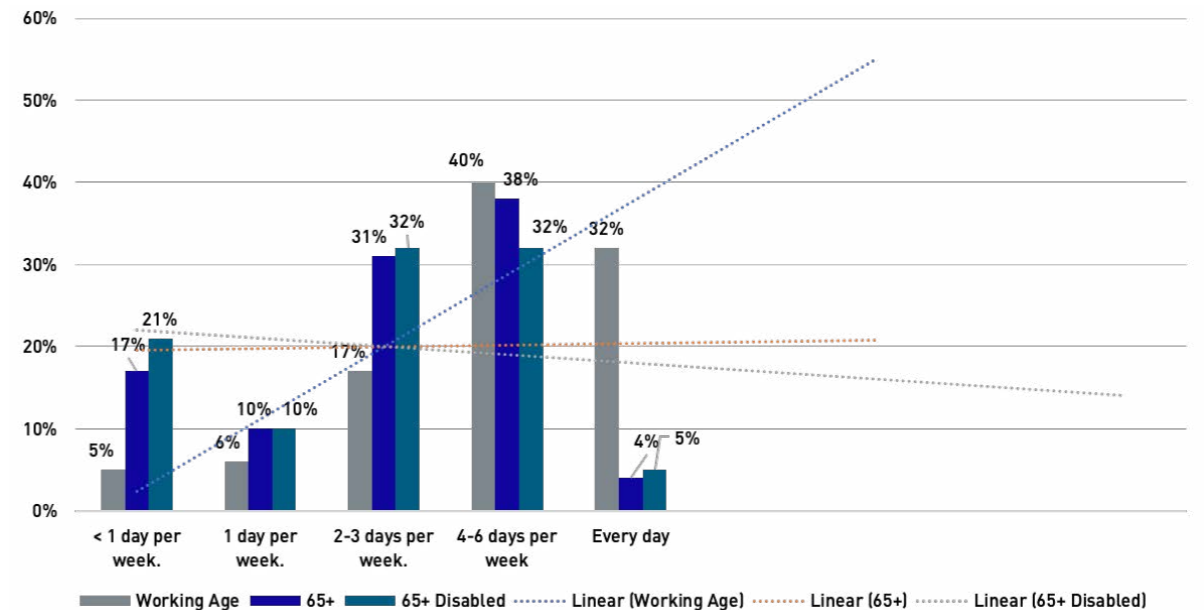


Figure 20 – Frequency of Visits to Commercial Properties (Age V Disability)

# 4 Data Analysis

respondents has little influence who they feel should fund reasonable adjustment. Also, there is negligible difference between those who recognise as having a physical or mental impairment and those that

don't concerning the sources of funding. In all cases there is an overwhelming majority in agreement that building owners should fund reasonable adjustment. There is only a slight majority of respondents

In your experience: "commercial buildings and services providers (shops, offices, hotels / leisure, restaurants, schools / colleges etc) appear fully accessible for those with physical or mental impairments / disability"

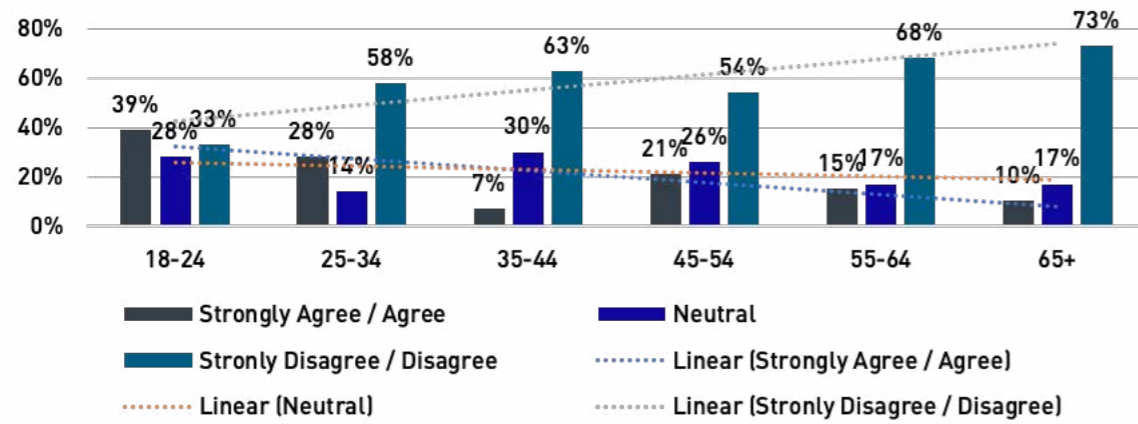


Figure 21 – Accessibility of Commercial Buildings and Service Providers per Age Category

In your experience: "commercial buildings and services providers (shops, offices, hotels / leisure, restaurants, schools / colleges etc) appear fully accessible for those with physical or mental impairments / disability"

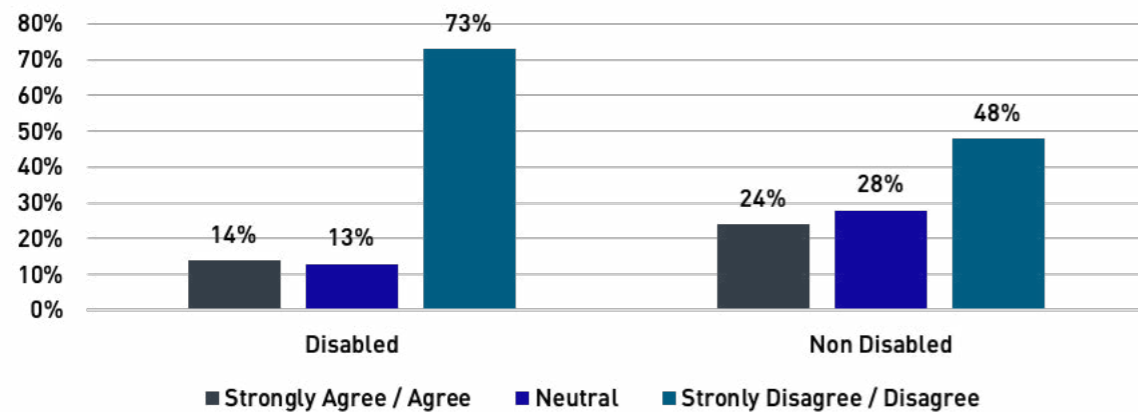


Figure 22 – Accessibility of Commercial Buildings and Service Providers for the Disabled v Non-Disabled

# 4 Data Analysis

(51%) willing to pay or contribute more for goods and services to facilitate the funding of reasonable adjustments. Deeper analysis of the data has identified differences in the age categories with

younger respondents appearing more willing to pay or contribute, as shown in Figure 23.

Analysing the responses of those who identify as

"On a scale of 1 to 10: where 1 is the lowest and 10 is the highest; rate your agreement with the following statement: "I would be prepared to pay or contribute something extra for my goods and services to help fund the accessibility of commercial building"

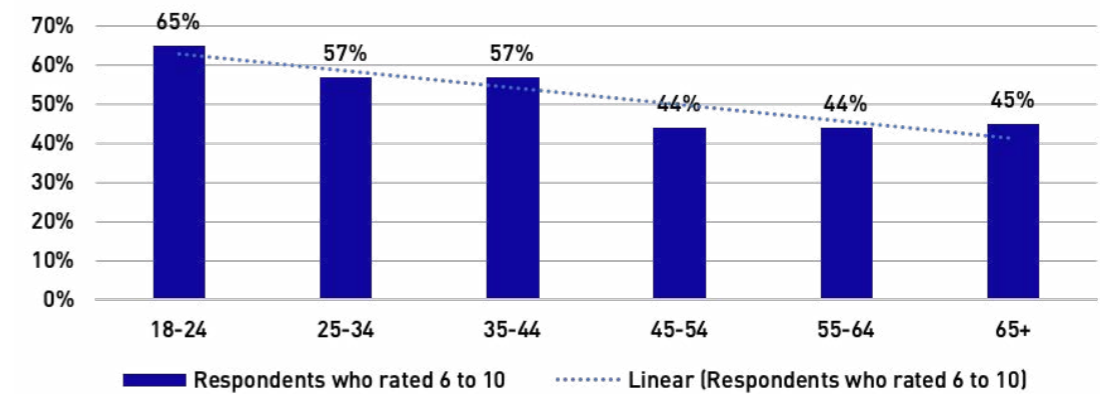


Figure 23 – 'Willingness' to Fund Accessibility per Age Category

"On a scale of 1 to 10: where 1 is the lowest and 10 is the highest; rate your agreement with the following statement: "I would be prepared to pay or contribute something extra for my goods and services to help fund the accessibility of commercial building"

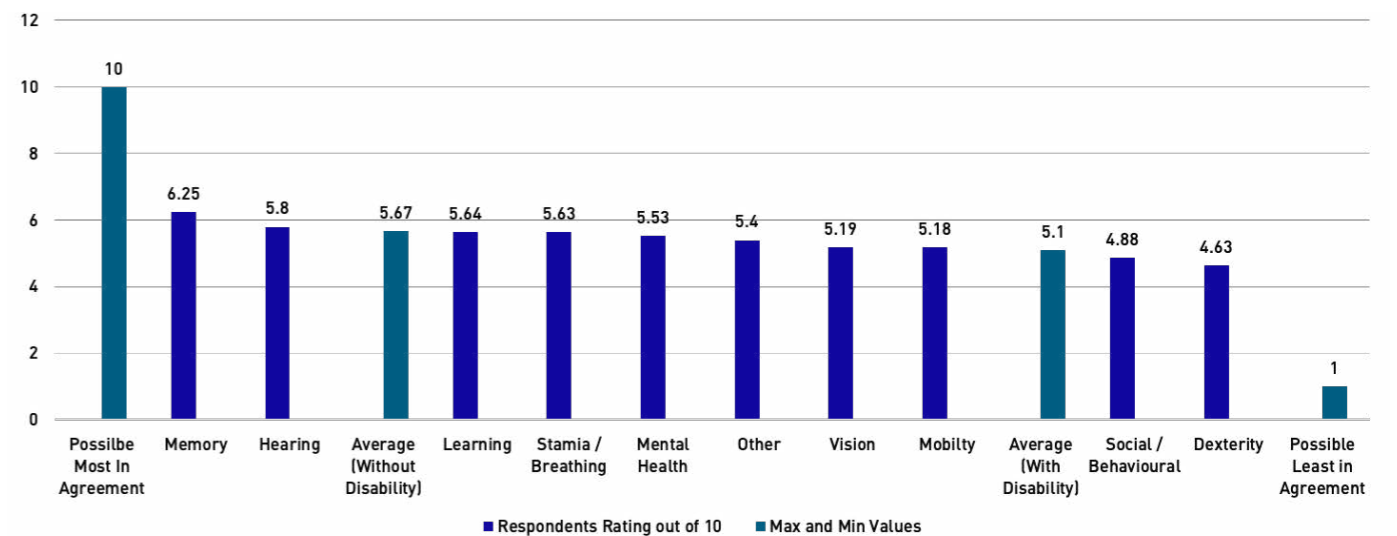


Figure 24 - Average Rating of Respondents with Physical or Mental Impairments and their Willingness to Pay or Contribute Something Extra for Goods and Services to Fund Accessibility to Commercial Buildings



## 4 Data Analysis

having a physical or mental impairment; less than half (45%) are willing (on a scale of 6-10) to pay or contribute. This compares with 54% of those without a physical or mental impairment. The 'strength' of the rating and their willingness to pay or contribute differs between those with a disability and those without. It indicates that the majority of those with a disability are not willing to pay or contribute but those who are willing, have a stronger agreement to do so:

- Average Rating for those with Physical / Mental Impairment 5.10
- Average Rating for those without Physical / Mental Impairment 5.67

The ranking for each of the categories of physical and mental impairment compared to the average strength / rating of agreement of respondents to contribute or pay more for goods or services to help fund accessibility, is shown in Figure 24.

### 4.1.7 Summary Findings

The findings of the data analysis into Public Attitudes to Disability in the Built Environment can be summarised by the following key numbers:

- 90% of the respondents are aware of the legal requirement for service providers to undertake reasonable adjustment.
- 73% of the respondents feel building owners should be responsible for funding reasonable adjustments to commercial properties.
- 73% of the respondents who identify as having a physical or mental impairment do not agree that commercial buildings and service providers are fully accessible for those with physical or mental impairments.
- 73% of the respondents aged 65 and over do not agree that commercial buildings and service providers are fully accessible for those with

physical or mental impairments.

- 70% of the respondents visited commercial buildings, (pre Covid-19 lockdown conditions) 4-7 days in a week.
- 65% of 18-24-year olds are willing to pay or contribute more for goods or services if this is used to fund accessibility in the built environment.
- 62% of the respondents feel that funding is currently not sufficient in providing an inclusive environment.
- 51% of the respondents agree with a rating of between 6-10/10 that they would be willing to pay or contribute more for goods or services to fund accessibility.
- 48% of the respondents who do not identify as having a physical or mental impairment disagree that currently commercial buildings and services are fully accessible.
- 45% of respondents who identify as having a physical or mental impairment are willing to pay or contribute more for goods or services to fund accessibility.
- 32% of the respondents identify as having a physical or mental impairment which is significantly higher than the 22% of the population relevant to the DWP (2018) data.
- 5% of the respondents feel that end users or customers should be responsible for funding the costs or providing accessibility.
- 4% of the respondents aged 65+ and recognising as having a physical or mental impairment visit commercial properties every day.
- 3% of the respondents aged 65 and over visit commercial properties every day.

## 4 Data Analysis

### 4.2 Commercial Attitudes to Disability in the Built Environment

#### 4.2.1 Demographics

There was a total of 34 respondents from multiple real estate, investment and surveying firms who were contacted and invited to take the online survey. However, only 1 from 40 service providers who were given a postage paid paper survey responded meaning a total of 35 responses were received. The response rate was highest from those who recognise as being consultants which is in line with the author's key sector contacts, as shown in Figure 25, but the relatively low response rates from property owners, agents and service providers make any other than the analysis of general trends in the data highly speculative.

Concerning the numbers of years of 'experience' of the respondents, as shown in Figure 26, it is evident that there is a broad section ranging from those with less than 5 years' experience up to more senior

professionals with more than 25 years' experience.

Significantly only 2 respondents (6%) from the 'commercial attitudes' survey identify as having a physical or mental impairment.

Respondents were asked to verify, with more than one option being available, their area of operation within the commercial property sector. Figure 27 shows that this is varied and diverse.

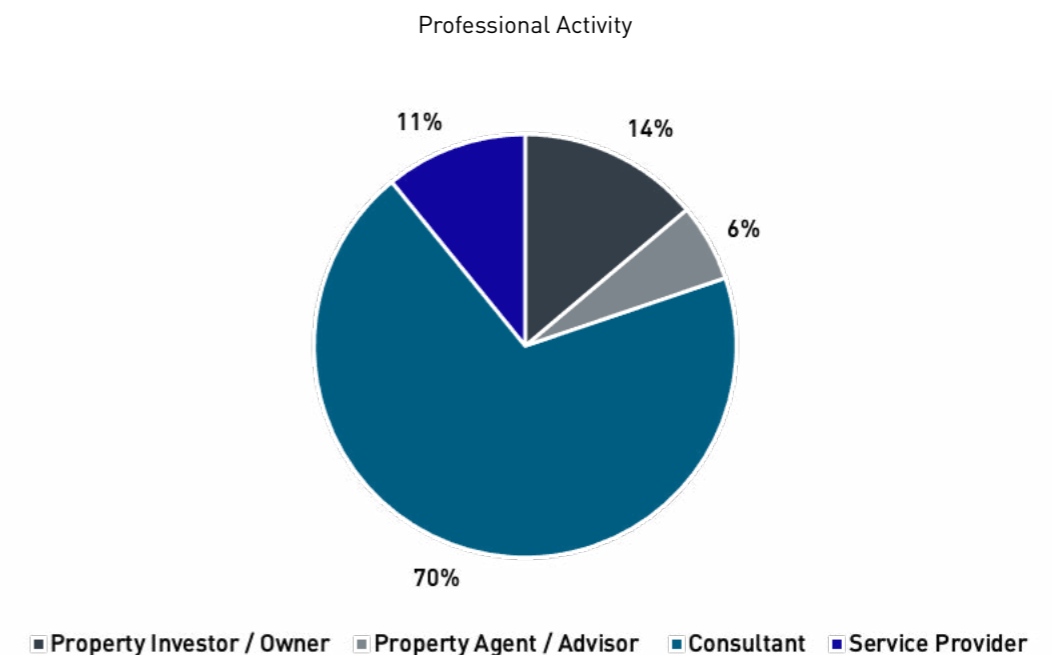


Figure 25 – Professional Activity

## 4 Data Analysis

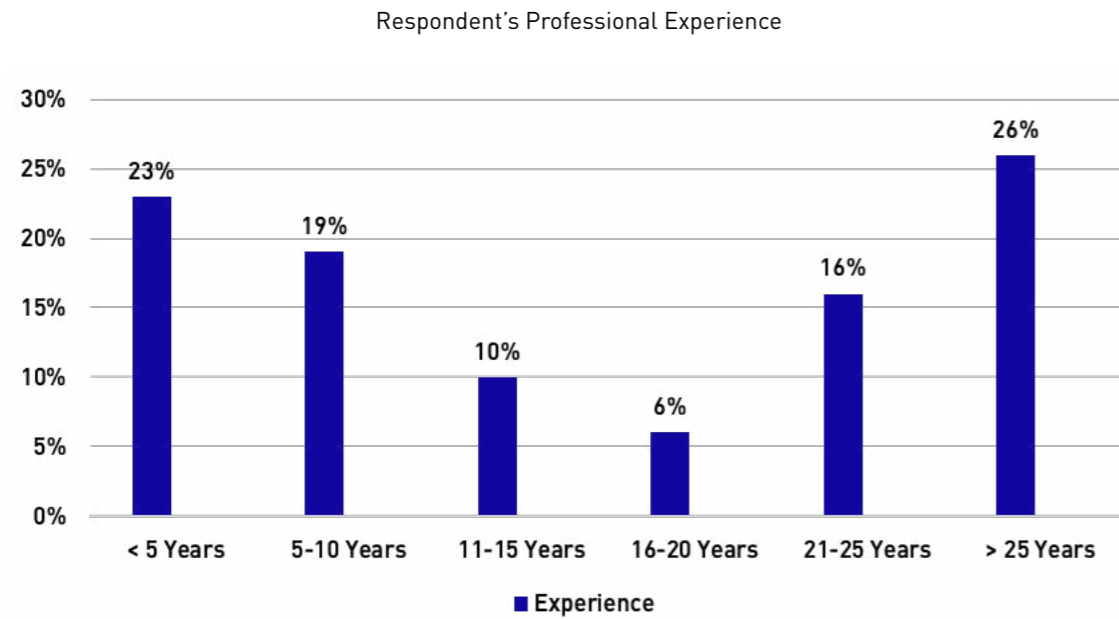


Figure 26 – Respondent's Involvement in the Commercial Property Sector or the Delivery of Goods and Services

Respondents were asked to confirm their geographic area(s) of operation and this is shown in Figure 28, it illustrates London and the Southeast as being the

regions of dominance but also some limited regional areas of operations:

Commercial Sectors of Operation (More than one option)

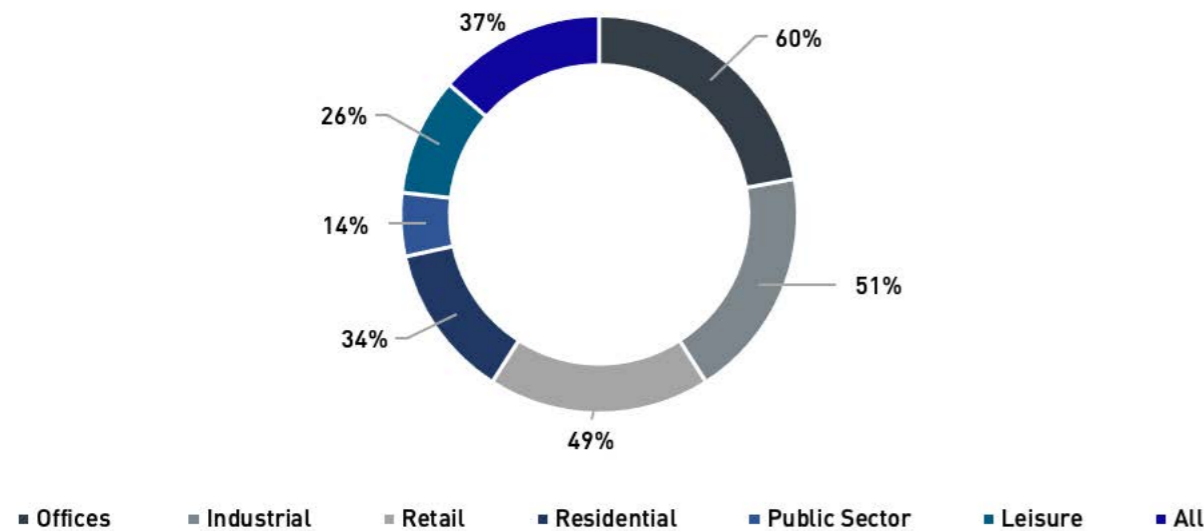


Figure 27 – Commercial Sectors of Operation

## 4 Data Analysis

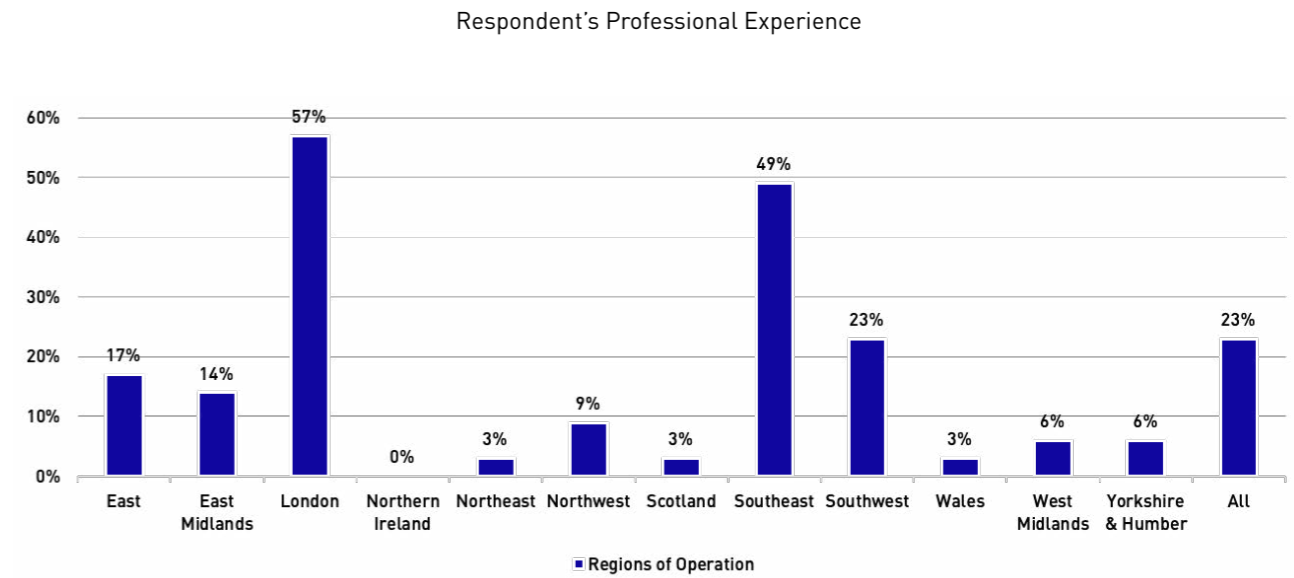


Figure 28 – Respondent's Regions of Operation

### 4.2.2 Experiential Understanding of Accessibility

97% (34/35) of respondents confirmed their knowledge of the requirement under the Equality Act 2010 to provide access to goods and services.

Concerning an understanding of the term "Reasonable Adjustment" in the provision of access to goods and services for those with physical or mental impairments:

- 83% of respondents understand this term.
- 11% of respondents do not understand this term.
- 6% of respondents are unsure when it comes to understanding this term.

When asked to apply their experience in providing fully accessible buildings, relevant to their own field of operation, their responses are shown in Figure 29.



## 4 Data Analysis

“The Commercial Building(s) we own / advise on or the service we provide appear fully accessible for those with physical or mental impairments”

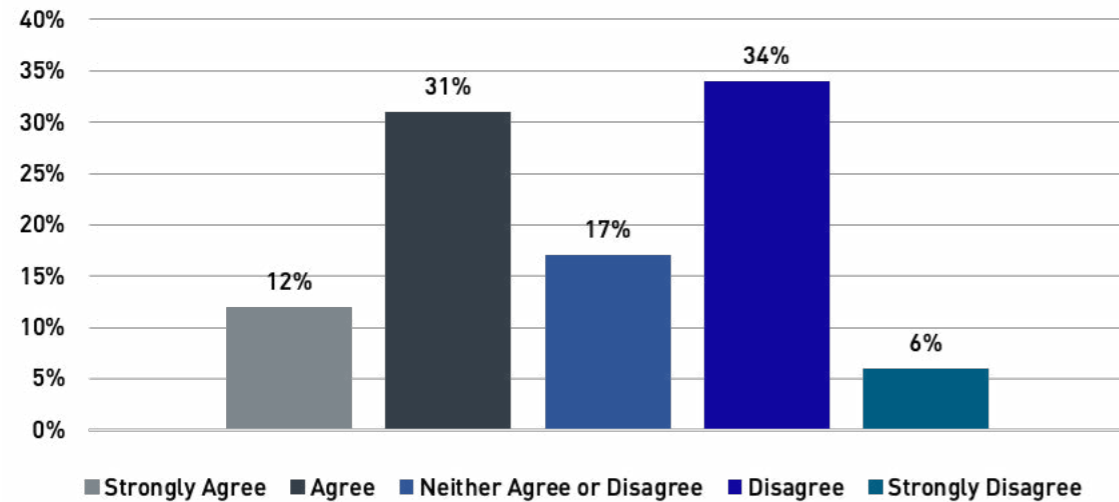


Figure 29 – Accessibility of Buildings / Goods and Services

Looking more closely at the current legislation (EA10) it is evident that those owning, advising on or providing goods and services in the commercial property sector agree that this is sufficient. However,

as shown in Figure 30 there is an overall combined majority who either feels it is not sufficient or are unsure:

“Is the current legislation concerning accessibility to those with a disability sufficient?”

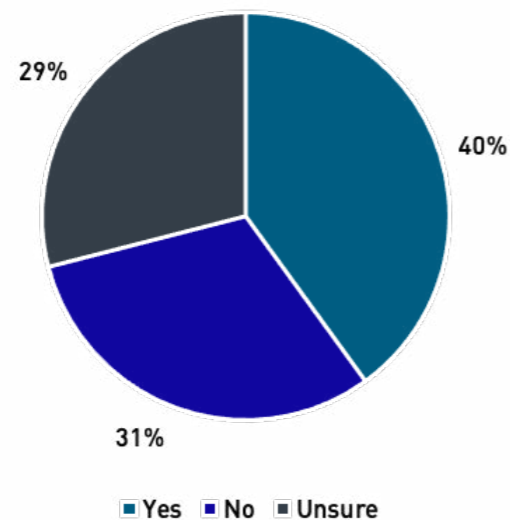


Figure 30 – The Sufficiency of the Current Legislation

## 4 Data Analysis

### 4.2.3 Commercialisation of Accessibility

It has been established that the majority of those working within the commercial property sector are aware of the current legislation and the complexity of the application in the terms of ‘reasonable adjustment’. However, there is less confidence that the current legislation is sufficient and more importantly whether their own commercial properties or business comply with this. Respondents were further asked to assess the statement that “There’s commercial value in providing fully accessible buildings, goods and services” and the overwhelming positive results are shown in Figure 31.

Concerning the level of current compliance with provisions for access to buildings, goods or services the majority of respondents indicated that this level is variable. There is a slightly stronger emphasis on compliance to above the minimum legal standard as opposed to providing a standard to the legal minimum. See Figure 33.

Concerning the need to fund the necessary adjustments to provide accessibility, respondents were given a range of options on who they feel is responsible for this. The results are shown in Figure 32.

“There’s commercial value in providing fully accessible buildings, goods and services”

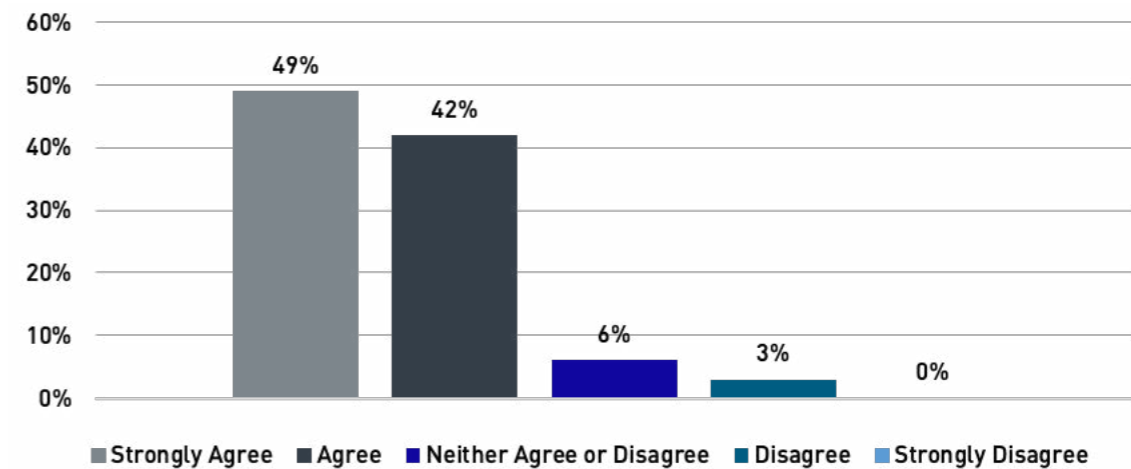


Figure 31 – Commercial Value in Providing Accessibility

## 4 Data Analysis

Who should fund the necessary adjustments to provide accessibility? (more than 1 choice)

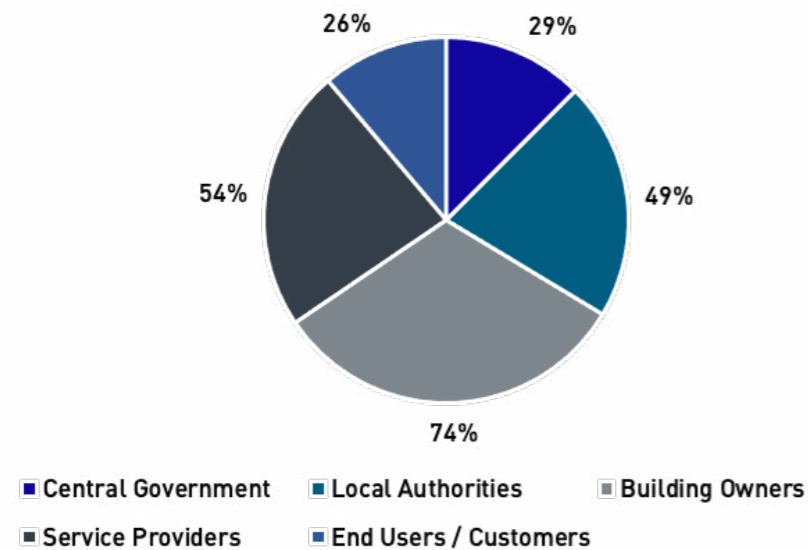


Figure 32 – Funding of Necessary Adjustments to Provide Accessibility

“As an investor, advisor or service provider, access provision to the buildings you own, manage or the services you provide is undertaken:”

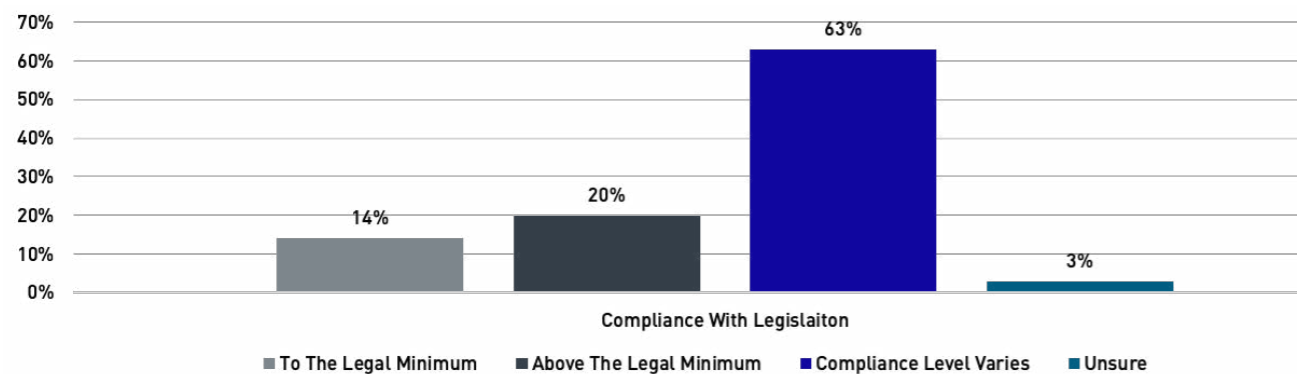


Figure 33 – Current Levels of Access Provision

## 4 Data Analysis

### 4.2.4 Commercial Attitudes Survey – Emerging Themes

Some key observations and themes emerging from the initial responses to the online survey relate to:

- Demographics and lack of ‘professional diversity’.
- Respondents who identify as having a disability.
- Regional bias.
- Inconclusive responses around the current provision of accessibility and the suitability of the legislation.
- Overwhelming agreement in the commercial value of accessibility.
- Decisive agreement in who is responsible for funding building adjustment for accessibility.

Concerning the demographics of the online survey respondents it is evident that this is heavily populated by consultants who are typically Building Surveyors who might be considered the most proficient of all the ‘property professions’ to advice on accessibility. Their dominance as respondents (70%) may have influenced the findings of the survey. While real estate owners, investors and advisors account for nearly a quarter of the respondents, there is an obvious under-response from service providers (11%) and it is critical, to ensure robust data is produced, that there is greater representation from this group. The Covid-19 ‘lockdown’ and limited access to retail facilities has restricted ‘cold calling’ or door to door survey research. Service providers were contacted by post and given a paper copy of the survey as well as a postage paid return envelope. Despite this, only one service provider completed and returned the survey this way.

Significant is that only two respondents (6%) identified as having a disability under the definition contained in the EA10. This is not in line with the 22% in the national data concerning disability (DWP, 2018)

or even the 19% for those of identifying as disabled in the working age category (DWP, 2018). This opens up some interesting points for further discussion:

- The overall lack of property professionals and service providers with disability in the commercial property sector.
- The lack of experiential learning or understanding of disability of those driving design, implementing compliance or critically evaluating commercial property.
- There appears a need for clarity in legislation and guidance notes on accessibility in order to deliver empathetic solutions by those who are not themselves disabled.

It is evident from the ‘commercial attitudes’ survey responses that there is a reasonable coverage of the UK with representation from UK wide regions accounting for about a quarter (23%) of the respondents. However, there is a strong bias towards investors, owners, consultants, agents and service providers operating in London and the Southeast of the UK. Regional representation is perhaps more relative to areas of economic prosperity.

There is an overwhelming recognition amongst respondents of the current legislation preventing discrimination and 91% of respondents agree that there is commercial value in providing full accessibility. However, when asked to assess the current levels of accessibility to the built environment and also the suitability of the current legislation, it is evident that this is much more inconclusive.

Respondents were given a number of choices on who they think should fund the necessary adjustments to provide accessibility. It is evident from the data that there is a strong emphasis on building owners, investors and service providers being responsible for this. It should be noted that behind building owners and service providers, the third choice suggests funding from local authorities.



## 4 Data Analysis

### 4.2.5 Summary Findings

The key findings of the data analysis into Commercial Attitudes to Disability in the Built Environment can be summarised by the following key numbers:

- 97% of the respondents are aware of the requirements under the Equality Act 2010 to provide access to goods and services.
- 91% of the respondents agree that there is commercial value in providing accessibility.
- 83% of the respondents understand the term 'Reasonable Adjustment' in the provision of accessibility.
- 74% of the respondents believe building owners should be responsible for funding the necessary reasonable adjustments to facilitate accessibility.
- 63% of the respondents confirm that the level of access provision varies across the buildings they own, manage, advise upon or the services they provide.
- 54% of the respondents believe that service providers should be responsible for funding the necessary reasonable adjustments to facilitate accessibility.
- 49% of the respondents believe that local authorities should be responsible for funding the necessary reasonable adjustments to facilitate accessibility.
- 40% of the respondents agree that the current legislation concerning accessibility is sufficient.
- 40% of the respondents disagree that the buildings they own and advise upon or services they provide are fully accessible.
- 31% of the respondents disagree that the current legislation concerning accessibility is sufficient.
- 29% of the respondents are unsure that the current legislation concerning accessibility is sufficient.
- 26% of the respondents feel that end users / customers should be responsible for the funding of accessibility.
- 20% of the respondents confirm minimum level of compliance for access provision to the buildings they own, manage and advise upon or the services they provide.
- 17% of the respondents are unsure or do not understand the term 'Reasonable Adjustment' in the provision of accessibility.
- 14% of the respondents confirm above minimum level of compliance for access provision to the buildings they own, manage and advise upon or the services they provide.
- Only 6% of the respondents involved in investing, owning and advising on commercial property or providing goods and services identify as having a disability.

In order to enable a more holistic understanding of accessibility to commercial property to be obtained it would be necessary to target a more diverse professional representation alongside an increased response from service providers.

## 4 Data Analysis

### 4.3 Overall Emerging Themes

The data collected on both public and commercial attitudes to disability in the built environment has identified the following key points of discussion:

- A majority understanding of the presence of legislation obliging service providers and commercial building owners to undertake reasonable adjustments.
- A disparity between public and commercial perceptions concerning the current compliance of commercial properties.
- Evident commercial value in providing accessibility and a potential user interest in part funding of this.

## 5 Discussion

### 5.1 Legislation

#### 5.1.1 The Equality Act 2010

The 'headline' data from this research concerning the legal prescription is that both commercial (97%) and public attitudes survey (90%) respondents are aware of The Equality Act 2010 (EA10) and in particular the requirement of service providers to undertake reasonable adjustment. This perhaps dispels the notion that repealing the Disability Discrimination Act 2005 (DDA05) in 2010 and replacing it with the EA10 has meant a loss of focus on disability (Blunkett, 2015). It should however be noted that in the in the terms of legal challenge brought under the EA10 and in particular access to goods or services, there has been little in the way of high-profile cases. The exception to this is *Paulley v First Group plc* but this did not specifically concern access to the built environment, so it is not clear how effective the EA10 is concerning enforcement procedure for commercial properties or service providers.

Property professionals and service providers have an obligation to have knowledge of the legislation. Their understanding is likely to be reinforced if they have undertaken a higher education qualification within the built environment disciplines where accessibility is embedded in the courses accredited by the RICS or CIOB. This is the case with those who identify as being consultants or agents in the survey and is perhaps is the reason why there is a 97% awareness of the EA10 and the need for reasonable adjustment.

Awareness of the legislation and the obligations placed on service providers is also evident in the findings of the 'public attitudes' survey. The level of awareness from the end users is encouraging in the greater context of inclusion in society and may be a result of the increased publicity centred around disability associated with events such as the Paralympics. However, technically an understanding of the application of 'reasonable adjustment' is

likely to be less well understood as the general public are unlikely to have undertaken specific research, training or education on this subject. This is reflected by the data that nearly one quarter of respondents to the 'public attitudes' survey neither agree or disagree that commercial properties and service providers are fully accessible to those with a physical or mental impairment.

Furthermore, also one quarter of respondents to the 'commercial attitudes' survey also expressed a neutral opinion concerning the accessibility of commercial buildings. This suggests that even with specific research / knowledge, training or education on the subject it is still difficult for some to assess whether commercial properties, goods and services are fully accessible.

#### 5.1.2 Visiting Commercial Properties or Accessing Goods and Services

Having analysed the data concerning visits undertaken to commercial properties, younger (working age) respondents and those without disability do this with more frequency than those with a physical or mental impairment. Those aged above 65 and those also in this age category identifying as having a physical or mental impairment are less likely to make daily visits. However, approximately three quarters of all respondents (73%) made visits to commercial properties 4-7 times a week (pre Covid-19 lockdown). Therefore, it can be concluded that a significant majority of the 'public attitudes' survey respondents experience, on a regular basis, accessing commercial buildings, goods and services. This is an important consideration as respondents were asked their opinion on the current accessibility regimes of commercial properties or services for those with a physical or mental impairment.



## 5 Discussion

### 5.1.3 The Perception Gap

Based on their experience of accessing commercial properties or goods and services, there is a significant difference of opinion between those with disability and those without. Nearly three quarters (73%) of those with a physical or mental impairment do not agree that commercial buildings or goods and services are fully accessible. This differs from nearly half (48%) of those without disability who also disagree with the same statement. This represents a 25% gap between the 2 opinions and is comparable, to an extent with the Scope Disability perception gap – report (Dixon et al, 2018). This report detailed a ‘gap’ of 10% in the perception of discrimination felt by those with a disability compared to the perceptions of disability discrimination by non-disabled people. In the context of this research and a ‘gap’ of 25% in perception on the accessibility of commercial properties, this is likely to be heightened or magnified by a tangible experience. This can only truly occur to those with a disability or those accompanying a disabled person when accessing goods or services. The implications of the perception gap detailed in the Scope report includes a suggestion that this contributes to an increase in discrimination. Consequently, if that theory is applied to this research, together with evidence of a wider gap, it may result in reduced awareness and support for improved access to commercial buildings.

There is a significant deviation from the initial findings that 90% of the public have an awareness of the EA10 and the term ‘reasonable adjustment’ compared with their experience of accessibility. When examined in more detail to establish whether current commercial properties are fully accessible, this produces a perception gap. It perhaps is best embodied by the sentiment following the London 2012 Paralympics. The UK Government claimed an improvement in the public perception of disability (Gov.UK, 2014) which differs significantly to the opinions of both Christiansen (2013) and Scope (2013). It is obvious that despite an overwhelming

majority being aware of the measures to prevent disability discrimination, there is a lack of understanding from non-disabled respondents on actual accessibility which appears to mirror the contradiction in published work pre and post 2012 Paralympics.

The responses of the interviewees concerning the perception gap effectively questions whether the minimum standards are really accessible. There is a feeling that there is a fundamental difference between what is accepted under Part M of the Building Regulations and what is actually accessible in practice (Participant 2), it is also evident that compliance with building regulations does not indicate compliance with the EA10, as well as an ignorance concerning the legislation and regulations (Participant 1). There is a sense that there is an unwillingness to accept that discrimination is very common and institutionalised (Participant 1). These are strong opinions emanating from both participants’ extensive experience of working closely with or representing those with a disability, suggesting more a deep-set misunderstanding of disability and the legal frameworks.

### 5.2 Compliance

#### 5.2.1 Commercial Attitudes and Public Perception

There is an overwhelming 97% awareness from investors, owners, consultants, agents and service providers of the EA10. As previously indicated, those operating within the commercial sector and in particular those delivering advice e.g. agents and / or consultants, are expected to have more than just awareness of the legislation. Although they are not necessarily expected to be specifically trained access consultants. They should be able to identify potential areas of non-compliance or building issues that might affect accessibility, accordingly, 83% of respondents understand the term reasonable adjustment. The findings of the research data established varied opinions regarding the accessibility of buildings, goods and services. There

## 5 Discussion

is a marginal majority of respondents (43%) who feel the buildings they own, advise on or the goods and services they deliver are fully accessible to those with physical or mental impairments. In contrast 40% of respondents from the ‘commercial attitudes’ survey disagree and 17% have a neutral opinion.

The overall response rate from the ‘commercial attitudes’ survey was lacking in the opinions of agents and actual service providers so it is difficult to draw significant conclusions as to their opinions. However, amongst consultants, opinion is divided on whether the properties they advise upon are fully accessible with 36% agreeing and 36% disagreeing to the statement. Consultants are likely to be the most ‘qualified’ in the delivery of advice on accessibility. Their education, professional obligation and experience of commercial property means they are often instructed to deliver evidence-based opinion on accessibility in the course of their work.

There is a significant contrast between the public attitudes and commercial attitudes surveys on

whether commercial properties or goods and services are fully accessible. The perception gap identified in previously widens further when the responses of the ‘commercial attitudes’ survey are included as in Figure 34.

Considering the lack of commercial respondents who identify as having a physical or mental impairment (6%), it is likely that knowledge of accessibility is derived from the legal framework taught as part of education, training or guidance documents as opposed to an experiential understanding. The actions associated with performing surveys of commercial buildings and in particular access audits, compliance with legal standards should be binary, it either complies or it does not. However, ‘reasonable adjustment’ is a term that can be used to ‘soften’ or compromise access obligations where it is physically impossible to do this within the existing built environment. Those working in commercial property are more likely to adopt a pragmatic application of the law regarding reasonable adjustment. This may be one significant reason why 40% of respondents

Commercial Properties / Goods and Services are Fully Accessible to those with Physical or Mental Impairments (Hybrid of commercial and public attitudes surveys)

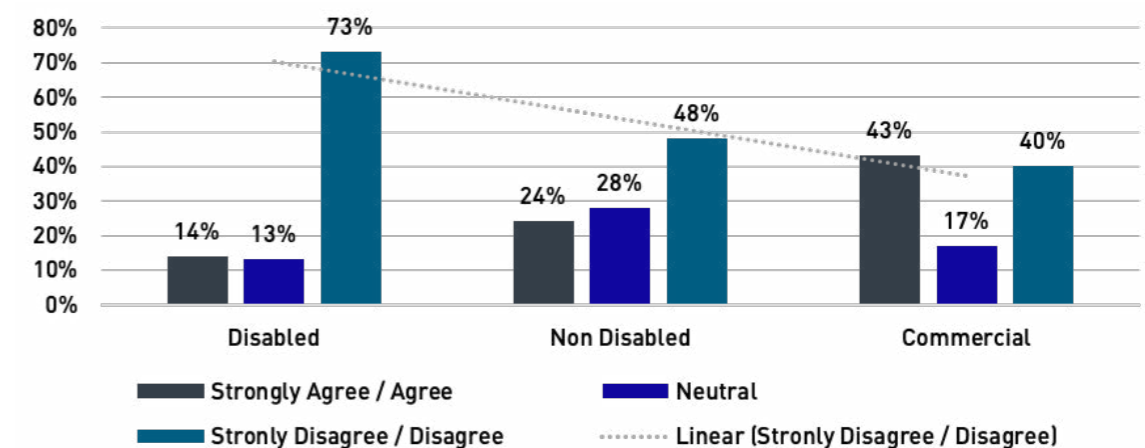


Figure 34 – The ‘Perception Gap’ Concerning the Accessibility of Commercial Properties, Goods and Services

## 5 Discussion

disagree with the statement that the commercial buildings they advise on are fully accessible.

It has been acknowledged that there exists a 'perception' gap between disabled and non-disabled respondents in the 'public attitudes' survey around whether they feel buildings, goods and services are fully accessible. This can be 'reasoned' to a lack of experiential understanding where those without disability feel different to those with a physical or mental impairment. This does not explain why those operating within the commercial property sector or the delivery of goods and services have such a significant difference of opinion. Disability is an emotive subject, while legal prescription concerning the access of goods and services is objective, it does not replace the experience or struggles of actually attempting to gain access to buildings, goods and services. There appears a difference in the understanding of disability access provision with knowledge-based opinion of the 'commercial attitudes' respondents contrasting significantly from practical opinions of those with disability. It is therefore necessary to establish whether the legal prescription and guidance is sufficient to establish ways to bridge this gap in understanding.

Concerning the suitability of the current legislation, it has been noted that the response from the 'commercial attitudes' survey has identified that 40% of respondents believe that this is suitable although there are 21% who disagree. Considering that the majority of the commercial attitudes respondents do not identify as having a physical or mental impairment it is not clear why only 40% believe the current legislation is sufficient. The respondents are likely to be more than aware and, in most cases, formally taught or trained in the concept of accessibility. Their willingness to doubt the sufficiency of current legislation may come from a genuine belief in a requirement for improved accessibility.

Alternatively, it may be based on either their experience of delivering goods and services or

advising property investors, owners and occupiers. It is not clear if the answers to this question are objective and governed by the legal prescriptions or subjective and 'feelings' based. Over half (57%) of the respondents who disagree that the current legislation is sufficient also disagree that the buildings they advise upon or the goods and services they deliver are fully accessible. This establishes a limited correlation but more importantly begins to question the appropriateness of the existing legal provision or guidelines on accessibility.

It can therefore be suggested that there is a disconnect between the theory based legal prescription; which includes the legal minimum requirements and the practical application of those experiencing disability. There seems an obvious requirement to 'close' this gap. The options for doing this include:

- [Analysing the effectiveness of the existing minimum legal requirements.](#)
- [Upgrading or strengthening the minimum legal requirements.](#)
- [Consulting those with physical or mental impairments on areas of specific access concern, their experiential difficulties with access.](#)
- [Developing a more comprehensive accessibility grading or rating system and communicating this to the wider general public this should include those with disabilities in order to provide simple and effective communication about where and how goods and services can be fully accessed.](#)

## 5 Discussion

### 5.2.2 Levels of Compliance

When considering the levels of compliance for accessibility, the default and minimum requirement is by adopting the content of Part M of the Building Regulations, however, it is important to note that for existing buildings this is not always enforceable but provides a benchmark or reference set of requirements. Under the EA10, it is necessary to undertake 'reasonable adjustment' in existing buildings to avoid discrimination and this should be done wherever possible to meet the legal minimum requirement. Above the minimum requirement compliance commonly equates to access provision which is drawn from all or part of British Standard 8300 (BS8300, 2018) Parts 1 and 2.

Responses to the 'commercial attitudes' survey confirmed that for 63% of respondents, the level of compliance varies between the legal minimum and above the legal minimum. This reflects the varied nature of the existing built environment as well as the associated complexity in implementing access provision. A small number of respondents (14%) confirmed that levels of compliance were above the legal minimum, which illustrates that one in 7 respondents are making this choice but the constraints of the existing built environment often dictates compromise. Therefore, the combined survey data is that 77% of respondents undertake a mixture of legal minimal and above minimum compliance and that improved access is achieved because they want to and not because they have to. The positive nature of creating above minimum requirement reasonable adjustment to meet the requirements of the EA10 contradicts the negative commentary of Hand et al (2012) as well as Unison (2015). It was their assertion that with the EA10, this 'new' piece of legislation would revoke much of the change initiated by the DDA95/05. However, the findings of this research dispel this notion, but it still does not explain the perception gap between disabled users and commercial providers on the basic accessibility of commercial properties.

Contradicting the survey findings, it is evident in the responses of the interviewees that investors, property owners and service providers going above the minimum standard is the exception (participant 2). There appears a willingness to revert to the basic minimum standards in Part M as an acceptable status when this is not always accessible (participant 1). There is a uniform criticism that the current UK legislation does not equate to a set of building codes, such as that used in the USA, added to this is that the existing building regulations are not being enforced. Furthermore, both interviewees suggest compliance with the minimum standards does not always mean that buildings are fully accessible and this is an opinion widely shared by the inclusive design community.

### 5.3 Accessibility

#### 5.3.1 Use of Commercial Properties and Access to Goods and Services

The headline data from the 'public attitudes' survey is that almost three quarters of respondents make visits to commercial properties 4-7 days a week. Accordingly, it appears that service providers have a vested interest in being accessible as well as being open. There is a broad trend in the number of visits decreasing with age which is illustrated by the data that only 3% of those age 65 and over are visiting commercial properties every day. There is a similar trend evident with those who identify as having a disability in that they also visit commercial properties with less frequency. However, it should be acknowledged that visit frequency may be linked to a lack of an accessible transport systems and this is something which does not form part of this research.



## 5 Discussion

There is a link in the survey data between age and disability with the over 65s recognised as having increased physical or mental impairments, the prevalence of age-related disability is similar to data published by the DWP (2018). The following characteristics have been established concerning the survey population of those over 65:

- Increased incidence of physical or mental impairments compared to those of working age.
- 78% of over 65s who identify as having a disability, indicate this to include mobility as an issue.
- 42% of over 65s who identify as having a disability indicate this to include visual impairment as a disability.
- Over 65s visit commercial properties or service providers with lesser frequency than those of working age.

### 5.3.2 Perception on Accessibility

A general trend has been established that a majority of those with physical impairments including mobility, stamina, breathing, dexterity, vision and hearing have view that commercial properties, goods and services are not fully accessible. This is magnified significantly for the over 65s where impairment is more prevalent.

It has been established that 73% of respondents over the age of 65 and 73% of respondents who identify as having a disability, disagree when drawing from their own experience that commercial buildings, goods and services are fully accessible. Deeper analysis of the data for the over 65s per category of disability has identified:

- 73% of those who identify mobility as their physical impairment disagree that commercial buildings, goods and services are fully accessible.
- 75% of those who identify vision as their physical impairment disagree that commercial buildings, good and services are fully accessible.

This establishes that the two largest demographics

of those with disability who do not feel commercial properties, goods or services are fully accessible are the over 65s with mobility issues and visual impairment.

### 5.4 Value and Funding of Inclusivity

#### 5.4.1 Commercial Value

The findings of the 'commercial attitudes' survey is that 91% of respondents strongly agree or agree that there is commercial value in providing fully accessible buildings, goods and services. This correlates with the findings of the Accenture report (2018) which also mentions engagement, enabling and empowering those with a disability from a commercial perspective. The concept of empowering those with a disability is also discussed by Blunkett (2015) and parallel to the commercial value of providing accessibility is the social benefit of supporting disabled people to contribute to their own communities. The missing link between the recognition of disability within the built environment and achieving the commercial and social value of this is likely to be caused by the perceived costs associated with making reasonable adjustments.

#### 5.4.2 Implementation of Accessibility

The EA10 obliges service providers to undertake reasonable adjustment in order to prevent discrimination against those with physical or mental impairment seeking access to goods and services. The majority of reasonable adjustments will involve removal or alteration of building features or the provision of alternative access options. In most cases the service provider within commercial properties is either an owner occupier or tenant. In the event that the service provider is a tenant then alteration of the property and in particular removing or altering building features will likely be governed by the nature of their lease agreement. Despite this, the response of both the commercial and public attitudes surveys identified that the 73% and 74% or the respective

## 5 Discussion

respondents felt that building owners should be responsible for funding the necessary adjustments.

The EA10 obliges service providers to undertake reasonable adjustment in order to prevent discrimination against those with physical or mental impairment seeking access to goods and services. The majority of reasonable adjustments will involve removal or alteration of building features or the provision of alternative access options. In most cases the service provider within commercial properties is either an owner occupier or tenant. In the event that the service provider is a tenant then alteration of the property and in particular removing or altering building features will likely be governed by the nature of their lease agreement. Despite this, the response of both the commercial and public attitudes surveys identified that the 73% and 74% or the respective respondents felt that building owners should be responsible for funding the necessary adjustments.

Commercially the costs of implementing access requirements may be absorbed by the building owner or service provider, depending on the value of the works, size of the organisation and available funds. It is possible that the costs may be passed on to the tenants or service providers and eventually customers, however, the majority (91%) opinion is that there is commercial value in providing accessibility. There appears to be an established incentive for building owners and service providers to invest in accessibility with 22% (DWP, 2018) of the population recognising as having a physical or mental impairment. Despite the over 65s and those with disability undertaking less frequent visits to commercial properties, more emphasis should be placed on the quality and not quantity of their means of accessing goods and services.

When asked to consider the principal barriers and drivers for inclusivity both of the interviewees suggested a need for a change in attitude away from minimum standards culture. Given the government's role in delivering, in conjunction with private sector vast infrastructure projects, the government can lead

by example (participant 1) and make inclusive design a requirement of all aspects of publicly funded works and hence encompass the sense that inclusivity is a benefit for all as opposed to a minority. More could also be done to embrace access consultants in the process as well as working with end users (participant 2). There is a notion that costs associated with inclusivity present a barrier (participant 2) but it is more cost effective or cost neutral to implement this at the design stage (participant 1).

There is an urgent need to strengthen legislation (both the EA10 and the Planning and Building Act) as well as ensuring much better enforcement of the existing standards and a need for trained Approved Inspectors (participant 1). Proper enforcement and the existing legislation as well as the provision of state funded legal aid to allow disabled people to challenge access provision is also something that could yield more positive results. Such opinions are evident from those at the 'sharp end' who have been either representing disabled people or working on the application and implementation of inclusive design. There is an apparent social, attitudinal and commercial resistance to change (participant 2).

Strengthening legal controls goes against opportunity and in favour of obligation, it chooses "stick" over "carrot", which is confrontational in an economic environment where the public purse is stretched and the possibility of legal aid practically non-existent. The cash reserves in commercial property, perceived commercial value of inclusivity and the benefit over cost may be a better way to structure the 'argument'.

## 5 Discussion

While the commercial value attributable to fully accessible commercial properties has been established in the survey results, the interviewees took a more holistic approach. The social value of inclusivity is not to be underestimated with socially inclusive companies being more productive (participant 1) along with the added commercial value seeing disabled people as:

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**“...citizens with spending power and also as excellent employees”**

(Participant 2)

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The following recommendations should be adopted to ensure reasonable access to commercial buildings, goods and services:

- Grading and marketing of commercial properties, goods or services which are fully accessible to allow users to make a choice.
- Establishing what can be gained or the commercial ‘edge’ achieved through the provision of fully accessible goods and services.
- Analysis of the cost benefit of short-term investment against commercial gain through the adoption of accessible environments.
- Encouraging the adoption of an above legal minimum compliance level to showcase and replace the feelings of ‘obligation’ often associated with legal compliance to one of commercial ‘opportunity’.

### 5.4.3 Funding

The majority of responses to the commercial and public attitudes surveys indicate building owners and service providers as those responsible for funding the necessary adjustments. The minority responses were for the end users or customers to pay for this with 26% of commercial attitudes responses suggesting this compared to 5% of public attitudes responses.

When explicitly asked if they were willing to pay or contribute something extra to help fund the accessibility of commercial properties or goods and services, there is a marginal willingness to do this but it is not conclusive. Those aged 18-25 were the most willing to contribute but this is in contrast to the over 65s and those with a physical or mental impairment who were less willing to do this.

There may be a number of reasons why individuals would agree or disagree to pay or contribute extra for goods or services. The review of the existing body of knowledge has established increased levels of poverty amongst elderly and those with a disability (Hancock et al, 2016). This could be a contributing factor as to why there is less willingness by those with a disability and / or elderly to contribute to funding for accessibility.

This research has established that those over the age of 65 and with a mobility or visual impairment disagree with the view that most current commercial buildings or goods and services are fully accessible. These 2 demographics are amongst the least willing to pay or contribute extra for goods and services but there is insufficient information to verify the reason or significance of this.

Both interviewees agree that it is wholly inappropriate for those with a physical or mental impairment to pay extra for goods and services, this in essence contradicts the very core of the Equality Act 2010 and is illegal. It is recognised that living with a disability incurs more cost (participant 1) and in essence disabled people are simply fed up with having to pay more for things that are a basic right. Tax relief or tax credits can be considered as a way to ‘reward’ commercial organisations for implementing adjustments to ensure accessibility, however, this feels inappropriate when it should be the ‘norm’ to undertake these works and not seen as something to ‘reward’ (participant 1).

There is a feeling amongst disabled people, organisations of disabled people and those working

## 5 Discussion

to remove physical barriers and create an inclusive built environment that discrimination is endemic, institutionalised. Citing the Black Lives Matter campaigners (participant 1), there is a sense of anger and frustration that accessibility is only given ‘lip service’ by those in power. It goes unrecognised or is ignored by commercial concerns, so a substantial section of our community continues to be excluded. This state of affairs should not be tolerated any longer (participant 1).

### 5.5 Summary

Reflecting on the findings of the data and the emerging themes from the review of the existing body of knowledge the following findings have emerged from this research:

- There is an overwhelming awareness of the Equality Act 2010 by both public and commercial respondents in respect of the obligation to make goods and services available to those with physical or mental impairments.
- The commercial attitudes survey has identified that those advising on commercial property or providing goods and services neither agree nor disagree that the current legislation is sufficient.
- In line with the report published by Scope: Disability Perception Gap – Report there is also a significant difference in how those with a disability, those without a disability and property professionals / service providers view the current accessibility of commercial properties. Importantly there is an obvious difference between the theory from legislation and guidance documents and practical application, gained from experiential understanding regarding current access provision.
- There is a suggestion that investors, owners, consultants and service providers are implementing some above minimum legal

requirement compliance. This clearly does not appear to be experienced by those with a physical or mental impairment, as detailed by the perception gap identified in this research. It has also been questioned whether the minimum standards are sufficient as there is evidence of buildings that are deemed to be compliant, but in reality, are not accessible.

- There is an overwhelming feeling that there is commercial value in providing accessibility to the built environment with an emphasis on building owners as well as service providers to fund the necessary adjustments. Although there should be a push to change attitudes or evolve processes away from the ‘check box’ approach of minimum compliance. Obvious commercial value can be seen in the terms of income or profit; however, true value is both financial and social with much longer lasting or generational benefit.
- Despite marginal agreement by the public to pay or contribute more for goods and services to facilitate an accessible built environment, more data is required to establish the underlying reasons for the responses. However, living with a physical or mental impairment does incur more costs. This may be a contributing factor why those with a disability are less willing to pay or contribute when they also consider this to be a basic right.



## 6 Conclusions and Recommendations

The overall aim of this research was to investigate public and commercial attitudes to inclusivity in the Built Environment to ascertain if there is a commercial value to goods or service providers in its delivery.

### 6.1 Public Attitudes to Disability in the Built Environment

The following conclusions can be drawn out of this research regarding public attitudes to disability in the built environment:

- A widespread public awareness of the legal requirement for accessibility.
- The presence of a perception gap between the disabled and non-disabled emanating from a lack of experiential understanding of just how inaccessible commercial buildings, goods and services are in reality.
- Those with a disability or the elderly make less visits to commercial properties, and they appear to be afforded lesser access rights.
- One in five of the UK population recognises as having a disability, it therefore makes commercial sense not to discriminate against this demographic, irrespective of the legal provision.

### 6.2 Commercial Attitudes to Disability in the Built Environment

The following conclusions can be drawn out of this research regarding commercial attitudes to disability in the built environment:

- Despite an even wider 'perception gap' between those with disability and commercial property owners, their advisors and service providers, there is a commercial interest in affording access.

- There is widespread commercial agreement that there is value in providing fully accessible buildings, goods and services.
- Of some concern is the evident inconsistency from commercial respondents regarding the suitability, as well as the application, of the current legislation.
- There is some suggestion that the current legislation lacks clarity and consistent enforcement.
- Despite a suggestion that there are many examples of above minimum standard compliances, a significant percentage of commercial respondents do not feel commercial buildings, goods and services are fully accessible.

### 6.3 Inclusivity – An Obligation or Opportunity?

Despite the presence of a perception gap, the majority of all respondents are united in the response that building owners should be responsible for funding the relevant adjustments to facilitate access. Delivering an accessible built environment potentially opens up businesses to another 20-25% of custom from those who identify as having a physical or mental impairment. A powerful commercial argument can be made to the extent that if goods and services are not accessible to a disabled person, their friends and family may also choose not to access their services. A similar argument can be made regarding the hospitality sector and making venues, goods and services 'family friendly' as this can lead to increased revenues. Essentially more needs to be done to showcase or promote the 'opportunity' over the 'obligation' when it comes to the delivery of an accessible built environment.

There is an indication, albeit marginal, that there is a willingness for customers or end users to contribute more for goods and services to fund inclusivity, however, those with a disability largely reject this notion. More should be made of the social

## 6 Conclusions and Recommendations

## 6 Conclusions and Recommendations

feel good factor associated with providing inclusivity, with companies and businesses appearing eager to enhance their contribution to Corporate Social Responsibility (CSR). Encouraging businesses to match customer contributions in paying more for goods or services may be one way to help fund an accessible built environment.

### 6.4 Recommendations

Prior to making recommendations it is necessary to recognise the limitations of this research. While response to the online 'public attitudes' questionnaire delivered 313 opinions which is sufficient to identify a trend in the findings, it should be acknowledged that there is a relative high response rate from those identifying as having a physical or mental impairment.

The response rate of the 'commercial attitudes' is lacking in the opinions of service providers. This demographic is at the 'front end' of the goods and services sector, and this lack of responses means that the findings are based on the opinions of consultants who make up the majority of the sample population.

#### 6.4.1 Closing the Gap

Perceptions of accessibility in the built environment are either gained through acquired knowledge, practical application or a combination of both. However, this research has identified only 6% of commercial respondents recognise as having a physical or mental impairment. Consequently, they are likely to have a strong knowledge-based experience of the law but lack empathy in their understanding of the practical effects of disability access. The 'perception gap' risks sustained or increased discrimination due to their being a misunderstanding that current levels of accessibility are sufficient, thus engendering a willingness to maintain the status quo and to effectively do nothing.

It is therefore necessary to:

- Further enhance the public's awareness of good practice when it comes showcasing the accessibility of the built environment.
- Devise both minimum and 'gold' standards on inclusive design.
- Ascertain the complex combination of needs to meet the access requirements of different disabilities.

There should be no reason why access provision should not be considered by all commercial property owners and service providers. Ultimately there is commercial interest and value in being wholly accessible. This research has identified that primarily building owners as well as service providers should be responsible for providing the funding to facilitate access. It should not be the responsibility of the tax payer to fund this as, apart from the feel-good factor associated with an inclusive environment, it is the service providers and customers who ultimately benefit from enhanced access provision. Suggesting that end users are obliged to pay 'extra' for the same goods and services contradicts the principles of the Equality Act 2010, however, introducing a voluntary contribution allows individuals to make a choice to contribute to an accessible built environment.

Commercial organisations invest heavily in corporate social responsibility but this is probably not something considered by small businesses or individual service providers. However, for relatively modest investments in accessibility, it is possible for all commercial service providers to reap the rewards commercially. This could be recognised with the certification or accreditation of those organisations choosing to contribute to an accessible built environment by making this a strategy as part of their corporate social responsibility.

## 6 Conclusions and Recommendations

### 6.5 Next Steps / Further Research

Concluding this research, there are a number of possible areas of further research including the following:

- Detail the specific attitudes of service providers to disability in the built environment.
- Critical appraisal of the existing legal framework, standards and guidelines associated with inclusivity should be undertaken. This to take place in conjunction with a more forensic analysis of individual disabilities and the effects of these on accessibility.
- Analyse the cost benefit of providing access solutions to enable an understanding of how this could be applied to the myriad of different commercial properties in the UK (both now and in the future).
- Examine ways to fund inclusivity and investigate public / commercial partnerships.



## Appendix A - References

Accenture. (2018). THE ACCESSIBILITY ADVANTAGE: Why Businesses Should Care About Inclusive Design [online] Available at: [https://www.accenture.com/\\_acnmedia/pdf-91/accenture-accessibility-advantage-pov-final.pdf](https://www.accenture.com/_acnmedia/pdf-91/accenture-accessibility-advantage-pov-final.pdf) [Accessed 3 Dec. 2019].

BBC. (2010). Forty years of Chronically Sick & Disabled Persons Act. [online] Available at: [http://news.bbc.co.uk/local/lancashire/hi/people\\_and\\_places/newsid\\_8697000/8697441.stm](http://news.bbc.co.uk/local/lancashire/hi/people_and_places/newsid_8697000/8697441.stm) [Accessed 6 Apr. 2020].

Blunkett, D. (2015). The public's perception of disabled people needs to change — we're not just Paralympians or scroungers. The Independent. [online] Available at : <https://www.independent.co.uk/voices/comment/the-publics-perception-of-disabled-people-needs-to-change-were-not-just-paralympians-or-scroungers-10104704.html> [Accessed 20 Nov 2019].

Braye, S., Gibbons, T. and Dixon, K. (2013). Disability 'Rights' or 'Wrongs'? The Claims of the International Paralympic Committee, the London 2012 Paralympics and Disability Rights in the UK. Sociological Research Online, 18(3), pp.1-5.

Branson, J. and Miller, D. (2002). Damned for Their Difference: The Cultural Construction of Deaf People as Disabled. p.7. Gallaudet University Press.

British Property Federation. (n.d.). About Real Estate. [online] Available at: <https://www.bpf.org.uk/about-real-estate> [Accessed 21 Nov 2019].

Bsigroup.com. (2018). BS 8300-2:2018 . Design of an accessible and inclusive built environment. Buildings. Code of practice. [online] Available at: <https://shop.bsigroup.com/ProductDetail/?pid=000000000030335835> [Accessed 26 Nov. 2018].

Campbell, K. (2019). MIKE OLIVER, FATHER OF THE SOCIAL MODEL OF DISABILITY, DIES. Unite. [online] Available at: <https://unitemagazine.co.uk/mike-oliver-father-of-the-social-model-of-disability-dies/> [Accessed 6 Apr. 2020].

CBS News. (2012). Paralympics ends, breaks all the records. [online] Available at: <https://www.cbsnews.com/news/2012-paralympics-ends-breaks-all-the-records/> [Accessed 23 Nov. 2019].

Christiansen, S. (2013). A year after the Paralympics attitudes to disability need to improve. [online]. Available at: <https://www.theguardian.com/sport/blog/2013/aug/24/paralympics-sophie-christiansen-equestrian> [Accessed 20 Nov. 2019].

Cohen, D. (2001). The war come home. Berkeley: University of California Press, p.1.

The Construction Industry Council. (n.d.). [online] Available at: <http://cic.org.uk/news/article.php?s=2017-0425-building-for-equality> [Accessed 01 Dec 2019].

Council of Europe. (n.d.). "Disability and Disablism" [online] Available at: <https://www.coe.int/en/web/compass/disability-and-disablism> [Accessed 20 Nov. 2019].

Davies, A. (2011). Health and Safety, Premises and Environment Handbook 2012. Kogan Page, p.23.

Department of Work and Pension. (2018). Family Resource Survey 2016/7 [online] Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/692771/family-resources-survey-2016-17.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692771/family-resources-survey-2016-17.pdf) [Accessed 25 Nov. 2019].

Dixon, Smith and Touchet. (2018). Disability perception gap – Policy report. Scope. [online] Available at: <https://www.scope.org.uk/campaigns/disability-perception-gap/> [Accessed 6 Apr. 2020].

Equality and Human Rights Commission. (2017). Being disabled in Britain A journey less equal. [online] Available at: <https://www.equalityhumanrights.com/sites/default/files/being-disabled-in-britain.pdf> [Accessed 3 Aug. 2019].

The European Commission. (n.d.). "The Relationship between UN CRPD and EU Law Definition of Disability at EU level" [online] Available at: [http://www.era-comm.eu/UNCRPD/e\\_learning/B/definition.html](http://www.era-comm.eu/UNCRPD/e_learning/B/definition.html) [Accessed 20 Nov. 2019].

Evans, J. (2019). Death of the high street weighs heavy round the world. Financial Times. [online] Available at: <https://www.ft.com/content/4e5e1022-8df3-11e9-a1c1-51bf8f989972> [Accessed 5 Dec. 2019].

Fleck, J. (2019). Are You An Inclusive Designer?. RIBA Publishing.

## Appendix A - References

Gov.uk. (2014). 'Transformation' in British attitudes towards disabled people since Paralympics 2012 - GOV. UK. [online] Available at: <https://www.gov.uk/government/news/transformation-in-british-attitudes-towards-disabled-people-since-paralympics-2012> [Accessed 15 Nov. 2019].

Gov.UK. (2015). Inspired by 2012: the legacy from the Olympic and Paralympic Games – Forth Annual Report Summer 2016. [online] Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/544197/1776-E\\_Legacy\\_Report\\_2016\\_ACCESSIBLE.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/544197/1776-E_Legacy_Report_2016_ACCESSIBLE.pdf) [Accessed 27 July 2020].

Gov.UK. (2015). Introduction to the NHS Constitution. [online] Available at: <https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england> [Accessed 20 Nov. 2019].

Gov.UK. (2015). The Building Regulations 2010 Access to and use of Buildings Approved Document Part M Volume 2 – Buildings other than Dwellings. [online] Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/441786/BR\\_PDF\\_AD\\_M2\\_2015.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/441786/BR_PDF_AD_M2_2015.pdf) [Accessed 25 Nov. 2019].

Gov.UK. (2015). Definition of Disability Under Equality Act 2010. [online] Available at: <https://www.gov.uk/definition-of-disability-under-equality-act-2010> [Accessed 15 Nov. 2019].

Gov.uk. (n.d.). Building regulations approval - GOV.UK. [online] Available at: <https://www.gov.uk/building-regulations-approval/when-you-need-approval> [Accessed 26 Nov. 2015].

Hancock, R, Morciano, Pudney, S. (2016). Disability and poverty in later life. Joseph Rowntree Foundation.

Hasted, R. (2016). Domestic Housing for Disabled Veterans 1900-2014 Introductions to Heritage Assets. Historic England.

Historic England. (n.d.). A History of Disability: from 1050 to the Present Day. [online] Available at: <https://historicengland.org.uk/research/inclusive-heritage/disability-history/1050-1485/> [Accessed 15 Nov. 2019].

HM Government Office for Disability. (2011). Equality Act 2010 Guidance. [online] Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/570382/Equality\\_Act\\_2010-disability\\_definition.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/570382/Equality_Act_2010-disability_definition.pdf) [Accessed 15 Nov. 2019].

International Paralympic Committee. (n.d.). History of the Paralympic Movement. [online] Available at: <https://www.paralympic.org/ipc/history> [Accessed 15 Nov 2019].

Johnson, J. (2019). Death of the High Street overstated claims Which?, as analysis shows the rebirth of independent shops. The Telegraph. [online] Available at: <https://www.telegraph.co.uk/news/2019/10/19/death-high-street-overstated-claims-analysis-shows-rebirth-independent/> [Accessed 07 Dec 2019].

Joseph Rowntree Foundation. (2019). Blog: It's Not Right that Four Million Disabled People are Locked in Poverty. [online] Available at: <https://www.jrf.org.uk/blog/its-not-right-four-million-disabled-people-are-locked-poverty> [Accessed 10 July 2020].

Joseph Rowntree Foundation. (2020). Poverty Rates in Families with a Disabled Person. [online] Available at: <https://www.jrf.org.uk/data/poverty-rates-families-disabled-person> [Accessed 10 July 2020].

Kahleeli, H. (2016). Meet the superhumans stars of channel 4's Paralympics trailer. [online] Available at: <https://www.theguardian.com/tv-and-radio/2016/jul/19/meet-the-superhumans-stars-of-channel-4s-paralympics-trailer> [Accessed 20 Nov. 2019].

Mawson, T. (1918). An imperial obligation: Industrial villages for partially disabled soldiers & sailors. London: G. Richards. pp. 45 – 49.

Motor Neurone Disease Association. (2019). Disabled people hardest hit by welfare reform according to new report. [online] Available at: <https://www.mndassociation.org/disabled-people-hardest-hit-by-welfare-reform-according-to-new-report/> [Accessed 28 Nov. 2019]

Office of National Statistics.2020.Population Estimates. [online] Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates> [Accessed 4 July 2020].

Papworthtrust.org.uk. (2018). Disability in the United Kingdom 2016, Facts and Figures. [online] Available at: <https://www.papworthtrust.org.uk/news-and-blogs/new-report-highlights-crucial-challenges-still-facing-disabled-people/> [Accessed 1 Aug. 2019].

Powell, A. (2019). People With Disabilities in Employment, House of Commons Library. [online] Available at: <https://researchbriefings.files.parliament.uk/documents/CBP-7540/CBP-7540.pdf> [Accessed 02 Dec. 2019].

## Appendix A - References

Rex, R. (2006). Henry VIII and the English Reformation. 2nd ed. Basingstoke: Palgrave Macmillan, p.45.

RICS. (n.d.). Industrials still in huge demand as retail fails to pick up. [online] Available at: <https://www.rics.org/uk/news-insight/research/market-surveys/uk-commercial-market-survey/q1-2019/> [Accessed 3 Dec. 2019].

Rivett, G. (2017). National Health Service History. [online] Available at: <http://www.nhshistory.net/shorhistory.htm> [Accessed 20 Nov. 2019].

Savills. (n.d.). Market in Minutes: Commercial Property. [online] Available at: <https://www.savills.co.uk/research/articles/229130/286627-0> [Accessed 05 Dec. 2019].

Social Housing History. (2019). Homes Fit For Heroes. [online] Available at: <http://www.socialhousinghistory.uk/wp/index.php/homes-fit-for-heroes/> [Accessed 15 Nov. 2019].

Scope. (2013). Have the Paralympics improved the daily lives of disabled people? [online] Available at: <https://blog.scope.org.uk/2013/08/29/have-the-paralympics-improved-the-daily-lives-of-disabled-people/> [Accessed 23 Nov. 2019].

Scope. (2015). How the social model liberated people and inspired a movement – #DDA20. [online] Available at: <https://blog.scope.org.uk/2015/11/03/how-the-social-model-liberated-people-and-inspired-a-movement-dda20/> [Accessed 6 Apr. 2020].

Scope. (n.d.). Social model of disability. [online] Available at: <https://www.scope.org.uk/about-us/social-model-of-disability/> [Accessed 23 Nov. 2019]  
Scope. (n.d.). History. [online] Available at: <https://www.scope.org.uk/about-us/history/> [Accessed 23 Nov. 2019].

Shakespeare.mit.edu. (n.d.). The Life and Death of Richard the Third. [online] Available at: <http://shakespeare.mit.edu/richardiii/full.html> [Accessed 15 Nov. 2019].

Statista.Com. (n.d.). Population of the United Kingdom in 2019, by age group. Available at : <https://www.statista.com/statistics/281174/uk-population-by-age/>. [Accessed 4 July 2020].

Stokes, L. (2018). Why Do Able-Bodied People Struggle to Acknowledge Disabilities?. [online] The Mighty. Available at: <https://themighty.com/2018/01/why-able-bodied-people-struggle-to-acknowledge-disabilities/> [Accessed 20 Nov. 2019].

Tagg, A. (2018). Technical Due Diligence and Building Surveying for Commercial Property. Routledge.

The Telegraph. (2014). Prince Harry launches Invictus Games for wounded servicemen. [online] Available at: <https://www.telegraph.co.uk/news/uknews/prince-harry/10679969/Prince-Harry-launches-Invictus-Games-for-wounded-servicemen.html> [Accessed 15 Nov. 2019].

Unison. (2015). Fact Sheet, 20 Years after the Disability Discrimination Act. Unison. p.1. [online] Available at: <https://www.google.co.uk/l?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewjG9Y3305bsAhWEoVwKHYYkAOYQFjAAegQIAhAC&url=https%3A%2F%2Fwww.unison.org.uk%2Fcontent%2Fuploads%2F2016%2F02%2FFact-sheet-Twenty-years-after-the-Disability-Discrimination-Act.doc&usq=AOvVaw2GHdCfQa-PErGcbWHz6G4U> [Accessed 14 May. 2019].

United Nations. (2006). Convention on the rights of persons with disabilities. [online] Available at: <https://www.un.org/convention-on-the-rights-of-persons-with-disabilities> [Accessed 15 Nov. 2019].

University of Leicester. (n.d.). Scoliosis. [online] Available at: <https://www.le.ac.uk/richardiii/science/osteology-4-scoliosis.html> [Accessed 15 Nov. 2019].

Women and Equalities Committee. (2017). Building for Equality: Disability and the Built Environment. House of Commons. [online] Available at: <https://publications.parliament.uk/pa/cm201617/cmselect/cmwomeq/631/631.pdf> [Accessed 20 Nov. 2019].

World Health Organisation. (n.d.) Disabilities. [online] Available at: <https://www.who.int/topics/disabilities/en/> [Accessed 12 Nov. 2019].

## Appendix B - References

### [1] Public Attitudes Questionnaire

1. What age category are you?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- Over 65

2. Where do you live?

- East.
- East Midlands.
- London.
- Northern Ireland.
- Northeast.
- Northwest.
- Scotland.
- Southeast.
- Southwest.
- Wales.
- West Midlands.
- Yorkshire & Humber.

3. Do you have a physical or mental impairment which has a substantial long-term effect on your ability to undertake normal day to day activities?

- Yes.
- No.

4. How would you define your physical or mental impairment (you can choose more than one)?

- Mobility.
- Stamina / Breathing.
- Dexterity.
- Mental Health.
- Memory.
- Hearing.
- Vision.
- Learning.
- Social / Behavioural
- Other (please state).

5. Do you know a child (under 18) that has a physical or mental impairment which has a substantial long-term effect on their ability to undertake normal day to day activities?

- Yes.
- No.

6. How would you define their physical or mental impairment (you can choose more than one)?

- Mobility.
- Stamina / Breathing.
- Dexterity.
- Mental Health.
- Memory.
- Hearing.
- Vision.
- Learning.
- Social / Behavioural
- Other (Please state).

7. How often do you visit or use commercial buildings (shops, offices, hotels / leisure, schools / colleges etc)?

- Less than once a week.
- Once a week.
- 2-3 days a week.
- 4-6 days a week.
- Every day.

8. In your experience: "Commercial Buildings and services providers appear fully accessible for those with physical or mental impairments"

- Strongly agree.
- Agree.
- Neither agree or disagree.
- Disagree.
- Strongly disagree.

9. Are you aware that service providers (shops, offices, hotels / leisure, schools / colleges etc) are legally required to undertake 'reasonable adjustment' to their premises or service to make this accessible to those with physical or mental impairments?

- Yes.
- No.



## Appendix B - References

10. Who do you feel should fund the necessary adjustments to commercial buildings (shops, offices, hotels / leisure, schools / colleges etc) to ensure they are accessible for those with physical or mental impairments?

- Central Government.
- Local Authorities (councils).
- Service Providers
- Building Owners.
- Users.

11. Do you feel the funding or investment in providing an inclusive environment to those with physical or mental impairments is sufficient?

- Yes.
- No.
- Don't Know.

12. On a scale of 1 to 10: where 1 is the lowest and 10 is the highest; rate your agreement with the following statement:

"I would be prepared to pay or contribute something extra for my goods and services to help fund the accessibility of commercial buildings (shops, offices, hotels / leisure, schools / colleges etc) to those with physical or mental impairments"

- 1 (least in agreement).
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (most in agreement).

### [2] Commercial Attitudes Questionnaire

1. What describes your activity in the commercial property sector (you can select more than one):

- Property investor / owner.
- Property agent or advisor.
- Service provider (tenant).

2. How long have you been involved in the commercial property sector / delivery of goods or services?

- Less than 5 years.
- 5-10 years.
- 11-15 years.
- 16-20 years.
- 21-25 years.
- More than 25 years.

3. Do you have a physical or mental impairment which has a substantial long-term effect on your ability to undertake normal day to day activities?

- a. Yes.
- b. No.

4. How would you define your physical or mental impairment (you can choose more than one)?

- Mobility.
- Stamina / Breathing.
- Dexterity.
- Mental Health.
- Memory.
- Hearing.
- Vision.
- Learning.
- Social / Behavioural
- Other (please state).

5. Which commercial sectors do you invest, advise or operate within (you can choose more than 1)?

- Office (service sector).
- Industrial (manufacturing, storage, logistics).
- Retail (goods).
- Residential (housing association, social housing, management companies, student accommodation).
- Public sector (infrastructure, transport, health, justice, civic administration, prisons etc).

## Appendix B - References

- Leisure (Hotels, sports facilities, stadia, arts, theatre etc).
- All of the above.

6. Geographically in the UK, what location(s) do you operate (you can choose more than one)?

- East.
- East Midlands.
- London.
- Northern Ireland.
- Northeast.
- Northwest.
- Scotland.
- Southeast.
- Southwest.
- Wales.
- West Midlands.
- Yorkshire & Humber.
- ALL of the UK.

7. As an investor, advisor or service provider are you aware of the requirement under the Equality Act 2010 to provide access to premises, goods or services?

- Yes.
- No.
- Unsure.

8. Do you understand what the term 'reasonable adjustment' means in the context of providing access to buildings, goods and services for those with physical or mental impairments?

- Yes.
- No.
- Unsure.

9. In your experience: "The Commercial Building(s) we own / advise on or the service we provide appear fully accessible for those with physical or mental impairments".

- Strongly agree.
- Agree.
- Neither agree or disagree.
- Disagree.
- Strongly disagree.

10. Is the current legislation concerning accessibility to those with a disability sufficient?

- Yes.

- No.
- Unsure.

11. In your opinion: "There's commercial value in providing fully accessible buildings, goods and services".

- Strongly agree.
- Agree.
- Neither agree or disagree.
- Disagree.
- Strongly disagree.

12. Who do you feel should fund the necessary adjustments to commercial buildings (shops, offices, hotels / leisure, schools / colleges etc) to ensure they are accessible for those with physical or mental impairments (you can choose more than 1)?

- Central Government.
- Local Authorities (councils).
- Service Providers.
- Building Owners.
- Users.

13. As an investor, advisor or service provider, access provision to the buildings you own, manage or the services you provide is undertaken:

- To the legal minimum.
- Above the legal minimum.
- The level of compliance varies.
- Unable to confirm this / Don't know.

