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Disability and the Use and Experiences of Public Transport in Surrey

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Being a dissertation submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Transport and City Planning at University College London: I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

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<u>Abstract</u>

Access to transport systems and the environment is essential for carrying out daily activities and ensuring equality for all. But, access to this for many disabled people in Surrey is one of negotiation and constraint. There is generally a lack of education surrounding disabled people's needs, by planning professionals and the general public. This has led to inaccessible places. The dissertation therefore identifies the current barriers to using public transport, and how this affects the lives of disabled people in Surrey. Surrey differs to cities by having more rural areas, and so this study provides a different perspective. Suggestions are then made on achieving accessibility for all. To understand the situation, two focus groups and fifteen semi-structured interviews took place. The results show that many of the train stations and bus stops in surrey are inaccessible, as well as the walking routes to these. The services are poor and infrequent, and changes to policy has further restricted travel. The staff of a service, and the public also significantly affect the experience of getting from one destination to another. To overcome the barriers is a complicated task, but this research suggests some initial strategies, aside from improving the services and stations. This includes the integration of transport in Surrey as a minimum, but preferably nationally. Further, the use of technology can provide change. Real Time Passenger Information (RTPI) was seen to be important, but there needs to be complete roll out across the County. Even though these improvements were identified, there is resistance in actually fighting for them. By incorporating the needs of this group, and addressing the above issues, a more inclusive society could be formed.

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1.0 Introduction

This dissertation will explore public transport and disability in Surrey. The geographical area was chosen as public transport is more limited here than in cities or more urban areas. It will therefore provide an interesting insight into this part of England.

1.1 Background to Mobility

Over the last half a century the study of mobility has grown, with it now having a deeper meaning of more than just transporting people from one destination to another (Sheller and Urry 2006). Mobility impacts public spaces, by bringing people together through social and familial networks, but also forms gendered subjectivities, and spatially segregated neighbourhoods (Sheller and Urry 2006). Cresswell (2006) furthers this by stating that mobility is a statement on one's life, and for any individual there is some form of mobility. But, mobility can be categorised with domination and power (Cresswell 2010). For some people movement is a luxury, while for others it consumes energy and can be tiring. This then poses an important question of who can move the fastest, furthest and most often. Two different people following the same journey from one place to another may not have the same experience. For Imrie (2000) there are many assumptions about movement and mobility that rank certain groups of people over others. Bodies that are considered 'not normal' are alienated, and those with mobile bodies are prioritised. This produces inequality, as independent mobility is essential in allowing engagement with everyday tasks (Hardy 2004). The above shows that individual people are now the main focus of research into mobility (Miralles-Guasch et al., 2015).

1.2 Disability and Transport

Researchers have been interested in social justice for a long time (Valentine 2003). But, it is only recently that specific groups have been studied in relation to being excluded from society. This includes children, women, ethnic minority populations, gay men, lesbians and disabled people. Fifty years ago members of the transport profession started to recognise that minority populations had different mobility needs (Law 1999). The concept of transport-disadvantaged subgroups then emerged, which includes young, elderly, and disabled people (Falcocchio and Cantilli 1974). This was further developed in the mid 1990s, as the geographies of disability was mapped out. This focused on the relationship between disability and citizenship, exclusion and social justice (Kitchin 2001). More recently, the knowledge on disability has grown (Taylor and Józefowicz 2012). There have been changes to policy, which does show some change in

protecting individuals. The 'Disability Discrimination Act' of 1995 now protects anyone with a disability by legislation (Disability Discrimination Act 1995). Further, the 'Equality Act' of 2010 protects people in work, and wider society (Equality Act 2010).

But, despite the changes in policy and research, Porter (2000) argues that people with a disability still experience travel differently from abled bodied people. Much of the literature agrees that travel is generally constrained for people with a physical impairment (Taylor and Józefowicz 2012). For them the experience will be one of negotiation and constraint. Understanding the barriers currently present for them is therefore important, in order to create a more inclusive society.

1.3 Research Aims and Objectives

The aim of this study is to analyse the use and experiences of public transport, including trains, buses, and walking for individuals with a physical disability in Surrey. Disability is defined by the Equality Act (2010) as being 'a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal daily activities'. This dissertation will focus only on adults with physical impairments, as mental disabilities and transport is a separate issue.

To address the main aim, the below objectives are proposed:

1. Define the current barriers to using public transport in and around Surrey, and from Surrey to other geographical areas.

2. How the current barriers to mobility affect the daily lives of disabled people in Surrey.

3. How to make Surrey more accessible for people with a disability.

1.4 Structure of the Dissertation

Following the introduction, the next section of the study is the Literature Review. The existing literature on disability and transport is compared and contrasted through this section. It also identifies the research gaps present, which this dissertation aims to fill. The following section looks into the methodology chosen for data collection. The main research findings are then discussed through the next chapter. Finally, the conclusion summarises the dissertation, and suggests future research opportunities to further develop the findings of the dissertation.

2.0 Literature Review

This chapter compares and contrasts the existing literature on the topic. The first section looks into the barriers in accessing public transport, and the next section discusses the importance of transport to those with a disability. The third section mentions how to improve transport, and then the use of technology as a solution follows. The final part summarises the findings and explains the literature gaps.

2.1 Barriers to Using Public Transport

The introduction has shown that the literature on transport and disability has greatly improved. But, the planning profession still treats perfect mobility as the norm. Not enough is done to include accessibility in the planning profession (Taylor and Józefowicz 2012; Imrie and Edwards 2007). Evcil (2010) suggests that the desires of disabled people are rarely included by the theories and practices of architects. This means easily reached transport is rare, rather than as standard (Barnes 1991). For example, pavements are scattered with obstacles, and the provision of tactile paving with actual colour contrasts is rare (Imrie and Kumar 1998). It is also common place for pavements not to be continuous. They have raised kerbs at crossings, instead of dropped kerbs and tactile paving, which means it is harder for some disabled people to get from one side of the pavement to the other. This could be due to a lack of legislation and regulations in policy, and an absence of public awareness and interest. It has led some authors to believe that in western countries there is only a partial obligation for governments to provide access (Kitchin 2001). This means disabled people can only move around certain parts of cities and towns.

The lack of legislation leads to barriers, and accessibility is one of the biggest problems physically impaired people face (Kassim et al 2018). Sammer et al (2012) state that there are four main barriers to this accessibility, apart from specific circumstances such as income or time. The first being those responsible for the transport operation; the second is insufficient supply of transport; the third is problems with the built environment; and the fourth a lack of information. It is important to remember that it is not just a train or bus that have to be made accessible. Full accessibility covers the whole journey from the beginning to the end, so incorporates the walk to the transport infrastructure, and the information on offer (Hine and Scott 2000). Planning a trip is an essential element of a journey, and there is generally a lack of information available (André et al 2007; Wardman et al 2001). This therefore makes

individuals more likely to stick to a route they are familiar with, so no unforeseen consequences arise (Casey et al 2013).

Contrary to the above, some authors believe that the barriers to movement are becoming less frequent. Authors, such as Gant (1997) mention that attitudes have changed towards disability, with more support for creating inclusive spaces. Tolley (1997) furthers this by suggesting that a change in priority from the private car to pedestrianisation and public transport has become an important feature in redevelopment schemes. For Imrie and Wells (1993) these changes has reinforced the creation of a barrier free urban area. But, this study argues that this is not the case. It may well be true in urban areas, but in Surrey a significant amount of the inhabitants are still driving, and the road network encourages them to do so (Surrey-I 2011).

The above has shown that generally those with a physical impairment are not represented in the designs of developments to the level in which they should be. It is important to remind oneself that it is not the actual physical disability that excludes people, it is the way the built environment is delivered (Kitchin 2001). But, Imrie and Kumar (1998) explain that disabled individuals feel powerless to change this current situation. This is largely because disabled people are not consulted, involved, or listened to in the first place (Unit PMSS 2005). They have restricted access to power, meaning they are underrepresented in political positions, and so the cycle continues. This therefore means that their views are not put across, and this limits changes that could be made (Kitchin 2001).

2.2 Importance of Transport

The Prime Minister's Strategy Unit states that up to one in five adults in Britain could be classified as disabled, and find themselves disadvantaged compared to abled bodied individuals (Unit PMSS 2005). This is an issue as restricts disabled peoples independence, and therefore economies and societies may ultimately lose out on their talents (Denmark 1998). Most people expect to move with ease around the built environment (Imrie 2000). But, Oliver (1996), who has considerably added to the discussions, shows how this is not the case. The author argues that places are constructed primarily for people to walk, and that this is highly political. For someone who cannot walk due to a disability this puts into question 'the power of professionals, it exposes the ideology of normality, and it challenges the whole rehabilitation exercise' (Oliver 1996, 104). Being excluded from walking or using transport in the standard way has many implications. It can exclude people from the same level of citizenship as abled bodied people, meaning they experience reduced social justice (Kitchin 2001). Percy-Smith (2000) further this

by mentioning that if an individual cannot participate in either economic, political or social activities then they will feel excluded in society. Policy documents, such as The DETR (2000) reinforce this. Articles on social exclusion and the availability of transport highlight a connection between social exclusion and the lack of transport.

If mobility is more inclusive, it can be very positive. For Maat and Louw (1999) and Delbosc (2012) mobility opens up many opportunities, by giving people the chance to grow themselves both economically and socially. For Cahill (1994) and Sammer et al (2012) mobility is a social service, and required for satisfying basic human needs. It facilitates social interaction and participation in formal and informal networks, limits isolation from goods and services, friends and family (Kenyon et al 2002). The UN (2006, 1) states that 'An accessible physical environment benefits everyone, not just persons with disabilities'. There is therefore even more of a reason for designers to strive for accessibility (Evcil 2010). Napolitano (1995, 33) argues that good urban design sends an important message to disabled people, one which tells them 'we want you here', and 'you are important'. The author further mentions that if disabled people's needs are marginalised, and they are sent on long and strange routes to access a place, this might make them feel unwanted. Anderson and Kitchin (2000) state that the consequences of this are numerous, and reiterates a sense of being out of place in public.

To summarise the information drawn from government and academic papers, it is clear that to create a fairer and more inclusive society, there needs to be increased mobility and better transport (Church et al 2000). Spatial mobility is therefore important, and even more so in rural areas (Currie 2010). Population densities in rural areas are low, and services and shops are more widely spread out. For residents in these locations there is only a limited amount of services and goods that can be accessed within walking distance, and therefore there is a greater need for other forms of transport to access basic human needs (Nutley and Thomas 1995).

2.3 How to Improve Transport

For Hine and Mitchell (2001), the social consequences of restricted mobility should be measured so that transport can become better. For Sammer et al (2012) it is important to raise an awareness amongst the general public and build public relations with decision makers, to support fair opportunities for mobility. Freedom Passes are one step in achieving this. They allow for more travel independently, which means more trips are taken for leisure. This is vital for the well-being of an individual (Goodman et al 2014). It also removes the barrier of income level, which can discourage people with a physical impairment from travelling as generally

income levels are lower, as work opportunities are more limited (Oxley and Richards 1995). But, these Freedom Passes may only work in larger geographical areas. In London it is accepted on most transport networks, with a few exceptions (London Councils 2018). But, as soon as travel leaves London, the rules change.

Church et al (2000) argue that attempting to tackle the exclusions from transport not only requires improvements to the actual transport infrastructure. It also requires policies to fight the issues that affect trips at either end of the transport system. Luk and Olszewski (2003, 49) explain that many journeys begin and end by walking, and therefore walking should be fully integrated into the 'travel chain'. Disabled people generally need flat surfaces and lifts to overcome the irregular surfaces, or steps (Kassim et al 2018). Further, care needs to be taken between the interchanges of different transport modes. Luk and Olszewski (2003) clarify that most barriers exist at terminals and stations. This is therefore where energy should be focused, by adding ramps, lifts, escalators, and reducing the gap between trains or vehicles and the platform. These above steps would require change on a national level, and would need to be developed before the policies are prepared.

Despite the above, not all authors agree with the approach taken in making places more accessible. In his research, Imrie (1997) shows that the local access policies produced by Local Authorities are biased towards producing a built environment that is suitable for wheelchair users. But, Barnes (1991) argues that as a rough estimation, only 5 percent of adults are dependent on a wheelchair in the United Kingdom. This is furthered by Sammer et al (2012) who argue that transport and disability is on the minds of transport planners and researchers, but that the disabilities of other groups have not been considered in as much detail. This shows that disability is a diverse subject, and every disability needs to be treated differently. Different solutions are needed to satisfy different groups of disabled people.

2.4 Technology

According to Kassim et al (2018), the most significant barrier for disabled people accessing infrastructure is devices for guiding people. Virtual mobility is growing, with a growth in technologies that aid travel. This could improve the lives of people with physical impairments who find physical mobility hard, through alternative social services, networks and goods (Kenyon et al 2002). Jones (1995) explains that it is now possible to move through social spaces such as chat rooms or work from home, without physical mobility. This can include the socially excluded, and lessens the negative impacts of their reduced physical accessibility (Hine and

Grieco 2003). But, when designing assistive technologies for the disabled, there are some ethical issues that have to be considered (Kassim et al 2018). There is still an importance to face to face human interaction (Hamburger and Ben-Artzi 2000). Without this, it can lead to a decline in community and isolation (Cornwell and Lundgren 2001). Therefore, there will always be a need for public transport systems, especially for the disabled.

RTPI is a solution in finding the correct service for an individual (Mishalani et al 2006). This is where passengers can receive information about the timings of the transport system in real time to help aid decisions about what transport to use and when it will arrive. This can improve the waiting times of disabled passengers, which in turn reduces stress and adds a sense of security which makes the experience better (Brakewood et al 2014; Hounsell et al 2016). However, for some authors, such as Hickman and Wilson (1995) the RTPI only provides a modest improvement to passenger's journeys, and the actual benefits of using this appear questionable. Therefore, more research is needed on how RTPI actually improves the lives of disabled people through lived experiences.

2.4 Summary and Literature Gaps

Despite the late start on research into transport and disability in the 1970s, a number of different issues have since been investigated by many different authors. But, the topic is still highly under researched (Kitchin 2001). Not enough information is understood on the actual lived experiences of the disabled (Risser et al 2015). It is important for researchers to understand the topic more, as this can help the planning profession in designing better transport that includes all groups of people. Further, it is more than likely that the experiences are varied in different geographical locations, and the existing literature does not cover the lives of those in Surrey. Surrey is classified as urban to the north and northeast, but to the south more rural (Surrey-I 2011). A significant amount of the research on transport and disability focuses on urban environments, and especially the larger cities. For example, TFL (2010) conducted a study in London, to try and understand the travel experiences of disabled people in peak hour times. There is therefore a gap in the research on communities that are not as built up as cities (Velaga et al 2012). There is a clear difference in accessibility and connectivity to transport between rural and urban areas (Clarke and George 2005). The data from a big city, such as London, is likely to be a lot different than smaller and quieter places. Currie (2010) explains that this is a shame seeing as the need for transport services in areas outside of cities is undisputable. The research will therefore fill this gap in the literature by studying disability in Surrey, a suburban and rural county in England. The topic is also currently topical in Surrey, due to a recent change in policy. From the first April 2019, those with a disability could no longer travel on a bus for free before 9:30am, or after 11pm on weekdays with a disabled or companion pass (Surrey County Council 2019a). It would be interesting to find out how this has affected disabled people in Surrey, and how this connects to the bigger picture. Overall the study will aim to summarise the most up to date findings on transport and disability.

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3.0 Methodology

This chapter looks into the methods used in order to meet the research objectives that were outlined in the introduction section. The first section lays out the methods used. The next section discusses the sampling technique, followed by the preparation and analysis of the data. Some thought is given to the use of alternative methods, and then finally there is a statement on research ethics.

3.1 Methods Used

Following the aims of this study, qualitative methods of research are most useful. The purpose of the research is to gather detailed information from people with a disability about their experiences of using public transport. Quantitative forms of research are not suitable because the experiences of every individual were anticipated to be different. Winchester (1999) argues that qualitative methods highlight the specific emotions felt by individuals and reveals structures present. Therefore, interviews and focus groups took place. Several academic authors have claimed that this form of data collection provides researchers with some of the most interactive and richest forms of research (Bradshaw 2001; Baxter and Eyles 1997). The focus group differed in that it involved a small group of people discussing matters. This is also known as being a valuable data collection method (Cameron 2005). This is because the discussions can lead to previously unthought of subjects to develop (Skop 2006). This is because participants will react more in groups, by engaging together and sharing experiences (Goss 1996). The combination of the two research methods meant there were less refusals to take part. Lambert and Loiselle (2008) explain this as it gives people a choice of a method that is more convenient for them. The authors further explain that it can lead to data completeness and confirmation, as each different method exposes different parts of the research.

3.2 Sampling

Several disability groups across different boroughs and districts in Surrey were contacted by email. A total of fifteen semi-structured interviews, and two focus groups involving four and six participants took place as part of the research, and these lasted between half an hour to several hours. It was considered that this sample size was reasonable, given that interviews do not aim to represent the masses or numbers of people (Lindsay 1997). Some participants were contacted through snowball sampling, where further interviewees were recommended to take part. Spreen (1992) explains that this is a usual tool in locating members of specific

populations. The individual interviews were all conducted face to face, or by phone, as Drabble et al (2016) state that the latter is how to engage with the groups that are harder to reach.

For the latter stages of data analysis, it was useful to have some general information on the interviewees, as this proved to be beneficial when comparing the data (Longhurst 2005). Therefore, the types of disability, and home borough or district in Surrey of the participants was recorded, as shown in Table 1.

Participant	Type of Research	Disability	Geographical Area
A	Focus Group	Wheelchair	Mole Valley
В	Focus Group	Wheelchair	Mole Valley
С	Focus Group	Restricted mobility	Mole Valley
D	Focus Group	Restricted mobility	Mole Valley
E	Focus Group	Wheelchair	Surrey Heath
F	Focus Group	Wheelchair	Surrey Heath
G	Focus Group	Wheelchair	Surrey Heath
Н	Focus Group	Restricted mobility	Surrey Heath
I	Focus Group	Restricted mobility	Surrey Heath
J	Focus Group	Restricted mobility	Surrey Heath
K	Interview	Wheelchair	Surrey Heath
L	Interview	Restricted mobility	Surrey Heath
М	Interview	Wheelchair	Surrey Heath
N	Interview	Wheelchair	Surrey Heath
0	Interview	Restricted mobility	Surrey Heath
Р	Interview	Wheelchair	Elmbridge
Q	Interview	Restricted mobility	Elmbridge
R	Interview	Restricted mobility	Surrey Heath
S	Interview	Restricted mobility	Elmbridge
Т	Interview	Wheelchair	Woking
U	Interview	Restricted mobility	Guildford
V	Interview	Wheelchair	Mole Valley
W	Interview	Wheelchair	Elmbridge

Table 1- Profile of Participants

Х

Y

Interview

Interview

Wheelchair

Wheelchair

Mole Valley

Mole Valley

3.3 Preparation and Analysis

Many academic authors have highlighted the need to be organised for the interviewing process (Hoggart et al 2002; Healey and Rawlinson 1993). This meant the topic was read upon widely, and some initial topics were listed. The interviews and focus groups were led in a semistructured way. A list of questions, in Appendix 1, were prepared, but the conversation developed informally. This meant there was flexibility in subjects raised, and more freedom for participants to mention feelings (Drever 1995). But, also meant that there was some comparability between interviews, as they all followed the same basic structure. This method also makes the experience more like a friendly conversation rather than an exercise to gather data (Knox and Burkard 2009).

The interviews and focus groups were recorded with permission, using the researcher's phone, and then transcribed. This made it easier to study the data in detail, and meant that it could be linked with codes (Bailey 2008). The coding identified phrases and specific words that were reoccurring, and then these were investigated further (Seale and Kelly 1998).

3.4 Consideration to Other Methods

Due to time constraints, only two forms of data collection were used. In the future ethnographic and observational methodologies could further progress the study, and delve deeper into understanding the relationship between disability and transport. The researcher could accompany interviewees along their journeys in and around Surrey to see their experience of public transport first hand. This can provide richer data as it stops participants trying to give a correct answer, and provide a different perspective (Evans and Jones 2011). Additionally, participants could keep a diary to write their thoughts and emotions at specific parts of their journeys. This focuses the participant's attention to everyday activities and to reflect on what they value, which can then be explored further in the interviews (Jacelon and Imperio 2005).

3.5 Research Ethics

Research using qualitative forms of data has led to queries on how to address issues in a sensitive way and empower participants (Valentine 2003). For this study the correct procedure has been followed, with the aim of reducing the ethical risk. The application for data collection was submitted to the Research Ethics Committee for approval, along with a completed Consent Form and Participant Information Sheet. These documents were then given to every respondent of the research for them to sign, before any interviews were conducted. These forms advised

interviewees of the purpose of the dissertation, and steps to take should they wish to withdraw from being part of the research, as well as informing them that the data will remain anonymous. The results have remained anonymous throughout the dissertation writing process, and any participant that wishes to see the final dissertation can do so.

4.0 The Current Situation in Surrey

Before the main research was undertaken, it was beneficial to see what the current situation in Surrey is in terms of accessibility. Using the Access Map created by National Rail (2019), each individual train station in Surrey was researched to see what the current level of access was for all, and recorded in Table 2. Out of the 84 train stations in Surrey (Surrey County Council 2019d), only fourteen are shown to be fully accessible. These stations include Ashford, Caterham, Dorking, Epsom, Guildford, Haslemere, Horley, Kingswood, Leatherhead, Redhill, Reigate, Staines, Weybridge and Woking. Many of the other stations include some level of accessibility, but lack in some areas. The remaining train stations are completely inaccessible. Only abled bodied people can use these stations, and include Ash, Byfleet and New Haw, Dorking Deepdene, Frimley, Godstone, Hersham, Hinchley Wood, London Road, Longcross, Stoneleigh, Thames Ditton and Wanborough.

Train Station	Accessible Toilets	Staff Availability	Train Access Ramp	Full Step Free Access
Addlestone	×	×	✓	√
Ash	×	×	×	√
Ash Vale	×	×	×	×
Ashford	√	√	✓	✓
Ashtead	×	√	✓	✓
Bagshot	×	×	✓	×
Banstead	×	×	✓	×
Betchworth	×	×	√	×
Bookham	×	×	×	√
Box Hill and	×	×	√	×
Westhumble				
Brookwood	\checkmark	×	√	×
Byfleet and New	×	×	×	×
Haw				
Camberley	✓	×	✓	✓
Caterham	✓	✓	✓	√
Chertsey	×	×	✓	×
Chilworth	×	×	✓	×
Chipstead	×	✓	✓	×
Clandon	×	×	✓	✓
Claygate	✓	×	✓	✓
Cobham and Stoke	✓	×	✓	✓
D'Abernon				
Dorking	✓	✓	✓	✓
Dorking Deepdene	×	×	×	×
Dorking West	×	×	✓	×
Dormans	×	√	✓	×
Earlswood	√	×	✓	×

Table 2- Accessible Features of all Train Stations in Surrey

Effingham	\checkmark	×	✓	\checkmark
Junction				
Egham	✓	×	×	\checkmark
Epsom	✓	✓	✓	\checkmark
Epsom Downs	×	×	×	\checkmark
Esher	×	×	✓	×
Ewell East	×	√	 ✓	
Ewell West		×	✓ ✓	×
Farncombe	×	×	×	·····
Farnham	 ✓	×		· · · · · · · · · · · · · · · · · · ·
Frimley	×	×	×	×
Godalming	 ✓	~	 ✓	
Godstone	×	×	×	×
Gomshall	×	~ ×	~	×
Guildford	~	~	✓ ✓	~
	✓ ✓	-	✓ ✓	✓ ✓
Hampton Court	✓ ✓	×	✓ ✓	✓ ✓
Haslemere			-	
Hersham	*	×	×	×
Hinchley Wood	*	×	*	×
Holmwood	*	×	✓	×
Horley	✓	✓	✓	✓ ✓
Horsley	×	×	✓	×
Hurst Green	×	✓	✓	✓
Kempton Park	×	×	✓	×
Kingswood	√	√	✓	✓
Leatherhead	✓	✓	✓	✓
Lingfield	\checkmark	✓	✓	×
London Road	×	×	×	×
Longcross	×	×	×	×
Merstham	×	✓	✓	\checkmark
Milford	×	×	\checkmark	\checkmark
North Camp	×	×	\checkmark	×
Nutfield	×	×	×	\checkmark
Ockley	×	×	×	\checkmark
Oxshott	\checkmark	×	×	×
Oxted	\checkmark	√	✓	\checkmark
Redhill	\checkmark	\checkmark	✓	\checkmark
Reigate	\checkmark	✓	✓	\checkmark
Salfords	\checkmark	√	✓	×
Shalford	×	×	\checkmark	×
Shepperton	×	×	√	\checkmark
Staines	\checkmark	✓	✓	\checkmark
Stoneleigh	×	×	×	×
Sunbury	×	×	✓	✓
Tadworth	×	✓	✓	\checkmark
Tattenham Corner	×	✓	√	✓
Thames Ditton	×	×	×	×
Upper Halliford	×	×	✓	×
Upper	×	 ✓	· · · · · · · · · · · · · · · · · · ·	×
Warlingham				
Virginia Water	×	✓	×	\checkmark
Walton on Thames	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	×	×	· · ·
	-			
Wanborough	×	×	×	×

West Byfleet	\checkmark	×	×	✓
Weybridge	\checkmark	✓	\checkmark	✓
Whyteleafe	×	√	✓	√
Whyteleafe South	×	✓	✓	√
Witley	×	×	✓	×
Woking	\checkmark	√	✓	√
Woldingham	×	√	×	×
Worplesdon	×	×	✓	×

Although the above table has been constructed for train stations in Surrey, for buses it is not as simple. Surrey County Council (2019c) mentions that in general buses used across the county are operated with a low floor and fully accessible, which they state make it easier for those with wheelchairs, mobility scooters and mobility impairments. They do acknowledge though that some of the more infrequent services, which are most likely to be in the more rural parts of Surrey, may be inaccessible. In these situations the user must contact the bus operator in advance of travel to allow alternative arrangements to be made. However, just because the actual bus is accessible, does not mean access on and off the bus is. The curb heights, the pavements, loading and unloading areas must all be up to the required standards to allow disabled passengers off with a wheelchair (Wu et al 2011).

5.0 Findings and Discussion

This part of the dissertation looks into the discussions had with the interviewees and focus group members. Firstly, the current barriers are explored, and then the importance of transport to disabled people is discussed. The last section looks into the improvements that could be made to make Surrey more accessible.

5.1 The Current Barriers

5.1.1 Change to policy

A recent change in Policy at Surrey County Council has left many disabled residents confused. Prior to April 2019, disabled people could travel for free on any surrey buses and at any time of day. But now people with a disability can no longer travel for free before 9:30am, or after 11pm on weekdays with a disabled or companion pass (Surrey County Council 2019a). This change shows a lack of public awareness and knowledge. This supports Kitchin's (2001) argument that access to the built environment in Western societies is only partially legislated for, as there is only a partial obligation for governments to provide access. This could change the way disabled people travel, as they will now need to start paying for some travel, and income levels of the disabled are generally lower due to limited employment opportunities (Oxley and Richards 1995). This would not encourage these people to get out and look for jobs, or partake in social activities which Goodman et al (2014) explain is good for ones well-being.

Interviewee Q 'Disability does not start and end at specific times. I don't understand how they can change this'.

5.1.2 Infrastructure

The research has shown that the transport infrastructure is a major barrier for disabled people in Surrey. Both the service, and the actual station infrastructure provide frustration, and limits the amount of travel. This supports Taylor and Józefowicz (2012) and Imrie and Edwards (2007), who all state that seamless mobility is often taken for granted in planning, and not enough is done to make it more accessible.

Interviewee A 'They put me on in Dorking, and when you arrive and get to Horsham, that door, when you arrive you drop down into a brick wall...you have 2ft to get out and around.. I thought I'll try Horsham, but I won't try it again'.

Interviewee X 'The 465 route stops on the main road at Dorking railway station, and I don't think they have done anything there to let a person off in a wheelchair'.

Interviewee P 'the lift has broken down at the station many times... I even got stuck quite recently, and the fire brigade had to come and help me out'.

The above quotes are representative of many of the comments made in relation to the actual station infrastructure at the train and bus stations. This agrees with Evcil (2010) that those designing the infrastructure will rarely include the needs of the disabled. Interviewee A highlights a trial and error procedure, whereby she tests out different stations to see their features. If she has a negative experience she will not use that station again, meaning she is completely excluded from any activities in that area. Interviewee P spoke about a recent experience whereby the lift they were using with their wheelchair broke down. They explained that this was a frightening and embarrassing situation to be in, and completely changed their plans for that evening. It does seem as though unless there is a direct safety issue, the council are very unlikely to respond to or comment on residents wishes. This is contrary to the literature from Grant (1997) and Imrie and Wells (1993) who have argued that there has been a change in attitudes towards creating inclusive spaces, which is reinforcing the creation of a barrier free society. As well as the actual station infrastructure creating a barrier, the service further adds to the obstacle of accessing public transport.

Interviewee B 'The buses are ok, but then you have to hang about for them, and we don't get many buses here'.

Interviewee Y 'Very few services run late at night. The services stop too early to be frightened at night'. Interviewee I 'I can be at the bus station for 40 mins, then 3 buses turn up all at once'.

Interviewee J 'The buses could be made better by being more reliable, and more frequent'.

The above quotes show that the services in Surrey are infrequent and unreliable, which according to the literature is typical of more rural communities (Velaga et al 2012; Clarke and George 2005). It therefore does not encourage individuals to use the services, which is a shame as the need for transport services is even greater here than in cities (Currie 2010). The lack of services differs to Tolley's (1997) findings, that there has been a change in priority from the automobile to favouring pedestrians and public transport. This may well be true in cities in England, such as London. But suburbs and rural areas still face the same exclusions. Generally, those participants that had access to a car used this. But, for many the private car was not an option, so they just travelled less.

5.1.3 The whole Journey

As well as a reliable service and accessible station infrastructure, an accessible journey needs to include the whole journey from start to finish (Church et al 2000). Schmöcker et al (2005) argue that most transport agencies are upgrading their buses to enable wheelchair access, but this is pointless if the walk to the bus or train is not suitable and there is a lack of information available (Hine and Scott 2000).



Figure 1 Stairs at a Crossing in Staines



Figure 2 Bin Day Obstructing Pavements



Figure 3 No Dropped kerbs at Crossing

Interviewee W 'Even if the train station I am going to accommodates my wheelchair, the journey to the actual train station may be inaccessible'.

Interviewee F 'I can't leave my house without my sons because the pavements are not very good... loads of potholes and broken bits of pavement'.

Interviewee T 'Even if a bus does allow wheelchairs on board, they might not park in the right place...In most cases the kerb and the ramp don't meet directly, because the pavement and the kerb are not high enough'.

If the bus pulls over at a stop, and the bus and kerb do not meet, a wheelchair cannot get off. This provides frustration and inconvenience, and encourages the participants to either stick to the routes they know, or avoid travel in the first place. This is similar to what Imrie and Kumar (1998) identified in their study. They revealed a range of emotions in disabled people towards the built environment. Interviewee W explains that even if the transport infrastructure is accessible for his wheelchair, the walk may not be. This is due to obstructions on the pavements, such as bins shown in Figure 2, limited dropped kerbs at crossings, like Figure 3, stairs and narrow pavements (Kassim et al 2018). According to Table 2, Staines Station is fully accessible, but within an 8 minute walk from the station a busy dual carriageway only has a crossing with stairs, as shown in Figure 1. Therefore, more energy should be put into providing ramps, lifts, and step free environments (Luk and Olszewski 2003). In the Literature Review,

it was clear that not all authors agree with this approach of making places more accessible (Imrie 1997; Barnes 1991; Sammer et al 2012). This research has shown that in Surrey, those in wheelchairs do not have 'special' treatment over others. They are still excluded from using the built environment, and more should be done to overcome this. The views of the above authors are therefore not representative of the situation in Surrey, and possibly other similar areas in England.

5.2 The importance of Transport

5.2.1 Importance

Oxley and Richards (1995) explain that the lack of accessibility can reduce trips. Imrie (2000) further states that poorly designed infrastructure reduces this even more. Therefore, the only option for many disabled people is to stay in their own homes (Imrie and Kumar 1998).

Interviewee X 'Mole Valley is a rural district and therefore everything is spread out. This makes the bus service even more important to me'.

Interviewee E 'I only travel to places I know, I don't go anywhere new'.

The above quotes highlight just how important public transport is for those living with a disability in the more rural parts of Surrey. Many of the respondents interviewed explained they cannot drive due to their physical disability, meaning they are completely reliant on other modes of transport. But, as population densities are low in the majority of the district of Mole Valley, services and goods are more widely spread out. This creates a greater need for transport, but bus and train stops are further away, and the actual service less frequent (Nutley and Thomas 1995).

Interviewee Y 'If I see a building with a ramp, I think to myself that I am welcome here'.

This quote from an interview demonstrates what Napolitano (1995:33) was trying to explain that good urban design sends a message to disabled people saying 'we want you here'. It shows that if individuals can use the built environment and walking infrastructure in the normal way, then they will feel included in society and experience the same social justice (Kitchin 2001; Percy-Smith 2000). It shows that if parts of the built environment, such as buildings, are built for everyone in mind, including those in wheelchairs, then it has a positive effect. It gives people the chance to grow themselves in many ways (Matt and Louw 1999).

5.2.2 Public Reaction

As well as the physical barriers to using public transport, there are social barriers too, which all affect the travel experience. Many people with a physical impairment face abuse either physically or verbally, and experience negative reactions in public spaces (Butler and Bowlby 1997). In Sammer et al's (2012) research, nearly all of the respondents found other users of the transport system inconsiderate in helping out disabled people in certain situations. In this research, around half did mention this to be a problem in one way or another. The responses ranged from the public not knowing how to treat the disabled individuals, or not giving up their seats or space to put their wheelchairs. When asked why they thought this was the case, many put it down to lack of education, or just inconsiderate people. In surrey, most buses can only accommodate a single wheelchair at any given time. Many participants found this hard enough, let alone when other users of the bus used the wheelchair space for other reasons. There seems to be conflict between those with wheelchairs, and those with pushchairs. This shows a flaw in the way buses are designed. They should include more floor space for wheelchairs and buggies.

Interviewee M 'There is a problem with buggies in disabled spaces. The bus drivers pretend they don't see you if there is a buggy in the wheelchair space, and drive off. So then you have to wait for the next one, and if it is raining, hard luck.

Interviewee N 'In my day, if you had a child in a buggy, you would take them out and put them on your knee'.

Despite the above, in some instances other members of the public can be helpful and considerate.

Interviewee A 'The public say to me is anyone helping you off'.

Interviewee S 'I have a walking stick, and I find people are generally very helpful'.

The above quotes are dissimilar to what Sammer et al's (2012) and Imrie and Kumar's (1998) work found, in that the participants found the public to be negative, and awkward towards themselves. Around half of the participants of this research did actually have positive things to say about the general public when using public transport, or walking down the street. The change could be down to an increase in education and exposure to disabilities.

5.2.3 Staff Assistance

All interviewees and focus group members mentioned issues with staff, for a variety of different reasons. The most common issues were relating to staff attendance.

Interviewee B 'Someone I know got stuck on the train, they forgot him or something'.

Interviewee A 'Well I've had that twice, just last week'.

Interviewee C 'Originally I was stuck on the train, because they forgot to ring through to say that I was going to Horsham. So I bashed on the window'.



Figure 4 Ramp for Wheelchair Users

In Surrey, if you have a disability and need staff assistance to travel, you are required to book twenty-four hours in advance of travel (National Rail 2019). This is so the appropriate arrangements can be made, such as staff moving the ramp shown in Figure 4. This is unlike Transport for London that operates a 'turn-up-and-go' service which means you do not have to pre-book assistance to use some of their services (TFL 2019). This highlights another difference between big cities and smaller, more rural areas. Some of the participants explained that they cannot always predict their travel twenty-four hours in advance. Some trips are made unexpectedly, or later/ earlier than usual. The hassle of organising the actual travel seemed to put a lot of the participants off using trains and buses. For many, they chose to not travel, or rely on family or friends to take them in the private car.

Interviewee B 'To be honest I just use the car. I have to rely on my husband. I have used the train but it is a bit of an effort because, I mean you have to arrange for ramps and things, and erm, make sure that they are there... someone to help you get off the train at the end...it has worked in the past, but it is always a will it work, wont it work sort of thing'.

Interviewee V 'I have only ever travelled in the day, out of rush hour. Merely because you can get in the way, and you have got to make sure there are some staff to field you when you get off at the other end. And of course the later you leave it, the less chance there is of someone being there'.

Even if some of the participants decide to go through the hassle of organising staff assistance at train stations, there is no guarantee that there will be no further hiccups. Respondent P travels from Weybridge station in the Elmbridge Borough, up to London Waterloo every day for work. This participant uses a wheelchair and is therefore reliant on the lift to get from the station platform and out onto the street. When looking at Table 2, Weybridge station is one out of fourteen stations that is meant to be fully accessible in Surrey. But, it is clear that the station is not accessible at all times. The lift, such as that shown in Figure 5, has broken down a few times, and this really impacts on the participant's life. It means they have to come home from London before seven in the evening, as after this the station is unstaffed. This has resulted in the individual missing out on social events in the evening after work.

Interviewee P 'The staff confirmed the lift will be out of service for at least 4 weeks. I actually took a day off of work to meet the manager of accessibility, but nothing came out of it, and I received no compensation'.



Figure 5 Lift at an Accessible Station

There is also an issue with staff awareness. A significant number of participants mentioned that staff do not have the skills to deal with disabilities. This was particularly noticeable when talking to those who use buses as their main form of transport.

Interviewee H 'There needs to be more bus driver awareness. I find the bus drivers talk to the person I am with rather than me'.

Interviewee G 'If the bus drivers already have someone on board, and they see you waiting at the stop, they just drive straight past and don't even stop'.

The above quotes are representative of many of the other quotes. The participants are physically disabled, not mentally, so it was surprising to hear that bus drivers chose to liaise with a friend or family member of the disabled person and not themselves directly. Further, if the one disabled space on the bus is already taken, the bus driver may not even stop at a bus stop and explain the situation, but rather just drive off. This has left the disabled participants angry at the situation. Rohani et al (2013) do acknowledge that the job role of a bus driver is demanding both physically and mentally, by balancing good communication and keeping the service running on time. But, because the bus drivers are closer to passengers, they should play an important role in managing passenger expectation. They need knowledge on how to deal with passengers, and especially those with a disability.

5.3 Improvements

5.3.1 Integration of Transport

The research conducted found that one of the biggest barriers to using transport in Surrey was the absence of an integrated transport network. The types of transport on offer, and the rules surrounding them differ across the eleven different boroughs and districts that Surrey has, and from Surrey to other geographical areas. This means journey planning is difficult and frustrating.

Interviewee N 'There is an issue of responsibility. The dial a ride only works in surrey, and won't take you cross border anywhere. My friend only lives 10 mins drive away from here, but I can't get the free service. I have to pay and get 3 different buses'.

This is clearly a problem to those individual's living with a disability in Surrey. The service seems to be fine for those travelling within their own specific area. But, as soon as a journey turns cross border, the system fails those who need it. For example, the free buses across Surrey will only work on buses that stay within Surrey (Surrey County Council 2019a). Hull (2005) highlights the need for new planning structures and practices that accommodate new policy demands. These new demands require joint working and policy linkages between different local authority governments and service providers at a national and local level. The UK 10-

year Transport Plan further emphasises the need for coordination and integration for successful development (DETR 2000). If this were to occur then the impacts of the proposed policy measures on the transport system would be clearer. But, ultimately unless the integration of transport is done in larger geographical areas, preferably nationally, people will still have difficulty crossing the 'invisible' borders.

Interviewee D 'Where we have two separate authorities, may well be an issue, seems to work, but where county has responsibility for personal care, and the local authority does the practical side of transport services, I wonder if that is best way of doing it, might be better to integrate the services'.

5.3.2 Technology and RTPI

Kassim et al (2018) explain that navigation is a common problem for people with a disability. This is because they do not have the information surrounding them to freely decide a direction of travel. During the research, many interviewees mentioned that they used digital methods to access information on travel. Using the internet and apps were most common, rather than paper maps, or relying on paper timetables. This is contrary to the research by Golledge et al (2001), who found that traditional methods are used to aid disabled people when they are travelling. This change in accessing information can be explained by the recent advancement of technology. In the last few decades, access to information has changed drastically and is becoming better and easier for all to use (Kenyon et al 2002). It further means disabled people can be more independent on journey planning, rather than relying on others to find this information for them (Hine and Grieco 2003).

RTPI is one way that technology has improved the lives of those people living with a disability in Surrey. Most of the bus services in Surrey are included on the online system. It tracks the buses through GPS, and then displays on a screen the exact time the buses will arrive at the bus stops on an electronic display (Surrey County Council 2019b). This is shown in Figure 6. Contrary to the views of Hickman and Wilson (1995), who believe that RTPI only provides a slight improvement to people's journeys, many of the respondents found RTPI very useful. The system that provides live information about the arrival of buses makes many trips easier to manage and better, and the interviewees wanted more of them in Surrey. Many of those who were interviewed in the more rural boroughs/districts, like Mole Valley and Surrey Heath, found that RTPI at bus stops were quite rare. Figure 7 shows a typical bus stop in these areas, with just a flag and paper timetable.



Figure 6 RTPI at a bus stop in Surrey



Figure 7 Bus Stop without RTPI in Surrey

Interviewee D 'There needs to be more of them'.

Interviewee V 'The 465 is in real time, but I don't think the others are. There are timetables, just not in real time'.

Interviewee X 'Our buses are every hour. Would be good to know if you have just missed it'.

These findings correlate with much of the research on RTPI, that it improves journey experience by adding a sense of security, and in turn reduces stress (Brakewood et al 2014; Hounsell et al 2016). But it is clear that more of these display systems are needed. Many of the respondents from Mole Valley found that there was a lack of RTPI which meant that it is only partially useful. For them unless there is complete roll out across the County it will never be as useful as it can be. This means that many disabled people in parts of Surrey still have to rely on more traditional methods for accessing information on travel. This comes back to the point made earlier, that transport and the ways of accessing the information needs to be integrated nationally. The example of RTPI shows that unless there is complete roll out across larger geographical areas, then it is only partially providing real change. But, change does need to start somewhere.

5.3.3 Resistance

Even though it is clear that there are many improvements that could be done to make the transport in Surrey better for those living with a disability, there is resistance in actually attempting to achieve this.

Interviewee W 'They can't change anything because there is no money'.

Interviewee R 'Some Local Authorities have more money, or maybe different priorities'.

It seemed as though many of the respondents were just accepting that nothing could be done to make transport better in the area in which they lived. Some of the interviewees put this down to money problems, or different priorities. This data corresponds with Imrie and Kumar's (1998) research, that those with a disability feel powerless to change the current situation. And as Giddens (1991) points out, people with a disability have little influence over developers, building control officers and professional planners. For these reasons, it seems that disabled people in Surrey do not want to fight for improvements over the current situation. But, contrary to this literature, a small proportion of the respondents did actually speak out over what they thought was right or wrong. This agrees with Branfield (1997), who points out that disabled people can act out against cultural norms, and can engage with acts of resistance.

Interviewee C 'In leatherhead, Surrey County Council have changed the parking arrangements, and no car or vehicle can drop someone off until 6pm. So that means I can't get my nails done, or go to the bank. We are fighting that tooth and nail, and it is taking forever'.

One of the respondents in Mole Valley has been fighting over a new rule to make Leatherhead Town Centre car free. This has impacted the individual's life as with mobility problems walking is not an option, and vehicles are not permitted during the day. It is essential for disabled people to fight for what they believe is right, as this is the only way the transport system will become better for all people, and support fairer opportunities for mobility (Hine and Mitchell 2001; Sammer et al 2012).

6.0 Conclusion

In conclusion, this dissertation has aimed to look into disability and public transport in Surrey. It did this through three aims, which included the current barriers to using sustainable forms of transport in and around Surrey; how the current barriers affect the lives of disabled people in Surrey; and identifying measures that could be taken to make Surrey more accessible. The findings of the dissertation are similar with the earlier findings in the literature review, but there were some differences. This conclusion aims to sum up the main findings from the study and answer the research aims and objectives outlined in the earlier chapters. It will then look into the limitations of the dissertation, and identifies further research opportunities.

6.1 Current Barriers

The study found that there are still many barriers to accessing public transport in Surrey. It is argued that the data collected powerfully represents the unfair relationships many people with a disability face in Surrey when using transport or the built environment. A recent change in policy at Surrey County Council reinforces the point that disabled people's needs are neglected. The actual infrastructure, both in terms of the service and stations limit travel movements massively. Many of the respondents chose not to travel due to inaccessible bus and train stations, or a poor and unpredictable service. The journey from the front door to the actual infrastructure is also a significant barrier. For some participants this stopped them even leaving their homes without help. This section did agree with much of the literature on the topic, which is quite surprising seeing as a lot of the literature is dated. This shows just how little change has occurred in areas that are not cities, which differs to Grant (1997) and Imrie and Wells' (1993) findings.

6.2 Impact of Current Barriers

The impact the current barriers have on the disabled people in Surrey are huge. The study has shown how important public transport is to those in Surrey, and especially in the more rural areas. The current situation means residents are excluded from daily activities. But, when urban design is inclusive, it makes disabled people feel wanted. The public also impacted on the travel experience. Generally, only half the participants were negative about the public, which is a change from Sammer et al's (2012) and Imrie and Kumar's (1998) research. This could be down to education, but it is clear more could be done. Staff assistance was generally a negative experience, with it being a time consuming, unpredictable and complicated process. Staff

awareness is also lacking in Surrey, with increased education needed to improve the experience.

6.3 Increasing Accessibility

Overcoming all the current barriers listed in this study is essential if transport is to become fully accessible in the future. One of the most common improvements that was requested is the integration of transport across Surrey, but preferably nationally. The different rules, costs and types of transport varies across the county, and even more so further afield. This causes confusion and frustration among disabled residents. Technology is another way to improve the travel experience. Many participants mentioned the importance of RTPI to their journeys, but they stated that there is lack of them in Surrey. Even though improvements were identified, the study found that there was generally resistance in fighting for change. This is similar to much of the literature that disabled people feel powerless to do so.

6.4 Limitations and Future Research

Due to a restriction in time, only a limited amount of research could take place. But, every effort was made to ensure a range of respondents were chosen. A selection of boroughs and districts across Surrey were chosen, and a range of individuals through age, gender and occupation status were interviewed. But, as Table 1 has shown, many of the participants had similar disabilities, mainly restricted mobility and wheelchair users. The population of disability is diverse, and for different impairments, the barriers faced are different (Unit PMSS). Future research could therefore involve a range of disabilities, to see if the problems and issues are the same, or if they vary. Further, the research only involved participants who were over the age of eighteen. Interviewing disabled children could give different results, especially when thinking about travel to school. The research that was conducted was site specific, and only held with people who live in Surrey. It therefore cannot be assumed that this will be the same for the rest of the country. The same research should also be conducted in other geographical areas, to compare and contrast the results.

The study found that one of the major barriers to accessing transport is the way it has been designed. Future research could therefore look into why the built environment is designed and constructed in this way. This would involve speaking with planning professionals, architects, planning and transport officers in the local councils. It could be that they are not interested in catering for their needs, or it could be that they are hindered in some way. On the other hand, the research found that a way of improving the lives of the disabled was through technology.

This was explored briefly, but mainly in relation to RTPI. Technology has advanced at a fast rate over the last few decades, so this could be explored more deeply. New technologies, such as walking apps, or online systems that benefit disabled people could be investigated to find out how this is improving the lives of disabled people, and especially in Surrey.

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Appendices

Appendix 1- Semi-Structured Interview Questions

- 1. What transport do you currently use in surrey?
- 2. How do you get to and from a bus stop/ train station in Surrey?
- 3. How do you get around, eg. Wheelchair or crutches etc, do you walk?
- 4. What is your typical journey composed of?
- 5. How to do you choose your routes to a destination?- what information do you use, what are the factors.
- 6. Do you have access to RTPI at your stations/stops etc?- how important is this to the experience of the journey?
- 7. How does Surrey support your travel?
- 8. Thinking about travel to work, how do you find the transport?
- 9. Thinking about travel in your social life, how do you find the transport?
- 10. Is there always available space on public transport, or are you competing with other members of the public. For example parents with pushchairs, or cyclists?
- 11. How does travelling in Surrey affect your life?
- 12. Do you ever feel vulnerable on your journeys? For example do you feel more safe in the day etc?
- 13. How do you find seeking staff assistance at stations, bus stops or other?
- 14. If you rely on audio announcements, how do you find these?

15. How will the change to the 'Free bus passes for disabled people' affect you?

16. What would encourage you to use public transport more often in Surrey?

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Appendix 2- Participant Information Sheet

Participant Information Sheet For Target Group

UCL Research Ethics Committee Approval ID Number: 15455/001

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study: Experiences of Public and Private Transport in Surrey. Department: Bartlett School of Planning Name and Contact Details of the Researcher(s): Abigail Solway 07955645643 Name and Contact Details of the Principal Researcher: Gualtiero Bonvino gualtiero.bonvino.09@ucl.ac.uk

1. Invitation Paragraph

You are being invited to participant in a research project. Before you decide it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

2. What is the project's purpose?

The projects purpose is to look into the experiences of disabled individuals and transport in Surrey.

3. Why have I been chosen?

You have been chosen because you have a known disability and live in Surrey.

4. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form). You can withdraw at any time without giving a reason and without it affecting any benefits that you are entitled to. However, after transcription, the data will be anonymised and this will be unable to be removed.

5. What will happen to me if I take part?

You will be required to take part in one interview.

6. Will I be recorded and how will the recorded media be used?

You will only be recorded if you consent to this. The recordings will be done on a phone, and then transferred to a laptop. The recording will then be transcribed for the only purpose of the analysis of the dissertation, and then all recording will be destroyed. The anonymized results of the analysis will be used only for illustration in conferences presentation, lectures and academic papers.

7. What are the possible disadvantages and risks of taking part?

None. You can withdraw at any time.

8. What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will explore transport and disability in Surrey more deeply.

9. What if something goes wrong?

Complaints will be handled. To raise a complaint contact the Principal Researcher- contact details on consent form, and this form. If your complaint has not been handled you can contact the Chair of the UCL Research Ethics Committee – <u>ethics@ucl.ac.uk</u>

10. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications.

11. What will happen to the results of the research project?

The dissertation will be submitted and competed on the 1st September 2019. After this date the participants will be able to see the research if they wish. You will not be identified in any report or publication.

12. Local Data Protection Privacy Notice

Notice:

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at <u>data-protection@ucl.ac.uk</u>

This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice:

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

The categories of personal data used will be as follows:

Name Address

•••

The lawful basis that would be used to process your *personal data* will be [performance of a task in the public interest.]

The lawful basis used to process *special category personal data* will be for scientific and historical research or statistical purposes.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at <u>data-protection@ucl.ac.uk</u>.

13. Who is organising and funding the research?

The student- Abigail Solway

16. Contact for further information Abigail Solway, 07955645643 <u>abisolway@gmail.com</u>

Thank you for reading this information sheet and for considering to take part in this research study.

Appendix 3- Consent Form

CONSENT FORM FOR TARGET GROUP IN RESEARCH STUDIES

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Experiences of Public and Private Transport in Surrey. Department: Bartlett School of Planning Name and Contact Details of the Researcher(s): Abigail Solway- 07955645643 Name and Contact Details of the Principal Researcher: Gualtiero Bonvino gualtiero.bonvino.09@ucl.ac.uk This study has been approved by the UCL Research Ethics Committee: Project ID number: 15455/001

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Tick Box
1.	*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction	
	[and would like to take part in (please tick one or more of the following) - a group discussion - an individual interview	
	- a joint interview	
2.	*I understand that I will be able to withdraw my data up to the point of transcription. After this point it will be anonymised and unable to be removed.	
3.	*I consent to participate in the study. I understand that the interview will be used for the purposes explained to me. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing.	
4.	Use of the information for this project only	
	*I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified.	
	I understand that my data gathered in this study will be stored anonymously and securely. It will not be possible to identify me in any publications.	
5.	*I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes.	

6.	*I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. However, after transcription, the data will be anonymised and this will be unable to be removed.
7.	I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the research.
8.	I understand the direct/indirect benefits of participating.
9.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.
10.	I understand that I will not benefit financially from this study or from any possible outcome it may result in the future.
11.	I understand that the information I have submitted will be published as a report and I wish to receive a copy of it. Yes/No
12.	I consent to my interview being audio recorded and understand that the recordings will be: - Destroyed immediately following transcription, and then transcription will be securely kept on a laptop until it is no longer needed. To note: If you do not want your participation recorded you can still take part in the study.
13.	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.
14.	I hereby confirm that: (a) I understand the exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and (b) I do not fall under the exclusion criteria.
15.	I am aware of who I should contact if I wish to lodge a complaint.
16.	I voluntarily agree to take part in this study.

Name of participant

Date

Signature

Researcher

Date

Signature

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Appendix 4- Risk Assessment Form

RISK ASSESSMENT FORM

FIELD / LOCATION WORK

The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form

UCL

http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf

DEPARTMENT/SECTION BARTLETT SCHOOL OF PLANNING LOCATION(S) LONDON PERSONS COVERED BY THE RISK ASSESSMENT Abigail Solway

BRIEF DESCRIPTION OF FIELDWORK Interviews and Focus Groups with physically disabled people in Surrey

Consider, in turn, each hazard (white on black). If **NO** hazard exists select **NO** and move to next hazard section.

If a hazard does exist select **YES** and assess the risks that could arise from that hazard in the risk assessment box.

Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.

ENVIRONMENT	The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard
e.g. location, climate, terrain, neighbourhood, in outside organizations, pollution, animals.	Examples of risk: adverse weather, illness, hypothermia, assault, getting lost. Is the risk high / medium / low ?
CONTROL MEASURES	Indicate which procedures are in place to control the identified risk
	orates Foreign Office advice
	een trained and given all necessary information ntres are used for rural field work
	ar appropriate clothing and footwear for the specified environment
trained leaders acc	
refuge is available	
work in outside org	anisations is subject to their having satisfactory H&S procedures in place
	48

implemented:	OL MEASURES: plea	ase specify	any other control measures you have
EMERGENCIES	Where emergend risks	cies may a	rise use space below to identify and assess any
e.g. fire, accidents	Examples of risk:	loss of pro	operty, loss of life
No			
CONTROL MEASURES	Indicate which p	rocedures	are in place to control the identified risk
 contact numbers participants have participants have a plan for rescue the plan for rescue 	for emergency service means of contacting been trained and giv has been formulated ue /emergency has a	ces are kno emergeno ven all neco I, all parties reciprocal	essary information s understand the procedure
OTHER CONTRO implemented:	OL MEASURES: piea	ase specity	any other control measures you have
implemented:	OL MEASURES: piea	ase specny	any other control measures you have May 2010
implemented:	Is equipment used?	NO	· ·
implemented: FIELDWORK 1 EQUIPMENT	Is equipment used?	NO	May 2010 If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks ate, failure, insufficient training to use or repair,
implemented:	Is equipment used? Examples of risk: injury. Is the risk h	NO inappropri nigh / medi	May 2010 If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks ate, failure, insufficient training to use or repair,
implemented: FIELDWORK 1 EQUIPMENT a.g. clothing, outboard notors. CONTROL MEASURES the departmenta participants have all equipment ha all users have be special equipme	Is equipment used? Examples of risk: injury. Is the risk h Indicate which pr al written Arrangement been provided with as been inspected, be een advised of correct int is only issued to pe	NO inappropri nigh / medi rocedures it for equip any neces ifore issue ifore issue ersons trai	May 2010 If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks ate, failure, insufficient training to use or repair, um / low ? are in place to control the identified risk

ONE WORKING	Is lone working a possibility?	YES	If 'No' move to next hazard If 'Yes' use space below to identify and asses any
g. alone or in isolation ne interviews.	Examples of risk: o	difficult to	risks summon help. Is the risk high / medium / low?
one Interviews- Low risk.			
ONTROL MEASURES	Indicate which pro	ocedures	are in place to control the identified risk
whistle all workers are ful	lly familiar with emerg	gency pro	in the event of an emergency, e.g. phone, flare, cedures
implemented:		-	y any other control measures you have ocation and time of interviews
implemented:		-	
implemented:		-	ocation and time of interviews

LL HEALTH	below to identify a	and asses	ss any	s represents a safety hazard. Use space risks associated with this Hazard.
e.g. accident, illness,	Examples of risk: ir	njury, asth	ıma, all	ergies. Is the risk high / medium / low?
personal attack, pecial personal considerations or rulnerabilities.	Low risk			
CONTROL MEASURES	Indicate which pro	ocedures	are in	place to control the identified risk
all participants	s have had the necess ave been advised of th ed	ary inocul ne physica	lations/ al dema	t aid kits are present on the field trip carry appropriate prophylactics ands of the trip and are deemed to be
participants has encounter	ave been adequate ad	vice on ha	armful	plants, animals and substances they may
participants w		have advi	rised th	e leader of this and carry sufficient medicatio
	-	ease spec	cify any	y other control measures you have
	-	ease spec	cify any	y other control measures you have
	-	ease spec	cify any	y other control measures you have
OTHER CON implemented:	TROL MEASURES: pl		cify any	
OTHER CON implemented:	TROL MEASURES: pl	NO		Move to next hazard
OTHER CON implemented:	Will transport be required	NO YES	YES	Move to next hazard Use space below to identify and assess any risks
	Will transport be required Examples of risk: a training	NO YES accidents	YES	Move to next hazard Use space below to identify and assess
OTHER CON implemented:	Will transport be required Examples of risk: a	NO YES accidents	YES	Move to next hazard Use space below to identify and assess any risks
OTHER CON implemented:	Will transport be required Examples of risk: a training Is the risk high / me Low risk	NO YES accidents a adium / lov	YES arising w?	Move to next hazard Use space below to identify and assess any risks
CONTROL CONTR	Will transport be required Examples of risk: a training Is the risk high / me Low risk Indicate which properties	NO YES accidents a addium / lov	YES arising w? are in	Move to next hazard Use space below to identify and assess any risks from lack of maintenance, suitability or
CONTROL AEASURES CONTROL Donly public tra the vehicle wi	Will transport be required Examples of risk: a training Is the risk high / me Low risk Indicate which pro Insport will be used Ib e hired from a reput	NO YES accidents accident	YES arising w? are in	Move to next hazard Use space below to identify and assess any risks from lack of maintenance, suitability or place to control the identified risk
CONTROL CONTR	 Will transport be required Examples of risk: a training Is the risk high / me Low risk Indicate which products Indicate from a reput to be properly maintain 	NO YES accidents accidents adium / lov ocedures table supp ed in com	YES arising w? are in plier pliance	Move to next hazard Use space below to identify and assess any risks from lack of maintenance, suitability or
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CONTROL CONTR	Will transport be required Examples of risk: a training Is the risk high / me Low risk Indicate which product of the properly maintaining Is be hired from a reputite to properly maintaining with UCL Policy on E to properly maintaining with UCL Policy on E to proper the properly maintaining	NO YES accidents a edium / low ocedures table supp ed in com Drivers htt the approp prevent o	YES arising w? are in plier pliance tp://ww priate li driver/o	Move to next hazard Use space below to identify and assess any risks from lack of maintenance, suitability or place to control the identified risk e with relevant national regulations w.ucl.ac.uk/hr/docs/college_drivers.php icence operator fatigue, and there will be adequate
CONTROL ACCONTROL CONTROL CON	 Will transport be required Examples of risk: a training Is the risk high / me Low risk Indicate which product of the properly maintained and hold to be hired and hold to be properly maintained and hold to be properly maint	NO YES accidents a edium / low ocedures table supp ed in com Drivers htt the approp prevent o	YES arising w? are in plier pliance tp://ww priate li driver/o	Move to next hazard Use space below to identify and assess any risks from lack of maintenance, suitability or place to control the identified risk e with relevant national regulations w.ucl.ac.uk/hr/docs/college_drivers.php icence operator fatigue, and there will be adequate

OTHER CONTROL MEASURES: please specify any other control measures you have implemented: Transport will only be used in the normal way, to get from one place to another. The risk will be no greater than in everyday life. DEALING WITH THE Will people be If 'No' move to next hazard YES PUBLIC dealing with If 'Yes' use space below to identify and assess public any risks e.g. interviews, Examples of risk: personal attack, causing offence, being misinterpreted. Is the observing risk high / medium / low? Low Risk CONTROL Indicate which procedures are in place to control the identified risk MEASURES \boxtimes all participants are trained in interviewing techniques \square interviews are contracted out to a third party \boxtimes advice and support from local groups has been sought \boxtimes participants do not wear clothes that might cause offence or attract unwanted attention \boxtimes interviews are conducted at neutral locations or where neither party could be at risk OTHER CONTROL MEASURES: please specify any other control measures you have implemented: FIELDWORK 3 May 2010 WORKING ON OR Will people work If 'No' move to next hazard NO on NEAR WATER or near water? If 'Yes' use space below to identify and assess any risks e.g. rivers, marshland, Examples of risk: drowning, malaria, hepatitis A, parasites. Is the risk high / sea. medium / low? N/A CONTROL Indicate which procedures are in place to control the identified risk MEASURES 52

 coastguard inform prove a threat all participants are participants alway boat is operated to all boats are equiperaticipants have 	e competent swimmers vs wear adequate prote by a competent person oped with an alternativ received any appropria	II work takes place s ective equipment, e n re means of propuls ate inoculations	outside those times when tides could e.g. buoyancy aids, wellingtons sion e.g. oars r control measures you have implemented:
MANUAL HANDLING (MH)	Do MH activities take place?	NO	nove to next hazard use space below to identify and assess
e.g. lifting, carrying, moving large or heavy equipment, physical unsuitability for the task.	Examples of risk: stra	iin, cuts, broken bo	ones. Is the risk high / medium / low?
CONTROL MEASURES	Indicate which proc	edures are in plac	ce to control the identified risk
 the supervisor ha all tasks are within such activities all persons perfor equipment compo any MH task outs 	ming MH tasks are ad onents will be assembli ide the competence of	assessment course prsons physically ur equately trained ed on site i staff will be done h	nsuited to the MH task are prohibited from
N/A FIELDWORK 4			May 2010
		53	

SUBSTANCES	Will participants work with	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any
	substances		risks
e.g. plants, chemical, biohazard, waste N/A	high / medium / low?		oisoning, infection, illness, burns, cuts. Is the risk
CONTROL MEASURES	Indicate which proc	cedures	are in place to control the identified risk
 all participants a they may encou participants who needs 	are given information, transfer	aining and Ivised the	ng with hazardous substances and waste are followed d protective equipment for hazardous substances leader of this and carry sufficient medication for their
suitable contain	ers are provided for haz	ardous w	aste any other control measures you have implemented:
suitable contain	ers are provided for haz	ardous w	
Suitable contain	ers are provided for haz ROL MEASURES: pleas Have you identified any other hazards?	zardous w se specify	any other control measures you have implemented: If 'No' move to next section If 'Yes' use space below to identify and assess any
Suitable contain OTHER CONTR OTHER HAZARDS i.e. any other hazards must be noted and	ers are provided for haz ROL MEASURES: pleas identified any other hazards? Hazard: N/A Risk: is the risk	NO	any other control measures you have implemented: If 'No' move to next section If 'Yes' use space below to identify and assess any
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Have you identified ar adequately controlled		NO NO Move to Declaration YES D Use space below to identify t action was taken	he risk and what
s this project subject Research?	to the UCL requirement	ts on the ethics of Non-NHS Human	Yes
f yes, please state yo	ur Project ID Number		
or more information,	please refer to: <u>http://e</u>	thics.grad.ucl.ac.uk/	
DECLARATION		essed whenever there is a significant char pating in the work have read the assessm	
Select the appropr		y and associated risks and declare that th	ere is no
significant residual		,	
risk			
	nave assessed the activit	y and associated risks and declare that th	e risk will be
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