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Accessibility and inclusivity of bus and coach

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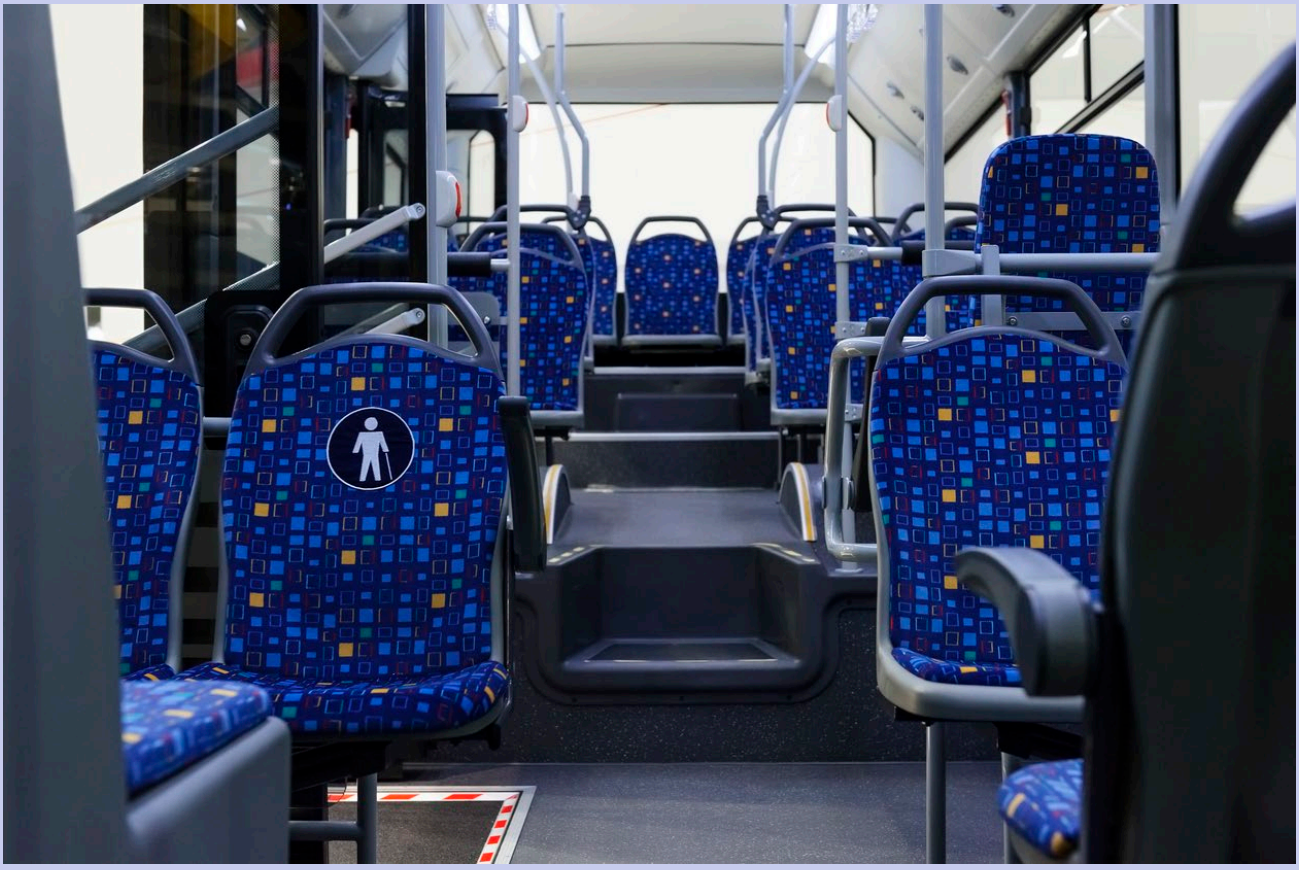
Prepared for: Department for Transport



APRIL 2024

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This project was carried out in compliance with ISO20252

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Executive Summary

This report presents findings from research exploring the accessibility and inclusivity of bus and coach services. A recent Department for Transport (DfT) evidence review of bus and coach use among disabled people and those with certain other protected characteristics identified gaps in existing research evidence, particularly with respect to certain health conditions and impairments and coach use. This project was commissioned to fill some of the gaps identified and to deepen understanding of this area.

This research was commissioned to specifically develop further understanding of:

- Accessibility and inclusivity of bus and coach vehicles, including perceptions of bus and coach and barriers and enablers to the use of bus and coach; and,

- Best practice in relation to bus and coach stops and stations, including key features that enable accessibility and the desirable features that would enhance accessibility and inclusivity, including personal safety.

In order to address these aims, a mixed-methods research project was designed to understand the experiences of bus and coach users. The qualitative phase consisted of focus groups and online travel diaries with disabled bus users and accompanied journeys on coaches with disabled passengers. The focus groups explored disabled bus and coach users' positive and negative experiences and what contributed to these. The accompanied coach journeys provided in-depth, in-the-moment insights into experiences of coach travel.

Findings from the focus groups were used to inform the design of an online quantitative survey with both disabled and non-disabled bus users. The survey sought to quantify the challenges faced by bus and coach users and determine how difficult and common these are.

Overall findings

Disabled people reported challenges across all stages of their journeys by bus and coach, with improvements required for stops, stations and vehicles. Basic provision, such as seating, shelter and timetables at bus stops and functional boarding aids for vehicles are not always available and have a pronounced impact on user experiences of bus and coach.

As has been highlighted in other research, confidence plays a key role in frequency of use of bus. Confidence was higher among frequent users; this group tended to have impairments or conditions that prohibited them from using other transport modes. Those less confident with using the bus, often due to anxiety, or who found it physically exhausting, were less likely to travel this way.

Factors influencing coach use tended to be more practical, such as proximity to a station and perceptions of comfort. Coaches were often compared with other transport modes; they were viewed favourably when compared to buses, due to assigned seating and less crowding, but negatively when compared to trains, due to being slower and offering less opportunity to move around.

While disabled passengers broadly feel that bus and coach services meet their needs, they report specific barriers to use. For bus, this includes not only physical features, such as lack

of seating and shelter at bus stops, but also inadequate provision of timetable information at stops, over-crowding onboard vehicles and bus drivers who pull away before ensuring passengers are seated. For coach, emphasis was placed on the lack of accessible toilets at stations and onboard vehicles, the height and number of steps required to board and access seating, and the limited opportunities to leave the coach during the journey.

There was a geographic inequity in the quality and provision of bus services particularly. Those living in urban areas tended to be frequent bus users and particularly so for those living in London. Those in rural areas encountered challenges, such as travelling for more than 10 minutes to get to a bus stop or bus stops lacking shelter.

Journey planning

- Routes to stops and stations that are physically demanding or dangerous, due to length, topography and lack of pedestrian crossings, pose problems for disabled people.
- Lack of accessibility information and an inability to book accessible seating for non-wheelchair users are pronounced challenges whilst booking coaches.

- **Suggested areas for improvement:** assess infrastructure around bus stops to ensure they are in close proximity to a pedestrian crossing. Improve accessibility information and booking processes for coach travel.

At stops and stations

- A lack of shelter and seating can cause disabled people discomfort and even pain whilst waiting for the bus.
- Lack of accessible toilets pose a problem for disabled people, particularly at coach stations.
- A lack of accessible timetable information at stops and stations can increase stress and anxiety among passengers.

- **Suggested areas for improvement:** prioritise shelter, seating and accessible timetable information across stops and stations.

Boarding

- If boarding aids, including vehicle lowering, ramps or lifts cannot be used, travel can be rendered impossible for disabled passengers, particularly for those who use wheeled aids such as wheelchairs or mobility scooters.

- **Suggested areas for improvement:** ensure boarding aids are operational across vehicles and provide better driver training to encourage proactive use of these.

On board

- Crowding onboard bus vehicles has a pronounced impact on disabled passengers, causing stress, anxiety and unease as well as increasing the risk of falls.
- Drivers pulling away before passengers are seated can put them at risk of injury and cause anxiety.
- Lack of accessible toilets on board can leave coach passengers in discomfort, a problem exacerbated by an inability to leave the coach during journeys.

- **Suggested areas for improvement:** address challenges of crowding and provide better driver training to communicate the needs of disabled passengers.

Although disabled passengers tend to be impacted more strongly by the challenges outlined across bus and coach journeys, non-disabled passengers are still affected by them. Improvements that would have a pronounced impact across all bus and coach users include: provision of shelter and useable timetable information at stops and stations, improved signage at bus and coach stations, drivers allowing passengers to sit down before pulling off, and reduced crowding and adequate handrails onboard vehicles. Additional improvements geared specifically towards disabled passengers include: provision of seating at bus stops and stations, unimpeded access to priority seating onboard vehicles, and pedestrian crossings around bus stops and stations.

1. Introduction

This report presents findings from research exploring the accessibility and inclusivity of bus and coach services. A recent Department for Transport (DfT) evidence review of bus and coach use among disabled people and those with certain other protected characteristics identified gaps in existing research evidence, particularly with respect to certain health conditions and impairments and coach use. This project was commissioned to fill some of the gaps identified and to deepen understanding of this area.

1.1 Research background

In February 2023, the DfT commissioned an evidence review into bus and coach travel among disabled people and those with certain other protected characteristics. The research found that disabled people experience a range of challenges when travelling by bus, including those related to physical barriers, a lack of accessible information and difficulties when engaging with other passengers and staff. These barriers were identified as having the potential to discourage disabled people from making certain journeys or travelling at all, hindering personal autonomy and making disabled people more reliant on others.

Alongside these findings, several gaps in the evidence base were identified, and recommendations were made for further primary research. The needs of specific groups of disabled people, the understanding of the infrastructure of the end-to-end journey and evidence related to coach travel were all felt to be areas where further research would be beneficial.

This report aims to provide insights to: validate the previous findings of the evidence review; address the gaps in the evidence base; and expand the knowledge base available on how disabled and non-disabled people experience bus and coach travel, including identifying those challenges that impact disabled people the most when travelling by bus and coach. The findings from this study will inform ongoing work on the future accessibility and inclusivity of bus and coach travel.

1.2 Research aims

This project was commissioned to address identified gaps in the evidence base of bus and coach travel, by developing a deeper understanding of:

- accessibility and inclusivity of **bus and coach vehicles**, including perceptions of bus and coach and barriers and enablers to the use of bus and coach; and,
- best practice in relation to **bus and coach stops and stations**, including key features that enable accessibility and the desirable features that would enhance accessibility and inclusivity, including personal safety.

To achieve these two core aims, the research sought to answer several research questions connected to each and understand the wider context within which people travel by bus and coach. These research questions are set out below.

- What factors influence disabled people's decisions about whether, when and where to travel by bus and coach?

The following questions aimed to understand the accessibility and inclusivity of bus and coach vehicles.

- What are disabled people's perceptions and experiences of vehicle accessibility, and how does this vary by type of impairment and vehicle type?
- What are the barriers and enablers that influence vehicle accessibility, and how do these factors vary by type of impairment? What other factors affect journey experiences?
- What is the impact of accessibility barriers in relation to vehicles and what are the potential impacts that removing these barriers could have?

And to meet the objective of identifying design features to enhance accessibility and inclusivity of bus and coach stops and stations, the research sought to answer the following:

- What are disabled people's perceptions and experience of the accessibility of stops and stations? How does this vary by type of impairment and type of stop/station? What other factors affect experiences at stops/stations?
- What are the essential features that enable accessibility of stops and stations? What are desirable features to enhance accessibility and how important are they?
- What is the impact of inaccessible stops and stations and what impact could improved accessibility have?
- What makes people feel safe at stops and stations? And what makes them feel un-safe? What can be done to improve feelings of safety?

1.3 Methods

The project used a mixed-method approach to gain rich insights into the experiences of disabled and non-disabled bus users. The qualitative phase consisted of two main elements: focus groups with travel diaries, and accompanied coach journeys. The quantitative research consisted of an online survey with a representative sample of disabled and non-disabled bus users to explore both bus and coach use. A brief overview of each method is provided in the following section with full details available in Appendix A.

1.3.1. Qualitative research phase

Online focus groups with disabled bus users were the key component of the first stage of the qualitative research. Participants for focus groups were recruited from the NatCen Panel and had all used a bus within the last year. Groups were structured around a single health condition or impairment to help people feel comfortable sharing their experiences. Seven groups were conducted as follows:

- vision impairment
- hearing impairment
- mental health conditions
- mobility impairment – walking aid user
- mobility impairment – wheelchair and/or mobility scooters users
- cognitive impairment
- other non-visible health conditions.

While participants were recruited on the basis of their 'main' impairment, it is important to note that often participants reported having multiple conditions or impairments that affected their travel. Where participants felt unable to participate in a group discussion due to their health condition or impairment, depth interviews were offered, and seven were conducted.

Focus group participants were also offered the opportunity to complete 'travel diaries' for up to five bus journeys in the week leading up to their focus group. Travel diaries provided insights into the day-to-day journeys conducted by participants and encouraged reflection on key discussion areas in advance of the focus group. A total of 38 disabled bus users participated in the focus groups, 17 of whom also completed diaries. For full details of the achieved sample see Appendix B.

In order to gain a deeper understanding of everyday experiences of coach use, the second stage of the qualitative research consisted of 15 accompanied journeys on coaches. These journeys enabled the research team to capture 'in the moment' feedback of participant experiences, but also observational data. Disabled participants who had one of the health conditions or impairments listed above were invited to complete a journey with a researcher. Measures were taken to preserve the health and safety of passengers and the duration of journeys was limited to between one and three hours. Recruitment for this stage of the research took place through third sector organisations; snowballing through personal contacts of the research team; the NatCen panel; and a recruitment agency.

1.3.2. Quantitative research phases

Early insights from the focus groups were used to inform the questionnaire design for the quantitative research. A 20-minute online survey covering both bus and coach use was conducted with a representative sample of disabled (n=1458) and non-disabled (n=1008) bus users using a non-probability panel. Use of a non-probability panel meant that only people already signed up to the research panel could take part in the survey, rather than anyone selected at random from the general public. In order to ensure the sample was as representative of the general public as possible, a nationally representative random probability dataset was used to establish quotas (see Appendix B). Quotas provide recruitment targets for what proportion of the final survey sample should come from different demographic groups. Where quotas were not met in this survey, weights were applied. This means that the data was adjusted to represent the target quotas (see Appendix B). Nevertheless, it is possible that people who signed up to the panel may be systematically different from people who did not, and if these differences are relevant to the topic of the survey, then this would bias the results. As a result, readers should avoid generalising percentages to the wider population. Instead, the findings presented here should be treated as indicative rather than authoritative.

Both descriptive analysis and advanced statistical analysis of the quantitative data were conducted. Descriptive analysis focussed on exploring and comparing experiences of key sub-groups, for example looking at the number of participants who would find certain scenarios related to bus and coach travel to be difficult and how this varied between those with an impairment and those without. Significance testing at the 95% level was carried out to explore key differences between groups. If there is a difference between two groups in a survey, this does not guarantee that the same difference exists in the wider population, because a survey only collects data from a sample of the wider population. When a difference between groups is statistically significant at the 95% level, this means that the reader can be 95% confident that the difference exists in the wider population as well. For the advanced

statistical analysis, Total Unduplicated Reach and Frequency (TURF) Analysis was utilised. This is a type of statistical analysis used to identify the optimum mix of service enhancements to satisfy the accessibility and inclusivity needs of the largest number of respondents. More detail on this analysis method can be found in Appendix A.

1.4 Interpreting the research

Throughout the report, the findings are presented thematically with findings from both the quantitative and qualitative phases of the research integrated wherever possible. For some themes, there may be more reliance on quantitative findings, while for others more evidence was gained through the qualitative research. For the quantitative findings, differences between sub-groups are only reported where they are statistically significant. Where the size of subgroup populations were low (fewer than 50) findings were not reported. Qualitative insights are presented without numbers, since qualitative research cannot support numerical analysis. This is because purposive sampling seeks to achieve range and diversity among research participants rather than to build a statistically representative sample.

While efforts were made to make the study as inclusive as possible, there were some limitations to the research that are important to note. Firstly, focus groups were conducted online which could have impeded the ability of those with limited digital literacy to participate. This was mitigated by offering telephone interviews to those who felt they would struggle to access an online group. The research did not include British Sign Language (BSL) interpreters at focus groups or for accompanied journeys, which may have acted as a barrier to participation for certain individuals with hearing impairments. Finally, while the online survey was tested for screen reader compatibility, use of an online panel provider is also likely to mean that those with limited digital accessibility were excluded. This exclusion means that the views of these groups were not included in the research.

1.5 Structure of the report

The report is structured as follows.

- Chapter 2: drawing from data produced in the quantitative research, this chapter provides an overview of bus and coach travel. It outlines how frequently buses and coaches are used, for what purposes and general perceptions of bus and coach travel.

- Chapter 3: drawing on both survey data and qualitative insights from the focus group and travel diaries, this chapter explores each stage of a bus journey in detail. It looks at features of both stops and stations and vehicles that support or hinder accessibility and also considers views on physical and personal safety.

- Chapter 4: drawing primarily on the qualitative findings from the accompanied coach journeys, this chapter explores accessibility across the entire coach journey. These findings are complemented by insights from the survey and focus groups where available.

- Chapter 5 presents findings related to the improvements that could be made to both bus and coach journeys to support accessibility. It also presents the results of the TURF analysis to identify the package of features that would meet most needs.

- Chapter 6 presents the conclusions of the report.

2. Understanding bus and coach use

This chapter explores frequency of bus and coach use across disabled and non-disabled users as well as describing when and why disabled passengers choose to use buses and coaches.

Frequent bus users are defined as using the bus at least once a week in the last 12 months. Infrequent bus users are defined as using the bus once a month or less. Participants had to have used the bus in the last 12 months to be eligible to participate in the survey. The definitions for coach users differ slightly, with frequent coach users using the coach at least once a month, while infrequent coach users are those who use a coach at least once a year. For coach use, a category that covered those who have never used the coach was included.

Key findings

- Disabled people were more likely to be frequent bus users than non-disabled people. However, the inverse was the case for coach use. Coach use was also less frequent overall across the sample.

- Disabled people were more likely than non-disabled people to say that bus services do not meet their needs, but all bus users would use buses more if the service was improved. Disabled people with mobility impairments, mental health conditions and visual impairments were all more likely to find using the bus difficult than disabled people without those conditions.

- Perceptions of coach use were often shaped by comparisons to travel by bus or by train. When compared with buses, coaches tended to be described favourably. However, coach was often seen as a less preferable option when compared with trains.

2.1 Frequency of bus and coach use

Frequency of bus use was shaped by a number of key factors.

- Disabled passengers used the bus more frequently than non-disabled passengers.
- Those living in urban areas used the bus more frequently than those in rural areas.
- Those more confident using the bus travelled by bus more frequently than those who were not confident.
- The availability of bus services also impacted how frequently bus services were used.

Key demographics differences did not drive frequency of coach use. Among disabled passengers in focus groups, lack of coach use was commonly driven by issues with accessibility and comfort. Another reason given was the inconvenient location of coach stations in terms of distance from their homes, and the lack of connecting buses to get them to and from the coach.

2.1.1. Buses

Disabled survey respondents were more likely to be frequent bus users than non-disabled respondents. Just over a third (35%) of disabled participants indicated that they were frequent bus users compared to only 29% of non-disabled participants.

Disabled focus group participants reported a number of reasons for choosing to use the bus, including inability to use other transport modes, confidence, affordability and convenience.

- **Unable to use other travel modes:** Participants described using the bus because they are not able to drive or walk due to their impairment. Buses were also viewed more positively and as preferable to using the underground by those with mobility impairments or mental health conditions living in London.
- **Confidence:** Participants who were more confident using the bus were more likely to use it regularly for essential journeys, for example commuting to work daily.
- **Affordability:** One view shared was that bus travel is preferable because it is less expensive than driving and paying for parking.
- **Convenience:** Bus travel can be quicker than driving, particularly in London.

On the other hand, disabled participants who did not use the bus frequently cited lack of confidence and the impact of their impairment or condition as the key reasons.

- **Lack of confidence:** Those less confident with travelling by bus only used it when it was absolutely necessary (for example to travel to medical appointments), or at less busy times of the week or day. Factors that impacted confidence included anxiety about crowding, about not being able to find a seat or about buses being late or cancelled.
- **Impact of impairment or condition:** For disabled participants who did not use the bus frequently, the main reason was the impact of their impairment or health condition. For example, some participants with mobility impairments or chronic fatigue avoided bus travel whenever possible as they found it physically exhausting. Some also found it mentally exhausting; those with a mental health condition found the unreliability and crowdedness of buses stressful and anxiety-inducing. Similarly, the difficulty of interacting with the bus driver was raised among people with hearing impairments.

Location also played a role in how frequently the bus was used. Just over a third (34%) of participants living in urban areas were frequent bus users compared to only a quarter (25%) of those living in rural areas, likely due to there being fewer buses and bus stops in rural areas. Additionally, those living in London were more likely to be frequent bus users, with 51% of London residents using the bus frequently.

2.1.2. Coaches

Coach use was less frequent than bus use across respondents, and there was no difference between disabled and non-disabled people when frequent coach users are considered. Fewer than one in five (16%) disabled participants were frequent coach users, a similar level to non-disabled participants (18%). Almost half (47%) of all survey respondents reported never using a coach, with disabled people being more likely (50%) than non-disabled (44%) to report this.

Disabled participants in the focus groups did not use the coach for a range of reasons, including inconvenience, lack of awareness of coach travel as an option, journey length and because they do not view it as accessible.

- **Inconvenience:** participants rarely had a coach station that was nearby or easy to get to, which contributed to the perception of coach travel as inaccessible.
- **Lack of awareness:** in addition to not having a station nearby, participants reflected that coach services were less widely advertised, contributing to them not being considered as an option for journeys.

- **Journey length:** although participants conceded that coach travel was often cheaper than trains, they were put off by the fact that coach journeys tended to be longer.
- **Inaccessible:** coach vehicles were viewed as particularly inaccessible by those who needed to use a mobility scooter or wheelchair (explored in more detail in chapter 4).

2.2 Journey purposes of bus and coach travel

Disabled participants used buses and coaches for a variety of reasons, with distinct journeys taken on each type of mode.

The most common reasons for taking the bus among disabled participants were essential journeys, such as going to the shops, commuting to work and attending medical appointments. Other, less frequent journeys included exercise, visiting the local town and getting to places of worship.

Coaches were often used to travel further distances, for example travelling to an airport, going on holiday or on a day trip, or visiting family. Coaches were also sometimes used to travel to other towns in the area, as a cheaper alternative to taking the train.

2.3 General perceptions of buses and coaches

2.3.1. Buses

Disabled bus users found it more difficult than non-disabled users to travel by bus, particularly those with a mobility or vision impairment or a mental health condition. Disabled bus users were less likely to be satisfied with their current local bus service than non-disabled bus users and suggested they would travel by bus more often if their local bus service met their needs.

Disabled bus users were less likely to find it easy to travel by bus, and less likely to agree that their local bus service meets their needs than non-disabled participants. Just over half of disabled bus users (56%) agreed or strongly agreed with the statement “I find it easy to travel by bus”, compared to 73% of non-disabled users. Those with a mobility or vision impairment or a mental health condition were all less likely to agree with this statement than other disabled people.

Disabled bus users were consistently less satisfied with their local bus service. When asked the extent to which they agreed with statements relating to whether bus vehicles, stops or stations met their needs, significantly fewer disabled participants indicated agreement, compared to non-disabled participants. Participants were able to select “does not apply to me” for any of the statements, and these responses were removed before calculating satisfaction. The proportion of participants who agreed or strongly agreed with each statement were:

- “The design of my local bus **vehicle** generally meets my needs” – 72% of disabled bus users compared to 82% of non-disabled bus users
- “The design of my local bus **stop** generally meets my needs” - 64% of disabled compared to 78% of non-disabled bus users.
- “The design of my local bus **station** generally meets my needs” - 63% of disabled bus users compared to 72% of non-disabled bus users.

Across the sample, those in London were more likely to agree than those in other regions that their local bus vehicle, stop and station met their needs. However, when it came to bus stations, both those in London and in the North were more likely to feel that their local stations meet their needs than those in the Midlands, East, South East and the West.

The research indicated that improved bus services could lead to both disabled and non-disabled users travelling by bus more often. Bus users who indicated that their bus service did not meet their needs were asked about the hypothetical impact of improved bus services on future use. More than half of all bus users agreed or strongly agreed that they would travel by bus more often if the service was improved. The proportion of participants who agreed or strongly agreed with each statement were:

- "I would travel by bus more often if the design of my local **bus vehicle** met my needs" – 63% of bus users;

- "I would travel by bus more often if the design of my local **bus stop** met my needs" – 60% of bus users; and,

- "I would travel by bus more often if the design of my **local bus station** met my needs" – 57% of bus users

The only difference between disabled and non-disabled respondents was for the design of local bus stations. Six in ten (61%) disabled bus users agreed or strongly agreed, compared to 48% of non-disabled bus users.

These findings indicate that improvements to bus vehicles and stops would encourage both disabled and non-disabled people to travel by bus more often. However, stations are a bigger barrier for disabled people than for non-disabled people and therefore improvements would benefit disabled people more. Frequent disabled and non-disabled bus users were also more likely to agree or strongly agree that they would travel by bus more often if their bus stop and station met their needs, suggesting that improving services would do more to encourage those who already use the bus to use it more often, and have less of an impact on those who do not currently use the bus frequently.

The focus groups revealed a spectrum of views among disabled bus users on their local bus service. At one end, there was the view that buses were convenient, accessible and affordable, while others found them inaccessible and stressful. There was agreement that confidence plays a large role in overall perceptions of buses. Often, participants would not use the bus if they were not feeling confident, both on the day of travel or in general. This was linked to the way their health condition or impairments impacted their travel, for example feeling embarrassment about not being able to hear the driver due to a hearing impairment or not wanting to ask for a seat despite having a mobility impairment, suggesting the attitudes of others can play a role in confidence using the bus. Participants tended to be confident with specific journeys that they knew well, and less confident if routes changed or the route taken was unfamiliar. On unfamiliar journeys, participants combated this worry by travelling with someone else.

2.3.2. Coaches

A range of perceptions of coaches arose from focus groups and interviews with disabled people. One view was that coaches were more comfortable and felt safer than buses, whereas another view was that coaches were uncomfortable and inaccessible.

Where perceptions of coaches were more favourable, this was usually when participants compared coach travel to bus travel. Coaches were viewed as more comfortable and less anxiety-inducing than buses due to assigned seating and lack of crowding. Compared to bus use, confidence was less of a consideration when travelling by coach and the main factors when considering coach travel were the closeness of a station and physical comfort. Other positive views shared on coaches focused on cost and convenience. Coaches were reported to be cheaper than trains and often took users straight into the centre of a town, which made them convenient. There were examples of coaches having heating and air conditioning, which improved perceptions of them. Coaches were also seen as offering a more personalised service, with more attentive drivers.

However, when compared to trains, coaches were viewed as uncomfortable, inaccessible and slow. A lack of a coach station near where participants lived was a common observation made by focus group participants. Comments also focused on a lack of leg room and toilets that were unsanitary or out of order. Trains were directly compared as being faster, more comfortable, more predictable and offering the chance to walk around.

3. Journeys by bus

This chapter explores experiences across an entire journey by bus. Taking each stage of the journey in turn, it outlines the key challenges faced by members of the public as they make their way to a bus stop or station, wait at a bus stop or station, board and alight from a bus and travel on a bus. The factors that contribute to a positive travel experience are also explored and defined. The final section explores feelings of safety throughout the bus journey.

Most of the quantitative data shared in this chapter are informed by the same style of question. Participants were presented with a set of hypothetical scenarios covering each stage of the bus journey. For each scenario, participants had to select whether it would make their journey: impossible or extremely difficult; very difficult; slightly difficult; or have no impact at all on level of difficulty.

3.1 Getting to the bus stop or station

This section outlines the challenges and positive experiences of bus users in relation to getting to a bus stop or station. Focus group participants tended to use bus stops more frequently than stations, therefore stops are the primary focus of this section.

Key Findings

- Scenarios related to getting to the bus stop, including travelling for more than 10 minutes to get there, steep or uneven routes and lack of pedestrian crossings would disproportionately impact disabled bus users.
- Nearly half of bus users who would be severely impacted by these scenarios reported encountering them regularly during their bus journeys in the last 12 months.
- Disabled bus users with mobility, vision, stamina, or dexterity impairments would be more likely to find each scenario challenging.

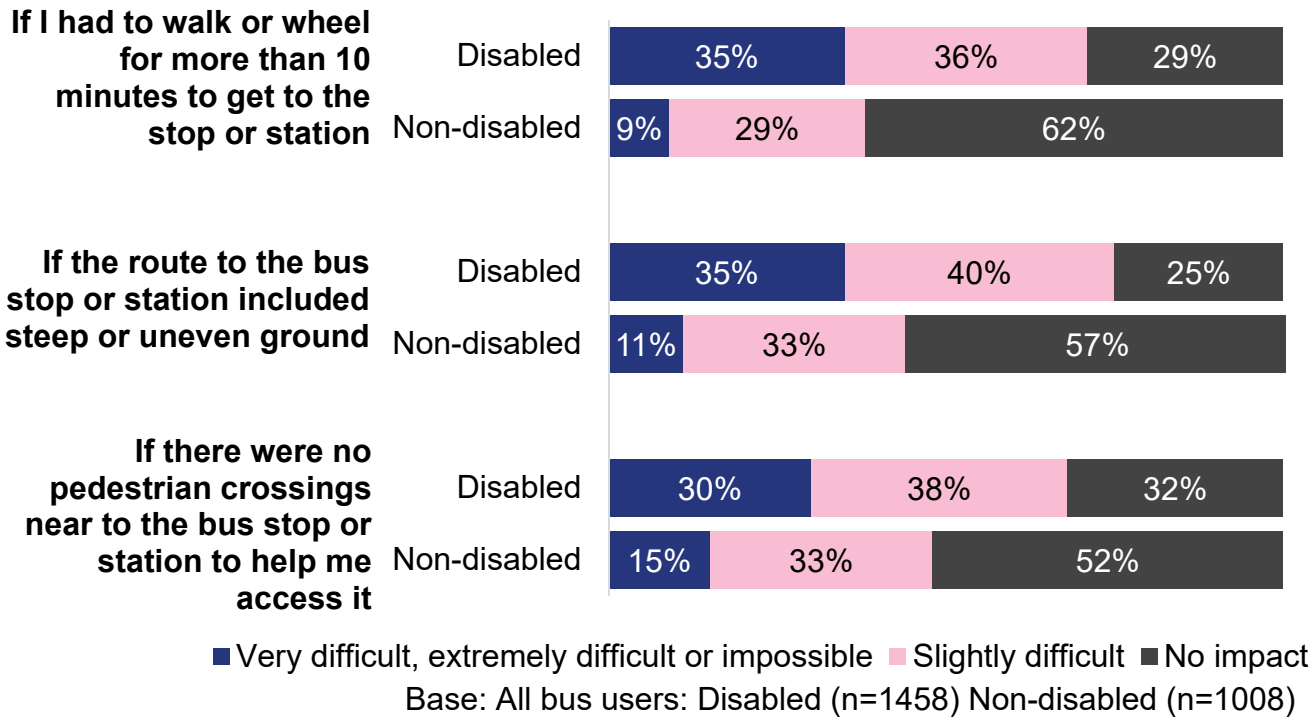
3.1.1. Physical environment

There were three key physical factors relating to the route to the bus stop that impacted experiences. As shown in Figure 1, the survey findings indicated that:

- **If bus users had to walk or wheel for more than 10 minutes to get to the bus stop or station**, 35% of disabled bus users compared to only 9% of non-disabled bus users would find it very difficult, extremely difficult, or impossible to get there. Only 29% of disabled bus users suggested this scenario would have no impact on difficulty at all, compared to almost two thirds (62%) of non-disabled bus users.
- **If the route to the bus stop or station included steep or uneven ground**, 35% of disabled bus users compared to just 11% of non-disabled bus users would find it very difficult, extremely difficult or impossible to get to the bus stop or station. Only a quarter (25%) of disabled bus users thought this scenario would have no impact on difficulty at all, compared to the majority (57%) of non-disabled bus users.
- **If there were no pedestrian crossings near to the bus stop or station,** 30% of disabled bus users compared to only 15% of non-disabled bus users would find it very difficult,

extremely difficult or impossible to get to the bus stop or station. Only a third (32%) of disabled bus users thought this scenario would have no impact on difficulty at all, compared to half (52%) of non-disabled bus users.

Figure 1 Impact of key scenarios on how difficult respondents would find it to get to a bus stop or station



Base: All bus users: Disabled (n=1458) Non-disabled (n=1008)

The distance to the bus stop, the topography of the route and the infrastructure near the bus stop could all contribute to making bus journeys more difficult for disabled bus users. Across the three scenarios, disabled people with a mobility, stamina, dexterity or vision impairment were more likely than other disabled people to report that they would find it very or extremely difficult or impossible to use the bus stop. Disabled people who used aids associated with these health conditions, such as wheeled aids (manual or motorised wheelchair or mobility scooter); walking aids (walking frame, stick or crutches) or a long cane, were also more likely than non-aid users to report this as very or extremely difficult or impossible. Among all bus users who reported that these scenarios would have a severe impact on their journey, approximately four in ten reported that this happened on some or most of their journeys in the last 12 months.

Long journeys to bus stops of 20 to 50 minutes were deemed by focus groups participants to be difficult or impossible, particularly for those with mobility impairments, because of the pain they experience when walking and the need to stop frequently to rest.

> *"In the morning, the bus stop is in the village, so it's only about a two-minute walk… but then in the afternoon, if we want to go into town,*

> *we've got a one-and-a-quarter mile walk…it's about 45-50 minute walk for me going along the road."* – bus user who uses a walking stick

Bus stop closures and infrequent services contribute to longer journeys to bus stops. Focus group participants described the physical difficulty of having to travel to a bus stop further away in these circumstances, but also the additional stress this could cause. A lack of scheduled services could lead to people having to use different bus stops (as in the quote above). Cancellations and changes to routes could also lead to longer journeys. Among participants with mental health conditions, the need to change plans last minute after coming across a closed bus stop caused anxiety due to fear of missing appointments, a disrupted routine or having to use an unfamiliar route.

> *"I recently had three bus routes cancelled so now my nearest bus stop is over a mile away."* – bus user who uses a wheelchair

Long journeys to bus stops were linked to location. Among bus users who reported that a journey of 10 minutes or more would have a severe impact, those living in rural areas were more likely to report that this occurred some or most of the time than those living in urban locations.

Bus stops located on hills were raised as a challenge in the focus groups among participants with mobility impairments. In contrast, routes with no potholes or obstacles in the way were described positively as they aided a smooth journey.

> *"A lot of my recent experience has been one of trying to find different ways to travel that actually minimises the amount of walking and minimises very specifically the amount of slopes."* – bus user who uses a walking stick

A strong emphasis was placed on the importance of well-placed pedestrian crossings around bus stops by focus group participants with mobility or vision impairments in particular. This was because they did not feel safe crossing busy roads without them. The survey showed there were no significant differences between rural and urban populations in how often this was experienced. One participant, who completed an online diary, described a situation where they alighted at a bus stop that was just a "*bit of worn grass*" on a 50mph road with no safe way to get across as shown in Figure 2.

Figure 2 Photo of a bus stop on a 50mph road, with no pedestrian crossing or bus stop sign visible

One positive example shared in focus groups and travel diaries that mitigated the difficulties of getting to the bus stop were local Demand Responsive Services (DRT) sometimes also called Dial-a-Ride. These services can pick people up at their homes, making the journey easier and more convenient. Among those who had access to these services, they were viewed very positively for their convenience, affordability, reliability and the more personalised service offered by drivers.

> *"My local Ring and Ride Service (…) is a godsend for me because of my limited ability of walking, they send you a mobile text informing you when the driver is on his way, upon arrival the driver helps you onboard."* - travel diary, wheelchair and walking aid user

3.2 At the bus stop or station

This section looks at experiences while waiting at a bus stop or station. Scenarios explored included those related to the physical environment and the provision of information. Where experiences were specific to either stops or stations this is clearly defined.

Key findings

- Shelter, seating and good lighting all contribute to positive travel experiences across the bus user population, particularly among disabled bus users. Disabled bus users with mobility, vision, stamina or dexterity impairments were more likely to report they would be affected by a lack of shelter, seating and good lighting.
- Many of those who would be negatively impacted by a lack of shelter or seating experienced it regularly on the bus journeys they have taken in the last 12 months.

- The availability of both accessible timetable information and live visual displays makes traveling easier for all bus users. However, live visual displays are not deemed as essential as timetable information.

- Disabled bus users with mobility, vision, stamina, dexterity or cognitive impairments and those with mental health conditions would be more impacted by a lack of timetable information than other disabled groups.

- Busy locations would contribute to making it more difficult for disabled bus users to use a bus stop, as would locations next to a cycle path. However, these scenarios would have a severe impact on a smaller proportion of disabled bus users.

3.2.1. Physical environment

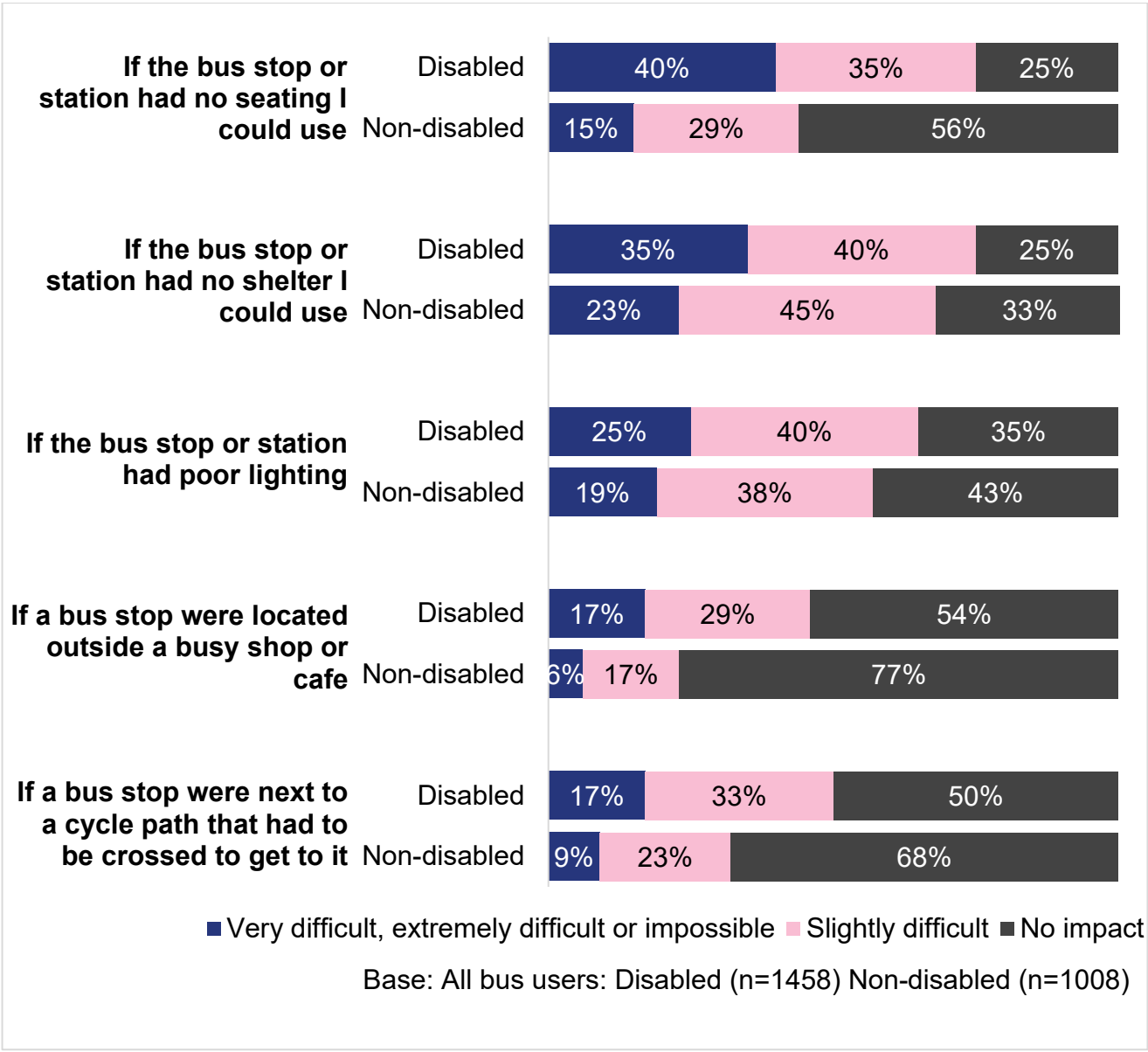
There were five key physical factors that influenced experiences of waiting at a bus stop or station. As shown in Figure 3, the survey findings indicate that:

- **If the bus stop or station had no seating bus users could use,** 40% of disabled bus users and 15% of non-disabled bus users would find it very difficult, extremely difficult or impossible to use. Only a quarter (25%) of disabled bus users thought this scenario would have no impact on difficulty at all, whereas over half (56%) of non-disabled bus users thought this.
- **If the bus stop or station had no shelter bus users could use,** 35% of disabled bus users and 23% of non-disabled bus users would find it very or extremely difficult or impossible to use. Only a quarter (25%) of disabled bus users and a third (33%) of non-disabled bus users thought this scenario would have no impact on difficulty suggesting lack of shelter affects everyone.
- **If the bus stop or station had poor lighting,** 25% of disabled bus users and 19% of non-disabled bus users would find it very or extremely difficult or impossible to use. Around a third (35%) of disabled bus users and 43% of non-disabled bus users suggested this scenario would have no impact at all on difficulty.

While the three scenarios above would impact a large proportion of disabled bus users, a smaller proportion of disabled bus users would be affected by the following two scenarios.

- **If a bus stop were located outside a busy shop or café,** the majority (54%) of disabled bus users thought this scenario would have no impact at all on how difficult they would find it to use a bus stop, rising to 77% among non-disabled bus users. Only 17% of disabled bus users and 6% of non-disabled bus users would find it very difficult, extremely difficult or impossible to use a bus stop in this scenario.
- **If a bus stop were next to a cycle path that had to be crossed to get to it,** 17% of disabled bus users and 9% of non-disabled bus users would find it very difficult, extremely difficult or impossible to use it. Half (50%) of disabled bus users and 68% of non-disabled bus users thought it would have no impact at all on difficulty.

Figure 3 Impact of key scenarios related to the physical environment on how difficult respondents would find it to use a bus stop or station



Lack of appropriate seating and shelter at bus stops or stations caused difficulties for disabled bus users. A lack of shelter was also widely reported to have some impact on journeys of the non-disabled population. Compared to other disabled groups, disabled bus users with mobility, stamina, dexterity and visual impairments were more likely to suggest that they would find it very difficult, extremely difficult or impossible to use a bus stop or station if there was no seating or shelter they could use. Once again, users of aids associated with these impairments were more likely than non-users to be severely impacted. Among those who reported that they would be severely impacted by the lack of seating and shelter, disabled bus users were more likely than non-disabled to have experienced it on some or most of the journeys in the last 12 months (58% vs. 46% for seating; 56% vs. 43% for shelter).

Seating was regarded as a necessity when using bus stops and stations particularly for those with mobility impairments who could find it uncomfortable or painful to stand. However, the seating available was not always appropriate. Among focus group participants, seating

provision was viewed negatively if it was: not a proper seat (i.e. if there was just a bar to lean on); uncomfortable; or if the behaviour of other passengers made it unusable (i.e. if passengers put their belongings on seats). Seating was often linked with shelter by participants as the two key elements shaping comfort. Protection from the weather was the key factor driving the importance of shelter in the focus groups.

> *"The problem I have is the fact that there's no shelter and no seats. So if the bus is cancelled or if it's running late and if the weather is really, really bad, I'm lumbered. Especially in the cold weather, it makes my arthritis a lot worse. That's really not good."* – bus user with anxiety and arthritis

Where participants expressed a preference for bus stations over stops, it was usually linked to the fact that bus stations were perceived to offer shelter and appropriate seating (along with other amenities).

Poor lighting at bus stops and stations could make using them difficult. Over half (58%) of those with a vision impairment thought it would be very difficult, extremely difficult or impossible to use a bus stop or station if it had poor lighting compared to 23% of other disabled people. Those with mobility, stamina, dexterity or cognitive impairments were also significantly more likely to indicate they would be severely impacted compared to other groups. Focus group participants stressed that a lack of light reduces visibility, which is a particular challenge for those who already face a vision impairment.

Bus stops in busy environments can pose challenges for disabled passengers. Only a small minority of disabled passengers thought it would be more difficult to use a bus stop if it were located outside a busy shop or café. However, disabled bus users with a vision or mobility impairment or whose health conditions did not fall into a clearly defined group, including those who are neurodivergent, were significantly more likely to indicate they would be impacted. Focus group participants within these impairment groups highlighted additional examples of how busy environments can negatively impact bus stop experiences, including: if multiple buses arrive at once, making it difficult to identify their bus; if two stops are close together, making it unclear which buses stop where; and if bus stops are too crowded, making it difficult to push to the front and get onto the bus.

> *"At the bus stops, there are many different numbers of buses that come along. As there's lots and lots of students around, it's quite often a bit of a scrum at the bus stop to make sure that the people that want the particular number get on it."* – bus user with a hearing impairment

Bus stops positioned next to cycle paths could be more difficult to use for disabled people. Disabled bus users with a mobility, stamina, dexterity, vision or cognitive impairment were more likely to indicate they would find this scenario at least very difficult than other disabled bus users. This was also the case among wheeled aid users, walking aid users, long cane users and hearing aid users. A quarter (26%) of disabled bus users in London, would find it very difficult, extremely difficult or impossible to use a bus stop in this scenario. Among disabled and non-disabled bus users who would find this scenario at least very difficult, 37% experienced it on most or some of their journeys, rising to 49% among bus users in London.

Other physical features of bus stops and stations that influenced experiences were the availability of toilets and cleanliness. Access to well-maintained and accessible toilets was

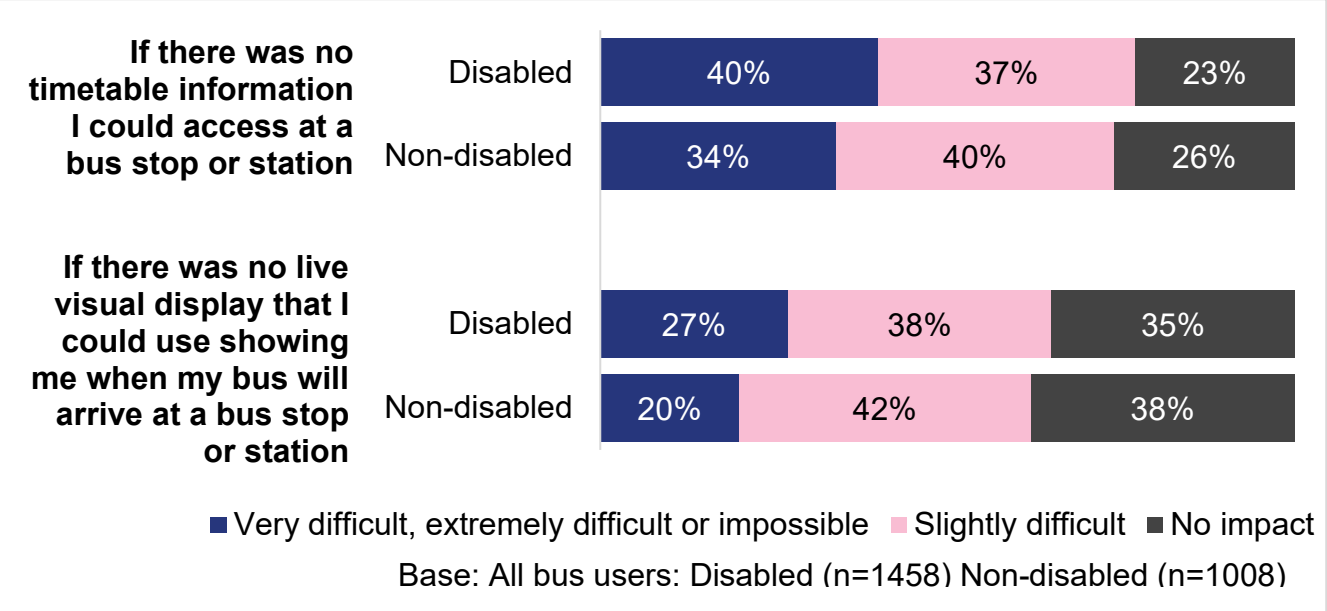
highlighted by focus group participants with non-visible health conditions, some of whom planned their journeys around this. Participants felt that toilets at bus stations were often unavailable, out of order, or not very well-maintained. Paid-for toilet facilities were also seen as inconvenient. Clean bus stops were viewed positively, while vandalised bus stops were highlighted as a problem, as features like shelter tended not to function properly.

3.2.2. Information

Availability of timetable information, both basic information and live updates, impact experiences of using a bus stop or station. As shown in Figure 4, survey findings indicate:

- **If there was no timetable information at a bus stop or station,** 40% of disabled bus users would find it very difficult, extremely difficult or impossible to use it, compared to 34% of non-disabled bus users. Around a quarter of all bus users (24%) suggested this scenario would have no impact at all on difficulty.
- **If there was no live visual display showing users when their bus would arrive at a bus stop or station,** 27% of disabled bus users and 20% of non-disabled bus users would find it very difficult, extremely difficult or impossible to use it. Just over a third of all bus users (36%) thought it would have no impact on difficulty.

Figure 4 Impact of key scenarios related to information on how difficult respondents would find it to use a bus stop or station



Lack of accessible timetable information, as well as live visual displays, make it difficult for both disabled and non-disabled bus users to use stops and stations. Lack of accessible timetable information was more likely to severely impact disabled bus users with mobility, dexterity, vision or cognitive impairments or mental health conditions. Among those who would be severely impacted by this scenario, it was a fairly frequent occurrence over the last 12 months. Particular challenges encountered by focus group participants in relation to timetables were: out of date timetables (which impacted not only the times buses arrived, but also where they stopped); paper timetables behind glass rendered unreadable in the winter because of condensation; and timetable text being too small to read.

A similar picture emerged for lack of live visual information. Those with dexterity, vision or cognitive impairments or mental health conditions and those whose condition did not fit into a named category, including neurodivergent passengers, were more likely to suggest they would be severely impacted. Additionally, among participants aged between 18 and 39, only 28% suggested this scenario would have no impact, which was significantly lower than other age groups. This suggests that younger passengers are more reliant on technology to make their journeys easier or have an expectation that this should be standard. The majority (58%) of those who would be severely impacted by an absence of live displays experienced it regularly during their bus journeys. The key benefit of live visual displays highlighted by focus group participants was removing uncertainty. Particularly for those with mental health conditions, live information removes the stress of worrying where their bus is. Where live updates were lacking from stops, apps were sometimes used to replicate their function. When these were accurate, they were viewed as positive tools to make bus journeys easier, but apps were not always found to be reliable.

> *"It causes a lot of stress about if I'm going to make it to where I need to get to on time as well. I do worry a lot about if I'm going to get to my job on time and things like that. I'll always pick a bus that's earlier than I need, just in case."* – bus user with anxiety and who uses a walking stick

3.3 Travelling on the bus

This section looks at scenarios related to travelling on the bus, including boarding and alighting, accessing seating and priority spaces, and navigating the bus vehicle.

Key findings

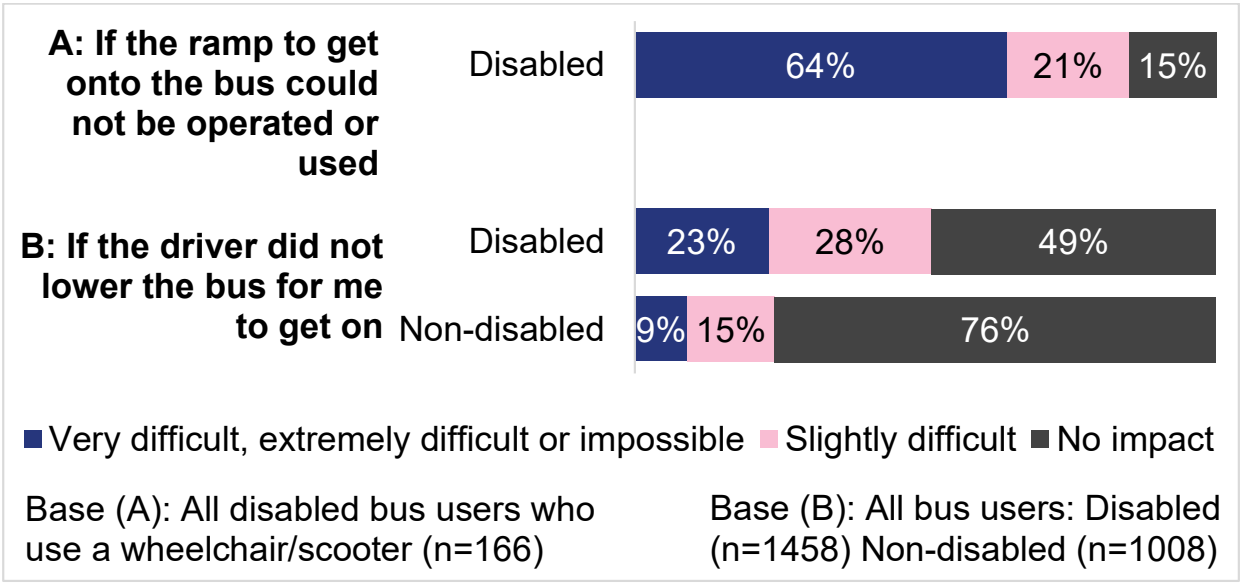
- Scenarios relating to boarding and navigating the bus were most likely to severely impact those with vision, mobility, stamina and dexterity impairments.
- Crowding and the bus pulling away before people are seated are issues that impact all bus users. However, disabled bus users are more likely to suggest they would be severely impacted by these scenarios.
- Access to priority seating was important to disabled bus users. Participants, particularly those with non-visible needs described the difficulties of having to ask other passengers to vacate a priority seat. However, assistance tools such as the Sunflower Lanyard were not necessarily viewed as the solution.
- A lack of audio and visual information on next stops would severely impact a smaller proportion of disabled people, but affects some groups such as those with vision, cognitive, hearing or mental health conditions more than others.
- Disabled people whose needs are typically less obvious to other people may be more likely to experience certain issues more frequently, or to find them more difficult (including younger disabled people, aged 18-39).

3.3.1. Getting on the bus

Features to support boarding are available on some bus vehicles. As shown in Figure 5, the survey findings indicated that:

- **If the ramp could not be used or operated**, 64% of wheelchair or mobility scooter users would find it very difficult, extremely difficult or impossible to use the bus.
- **If the driver did not lower the bus**, 23% of disabled people and 9% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus. This issue would have no impact on ease of travel for a substantially greater proportion of non-disabled people (76%) than disabled people (49%).

Figure 5 Impact of key scenarios on how difficult respondents would find it to get on the bus



If boarding aids are not utilised effectively, it can pose challenges for specific groups of disabled passengers. Disabled bus users with a mobility, stamina, dexterity or vision impairment were more likely to suggest that if a bus driver did not lower the bus, they would find it very difficult, extremely difficult or impossible to use the bus. This was also the case for wheeled aid users. However, those who did not use a wheeled aid and would be significantly negatively impacted by the scenario were more likely to experience it regularly than wheeled aid users. One potential explanation for this could be that it is typically less obvious to bus drivers when non-users require the bus to be lowered. An additional key boarding challenge for wheeled aid users was if the ramp to get onto a bus could not be operated or used. During focus groups and travel diaries, participants made clear that they preferred not having to ask for boarding aids to be deployed and believed drivers should be proactive in assessing their needs.

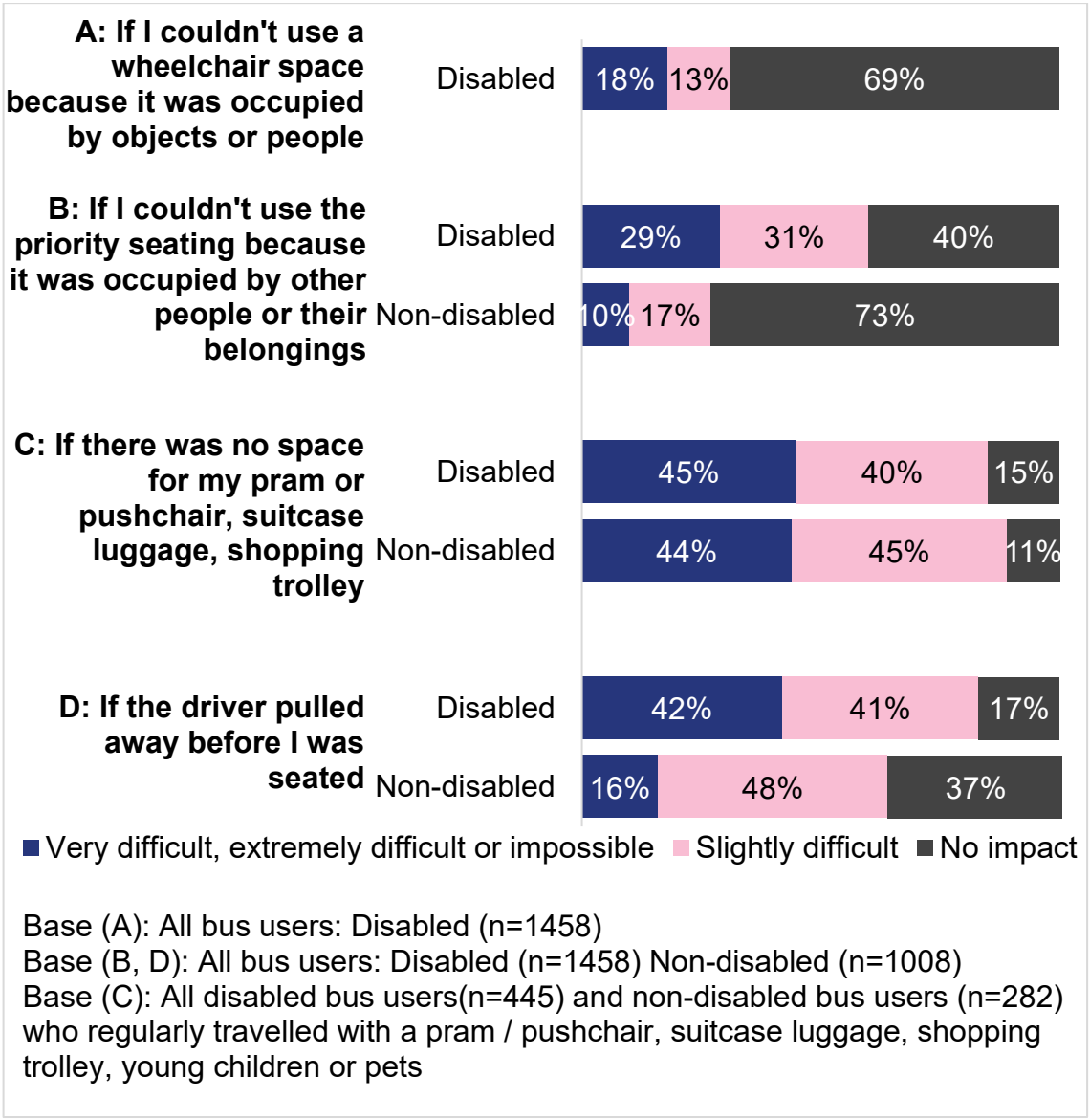
An additional boarding challenge raised by focus group participants was buying a ticket, due to the need to interact with the driver. This challenge was raised by participants with social anxiety and hearing impairments, who found that the thick glass of the driver's booth or drivers looking away can obscure communication. Mitigations to this included buying a digital ticket in advance of the journey.

3.3.2. When accessing seating or priority spaces

As shown in Figure 6, the survey findings indicated that:

- **If a wheelchair space could not be used because it was occupied by objects or people**, 18% of disabled people would find it very difficult, extremely difficult or impossible to use the bus, and for 69% this would have no impact (this question was asked of all disabled people, not just wheelchair users).
- **If priority seating could not be used because it was occupied by other people or their belongings**, 29% of disabled people and 10% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus. This issue would have no impact on ease of travel for a substantially greater proportion of non-disabled people (73%) than disabled people (40%).
- **If there was no space for a pram or pushchair, suitcase or shopping trolley**, overall, 45% of all people – disabled and non-disabled – who regularly travelled with at least one of those would find it very difficult, extremely difficult or impossible to use the bus. There were no significant differences in how disabled and non-disabled people answered this question.
- **If the driver pulled away before the person was seated**, 42% of disabled people and 16% of non-disabled people would find it very or extremely difficult or impossible to use the bus. This scenario would have no impact on ease of travel for only 17% of disabled and 37% of the non-disabled people.

Figure 6 Impact of key scenarios related to accessing seating or priority spaces on how difficult respondents would find it to use the bus



Base (A): All bus users: Disabled (n=1458)
Base (B, D): All bus users: Disabled (n=1458) Non-disabled (n=1008)
Base (C): All disabled bus users(n=445) and non-disabled bus users (n=282) who regularly travelled with a pram / pushchair, suitcase luggage, shopping trolley, young children or pets

Disabled bus users with certain impairments were more likely to be affected if designated priority areas of the bus were occupied. Those with a mobility, dexterity, vision or cognitive impairment were more likely to suggest they would find it very or extremely difficult or impossible to use a bus if the wheelchair space could not be used. This was also the case for wheeled aid, walking aid and long cane users. Similarly, those with a mobility, stamina, vision or dexterity impairment were more likely to indicate they would be severely impacted if the priority seating could not be used. Disabled passengers aged 18-39 were less likely to indicate they would be severely impacted by these scenarios than older age groups. However, those that indicated they would be severely impacted were more likely to report experiencing these scenarios regularly, suggesting that the needs of younger disabled passengers can be less obvious than older disabled passengers.

Among focus group participants, experiences of other passengers being deliberately slow or reluctant to vacate seating were widespread. Participants shared reservations about asking

passengers to move due to anxiety over the potential for unpleasant reactions or confrontation. One autistic participant, who also had a mobility impairment, described having days on which they struggled to communicate to other passengers why they require a seat and so chose not to travel on such days.

Focus group participants did not view journey assistance tools, such as the Hidden Disability Sunflower Lanyard, as adequate to address the problem of having to explain to others why use of a priority seat was necessary. These assistance tools were perceived to hold stigma and some participants felt that wearing one would single them out or draw unnecessary attention to their disability. These tools were not necessarily viewed as a solution, since they still require interaction with other people in a way that non-disabled people are not subject to. One participant, for example, explained they did not think they should have to 'justify' to other passengers why they require a seat at all.

> *"it would be good if the government can find a stronger way to let people without disabilities know that they should never sit in the priority seats […] if they are left for people with priority needs they would automatically feel comfortable about sitting down because they are aware that the seat is for them."* - Diary entry, walking aid user

Other issues related to seating included:

- **Backwards facing seats**. This presented two issues for those with hearing impairments, including preventing a clear view of visual displays and causing nausea.
- **A lack of individual seating**. This could contribute to social anxiety and discomfort for those with a mental health condition or could cause aggravation for participants who were sensitive to strong smells or loud noises.
- **Fold down seats**. Participants, including those with a mobility or vision impairment, expressed that fold down seating does not always offer them sufficient stability.
- **Cramped seats**. This could make sitting physically uncomfortable or painful for those with physical health conditions and/or those travelling with baggage, for example where seats are close together or lack leg room.

> *"The seat was uncomfortable as I couldn't fully stretch out my legs, but I noted that on another bus, the seats next to the exit the chairs can be turned around to allow passages with mobility problems to stretch out their legs and even rest their foot on the bars by the bus doors."* - Diary entry, walking aid user

Both disabled and non-disabled bus users would find it challenging to use a bus if there was no space for the items they travel with. If there was no space for a pram or pushchair, suitcase or shopping trolley, disabled bus users with a mobility or dexterity impairment, or a mental health condition were more likely to report they would find it very difficult, extremely difficult or impossible to use the bus. Disabled people who also travelled with a walking aid were also more likely to say this than those who did not. Female bus users were more likely to be severely impacted by this scenario than male bus users.

The majority of bus users (disabled and non-disabled) are impacted if the driver pulls away before they are seated. Disabled bus users with a mobility, stamina, dexterity, or vision impairment were more likely to suggest that they would find it very difficult, extremely difficult or impossible to use the bus in this scenario. Likewise, users of a wheeled aid, walking aid,

long cane, or hearing aid, were more likely to say this than non-users. Disabled passengers were more likely to experience this scenario regularly than non-disabled passengers, suggesting disabled bus users require longer to get to their seat, and are therefore less likely to have sat down before the bus driver pulls away. For disabled people who lived in London, this was more likely to happen during some or most journeys.

The qualitative research also reflected these findings. Participants described experiences where, for example, the bus had suddenly pulled out of or into a stop, and the loss of balance had either caused them pain or injury or risked doing so. One coping mechanism for this was sitting as close to the bus entrance as possible, to minimise standing time. Another was waiting for the bus to stop before standing up, but for some participants, doing so led to feelings of anxiety about holding the bus up.

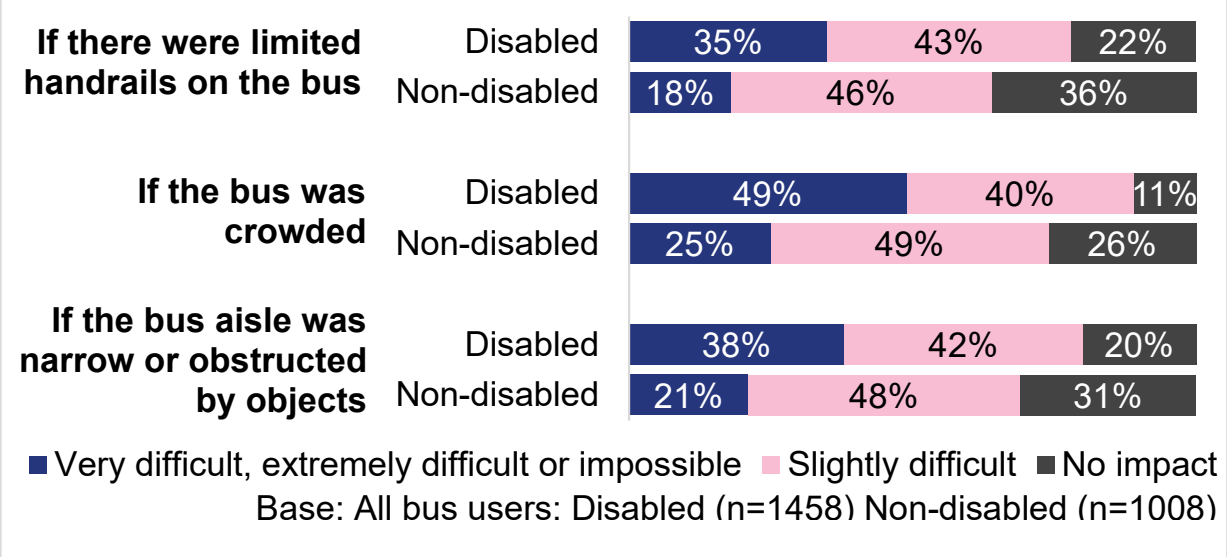
> *"I had an accident on a bus […] I really don't understand why, it's obvious that you've got a sight problem when you have a guide dog. It was standing room only on the bus. I wasn't able to hold on to anything because it was really crowded. Nobody offered me a seat […] as the driver was leaving the stop, he suddenly slammed on the brakes because there was somebody on the pavement waving down the bus to get on. I was flung from where the stairs were right to the front of the bus […] I was injured and ended up having surgery on my right arm"* – bus user with a vision impairment who uses an assistance dog

3.3.3. Navigating the bus

As shown in Figure 7, the survey findings indicated that:

- **If there were limited handrails**, 35% of disabled people and 18% of non-disabled would find it very difficult, extremely difficult or impossible to use the bus and the proportion for whom this would have no impact was 22% and 36%, respectively.
- **If the bus was crowded**, 49% of disabled people and 25% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus and the proportion for whom this would have no impact was 11% and 26%, respectively.
- **If bus aisle was narrow or obstructed by objects**, 38% of disabled people and 21% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus and the proportion for whom this would have no impact was 20% and 31%, respectively.

Figure 7 Impact of key scenarios related to navigating the bus on how difficult respondents would find it to use the bus



A lack of handrails and narrow or obstructed aisles were issues that impacted disabled people. Those with a mobility, stamina, dexterity, vision, or cognitive impairment were all more likely to report that they would find it very or extremely difficult or impossible to use the bus in these scenarios than other disabled bus users. Likewise, users of wheeled and walking aids or long cane were more likely to report they would be severely impacted than non-users. Among focus group participants, handrails were described as essential for supporting those with a mobility impairment but participants felt they were not ideally designed for some situations, such as alighting from the bus: *"handrails can help to lift yourself up and onto the actual bus itself […] they work great for going up, but not necessarily for going down"* [walking aid user].

Crowding was an issue that affected all bus users with only a quarter (26%) of non-disabled bus users reporting this would have no impact. However, crowding disproportionately impacts disabled people with almost half (49%) reporting they would find it very or extremely difficult or impossible to use a bus in this scenario. Those with a mobility impairment or a mental health condition were more likely to say this than other disabled people. Users of wheeled and walking aids were also more likely to report a severe impact. In terms of sociodemographic differences, younger disabled people (aged 18-39) were more likely than other age groups to report they would be severely impacted.

Disabled people were more likely than non-disabled people to say that the bus was crowded on some or most of their journeys. Those with a mental health condition were more likely to report this happening on some or most of their journeys in the last 12 months than those without. A possible explanation for this may be that disabled people are *not necessarily* more likely to experience crowding, but they are impacted more strongly by it, and therefore more likely to recall experiencing this regularly. Finally, for disabled people who lived in London, this was more likely to happen on some or most journeys.

The qualitative findings shed further light on the challenges introduced by overcrowding, particularly for those with non-visible and/or non-physical health conditions. Participants

described a range of ways in which overcrowding could prompt feelings of stress, anxiety or panic, such as not being able to see or quickly use the exit, not having access to a seat or, specifically for those with vision impairments, not being able to see where along the journey the bus is. Participants described various mitigations to bus crowding, such as identifying the least crowded bus (if multiple arrived at once), waiting for a less crowded bus to arrive or – where access to space or seating cannot be guaranteed – avoiding use of the bus entirely and taking another mode of transport such as taxi.

Some participants with hearing impairments explained that they actively avoided using the bus at times of day when children travel to/from school, because the resulting crowding could make the level of noise intolerable, for example by causing anxiety, or physical discomfort.

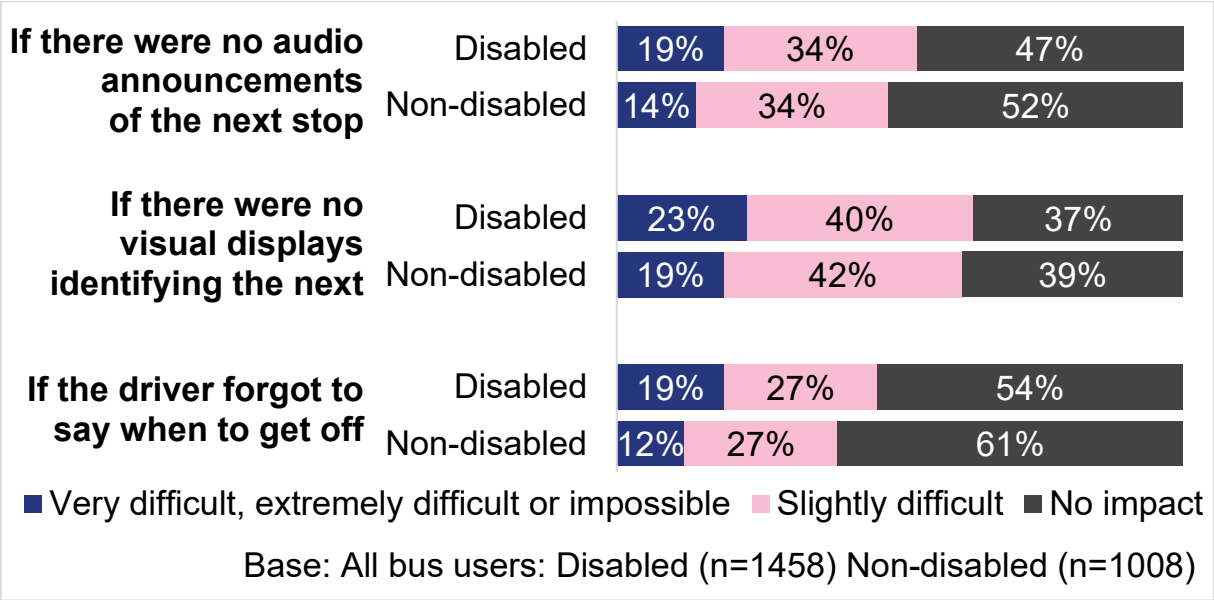
> *"Unfortunately, my trip to the bookshop took place at the height of school traffic, and there was no room on the lower deck. I went to the upper deck (not a problem as I don't have mobility issues) and found it was almost full of school children who were talking loudly. I couldn't hear the announcements but was able to rely on onboard signage. I experienced a degree of discomfort because of the noise level, which my hearing aids don't cope with very well, and found it an unpleasant journey."* - Diary entry, bus user with a hearing impairment

3.3.4. Knowing when to alight

As shown in Figure 8, the survey findings indicated that only a slightly larger proportion of disabled people would be impacted by the following scenarios than non-disabled people.

- **If there were no audio announcements of the next stop**, 19% of disabled people and 14% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus. Respectively, the proportion of disabled and non-disabled people for whom this would have no impact was 47% and 52%.
- **If there were no visual displays identifying the next stop**, 23% of disabled people and 19% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus. There was no significant difference in the proportion of disabled and non-disabled people for whom this would have no impact (38% overall).
- **If the driver forgot to say when to get off**, 19% of disabled people and 12% of non-disabled people would find it very difficult, extremely difficult or impossible to use the bus. The proportion of people – disabled and non-disabled – for whom this would have no impact was 54% and 61%, respectively.

Figure 8 Impact of key scenarios related to knowing when to alight on how difficult respondents would find it to use the bus



If there were no audio announcements or no visual displays identifying the next stop, disabled bus users with a cognitive or vision impairment were more likely to suggest that they would find it very or extremely difficult or impossible to use the bus. Likewise, in both cases, users of certain wheeled aids or a long cane were more likely to say this than non-users. For both scenarios, disabled people and non-disabled people aged 18-39 were more likely than those aged 60+ to report they would be severely impacted, as were bus users (disabled and non-disabled) in London, both of which may be accounted for by a greater expectation.

Looking at a lack of audio announcements specifically, those with a hearing or dexterity impairment were more likely to report being severely impacted than other disabled people. In the scenario of no visual displays, those with a mental health condition were more likely to suggest they would be severely impacted.

Over half (54%) of disabled people reported that if the driver forgot to tell them when to get off this would have no impact on their journey. However, those with vision, cognitive, mobility and dexterity impairments were more likely to report that they would find it very or extremely difficult or impossible to use the bus in this scenario. Likewise, users of aids associated with these health conditions (wheeled and walking aids and long canes) were more likely to report this than non-users. Disabled people aged 18-39 were substantially more likely to say this happened on some/most of their journeys than those in other age groups.

The qualitative findings highlighted the risks that can accompany not having information in an accessible format – such as missing a stop or becoming stranded, particularly for those with vision, hearing or cognitive impairments. One participant with a cognitive impairment explained that this was because it is hard for them to remember and recognise what the stop they are meant to get off at looks like. One mitigation was limiting bus use to a very familiar single route. Some participants preferred to rely instead on journey apps, and valued the additional functionality they provided, such as individual bus tracking or instantaneous updates. Other issues related to relying on audible and visible announcements, or the bus

driver, included not being able to see visual displays from certain positions onboard the bus; the amplification of background noise by audio induction loops (which made them unusable in some cases); the repetition of audio announcements (which can be annoying for those with ADHD); and drivers being ‘standoffish’ when participants asked them questions about the route.

3.4 Safety

This section provides an overview of how safe bus users feel across the three key stages of the bus journey (getting to the stop or station, waiting at the stop or station, and travelling on the bus). Physical safety considers the potential for physical harm from hazards such as trips and falls. Personal safety covers feelings of fear and anxiety caused by the behaviour of others, including abuse or harassment. Both are explored.

Throughout the bus journey, disabled bus users reported feeling less personally and physically safe than non-disabled bus users. Disabled bus users were also twice as likely to avoid travelling in the dark which may relate to safety concerns. Feelings of safety are shaped by the impairments or health conditions a bus user has, and demographic factors, such as age, sexuality and gender. Participants also shared ideas for how to improve their feelings of safety.

3.4.1. Physical Safety

In the survey, participants were asked how physically safe they felt while travelling by bus in their local area using a seven-point scale, where one end was labelled ‘not at all safe’ and the other ‘extremely safe’. Participants rated how safe they felt at each stage of the journey. The disabled population reported feeling less safe than the non-disabled population at each stage of the journey.

- **Walking (or wheeling) to their local stop:** 43% of disabled bus users selected one of the top two points of the scale closest to extremely safe compared to 62% of non-disabled bus users.
- **Waiting at their local bus stop:** 48% of disabled bus users selected one of the top two points of the scale compared to 65% of non-disabled bus users.
- **Waiting at their local bus station:** 38% of disabled and 54% of non-disabled bus users selected the top two points on the safety scale, the lowest across all stages of the journey. While a large proportion of respondents selected ‘not applicable’ for this option, this shows that bus users feel least safe waiting at the bus station.
- **Travelling on the bus:** 47% of disabled bus users selected one of the top two points of the scale compared to 63% of non-disabled bus users.

How safe disabled participants felt varied by the impairment or health condition they had. Participants with a vision impairment were less likely to select the top two points of the safety scale across all stages of the journey compared to other disabled people. Similarly, bus users with a dexterity impairment were less likely to report feeling safe when walking (or wheeling) to the bus stop, waiting at their local bus station and travelling on the bus.

Furthermore, demographic factors impacted feelings of physical safety. Female bus users were less likely to select the top two points than males across all stages of the journey. Younger bus users (aged 18-59) were less likely to select the top two points when walking (or

wheeling) to the bus stop, waiting at their local bus stop and travelling on the bus than those aged 60 and above.

Findings from the focus groups demonstrated that certain situations contributed to making disabled bus users feel less physically safe whilst travelling on the bus. These included feeling rushed, if drivers did not pull close to the kerb and an inability to find a seat. These challenges were reported to be exacerbated during busy periods of travel and when buses were crowded.

- **Feeling rushed**: Participants stressed that the feeling of being rushed when boarding, moving around the vehicle and alighting was a risk to their physical safety. This occurred when drivers pulled away before the person was seated or braked hard at stops, causing participants to feel at higher risk of falling over.
- **Drivers not pulling in close to the kerb** increased the risk of participants falling when boarding or alighting.
- **Inability to sit:** When buses were crowded participants described struggling to find a seat. This was an issue for those who found standing difficult especially if they were not close to a handrail and so at increased risk of falling over.

3.4.2. Personal Safety

Survey respondents were asked again to select ratings along the safety scale described in the previous section for the stages of the bus journey, this time in relation to feelings of personal safety. Disabled bus users reported significantly lower levels of personal safety than non-disabled bus users at each stage of the journey.

- **Walking (or wheeling) to their local stop:** 47% of disabled bus users selected one of the top two points of the scale closest to extremely safe compared to 61% of non-disabled bus users.
- **Waiting at their local bus stop:** 48% of disabled bus users selected one of the top two options of the scale compared to 62% of non-disabled bus users.
- **Waiting at their local bus station:** 36% of disabled and 49% of non-disabled bus users selected the top two points on the safety scale, again the lowest across all stages of the journey.
- **Travelling on the bus:** 47% of disabled bus users selected one of the top two points of the scale compared to 61% of non-disabled bus users.

As with physical safety, how personally safe participants felt varied by the impairment or health condition they had. Bus users with a mental health condition were less likely to select the top two points of the safety scale at every stage of the journey. Those with vision impairments were less likely to feel safe when making their way to the bus stop and travelling on the bus compared to other disabled participants.

As with physical safety, younger people and women were less likely to report feeling personally safe at different stages of the bus journey. Younger people across the sample were less likely to select the top two points of the safety scale than those aged 60+ when making their way to the bus stop, waiting at the bus stop and travelling on the bus.

Female bus users were again less likely to select the top two points on the ‘extremely safe’ end of the scale compared to male bus users at every stage of the journey. Furthermore, among the non-disabled population, females were significantly more likely than males (23%

vs. 15%) to indicate that poor lighting would make it at least very difficult to use a bus stop or station. This could be associated with females feeling unsafe without appropriately lit waiting areas. Non-heterosexual bus users were also less likely to select the top two points when considering waiting at their local bus stop and travelling on the bus compared to heterosexual bus users. Importantly, among demographics that reported lower feelings of personally safety (younger people, women and non-heterosexual people), disabled bus users within these groups were even less likely to select the top two points in the survey when compared to non-disabled members of these groups.

The views on personal safety were more diverse among focus group participants compared to views on physical safety but could be categorised into three main groups.

- **Generally feel safe:** the first group of participants expressed that they felt generally safe in relation to other passengers.

- **Feel anxious when engaging with others on buses:** A second group reported feeling anxious when using the bus or coach due to fear of harassment or negative reactions from other passengers. There were a few common occurrences which stoked this fear, such as when asking for a seat, the narrowness of bus and coach aisles and the space between rows of seats. This was because participants felt more at risk of harassment when forced to be physically close to other passengers. These factors were intensified when buses were crowded.

- **Feel unsafe getting to or waiting at a bus stop or station:** A third group stated that whilst they felt generally safe whilst on the bus, they felt at risk whilst waiting at a bus stop or station and walking home after their journey, sometimes after experiences of being followed. Possible solutions to improve feelings of personal safety suggested included bus shelters and having attendants or police available at busy bus stops or stations.

4. Journeys by coach

This chapter explores experiences of using a coach service. It covers challenges and best practice related to booking a coach; travelling to a coach station or stop; waiting at a coach station or stop and travelling on a coach. The findings are drawn primarily from the accompanied journeys carried out with disabled passengers. These are complemented by insights from the focus groups as well as findings from the survey.

Key findings

- Disabled participants with mobility impairments and those who use wheeled or walking aids faced a number of challenges using coaches, particularly when boarding and alighting, accessing seating and using onboard facilities.
- Despite often being required to provide detailed information about their travel support needs in advance, users of wheeled aids may still find that they are unable to use scheduled services due to failures of accessibility features.
- Coach stations were often poorly integrated into local transport networks making access without a private car difficult.
- Poor design of coach stops or stations, such as high kerbs, made navigating them challenging, particularly for those with mobility impairments. The availability of basic facilities at coach stops and stations (such as seating, accessible toilets and functioning departure boards) varies considerably, leading to poor experiences.
- Well trained staff can make a positive difference to people's experiences, especially where drivers have pleasant attitudes and offer assistance. However, participants felt that staff training could be improved, particularly with respect to treating disabled people with dignity when communicating with them and providing assistance.
- Priority seating for disabled people would support more positive journeys. However, often the current provision is cramped and lacking leg room making this less comfortable than the seating available to non-disabled passengers.

4.1 Booking the coach

For the accompanied journeys, the researcher booked tickets for passenger participants, therefore the insights described in this section are based on a combination of the coordinator's observations and the experiences reported by participants during coach journeys.

Despite the provision of accessibility pages on coach providers' websites, disabled passengers were not always given all the information they needed to travel. Examples of a lack of information included:

- **Seat selection:** online seating maps did not always make clear if stairs were necessary to reach certain seats. Therefore, there was a risk of booking a seat a passenger could not use.

- **Access to upper deck:** In one instance, ramped access onto the coach was requested and available, but the coach provider did not inform the passenger that stepped access was required for the upper deck seating. On this occasion, the disabled access seats on the lower deck was available, however this is not guaranteed.

During the booking process, disabled passengers are required to contact the operator with specific travel requirements 36-48 hours prior to departure, creating an additional administrative step. One coach provider requested passengers contact them 7 days prior to travel.

Coach providers cannot always guarantee accessible seating provision for disabled passengers. The researcher was unable to book accessible seating for a passenger who could not climb stairs because these seats were reserved for wheelchair users only. Therefore, the coach provider could not guarantee the passenger would be able to travel despite buying a ticket and making contact in advance. In another instance, a wheelchair space was confirmed prior to travel, however when the passenger tried to access the seat, a fault with the anchoring mechanism resulted in the passenger cancelling the journey. This experience is discussed in further detail in section 4.4.2

Participants had mixed views on whether they preferred to buy tickets online or at the station. A desire to speak to a staff member in person to confirm travel details drove a preference for in person booking. Reasons given for booking online were the ability to save tickets on mobile phones and accessing live updates on the day via an app. In some cases, having physical tickets posted to them was preferred.

4.2 Getting to the coach stop or station

During the accompanied journeys the main **methods of transport** to get to a coach station or stop were taxi and bus, while a few passengers used the London Underground, trains or private cars. Taxis were convenient but not always accessible for those with mobility aids. Buses were familiar and convenient for some, but unreliable, infrequent or unavailable for others. Some coach stations used for the journeys had no public transport connections at all.

For mobility impaired participants, not knowing if lifts would be working and their reduced walking speed (which was not considered on navigation apps) caused anxiety around arriving on time.

> *“I knew when you (the researcher) said 10 minutes that it would be double that for us. We always add on time to what is expected, making sure we have time for using toilets and giving the dogs a comfort break.”* - participant with a vision impairment who uses an assistance dog

> *“If I had to be somewhere or meet someone by a certain time, I would be worrying about whether I would get there on time or whether I would be late (…) I was a little bit stressed about getting to [the coach station] so we could get the coach in time”* - participant with multiple sclerosis

Focus group participants reported that they find it difficult to get to a coach station due to them being far away or because they are not well integrated with other transport options. Coach stations were perceived as not well connected with anything else, which often meant taxis were required to get to them. In addition, they were described as often not easily

accessible, particularly with luggage. As a result, participants reported not taking coaches regularly.

Travelling during winter can negatively impact on the travel experiences and well-being of disabled passengers. As the accompanied journeys were conducted during December and January, some participants withdrew due to concerns about the weather conditions and the reduced daylight hours. Participants cited various difficulties such as exposure to low temperatures while waiting for buses or coaches in wheelchairs, risk of falling on icy surfaces, or reluctance to venture outside in the dark.

4.3 At the coach stop or station

This section describes the experiences of disabled passengers waiting at a coach stop or station. It outlines what features benefit disabled passengers and what challenges they face. Areas covered include access, seating, toilet provision, information, signage, staff, comfort, and safety.

4.3.1. Infrastructure and comfort

The ability to easily navigate around a station, the provision of accessible seating and toilets and feeling comfortable were all important to disabled passengers.

For participants with mobility issues, the physical **infrastructure** in the coach station presented barriers. A participant who used a manual wheelchair identified that narrow pavements or walkways, and high kerbs made it harder to travel from the taxi drop-off to the departure gate. Focus group participants also commented that coach stations do not always have enough lifts or escalators for passengers to use, making it hard to transport heavy luggage, especially for those with mobility impairments.

Availability of **seating** made waiting at the station more comfortable for disabled passengers. Large coach stations were reported to have plenty of seating available and specific mobility lounges were viewed positively. Rest stops throughout large stations were also identified as helpful. In contrast, there were stations that had limited seating, especially disabled priority seating, which meant participants had to stand to wait. At one coach stop, there was no seating or shelter available. In one example, a participant with limited mobility had to lean on a bike rack in visible discomfort as no seating was provided at the coach stop (see Figure 9). When asked by the researcher, the participants confirmed they would like to continue the journey despite their discomfort.

Figure 9 Coach stop without shelter or seating, and bicycle racks used by participant to lean on

Waiting at warm coach stations was perceived as more comfortable than stations where passengers had to wait outside for the coach. The cleanliness of coach stations was also a positive factor shared by focus group participants.

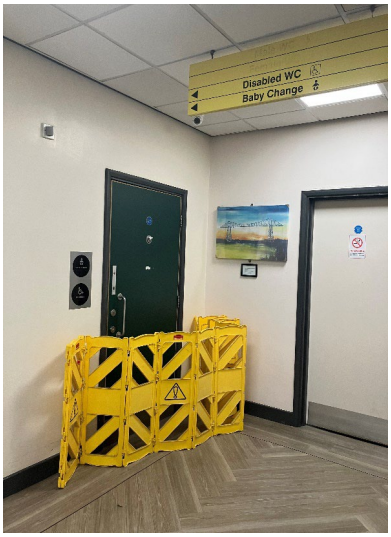
Free and accessible **toilets** were important at stations, especially for those who had to use the toilets frequently due to their disability:

> *“I don’t think they should charge for using toilets at stations, but it seems to be a more common thing now. I didn’t actually see if there were any disabled toilets.”* - participant with multiple sclerosis

One journey terminated at a coach station with no toilet at all, which resulted in the participant having to stop at a service station during the taxi ride home. Several participants carried RADAR keys which provided access to disabled toilets. Disabled toilets were out of service during several journeys (see Figure 10), which was criticised:

> *"The disabled toilet was out of order when I was last here a month ago. It's not good enough that they haven't fixed it. It shows that it's not a priority for them."* - participant with Persistent Postural Perceptual Dizziness

Figure 10 Out of service disabled toilet at coach station



A lack of easily **accessible facilities** for assistance dogs was also raised as a concern. During one journey, the researcher had to assist the participant by taking their assistance dog outside of the coach station for a comfort break as there were no facilities for this within the station and the participant did not feel comfortable and safe to look for green space without assistance.

4.3.2. Information

Many participants stated that looking for **information/departure boards** was the first thing they do on arriving at a station or stop. Across the journeys, clear and easy-to read departure boards were described as helpful in identifying the correct coach stand. In contrast, unclear or obstructed signage were described as making the journey more difficult, for example, signage was covered by an overgrown tree on one journey. One visually impaired participant noted that they found audio announcements helpful and would ask members of the public for assistance if there were none available.

Participants were concerned about waiting at the wrong stop and having missed the coach during delays, especially when information boards were either lacking or not providing up to date information. These concerns were exacerbated if no staff were available at the station and for participants with mental health conditions:

> *"It's really annoying that there were no departure boards. If I had been alone, I would have been much more stressed… I probably would have called my mum."* - participant with anxiety and ASD

Many of the participants relied on asking **staff** for assistance and felt *"trained staff"* were needed. Staff not being aware of disability requirements or speaking in an unpleasant manner were commonly pointed out. One participant, who used a wheelchair, reported that they regularly experienced staff leaning over them to speak and speaking to their carer rather than them directly. The participant felt that this was discriminatory. A visually impaired participant experienced staff infringing on their independence, despite having good intentions. On their journey and without being asked for assistance, a staff member fastened their seatbelt for them:

> *"I think they should have asked whether we needed help with the seatbelt rather than just grabbing it and putting it on us, because some people don't like that."* - participant with a vision impairment

Apps with live departure information were frequently described as helpful. One participant with anxiety and autism said that they would "*obsessively check with people*" that they were at the right stop and had the correct journey information and felt that an app would make them feel less stressed. Transport for London's 'Passenger Assist' service where passengers can prebook assistance from staff members via an app, the 'WelcomeME' app which allows passengers to schedule a visit to a service and book assistance, and JourneyCare used to pre-book assistance at train stations were mentioned as positive examples that could be adopted for coach.

4.3.3. Safety

Many stations and coaches were relatively quiet which was perceived as beneficial. None of the participants reported having any safety concerns when travelling with the researcher.

However, most would not choose to travel when it was dark or in the late evening as stations may feel too busy or rowdy. The primary concerns were large groups of people which sometimes felt intimidating, this was especially a concern for female disabled participants and for participants with assistance dogs as these may get distracted or approached by people at the station.

Most of the participants made the journey with a carer or companion. This was often due to their disability and participants stated they would be unable to travel safely without assistance. Others said they could make the journey alone but would always prefer to travel with someone as it made them feel safer, especially if the route was unfamiliar:

> *"With a journey I'm not used to going on [I'm feeling] slightly apprehensive."* - participant with mobility impairment

4.4 Getting on and off the coach

This section describes how participants navigated the coach and the mobility support provided. In particular, participants with mobility impairments experienced challenges when boarding and alighting the coach.

4.4.1. Navigating the coach

The survey and focus group findings indicated that multiple, steep steps up to a coach can be difficult to manoeuvre, particularly for those with mobility and vision impairments. A third (33%) of disabled bus users responded that they would find it very difficult, extremely difficult or impossible to use a coach that was **a high-floor vehicle with several steps to access seating**, whereas 10% of non-disabled bus users responded this way. Those with a mobility impairment, stamina impairment, dexterity impairment, cognitive impairment or a vision impairment were more likely to suggest they would be affected by this scenario. During focus groups, disabled participants suggested that the steep steps were a particular challenge and commented that the steps were not designed to be used by anyone with mobility problems. Participants noted that the challenge continues inside the coach, as there are sometimes further steps to get into seats or reach the back of the coach. Among those with vision

impairments, participants found it difficult to judge the large coach steps, resulting in trips and falls when getting on and off the coach. One positive experience highlighted in relation to coach steps was when a private coach driver provided a small extra step to aid in reaching the first step.

During accompanied journeys, the initial **step** onto the coach was commonly described as a challenge, especially when the coach pulled up further away from the kerb:

> *"Last time I was on a coach the first step was a nightmare."* – participant with vision impairment

All coaches used during the accompanied journeys could be lowered to reduce the height of the step which made boarding easier and, in some cases, possible at all. However, the coach was not always lowered unprompted at boarding or alighting. On occasions, carers or participants had to prompt the bus driver to lower the coach to allow the participant to exit at the destination stop. This was described as neglectful by one participant who felt the driver should have lowered the coach as a priority before onboarding or offboarding other passengers. Even where the coach was lowered, the gap to the pavement could still be large if the driver had not pulled in closely to the kerb as shown in the image in Figure 11. Poor weather could also lead to the step onto the coach getting wet when the door was left open which was perceived as dangerous, particularly for those with mobility issues.

Figure 11 Steps onto the coach when the coach is lowered

Stepped access within the coach vehicle provided challenges with accessing seating on the upper deck. Participants able to climb the stairs reported that this was difficult, and the steps were steep and narrow. One participant who had Persistent Postural Perceptual Dizziness (PPPD), meaning they constantly experience dizziness, told the researcher they had fallen over a few years ago and were now very scared of falling:

> *"As soon as I saw the stairs on the coach my heart sank."* – participant with PPPD

Participants who were not able to climb the **stairs** had to sit in the disabled access seating located on the lower deck directly behind the driver. In some cases, seats could only be

booked for wheelchair users and not for people with other disabilities or mobility aids. This meant that participants who did not require a wheelchair but could not climb the stairs did not have a guarantee of travel. The researcher had exchanged emails with the coach provider alerting them of the issue, but no resolution was offered.

Participants widely reported **handrails** to be helpful when boarding and alighting, especially if these were on both sides of the stairs and all the way up the stairs.

Dimmed **lighting** was perceived as challenging for a visually impaired participant who stated that this made it harder to disembark from the coach due to difficulty checking for obstacles and reduced visibility climbing down the stairs.

4.4.2. Mobility provisions

Survey and focus group findings illustrated that coaches without lift or ramp access pose a challenge for disabled people using mobility scooters and wheelchairs. Two thirds (66%) of bus and coach users who use a mobility scooter or a wheelchair, felt that it would be very difficult, extremely difficult or impossible to use a coach if there was no lift or ramp to access the coach. Among focus group participants, there were reported experiences of being unable to use rail replacement bus services when coaches were provided without the ability to enable boarding for wheelchair users. Ramps were not only viewed as important to help passengers using mobility aids to board the coach, but also to help move heavy mobility scooters into the luggage storage.

During accompanied journeys, mobility provisions such as **ramped access** were available on most journeys (see Figure 12), however, provision was inconsistent even within the same operator; some of the coaches did not have ramps available, whilst others did. On one occasion, the ramp was not available, but the participant was able to climb the step with assistance from their carer. They commented that they would never use public transport without their carer due to concerns about physical barriers and requiring assistance.

Another participant commented *“let’s see if they let me use the ramp”*, explaining that they often experienced reluctance from drivers to get the ramp out or found they would only provide ramp access for wheelchair users, failing to recognise the needs of non-wheelchair users with limited mobility.

Figure 12 Participant using the ramp to offboard the coach

One participant required a **wheelchair lift** to access the coach (as shown in Figure 13). This had been communicated to the coach company in advance of the journey and wheelchair specifications were provided. The participant had some difficulty navigating onto the lift and into the wheelchair space as both were narrow. The participant found the handrails on either side of the lift helpful, but they did not feel secure as there was no barrier at the front of the lift. At points, the driver assisted the participant by pulling the powered wheelchair in the correct direction. The participant expressed concerns to the researcher about the driver potentially damaging the electric controls on the powered wheelchair by manoeuvring the chair without asking the participant. The participant was concerned that the driver was not disability trained and would manoeuvre the wheelchair incorrectly.

Figure 13 Participant using the wheelchair lift onto the coach

In this instance, despite being able to board, the participant was unable to complete their coach journey as there was a fault with the mechanism designed to secure the wheelchair into the space (see Figure 14). An engineer was called to fix the fault, but after a delay of 35 minutes the researcher decided to cancel the journey. This was due to concern for the participant's well-being and the issue potentially arising on the return coach. The fact that this

issue arose despite the operator having been provided with all details of the wheelchair in advance demonstrates how unreliable the service can be.

Figure 14 Wheelchair accessible space and carabiner clips

Mobility scooter users in the focus groups reported not being able to travel due to the inability to store their scooters. Participants reported that coach companies put restrictions on the number of scooters that are allowed in the hold so they do not take up too much luggage space. As a result, mobility scooter users are not always able to travel with their mobility aid.

4.5 Travelling on the coach

This section describes how participants experienced the journey on the coach, including accessing information, infrastructure and comfort of the station and coach, and other people such as carers, the public, and the driver.

4.5.1. Information

Visual **display screens** gave participants confidence about the next stops. Where audio announcements or screens displaying each stop were not available, participants felt concerned and distressed. During one journey, the driver took a different route than the participant expected and made an additional stop. Due to the lack of information screens, they had *"no way"* of getting any further information without speaking to the driver directly.

The timing of **announcements** was criticised by one participant who suggested it would be useful to be informed of the upcoming stops in advance as disabled people often needed more time to prepare for alighting.

4.5.2. Infrastructure and comfort

The survey and focus groups found that not having access to a toilet whilst on the coach is a barrier for disabled passengers. 43% of disabled bus and coach users reported that they would find it very difficult, extremely difficult or impossible to use the coach if **there were no toilets they could use** compared to 26% for non-disabled passengers. Despite their importance, focus group participants reported that coach toilets were often out of order or not well maintained. Those with mobility impairments reported that toilets can be inaccessible

when stairs are required to get to them, or if they are too small. Having toilets on the same level as seating was seen as a positive feature of some coaches. On long coach journeys, inability to use the toilet was a challenge as opportunities to get off and use other facilities were limited. This challenge was even more difficult for some participants with non-visible conditions who rely on being able to use toilet facilities at short notice and could feel uncomfortable asking the driver to stop for them.

These findings were echoed during the accompanied journeys. **Toilets** caused concern during accompanied journeys when they were not accessible (for instance by being down steps as in Figure 15) or out of order. On coaches with a lower and upper deck, participants sitting in the disabled access seats behind the driver needed to climb stairs to reach the toilets. Passengers unable to climb the stairs therefore could not use the coach toilet, which would prevent disabled passengers with limited mobility from making longer journeys by coach. Toilets were further criticised for being too cramped and difficult to operate. One participant, who had arthritis, felt the button for the soap, water and air was stiff and difficult to use with their arthritic fingers:

> *"The toilet is too small, too difficult to use. It's not practical at all… it would be a good idea if the toilet had a handrail, that would be a really good idea, there are so many people who are much worse than me [in terms of their medical condition]."* - participant with osteoarthritis

Figure 15 Steps down on coach to access the toilet

Where drivers offered alternative solutions, such as stopping at the next coach station for passengers to use the toilet, this was appreciated as considerate and accommodating although inconvenient. In this instance, the researcher was asking the participant questions whilst sat in the accessible seating directly behind the driver, which may have influenced the driver's actions and behaviour.

Survey and focus group findings indicated that having the ability to leave the coach was valued by both disabled and non-disabled passengers. If there was **no opportunity to leave the coach during a rest stop**, 42% of disabled passengers responded that they would find it very or extremely difficult or impossible to use the coach. This figure was 23% among non-disabled passengers. However, only a third (34%) of non-disabled passengers reported that

this scenario would have no impact on how difficult they would find it to use a coach, suggesting the ability to leave the coach is important to the entire coach user population. Focus group participants highlighted the discomfort that comes from being on a coach for a long period of time, which is exacerbated when rest stops are lacking. Participants were particularly frustrated in situations where the bus driver was able to get off the bus at a rest stop, but they were not, or where the drivers had to change over, leading to extended time on the coach. One participant reflected on experiences waiting for a driver change:

> *"Because of the driver hours regulation and the traffic jams on the motorways, you quite often have to pull into somewhere like a service station and wait for a replacement driver to come along because the existing driver has run out of hours."* – participant with a hearing impairment

The **temperature** on the coach was found to affect the comfort of travelling during accompanied journeys. Coaches were largely described to be a good temperature. This was appreciated, especially by physically disabled participants or those with sensitivity to the cold. However, participants who sat on the disabled access seats at the front of the coach were close to the door and stated they were cold when doors were kept open. With regards to other **facilities**, participants reported plug and USB sockets as positive, however this was not mentioned in relation to their disability.

Survey and focus group findings illustrated that lack of accessible seating can be a considerable barrier for disabled passengers. A quarter (27%) of disabled bus and coach users responded that they would find it very difficult, extremely difficult or impossible to use a coach if there were **no priority seats designated for disabled passengers**. In contrast, 9% of non-disabled passengers responded the same way.

Overall, there were mixed views on coach seating during the focus groups. One view was that coach seats were more comfortable than bus seats, and that having an assigned seat led to less crowding compared to a bus. This was particularly useful for those with mental health conditions that make busy places difficult to cope with, such as anxiety. On the other hand, lack of leg room was seen as an issue on coaches, particularly among participants with a mobility impairment.

During the accompanied journeys issues related to **seats** included them being too small and uncomfortable, a lack of fold-down tables, footrests and neck support. However, some participants found the coaches more comfortable than other forms of transport or coaches they had taken in the past:

> *“This coach is very useful for leg room. I tend to usually sit on the aisle as I can stretch my legs out, but this seat is perfect.”* - participant with a mobility impairment

One participant found the coach seatbelt not large enough and was pulling on it throughout the journey to stop it from resting uncomfortably on their neck. Due to this discomfort, the journey was terminated early to reduce the time travelled on the coach.

Priority seating located behind the driver on some coaches (see Figure 16) was felt to be cramped and lacking leg room. The large screen behind the driver and in front of the seats blocked participants from being able to see out the front window and made them feel more

cramped. One of the participants travelling in the accessible seating reported feeling isolated as they were separated from the rest of the seating on the upper deck. One driver asked a participant and researcher not to talk during the journey due to their proximity to them, leading to the participant feeling less comfortable throughout the journey. There was also no storage space for bags or luggage at these seats in contrast to those available for non-disabled passengers on the upper deck.

Figure 16 Disabled accessible seating on the lower deck

Safety concerns were not commonly raised although handrails along the top of the seating and at the top of the coach stairs were viewed as a positive safety element. However, one participant highlighted that a lack of announcements regarding toilets and emergency exits made them less safe:

> *"They didn't say whether there was a toilet on the coach. They should probably announce that are the start of the journey, as well as about emergency exits, because we wouldn't know what to do in an emergency."* - participant with a visual impairment

4.5.3. People

Most of the participants travelled with a **companion or carer**. One participant described this as *"safety in numbers",* although they could make the journey alone; they would always prefer to have someone with them in case anything went wrong. A participant who regularly travelled alone said they felt reassured by the researcher's presence and felt worried when the coach was late, stating they would have called a family member had the researcher not been there.

The attitude and behaviour of **drivers** had a strong impact on participants' experience on the coach. Participants reported preferring using coaches as they could interact directly with the driver who would usually be able and willing to provide direct assistance. They said that this interaction meant that coaches could provide better support than other forms of transport where there was less access to staff. Many participants described overwhelmingly positive experiences with drivers.

> *"I think they try their best. He [the driver] immediately dropped the coach and put my walker in the luggage hold, I can't think of anything I would change. Drivers are always*

extremely helpful. If I was travelling alone [without the researcher] I'm sure he would've helped me with my bag." - participant with osteoarthritis

However, one participant expressed that they often faced hostility from coach drivers and that it was rare to get a nice driver, adding that this causes them apprehension before a journey due to the uncertainty regarding how comfortable and successful the journey might be. During their accompanied journey, the participant felt that the driver was hostile and untrained on how to assist disabled passengers.

The majority of the coach journeys were relatively quiet and, as a result, there were limited interactions between participants and members of the **public**. Some participants preferred coaches as they perceived them as less busy than other forms of public transport:

"[coach] is easier in the sense that you can see where you're going, on the train there are too many people, they push you." - participant with osteoarthritis

However, reactions from the public can put pressure on disabled passengers if boarding or alighting are delayed. The participant whose journey had to be cancelled due to a technical fault with the wheelchair anchoring, felt some passengers were "*intolerant but not aggressive"* and that *"different passengers* [had] *different reactions"*. The participant felt the attitudes from the other passengers were due to confusion on the delay and their frustration was aimed at staff rather than at them. The participant remained positive about the situation but said to the researcher *"imagine how I feel"* for holding up the service and making other passengers wait. The participant felt there should be better public awareness and suggested that the Department for Transport should run a campaign similar to one they had seen in a hospital: *"be patient as next time you might be the one who needs more time".*

5. Improving bus and coach journeys

This chapter presents desired improvements to bus and coach services. The first section draws on a TURF analysis to suggest the potential reach of delivering improvements to bus journeys in line with the scenarios presented in chapter 3. The final two sections go beyond this to consider features that would enhance journeys that are currently not widely available or not available at all.

5.1 Ideal improvement packages to bus services

The following section outlines the findings from the Total Unduplicated Reach and Frequency (TURF) analysis. The analysis focusses on issues that people experience on some or most of their journeys, which makes it very difficult, extremely difficult or impossible for them to travel by bus. This analysis is intended to provide information on the potential impact that a combination of improvements in this area would have for disabled and non-disabled bus users.

The TURF analysis is a statistical technique used to find the potential reach of a set of services or products. In the analysis, combinations of five scenarios were explored. These scenarios all relate to challenges that bus users might face, for example if there was a lack of seating at a bus stop or station, or if buses were crowded. The reach of any such combination is the share of people that are affected by at least one of the five scenarios. The TURF analysis focuses on identifying the combinations with the highest reach, so that these can be compared. In this section, the three combinations per population with the highest reach are presented.

It is important to note that this approach is limited in scope. It does not take possible interactions between the scenarios into account, and it treats all scenarios as having the same importance. It should therefore be treated as a complementary perspective on potential combinations of scenarios that future improvement work may wish to target. Examples of other perspectives that are important to consider alongside the analysis include in-depth assessments of the level of severity of each scenario, potential interactions between scenarios, as well as legal and practical considerations.

The TURF analysis was conducted for three subgroups of interest: disabled bus users, non-disabled bus users and disabled bus users without a mobility impairment. The 23 scenarios covered by the research were divided into two sets: scenarios relating to bus stops and stations, and scenarios relating to bus vehicles. Consequently, six iterations of the TURF analysis were conducted in total.

The findings are summarised in two tables. Each table showcases the top three combinations of five scenarios that have the highest reach for each subgroup. For each combination, the table shows its corresponding reach along with the individual scenarios included within the combination. The scenarios are sorted based on the percentage of disabled individuals affected by each scenario. Three combinations for each subgroup of interest were considered because the total reach of each combination is similar.

5.1.1. Stops and stations TURF

Summary of findings

- The best performing combinations of scenarios related to stops and stations reach approximately 46% of disabled bus users, 26% of non-disabled bus users and 37% of disabled bus users without a mobility impairment. Reach refers to the share of people that are affected by at least one of the five scenarios
- **No timetable information** is included in every best performing combination across the three subgroups
- **The bus stop or station had no shelter** and **no pedestrian crossings near the bus stop or station** are included in seven out of the nine best performing combinations across the three subgroups
- **The bus stop or station had no appropriate seating** is included in every best performing combination across the disabled bus users and disabled bus users without a mobility impairment
- **No live visual display at the bus stop or station** is included in every best performing combination across the non-disabled bus users and disabled bus users without a mobility impairment
- **Had to wheel or walk for more than 10 minutes to get to the bus stop or station** is included in every best performing combination for the disabled bus user group, but rarely appears in the combinations for the other subgroups

As shown in Table 1, for **disabled bus users,** the combinations that would, if addressed, benefit the largest proportion of people all include the following scenarios:

- The bus stop or station had no seating
- No timetable information
- Had to wheel or walk for more than 10 mins to get to the bus stop or station

Three further scenarios are included in two of the three top-performing combinations. These are:

- The bus stop or station had no shelter
- The route to the bus stop or station included steep or uneven ground
- No pedestrian crossings near the bus stop or station

Table 1 TURF results for stops and stations for disabled bus users

Combination	Reach	Scenarios included
Option 1	45.8%	1. The bus stop or station had no seating 2. No timetable information at the bus stop or station 3. Had to wheel or walk for more than 10 mins to get to the bus stop or station

		4. The route to the bus stop or station included steep or uneven ground 5. No pedestrian crossings near the bus stop or station
Option 2	45.7%	1. The bus stop or station had no seating 2. The bus stop or station had no shelter 3. No timetable information they could access at the bus stop or station 4. Had to wheel or walk for more than 10 mins to get to the bus stop or station 5. No pedestrian crossings near the bus stop or station
Option 3	45.5%	1. The bus stop or station had no seating 2. The bus stop or station had no shelter 3. No timetable information at the bus stop or station 4. Had to wheel or walk for more than 10 mins to get to the bus stop or station 5. The route to the bus stop or station included steep or uneven ground

For **non-disabled bus users** (Table 2)**,** the combinations that would, if addressed, benefit the largest proportion of people all include the following scenarios:

- No timetable information
- The bus stop or station had no shelter
- No live visual display at the bus stop or station
- No pedestrian crossings near the bus stop or station

Other scenarios included in the top-performing combinations are:

- The bus stop or station had poor lighting
- The bus stop or station had no seating
- Had to wheel or walk for more than 10 minutes to get to the bus stop or station

Table 2 TURF results for stops and stations for non-disabled bus users

Combination	Reach	Scenarios included
Option 1	26.9%	1. The bus stop or station had no shelter 2. No timetable information at the bus stop or station 3. No live visual display at the bus stop or station 4. No pedestrian crossings near the bus stop or station 5. The bus stop or station had poor lighting
Option 2	26.7%	1. The bus stop or station had no seating 2. The bus stop or station had no shelter

		3. No timetable information at the bus stop or station 4. No live visual display at the bus stop or station 5. No pedestrian crossings near the bus stop or station
Option 3	26.4%	1. The bus stop or station had no shelter 2. No timetable information at the bus stop or station 3. Had to wheel or walk for more than 10 minutes to get to the bus stop or station 4. No live visual display at the bus stop or station 5. No pedestrian crossings near the bus stop or station

For **disabled bus users without a mobility impairment** (Table 3), the combinations that, if addressed, would benefit the largest proportion of people all included the following scenarios:

- The bus stop or station had no seating
- No timetable information
- No live visual display at the bus stop or station

Three further scenarios are included in two of the three top-performing combinations. These are:

- The bus stop or station had no shelter
- No pedestrian crossings near the bus stop or station
- The route to the bus stop or station included steep or uneven ground

Table 3 TURF results for stops and stations for disabled bus users without a mobility impairment

Combination	Reach	Scenarios included
Option 1	37.7%	1. The bus stop or station had no seating 2. The bus stop or station had no shelter 3. No timetable information at the bus stop or station 4. No live visual display at the bus stop or station 5. No pedestrian crossings near the bus stop or station
Option 2	37.4%	1. The bus stop or station had no seating 2. No timetable information at the bus stop or station 3. The route to the bus stop included steep or uneven ground 4. No live visual display at the bus stop or station 5. No pedestrian crossings near the bus stop or station

Option 3	37%	1. The bus stop or station had no seating 2. The bus stop or station had no shelter 3. No timetable information at the bus stop or station 4. The route to the bus stop included steep or uneven ground 5. No live visual display at the bus stop or station

5.1.2. Vehicles TURF

Table 2 shows that the best performing combinations of scenarios related to bus vehicles reach half (50%) of disabled bus users, 24% of non-disabled bus users and 43% of disabled bus users without a mobility impairment.

Summary of findings

- **The bus was crowded** and **the driver pulled away before being seated** are included in every best performing combination across the three subgroups
- **Limited handrails on the bus** is included in eight out of the nine best performing combinations across the three subgroups
- **The bus aisle was narrow or obstructed by objects** is included in every best performing combination for the disabled bus user and non-disabled bus user sub-groups
- **No space for pram or pushchair, suitcase luggage or shopping trolley** is included in every combination for disabled bus users without a mobility impairment, but rarely appears in the combinations for the other subgroups

For **disabled and non-disabled bus users**, the combinations that, if addressed, would benefit the largest proportion of people all include the following three scenarios:

- The bus was crowded
- The driver pulled away before being seated
- The bus aisle was narrow or obstructed by objects

Other scenarios included in the top-performing combinations for disabled bus users (Table 4) are:

- Could not use the priority seating because it was occupied
- No visual displays identifying the next stop on the bus
- Limited handrails on the bus
- No audio announcements of the next stop on the bus

Table 4 TURF results for vehicles for disabled bus users

Combination	Reach	Scenarios included

Option 1	50.5%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. The bus aisle was narrow or obstructed by objects 4. Could not use the priority seating because it was occupied 5. Limited handrails on the bus
Option 2	50.1%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. The bus aisle was narrow or obstructed by objects 4. Limited handrails on the bus 5. No visual displays identifying the next stop on the bus
Option 3	50.1%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. The bus aisle was narrow or obstructed by objects 4. Could not use the priority seating because it was occupied 5. Could not use a wheelchair space because it was occupied

Other scenarios included in the top-performing combinations for non-disabled bus users (Table 5) are:

- No space for pram or pushchair, suitcase luggage or shopping trolley
- No audio announcements of the next stop on the bus
- The driver forgot to tell them when to get off

Table 5 TURF results for vehicles the non-disabled population

Combination	Reach	Scenarios included
Option 1	23.8%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. The bus aisle was narrow or obstructed by objects 4. Limited handrails on the bus 5. No space for pram or pushchair, suitcase luggage or shopping trolley
Option 2	23.8%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. The bus aisle was narrow or obstructed by objects 4. Limited handrails on the bus 5. Could not use a wheelchair space because it was occupied
Option 3	23.6%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. The bus aisle was narrow or obstructed by objects 4. Limited handrails on the bus

		5. The driver forgot to tell them when to get off

For **disabled bus users without a mobility impairment** (Table 6), the combinations with the highest reach all include the following four scenarios:

- The bus was crowded
- The driver pulled away before being seated
- No visual displays identifying the next stop on the bus
- No space for pram or pushchair, suitcase luggage or shopping trolley

Other scenarios included in the top-performing combinations are:

- No audio announcements of the next stop on the bus
- The driver forgot to tell them when to get off
- Could not use the priority seating because it was occupied

Table 6 TURF result for the vehicles disabled bus users without mobility impairments

Combination	Reach	Scenarios included
Option 1	43.2%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. Limited handrails on the bus 4. Could not use a wheelchair space because it was occupied 5. No space for pram or pushchair, suitcase luggage or shopping trolley
Option 2	43%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. Limited handrails on the bus 4. The driver forgot to tell them when to get off 5. No space for pram or pushchair, suitcase luggage or shopping trolley
Option 3	42.9%	1. The bus was crowded 2. The driver pulled away before being seated or positioned 3. Limited handrails on the bus 4. Could not use the priority seating because it was occupied 5. No space for pram or pushchair, suitcase luggage or shopping trolley

5.2 Additional improvements to bus and coach services

The following two sections set out desired improvements to bus and coach services that go beyond what is currently widely available.

Key findings

- There were similarities between the improvements desired for both bus and coach travel including: better training for staff; improved seating and signage; provision of accessible toilets and additional handrails.
- Certain popular improvements for buses and coaches were equally important for disabled and non-disabled passengers, including introducing CCTV cameras at bus stops, having accessible toilets available on coaches and more regular comfort breaks on coaches
- Other popular improvements were more important for disabled passengers, including completely enclosed bus shelters, introduction of a button to hail the driver at bus stops, additional handrails on board vehicles, availability of priority seating on board coaches and lower or fewer steps to board coaches
- Non-disabled passengers thought visual displays and audio announcements on board buses showing the full bus route and the bus's current location were more important than disabled passengers

5.2.1. Improvements to bus services

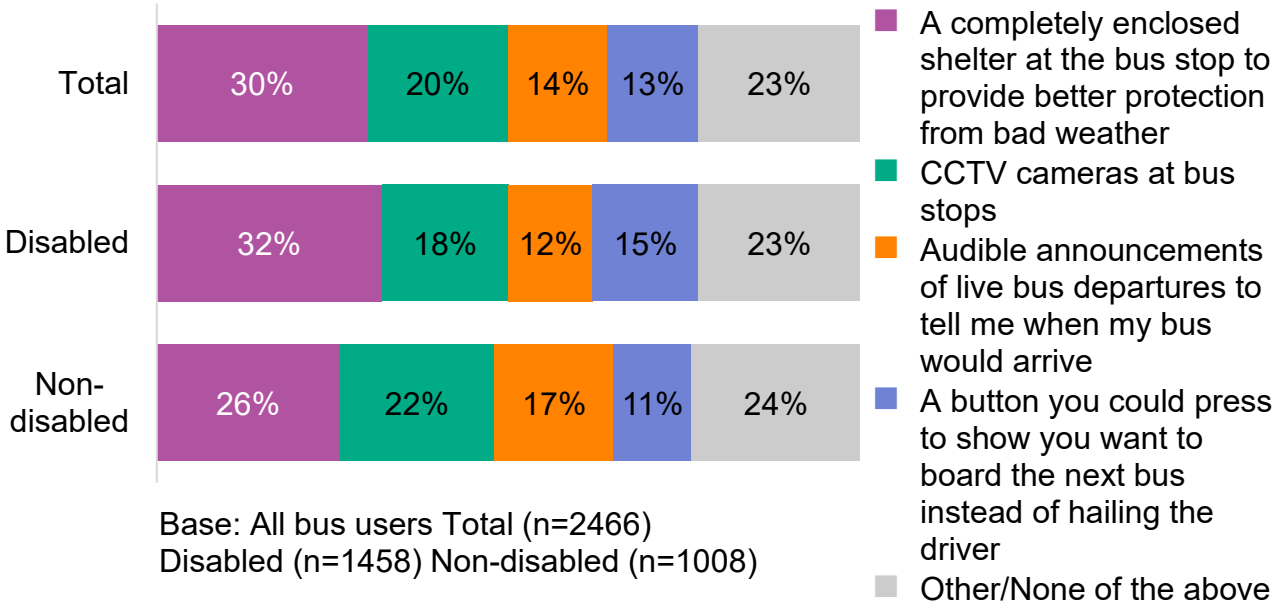
In the survey, potential improvements to bus stops, bus and coach stations, bus vehicles and coach vehicles were explored in turn. To assess which improvements in each area would make the biggest difference to passengers' journeys, a ranking exercise was performed using responses to a series of questions. First, participants were asked to select options from a list that would significantly improve their travel experience. The lists for each stage of the journey were generated from focus group insights and each list included six to thirteen items. These lists were designed to include features that generally go beyond what is commonly available on bus and coach services. If participants selected three or more options from the list, they were asked to rank the top three options that would improve their journey the most. If participants selected two options, they were asked which one would improve their journeys the most. If participants only selected one option initially, this was automatically marked as their top option. Through this process, the top option that would improve participants' journeys the most was ed for every participant.

Bus stops

As shown in Figure 17, the introduction of completely enclosed shelters would improve journeys the most for the greatest proportion of bus users (30%). This was followed by CCTV cameras at bus stops (20%), audible announcements to inform passengers when their bus would arrive (14%) and a button to show the driver they would like to board the next bus (13%). Disabled bus users were more likely to indicate that a completely enclosed shelter at the bus stop or a button to hail the next bus would improve their journeys the most, whereas non-disabled bus users were more likely to indicate that the introduction of CCTV cameras or audible announcements to inform them when their bus would arrive would improve their journeys the most.

"If I miss the bus, I've got a really long wait to get home […] the bus stops have a bit of a shelter, but it's not adequate if you've got a side wind and it's really cold." – Participant with cognitive impairment

Figure 17 Factors related to bus stops that would improve journeys the most



Base: All bus users Total (n=2466) Disabled (n=1458) Non-disabled (n=1008)

Whether participants had a specific impairment or not impacted how likely they were to select an option as significantly improving their journey the most as outlined below.

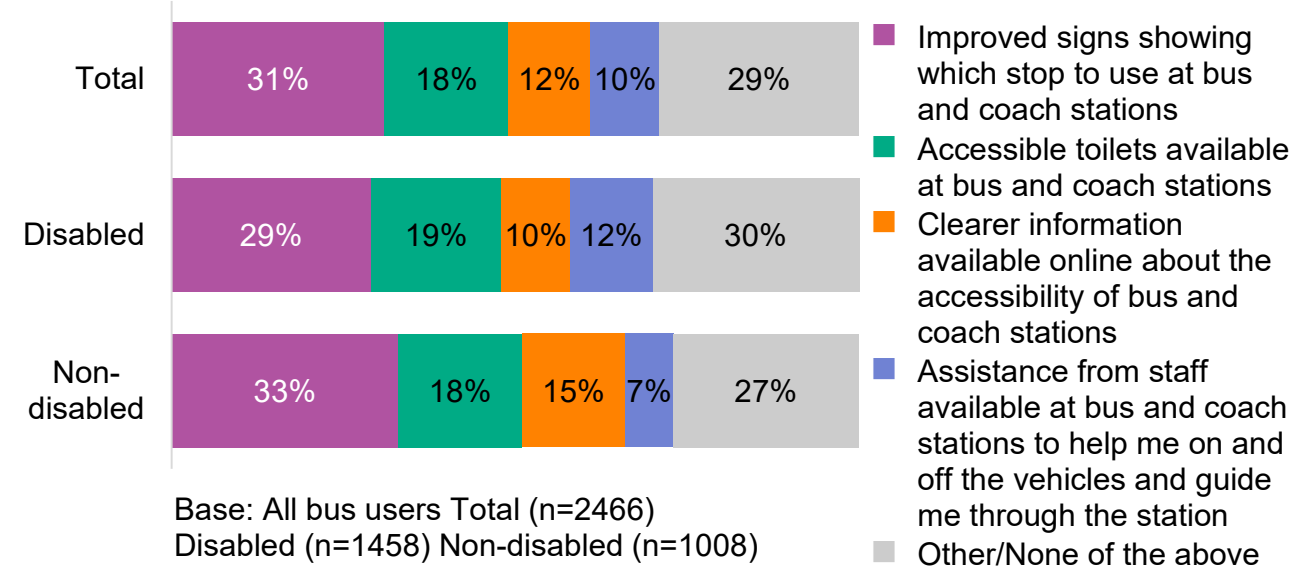
- Participants with a mobility impairment were more likely to select a completely enclosed shelter than those without.
- Participants with a mental health condition were more likely to select CCTV cameras at bus stops than those without.
- Those with a vision impairment or those whose condition did not fit into a named category, including neurodivergent passengers, were more likely to select audible announcements of live bus departures than those without.
- Those whose condition did not fit into a named category, including neurodivergent passengers, were more also likely to select a button you could press to show you want to board the next bus than those without.

Bus and coach stations

As shown in Figure 18, the introduction of improved signs showing which stop to use at bus and coach stations would improve journeys the most for the greatest proportion of bus users (31%). This was followed by the introduction of accessible toilets (17%), clearer online information about the accessibility of bus and coach stations (12%), and staff assistance when getting on and off the vehicle or to guide them through the station (10%). Disabled bus users were more likely to indicate that staff assistance would improve their journeys the most,

whereas non-disabled people were more likely to say this about improved signs or clearer online information.

Figure 18 Factors related to bus or coach stations that would improve journeys the most

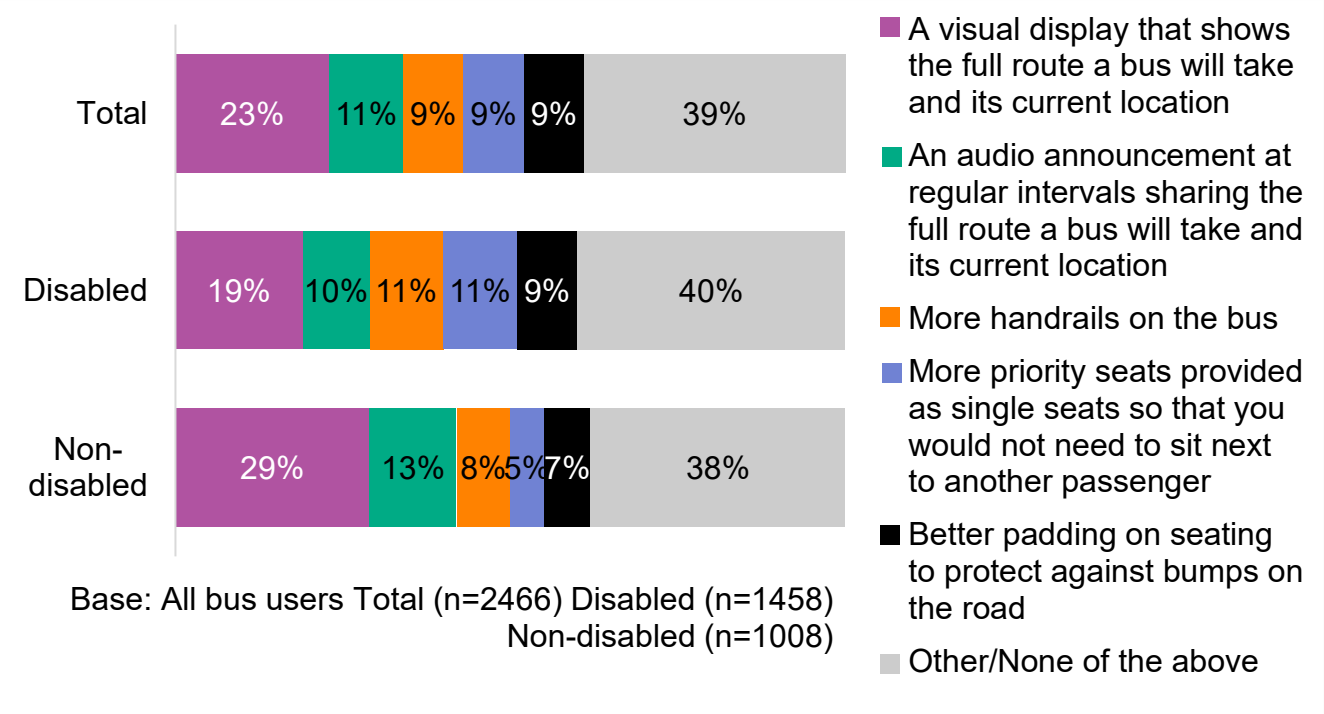


Compared to those without these impairments, participants with a mobility or dexterity impairment were more likely to select assistance from staff available at stations as improving their journeys the most. Additionally, participants with a mobility impairment were more likely to select having accessible toilets available as improving their journeys the most than those without a mobility impairment.

Bus vehicles

As is shown in Figure 19, nearly a quarter (23%) of all bus users indicated that a visual display that shows the full route a bus will take and its current location is the key improvement that would improve journeys. This was followed by an audio announcement at regular intervals with the same information (11%) more handrails on the bus (9%), more priority seats provided as single seats (9%) and better padding on seating (9%). Non-disabled bus users were more likely than disabled bus users to suggest visual and audio information on the bus would improve their journeys the most. Disabled bus users were more likely to indicate increased handrails and more priority seats provided as single seats would improve their journeys the most.

Figure 19 Factors related to bus vehicles that would improve journeys the most



Whether participants had a specific impairment or not impacted how likely they were to select an option as improving their journey the most.

- Participants with a mobility or vision impairment were more likely to select more handrails than those without.
- Those with a mobility impairment were also more likely to select priority seats provided as single seats than those without.
- Those with a vision impairment were also more likely to select an audio announcement at regular intervals than those without.
- Participants with a mental health condition were more likely to select a visual display that shows the full route a bus will take than those without.

Other improvements to bus services

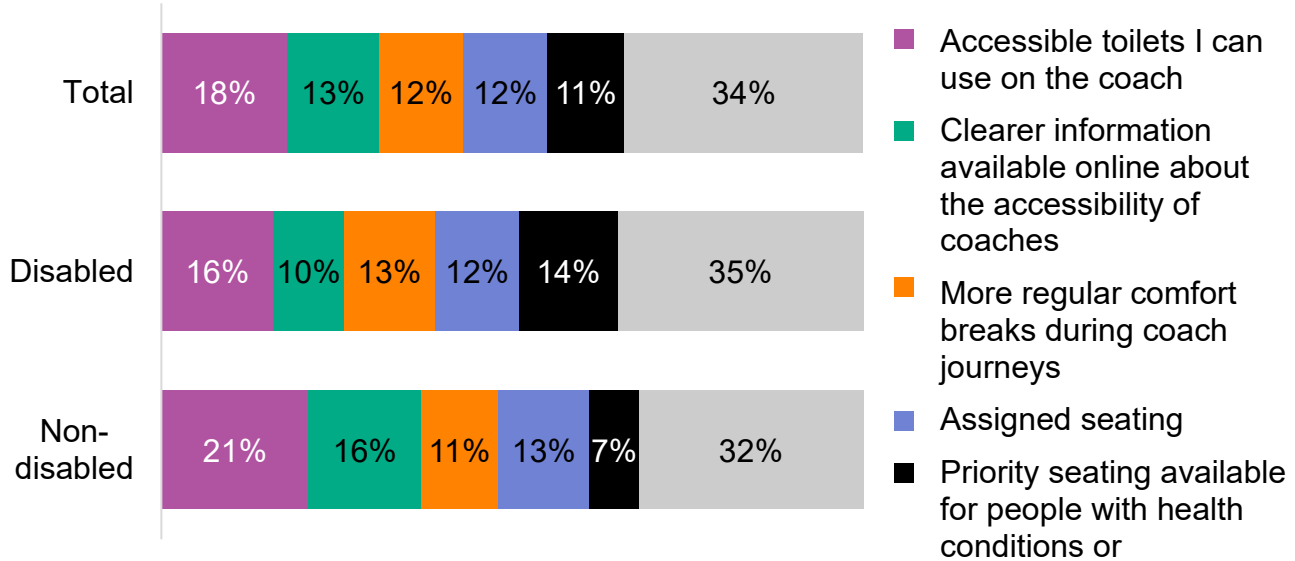
The qualitative research identified other potential improvements to bus services which were not explored in the survey. These related to crowding, interactions with other passengers, bus drivers or journey planning.

- **Measures to mitigate overcrowding** such as increasing bus frequency, providing double decker buses or designing more spacious buses
- **Greater promotion of public awareness surrounding disabled people's travel needs**
- **Greater enforcement of noise limitations**
- **Better training bus drivers on the needs of disabled bus passengers**
- **Improving journey planning apps**, including their accessibility and accuracy
- **Relaxation of the rules governing the use of disabled bus passes**, so that they can be used throughout the day

5.2.2. Improvements to coach services

As shown in Figure 20, the most popular improvement to coach services was the availability of accessible toilets, with 18% of all those who had used a coach in the last 12 months indicating this option would improve their coach journeys the most. However, other options, including clearer information available online about the accessibility of coach vehicles (13%) more regular comfort breaks (12%), assigned seating (12%), priority seating available for people with health conditions or impairments (11%) and lower or fewer steps on board the coach (10%), were similarly important.

Figure 20 Factors related to coach vehicles that would improve journeys the most



Base: All respondents who have used a coach in the last 12 months Total (n=1341) Disabled (n=763) Non-disabled (n=578)

Some differences were found between the disabled and non-disabled populations for which option would provide the greatest improvement. Having priority seating available for people with health conditions or impairments would have the most impact for 14% of disabled passengers and only 7% of non-disabled passengers. While having clearer information available online about the accessibility of coach vehicles was most important for 16% of non-disabled people and only 10% of disabled people. This could be because non-disabled passengers are taking a broad view of accessibility and still face challenges using coaches.

Whether participants had a specific impairment or not impacted how likely they were to select an option as significantly improving their journey the most. Those with a mental health condition and those whose condition did not fit into a named category, including neurodivergent passengers, were more likely to select more regular comfort breaks than those without these specific conditions. Participants with a hearing impairment were more likely to select clearer information available online than those without.

The accompanied journeys demonstrated other areas for improvement for coach services:

- **Improve comfort of all seating on coaches** e.g. more leg room
- **Provide clearer signage** including more departure boards at stations
- **Provide accurate journey apps** that provide delay and cancellation information
- **Better training for staff** around the needs and experiences of disabled passengers
- **Provide ramps and lifts on all journeys** and ensure they are in good working order
- **Raise public awareness** of the needs of disabled passengers to promote patience and understanding

6. Conclusions

The research sought to distinguish between factors that make disabled people's journeys by bus and coach extremely difficult or impossible as well as to identify design features that would significantly improve journeys. By doing this, the aim was to differentiate what are the minimum features to enable accessibility and what should be considered best practice or an enhancement. By looking at the granular detail of each stage of the journey, the research uncovered a range of issues that were cross-cutting – having a negative impact on the disabled and non-disabled population alike – as well as a few that were more particular to people with specific health conditions or impairments.

When considering bus journeys, the quantitative data revealed that those with mobility, stamina, dexterity, or visual impairments were often more severely impacted by issues relating to navigating physical space and obstacles than disabled people without these impairments. Examples of such issues include availability of seating at bus stops, if the route taken to the bus stop includes steep or uneven ground, if the bus is not lowered for passengers to get on or if there are limited handrails on the bus. Those with mental health conditions and cognitive impairments often reported being more severely impacted by features that affected the availability of information about their journey, such as a lack of timetable information or audio or visual displays on board buses. These findings were echoed in the accompanied coach journeys, where boarding and alighting from the coach and accessing seating presented (sometimes insurmountable) challenges for those with mobility impairments; while those with mental health conditions could suffer anxiety when information was unavailable. However, it is worth reiterating that participants often had multiple health conditions or impairments that may have interacted in complex ways to affect experiences. While these categories are a useful heuristic and necessary for conducting research, they may not always accurately capture this complexity.

Understanding bus journeys

Thinking of end-to-end journeys, the distance to a bus stop was a key factor shaping experiences for those with mobility, vision, stamina, or dexterity impairments that affected their ability to navigate physical space. Distances of over ten minutes of walking or wheeling, or routes over steep or uneven ground and a lack of pedestrian crossings were all scenarios that would negatively impact these individuals. However, more widely across focus group participants, the convenience (or lack thereof) of bus stops was something that widely shaped views and usage of bus services. Indeed, the positive experiences with Demand Responsive Transport (DRT) shared within focus groups highlighted the convenience of the bus arriving at your house as well as the more personalised service received from the driver.

At bus stops, the availability of basic facilities such as seating, shelter and a readable timetable are all critical to disabled people having an acceptable journey experience. Going beyond this, providing fully enclosed shelters, live travel information via visual displays and CCTV would all substantially improve disabled people's experiences. While these would disproportionately benefit disabled people, they would also enhance the travel experience of non-disabled bus users too.

Having multiple buses stop at the same time at the same stop can be challenging for those with visual or cognitive impairments but can also be stressful for those with mental health conditions. While the provision of a button to hail the bus could be an enhancement to resolve

this and this was a popular option among disabled people, better training or guidance to drivers to always pull into the front of the bus stop even if they have been waiting behind another bus, could address this issue.

The introduction of bus vehicles that lower to reduce the size of the step needed to board has been a key improvement for disabled people with mobility impairments. However, these are only effective where drivers pull in close to the kerb. Having to ask for this feature to be deployed was also a frustration for disabled people.

Once on the bus vehicle, negative experiences were not generally those linked to the design features of the vehicles themselves. Instead, it was experiences of buses being crowded; drivers pulling away before passengers were seated and aisles being narrow or obstructed that most affected disabled people. These are issues that are likely to be best addressed through improvements to the availability of bus services and training for staff. Design features on vehicles that did appear important included visual displays and audio information on upcoming stops and greater availability of priority seating. In terms of features that would further enhance people's experiences, providing audio and visual information that describes the whole journey rather than just the next stop and more handrails were items that were most frequently selected.

Understanding coach journeys

The research highlighted that coach use among disabled and non-disabled people is fairly low, but disabled people were more likely to never have used a coach than non-disabled people. Perceptions of coach travel were shaped by the comparison being made. Coaches are perceived to be more comfortable, less crowded and offer a better service than buses. However, they are viewed less positively in comparison to trains.

Accompanied coach journeys shed light on the seemingly small but consequential everyday challenges that disabled people may encounter during these journeys. These start at booking, where those using mobility aids have to provide detailed information about their aid well in advance of their journey.

Coach stops and stations were often poorly integrated with local transport and the design had not always accounted for access needs. Once at the coach stop or station, basic facilities were not always available: accessible toilets were out of order, departure boards were unavailable, and in some cases, there was nowhere to sit down. In contrast, good examples included coach stations with priority lounges, that were warm, clean and quiet.

Boarding and alighting coaches and accessing the main area of seating could be difficult for those with mobility or visual impairments. All the coach vehicles that were used for the accompanied journeys were able to lower to reduce the initial step onto the vehicle, which was helpful, but again this was most effective where drivers pulled in close to the kerb. Ramps were also available, although participants sometimes felt that drivers were reluctant to get them out. However, as the findings show, disabled people who used wheelchairs would not be able to guarantee their travel on coach, despite having clearly communicated their needs. This clearly remains a major barrier for this group of passengers.

Once on the coaches, access to the toilet was a challenge for those with mobility or vision impairments where there were stairs involved. The small size of the toilets and the lack of

handrails also made these hard to manoeuvre within. Having accessible toilets onboard all coaches was highlighted in the survey by all passengers as a key factor that would improve journeys. Relatedly, having more regular comfort breaks was an improvement that would be welcomed by all.

Interaction of comfort and safety

Finally, it is worth nothing that many of the factors that contribute to making journeys difficult or uncomfortable for disabled people also had an impact on feelings of safety. Disabled people were less likely than non-disabled people to report feeling safe across all stages of a bus journey. Where facilities or services are poor, these can put people at greater risk. Feelings of safety were also shaped by demographic factors: women, those who did not identify as heterosexual and younger people, were less likely to feel safe than others and this interacted with disability. As a result, any changes to improve comfort would also improve feelings of safety as well, particularly among these groups.

Appendices

Appendix A: Detailed Methodological Approach

Focus groups and travel diaries

Participants were recruited from the NatCen Panel using a sample of participants who had previously indicated that they were bus users. After short screening questionnaire, checking for details of the participants' health conditions and accessibility requirements, they were invited to participate in an online focus group and offered the opportunity to also complete a travel diary. For those who felt unable to take part in a focus group due to their health condition, a telephone interview was offered.

Focus groups were structured around the participants' main impairment or health condition. Groups were structured in this way to aid people to feel more comfortable discussing issues related to their impairment or health condition in an open manner. Across the sample, there were a significant number of participants with multiple health conditions or impairments that could interact in complex ways. For recruiting to focus groups, this would often mean participants could be eligible for more than one group. To ensure all participants were a good fit for the group they were allocated to, there was a degree of flexibility in the allocation process.

- **Mental Health** – Participants with health conditions that primarily impacted their emotional, psychological or social wellbeing. Participants in this group did not report having any other long-lasting health conditions.

- **Mobility Impairments** – Participants with health conditions that required the use of a mobility aid to assist with standing, walking or other types of physical exertion (for example, as a result of symptoms such as pain, fatigue, breathing difficulties or other types of physical discomfort). Two separate groups were created to distinguish between wheelchair and/or mobility scooter users and other mobility aid users:

  – *Mobility – ambulant*. Participants who used a mobility aid to assist them when travelling by bus, for example a walking frame, crutches or a long cane.

  – *Mobility – wheelchair or mobility scooter user*. Participants who used a wheelchair or mobility scooter to assist them when travelling by bus for at least some journeys. Participants in this group may also have used other aids, such as a walking frame, to assist them for some journeys.

- **Visual Impairments** – Participants with sight loss. This included those who travelled with and without travel aids (including assistance dogs).

- **Hearing Impairments** – Participants with hearing loss. This group included people with age-related hearing loss; tinnitus; and Meniere's disease.

- **Cognitive** – This group included participants with impairments that caused difficulties with learning, understanding, concentrating or memory caused by trauma to the head, strokes or as a result of long-term physical condition.

- **Non-visible (mix)** – Participants with non-visible health conditions that did not require the use of an aid when travelling by bus. This group included participants with a diverse range of conditions including endometriosis, epilepsy, multiple sclerosis (MS). It also included participants whose conditions affected them socially or behaviourally for example individuals with diagnoses of attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD).

Seven focus groups of five to seven participants were conducted. Each group was conducted online using Zoom and lasted 90 minutes. Participants were offered £40 shopping voucher as a thank you for their time. In addition to the groups, seven depth interviews were conducted, lasting between 45 and 60 minutes. All of the interview participants experienced multiple health conditions or impairments. With participants' consent all focus groups and interviews were audio recorded and transcribed verbatim.

Topic guides were used for the focus groups and interviews to guide the conversation. They covered the following key areas:

- Background to participants, including their health condition and their use of buses and coaches
- Bus use, including their views of the accessibility of their local bus stop, station and bus vehicles
- Coach use, including their perceptions of coaches and their views on coach accessibility
- Good practice and suggested improvements

Travel diaries were hosted on an online platform. Participants were asked to share their views and any relevant photos about accessibility of up to five bus journeys in the week leading up to the focus group. Participants who shared one to two entries received a £5 thank you voucher while those who submitted three or more entries received £10.

Accompanied journeys

In order to gain a deeper understanding of everyday experiences of coach use, the second stage of the qualitative research consisted of 15 accompanied journeys on coaches.

Given the demanding nature of the task asked of participants, a multi-phased approach to recruitment was adopted. A number of advocacy groups and charities across England were contacted and asked to share the invitation to participate in the research with their networks. Personal networks were also used to contact potential participants. Participants who had participated in focus groups were invited to also participate. Finally, a trusted recruitment agency was enlisted to help recruit the remaining participants.

Participants were incentivised with a £100 voucher which was given at the beginning of each journey. All elements of the journey, including getting to the coach station and back to the participant's home, were paid for by the research team. This included fares for carers or companions if these were required.

The journeys took place across England, with approximately one third starting or ending in London, the Northwest and the Northeast. The coach journeys were booked through a range of different UK coach providers. Measures were taken to preserve the health and safety of passengers. Journey duration was limited to between 1-3 hours and the demand of the journey was minimised (e.g. no night journeys were organised).

Researchers travelled with the participants to observe their experiences of travelling by coach. In some cases, and depending on the participants' preference, this included the journey to the coach station as well as back to the participants' homes using a range of transport modes. In other cases, the researchers met the participants at the coach station. The research approach involved both observing the participant at the coach stations and on the coach itself, and a semi-structured interview conducted throughout the journey and covering various aspects of the experience. Once again, a guide covering key areas of observation and topics to cover was produced to guide researchers on what to capture. Detailed fieldnotes were written up and where relevant photos were taken by the researcher. Where possible audio recordings were also made.

Online survey

A 20-minute online survey was conducted with a representative sample of disabled (n=1458) and non-disabled (n=1008) The online survey used Dynata's online panel to recruit participants. Quotas were set for age, sex, frequency of use, region, employment status and rural and urban split for both the disabled and non-disabled population. For the disabled segment of the sample, quotas were also set for different impairment type and accounted for the fact that respondents may have multiple impairments. The quotas for each population were based on the Inclusive Transport Strategy Wave 2 Panel Survey and were designed to make this survey as indicative of the wider population as possible given recruitment was done through a non-probability panel (i.e. a panel not representative of the population). Quotas provide recruitment targets for what proportion of the final survey sample should come from different demographic groups. Where quotas were not met in this survey, weights were applied. This means that the data was adjusted to represent the target quotas (see Appendix B). The Inclusive Transport Strategy Wave 2 Panel Survey is a nationally representative random probability survey of the disabled and non-disabled public This survey was used to provide robust population estimate for NatCen's evaluation of the Inclusive Transport Strategy, which is the DfT's strategy for making the transport system more accessible for disabled people.

The survey used in this study was designed to be twenty minutes long. Questionnaire design was informed by early insights from the focus groups. The questions primarily covered bus use but also included some questions on coach use and feelings of safety. The bulk of the questionnaire covered questions concerning the impact on making a bus journey of a range of hypothetical situations that may be commonly encountered when using a bus. Participants that selected that each scenario would make their journey very difficult or extremely difficult or impossible were also asked how often this scenario had occurred on their bus journeys over the last 12 months.

Descriptive analysis of the quantitative data focussed on exploring and comparing experiences of key sub-groups. Subgroups explored included the disabled and non-disabled populations; impairment types; and socio-demographic differences. Significance testing at the 95% level was carried out to explore key differences between subgroups. If there is a difference between two groups in a survey, this does not guarantee that the same difference

exists in the wider population, because a survey only collects data from a sample of the wider population. When a difference between groups is statistically significant at the 95% level, this means that the reader can be 95% confident that the difference exists in the wider population as well.

Conduct of the TURF analysis

In addition to the descriptive analysis, an advanced statistical analysis of Total Unduplicated Reach and Frequency (TURF) was conducted. The TURF analysis was based on the impact assessment survey participants conducted on 23 scenarios related to bus travel. In situations where participants reported that a scenario made it very difficult, extremely difficult, or impossible to travel by bus, the frequency with which they encountered each scenario was also explored.

Binary variables were derived from the responses to these 23 frequency-related questions in accordance with the requirements of the TURF analysis. Specifically, if a scenario was reported to occur during most or some of the journeys taken in the last 12 months, it was coded as having an impact on individuals. Conversely, if a scenario was perceived as a substantial barrier to bus travel but was encountered less often or not at all during journeys, it was not coded as having an impact on individuals. This approach enabled the analysis to consider both the severity and frequency of challenges experienced by commuters.

Table 7 The TURF analysis results for stop and stations scenarios

Scenarios: stops stations	Disabled bus users				Non-disabled bus users				Disabled bus users without a mobility impairment			
	% affected by each scenario	combinations			% affected by each scenario	combinations			% affected by each scenario	combinations		
		1	2	3		1	2	3		1	2	3
		Reach				Reach				Reach		
		45.8	45.7	45.5		26.9	26.7	26.4		37.7	37.4	37.0
The bus stop or station had no seating they could use	23	✓	✓	✓	7		✓		14	✓	✓	✓
The bus stop or station had no shelter they could use	20		✓	✓	10	✓	✓	✓	14	✓		✓
No timetable information they could access at the bus stop or station	18	✓	✓	✓	14	✓	✓	✓	17	✓	✓	✓
Had to wheel or walk for more than 10 mins to get to the bus stop or station	17	✓	✓	✓	5			✓	10			
The route to the bus stop or station included steep or uneven ground	17	✓		✓	3				10		✓	✓
No live visual display that they could use at the bus stop or station	16				10	✓	✓	✓	16	✓	✓	✓
No pedestrian crossings near the bus stop or station	14	✓	✓		7	✓	✓	✓	10	✓	✓	
The bus stop or station had poor lighting	12				8	✓			9			
The bus stop was located outside a busy shop or café	8				2				7			
The bus stop was next to a cycle path that they needed to cross	6				3				6			
Unweighted base	*1,458*				*1,008*				*846*			

Table 8 The TURF results for vehicles scenarios

Scenarios: vehicles	Disabled bus users				Non-disabled bus users				Disabled bus users without a mobility impairment			
	% affected by each scenario	combinations			% affected by each scenario	combinations			% affected by each scenario	combinations		
		1	2	3		1	2	3		1	2	3
		Reach				Reach				Reach		
		50.5	50.1	50.1		23.8	23.8	23.6		43.2	43.0	42.9
The bus was crowded	36	✓	✓	✓	15	✓	✓	✓	32	✓	✓	✓
The driver pulled away before they were seated or positioned	21	✓	✓	✓	6	✓	✓	✓	16	✓	✓	✓
The bus aisle was narrow or obstructed by objects	20	✓	✓	✓	7	✓	✓	✓	13			
They could not use the priority seating because it was occupied	17	✓		✓	4				8			✓
Limited handrails on the bus	12	✓	✓		8	✓	✓	✓	11	✓	✓	✓
No visual displays identifying the next stop on the bus	12		✓		5				8			
The driver did not lower the bus for them to get on	10				3				4			
They could not use a wheelchair space because it was occupied	9			✓	5		✓		10	✓		
No audio announcements of the next stop on the bus	9				-				5			
The driver forgot to tell them when to get off	7				3			✓	7		✓	
No space for pram or pushchair, suitcase luggage or shopping trolley	7				4	✓			6	✓	✓	✓
The ramp to get onto the bus could not be used	3				-				1			
No wheelchair anchoring on the bus	2				-				1			

Unweighted base	1,458				1,008				846			

Appendix B: Achieved Sample

The tables below set out the achieved (unweighted) sample across all phases of the research.

Table 9 Achieved focus group sample, primary characteristics

	Mobility - Ambulant	Hearing	Mobility - Wheelchair / scooter user	Mental health	Visual	Non-visible	Cognitive	Total
Coach user	4	3	5	3	0	1	1	17
18 to 39	0	0	1	1	0	2	1	5
40 to 59	2	2	2	3	4	1	4	18
60+	3	4	3	2	1	2	0	15
Female	2	2	6	2	2	4	3	21
Male	3	4	0	4	3	1	2	17
Total	**5**	**6**	**6**	**6**	**5**	**5**	**5**	**38**

Table 10 Achieved focus group and interview sample secondary characteristics

Criteria	Characteristic	Number achieved
Employment status	In employment	12
	Not in employment	26
Geography	Rural	11
	Urban	27
Region	London	5
	Midlands and East of England	11
	North	8
	South East and West England	14
Ethnicity	BAME	5
	White	32
Total		**38**

Table 11 Achieved sample for the accompanied coach journeys

Criteria	Characteristic	Number achieved
Gender	Male	4
	Female	11

Impairment / health condition	Vision	3
	Mobility	8
	Non-visible	5
	Mental health	2
	Hearing	1
Aid user	Visual aid (long cane/assistance dog)	4
	Wheeled aid	2
	Walking aid	5

Table 12 Quotas and achieved sample for the disabled population (n=1458)

Criteria	Characteristic	Quota Target	Quota Achieved
Sex	Female	885	834
	Male	615	619
Age	18-39	495	475
	40-59	450	456
	60+	555	527
Employment Status	In employment	480	537
	Out of employment	1020	921
Location Type	Rural	225	258
	Urban	1275	1200
Region	North	435	439
	Midlands / East of England	420	368
	South East / West England	360	361
	London	285	290
Bus Use Frequency	At least once a day	105	135
	At least once a week	420	422
	At least once a month	345	347
	At least once a year	615	554
Impairment Type	Mobility	630	598
	Stamina	390	374
	Mental Health	675	510
	Cognitive	195	141
	Dexterity	195	157
	Hearing	90	93
	Vision	75	82
	Other Disability	270	268

Table 13 Quotas and achieved sample for the non-disabled population (n=1008)

Criteria	Characteristic	Quota Target	Quota Achieved
Sex	Female	520	526

	Male	480	481
Age	18-39	390	392
	40-59	300	300
	60+	310	316
Employment Status	In employment	640	609
	Out of employment	360	399
Location Type	Rural	110	128
	Urban	890	880
Region	North	260	254
	Midlands / East of England	260	278
	South East / West England	220	236
	London	250	240
Bus Use Frequency	At least once a day	80	91
	At least once a week	210	226
	At least once a month	220	228
	At least once a year	490	463

Appendix C: Improvements to bus and coach services

Table 14 Factors related to bus stops that would improve journeys the most

Improvements	Total (Base: n=2466)	Disabled (Base: n=1458)	Non-disabled (Base: n=1008)
A completely enclosed shelter at the bus stop to provide better protection from bad weather	30%	32%	26%
CCTV cameras at bus stops	20%	18%	22%
Audible announcements of live bus departures to tell me when by bus would arrive	14%	12%	17%
A button you could press to show you want to board the next bus instead of hailing the driver	13%	15%	11%
Clearer information available online about the accessibility of bus stops	9%	9%	10%
A Help Point button which you could press to communicate with a control room or call centre	7%	8%	6%
None of the above	7%	6%	8%

Table 15 Factors related to bus or coach stations that would improve journeys the most

Improvements	Total (Base: n=2466)	Disabled (Base: n=1458)	Non-disabled (Base: n=1008)
Improved signs showing which stop to use at bus and coach stations	31%	29%	33%
Accessible toilets available at bus and coach stations	18%	19%	18%

Clearer information available online about the accessibility of bus and coach stations	12%	10%	15%
Assistance from staff available at bus and coach stations to help me on and off the vehicles and guide me through the station	10%	12%	7%
Lifts available at bus and coach stations	7%	10%	4%
Larger accessible toilets (Changing Places toilets) available at bus and coach stations	7%	8%	6%
Tactile paths available withing bus and coach stations to help visually impaired people find their way	3%	3%	2%
None of the above	12%	10%	14%

Table 16 Factors related to bus vehicles that would improve journeys the most

Improvements	Total (Base: n=2466)	Disabled (Base: n=1458)	Non-disabled (Base: n=1008)
A visual display that shows the full route a bus will take and its current location	23%	19%	29%
An audio announcement at regular intervals sharing the full route a bus will take and its current location	11%	10%	13%
More handrails on the bus	9%	11%	8%
More priority seats provided as single seats so that you would not need to sit next to another passenger	9%	11%	5%
Better padding on seating to protect against bumps on the road	9%	9%	7%

Priority seats with more legroom	8%	11%	3%
Seatbelts available	6%	5%	6%
Better lighting on the bus	4%	3%	5%
Clearer information available online about the accessibility of bus vehicles	5%	4%	7%
Wheelchair space for forward facing wheelchairs	2%	3%	1%
An interior colour scheme that avoids using very bright colours and overwhelming patterns	2%	3%	1%
A second wheelchair space provided on board the bus	2%	3%	1%
An induction loop to help people with hearing aids to be able to communicate with the driver	1%	2%	1%
None of the above	9%	7%	12%

Table 17 Factors related to coach vehicles that would improve journeys the most

Improvements	**Total (Base: 1341)**	**Disabled (Base: 763)**	**Non-disabled (Base: 578)**
Accessible toilets I can use on the coach	18%	16%	21%
Clearer information available online about the accessibility of coaches	13%	10%	16%
More regular comfort breaks during coach journeys	12%	13%	11%
Assigned seating	12%	12%	13%
Priority seating available for people with health conditions or impairments	11%	14%	7%
Lower or fewer steps to board the coach	10%	12%	8%

A lift to access the coach for people who are not in a wheelchair	5%	7%	3%
An interior colour scheme that avoids using very bright colours and overwhelming patterns	4%	5%	4%
An induction loop to help people with hearing aids to be able to communicate with the driver	4%	4%	4%
None of the above	10%	7%	14%

Appendix D: Survey Questionnaire

Introduction

Intro1

Hi, welcome to our survey.

We would like to explore your views and experiences in relation to travelling on public transport. These questions are being asked by the National Centre for Social Research on behalf of the Department for Transport.

Even if you do not feel sure, we still value your opinion, but please answer as honestly as you can.

The survey should take you around 20 minutes to complete, but this may be a little longer or shorter depending on your circumstances. You don't have to complete the whole survey in one go – any progress you make will be saved and you can start where you left off when you next log in.

For information on how your data will be used, please visit this page: https://natcen.ac.uk/accessibility-and-inclusivity-bus-and-coach-travel-privacy-notice

To get started, simply click the 'Continue' button below.

Intro2

In this survey we would like to ask some questions that may be perceived as sensitive such as ethnicity, sexual orientation and health data. Providing information in response to these questions is entirely voluntary and you may withdraw your consent at any time. The answers that you provide will be used only for research analysis purposes.

Do you consent to the collection of this information?

1. Yes, I consent [CONTINUE]
2. No, I do not consent [SCREEN OUT]

Bus & Coach Accessibility and Inclusivity

{ASK ALL}
{SINGLE CODE}
TERMINATE IF CODE 5 SELECTED
BusFrq [FLIP SCALE]

We'd like to start by understanding what modes of transport you use.

Please think about the last 12 months.

How frequently, if at all, did you use local buses during that time?

By local buses, we mean buses that typically cover shorter distances in the local area. The vehicles accommodate both standing and seated passengers, and people usually keep their belongings with them.

Please select one answer only.

1. At least once a day
2. Less than once a day but at least once a week
3. Less than once a week but at least once a month
4. Less than once a month but at least once a year
5. Never [SCREEN OUT]

{ASK ALL}
{SINGLE CODE}
CoachFrq [FLIP SCALE]
Please continue to think about the last 12 months.

How frequently, if at all, did you use coaches during that time?

By coaches, we mean vehicles that typically travels longer distances and have limited stops. They do not generally allow passengers to stand whilst they are moving, and may have a separate compartment for the storage of passenger belongings.

Please select one answer only.

1. At least once a day
2. Less than once a day but at least once a week
3. Less than once a week but at least once a month
4. Less than once a month but at least once a year
5. Never

{ASK ALL}
{SINGLE CODE}
Gender
We'd now like to ask a few questions about you.

What gender do you identify as?

1. Male
2. Female
3. Other
4. Prefer not to say

{ASK ALL}
SINGLE CODE
Age
What is your age?

1. 18-29
2. 30-39

3. 40-49
4. 50-59
5. 60 or older

{ASK ALL}
{SINGLE CODE}
TERMINATE IF CODES 10-14 SELECTED
Region
In what region do you live?

1. North East England
2. North West England
3. Yorkshire and The Humber
4. East Midlands
5. West Midlands
6. East of England
7. London
8. South East England
9. South West England
10. Wales [PN: SCREEN OUT]
11. Scotland [PN: SCREEN OUT]
12. Northern Ireland [PN: SCREEN OUT]
13. Channel Islands [PN: SCREEN OUT]
14. Isle of Man [PN: SCREEN OUT]

{ASK ALL}
{SINGLE CODE}
Location
Would you describe the area you live in as urban, suburban or rural?

1. Urban (typically refers to living within a city or a town)
2. Rural (typically refers to living in a small town or village in the countryside)
3. Suburban (typically refers to living in an area just outside a city or a town)

{ASK ALL}
{SINGLE CODE}
Employment
Which of the following descriptions describes what you spent the most time doing in the last seven days?

Please select one option only.

1. In full-time education (including on vacation)
2. On government training/employment programme
3. In paid work (or away temporarily) for at least 10 hours per week
4. Waiting to take up paid work already accepted
5. Unemployed
6. Not working due to being permanently sick or disabled
7. Wholly retired from work

8. Looking after your home or family
9. Doing something else

{ASK ALL}
{SINGLE CODE}
Dis12_DfT
Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?

1. Yes
2. No

{IF Dis12_DfT =1}.
{MULTI-CODE}
Distyp [RANDOMISE 1…10]
Do any of these conditions or illnesses affect you in any of the following areas?

Please select all relevant areas.

1. Vision (for example, blindness or partial sight)
2. Hearing (for example, deafness or partial hearing)
3. Mobility (for example, walking short distances or climbing stairs)
4. Dexterity (for example, lifting or carrying objects, using a keyboard)
5. Learning or understanding or concentrating
6. Memory
7. Mental health
8. Stamina or breathing or fatigue
9. Socially or behaviourally (for example, associated with autism spectrum disorder (ASD), which includes Asperger's, or attention deficit hyperactivity disorder (ADHD)
10. Speech
11. Other (please specify)
96. None of these [EXCLUSIVE]

{IF Distyp =1…11}
{SINGLE CODE}
DisAct_DfT
{IF single answer 1…11 at DisTyp: Does your condition or illness; {IF multiple answers 1…11 at DisTyp: Do any of your conditions or illnesses} reduce your ability to carry out day-to-day activities?

1. Yes, a lot
2. Yes, a little
3. Not at all

{COMPUTE FOR ALL}
DisabilityDV
IF DisAct_DfT = 1 OR 2, DisabilityDV = 1 [Yes]
IF DisAct_DfT=3, DisabilityDV = 2 [No]

{SHOW TO DV=1}
Info1
The Department for Transport is particularly interested in understanding the needs and experiences of people with a long-term health condition or impairment when using public transport. The following questions are designed to understand more about your individual needs and experience.

{IF multiple responses coded at DisTyp AND DisabilityDV=1}
{MULTI-CODE}
Distyp2 [RANDOMISE: 1…10; display only answers given at DisTyp]
Which of the following reduce your ability to carry out day-to-day activities?

Please select all that apply.

1. Vision (for example, blindness or partial sight)
2. Hearing (for example, deafness or partial hearing)
3. Mobility (for example, walking short distances or climbing stairs)
4. Dexterity (for example, lifting or carrying objects, using a keyboard)
5. Learning or understanding or concentrating
6. Memory
7. Mental health
8. Stamina or breathing or fatigue
9. Socially or behaviourally (for example, associated with autism spectrum disorder (ASD), which includes Asperger's, or attention deficit hyperactivity disorder (ADHD))
10. Speech
11. Other (please specify)
12. None of these [EXCLUSIVE]

{ASK IF DisabilityDV = 1}
{SINGLE CODE}
Visible
Some people have impairments or health conditions that are easily visible to others, whilst some impairments and health conditions are harder to see.

Would you say that your long-term impairment or health condition is visible to other people?

1. Yes – my impairment or health condition is clearly visible to others
2. Yes – my impairment or health condition is somewhat visible to others
3. No – my impairment or health condition is not visible to others

Travel contextual questions

{ASK ALL}
Intro3
The next questions are about travelling. We are interested in all kinds of travelling – this includes short journeys, long journeys, journeys you make everyday, and journeys you make less often.

When answering these questions, we would like you to think about the last 12 months.

Please click ‘Continue’ button to continue.

{ASK IF DisabilityDV = 1}
{MULTI-CODE}
MobTrv1 [Randomise…1 to 8 ALWAYS SHOW CODES 1 AND 2 TOGETHER]]
Please think about the last 12 months.

In that time, did you use any of the following aids to assist you when travelling?

Please select all that apply.

1. Wheelchair (manual)
2. Wheelchair (motorised)
3. Mobility Scooter (i.e. an electrically powered scooter that has a seat, not an e-scooter)
4. Walking frame/sticks or crutches
5. Long cane
6. Assistance dog (including guide dogs)
7. Orientation and guidance applications (such as Aira, Soundscape or Blindsquare)
8. Hearing aid
9. Other, please specify [ANCHOR; TEXT BOX]
10. None of these [ANCHOR;EXCLUSIVE]

{ASK IF DisabilityDV = 1}
{SINGLE CODE}
AccTlt
Do you require accessible toilet facilities when using transport, or at stations, ports, terminals or airports?

1. Yes
2. No

{ASK ALL}
{MULTI CODE}
TrvExtras {Randomise…1 to 5}
Please consider the local bus journeys you have taken in the last twelve months.

Did you regularly travel with any of the below when you used the bus?

Please select all that apply.

1. Pram or pushchair
2. Suitcase luggage
3. Shopping trolley
4. Young children
5. Pets (excluding assistance dogs)
6. None of the above {ANCHOR;EXCLUSIVE OPTION}

Bus and coach use

{ASK ALL}
Intro4
Thank you for your participation so far. The next set of questions will cover your experience with bus and coach use.

Please click ‘Continue’ button to continue.

{ASK ALL}
{GRID}
SC PER ROW
Satisfaction {FLIP SCALE}
Thinking about the last bus journey you took in your local area, to what extent do you agree or disagree with each of the following statements related to bus travel?

Column

1. Strongly agree
2. Tend to agree
3. Neither agree nor disagree
4. Tend to disagree
5. Strongly disagree
6. Does not apply to me {ANCHOR}

Rows {Randomise}

1. I find it easy to travel by bus
2. The design of my local bus vehicle generally meets my needs
3. The design of my local bus stop generally meets my needs
4. The design of my local bus station generally meets my needs

{ASK IF “Tend to disagree” or “Strongly disagree” selected for Codes 2, 3 OR 4 at Satisfaction}
{GRID}
SC PER ROW
FutureUse {FLIP SCALE}

You mentioned that the design of your local bus service does not meet your needs. To what extent do you agree or disagree with the statement(s) below?

Column

1. Strongly agree
2. Tend to agree
3. Neither agree nor disagree
4. Tend to disagree
5. Strongly disagree
6. Don’t know {ANCHOR}

Rows

1. {Show if “Tend to disagree” or “Strongly disagree” for Code 2 at Satisfaction} I would travel by bus more often if the design of my local bus vehicle met my needs
2. {Show if “Tend to disagree” or “Strongly disagree” for Code 3 at Satisfaction} I would travel by bus more often if the design of my local bus stop met my needs
3. {Show if “Tend to disagree” or “Strongly disagree” for Code 4 at Satisfaction} I would travel by bus more often if the design of my local bus station met my needs

{ASK ALL}
{LOOP}
SC PER OPTION
GetToStop
Please consider the following scenarios you might encounter when travelling to a bus stop or station, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to get to the bus stop or station.

{Options to be shown one per screen; Randomise}

1. If there were no pedestrian crossings near to the bus stop or station to help me to access it…
2. If I had to {Textfill if MobTrv1=1-3 wheel else walk} for more than 10 minutes to get to the bus stop or station…
3. If the route to the bus stop or station included steep or uneven ground…

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to get to the bus stop or station
2. …I would find it very difficult to get to the bus stop or station
3. …I would find it slightly difficult to get to the bus stop or station
4. …it would have no impact on how difficult I find it to get to the bus stop or station

{ASK ALL}
{LOOP}
SC PER OPTION
StopStnA
Please now consider the following scenarios you might encounter at a bus stop or station, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the bus stop or station.

{Options to be shown one per screen; Randomise}

1. If the bus stop or station had poor lighting…
2. If the bus stop or station did not have seating I could use…
3. If the bus stop or station had no shelter that I could use…

4. If there was no timetable information I could access at the bus stop or station…
5. If there was no live visual display that I could use showing me when my bus will arrive…
{ADD LINK TO IMAGE WITH TEXT: Please click here to see an image of the visual display we are referring to. https://natcen.ac.uk/digital-bus-stop-display }

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the bus stop or station
2. …I would find it very difficult to use the bus stop or station
3. …I would find it slightly difficult to use the bus stop or station
4. …it would have no impact on how difficult I find it to use the bus stop or station

{ASK ALL}
{LOOP}
SC per option
StopStnB
Please now think about the scenarios you might encounter at bus stops, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the bus stop.

{Options to be shown one per screen; Randomise}

1. If the bus stop were located outside a busy shop or café…
2. If the bus stop were next to a cycle path that I needed to cross to access it…

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the bus stop
2. …I would find it very difficult to use the bus stop
3. …I would find it slightly difficult to use the bus stop
4. …it would have no impact on how difficult I find it to use the bus stop

{ASK ALL}
{LOOP}
SC per option
BrdAlghtA
Please now think about the following scenarios you might encounter when getting on or off a bus, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the bus.

{Options to be shown one per screen; Randomise}

1. If the driver did not lower the bus for me to get on…

2. If the driver pulled away before I was seated {Show if MobTrv1=1-3: or positioned in the wheelchair space}…

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the bus
2. …I would find it very difficult to use the bus
3. …I would find it slightly difficult to use the bus
4. …it would have no impact on how difficult I find it to use the bus

{ASK ALL}
{LOOP}
SC per option
BrdAlghtB
Please continue to think about the following scenarios you might encounter when getting on or off a bus, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the bus.

{Options to be shown one per screen; Randomise}

1. If the driver forgot to tell me when to get off…
2. {SHOW IF MobTrv1=1,2 or 3: If the ramp to get onto the bus could not be operated or used }

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the bus
2. …I would find it very difficult to use the bus
3. …I would find it slightly difficult to use the bus
4. …it would have no impact on how difficult I find it to use the bus

{ASK ALL}
{LOOP}
SC per option
JrnyA
Please now consider the following scenarios related to being on a bus, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the bus.

{Options to be shown one per screen; Randomise}

1. If the bus was crowded…
2. If the bus aisle was narrow or obstructed by objects…
3. {SHOW IF DisabilityDV=1: If I couldn't use a wheelchair space because it was occupied by objects or people…}

4. If I couldn't use the priority seating because it was occupied by other people or their belongings…
5. {SHOW IF MobTrv1=1,2 or 3: If there was no wheelchair anchoring on the bus…}

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the bus
2. …I would find it very difficult to use the bus
3. …I would find it slightly difficult to use the bus
4. …it would have no impact on how difficult I find it to use the bus

{ASK ALL}
{LOOP}
SC per option
JrnyB
Please continue to think about being on a bus, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the bus.

{Options to be shown one per screen; Randomise}

1. If there were limited handrails on the bus…
2. If there were no audio announcements of the next stop on the bus…
3. If there were no visual displays identifying the next stop on the bus…
4. {SHOW IF TrvExtras = 1-3} If there was no space for my {LIST CODES SELECTED AT TrvExtras OUT OF CODES 1 TO 3. ADD A COMMA BETWEEN EACH CODE AND THE WORD 'OR' BETWEEN THE LAST TWO LISTED}

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the bus
2. …I would find it very difficult to use the bus
3. …I would find it slightly difficult to use the bus
4. …it would have no impact on how difficult I find it to use the bus

{ASK IF at least one Code 1 or 2 answer given at questions from GetToStop to JrnyB, inclusive}
{GRID}
Freq [FLIP SCALE]
You told us that some scenarios would make it very difficult or impossible for you to use bus stops, stations or buses. We would like to understand how often you've experienced these.

Please continue to think about your bus journeys over the last 12 months.

In that time, how often did you experience these?

Across the top:
1. Most of my journeys

2. Some of my journeys
3. Very few of my journeys
4. None of my journeys

Down the side: {Show attributes where Code 1 or Code 2 selected in question “GetToStop” to “JrnyB”. Show attributes in same order as shown in questions “GetToStop” to “JrnyB”}

1. There were no pedestrian crossings near to the bus stop or station to help me to access it [SHOW IF CODE 1 OR 2 SELECTED AT GetToStop]
2. I had to {Textfill if MobTrv1=1-3 wheel else walk} for more than 10 minutes to get to the bus stop or station [SHOW IF CODE 1 OR 2 SELECTED AT GetToStop]
3. The route to the bus stop or station included steep or uneven ground [SHOW IF CODE 1 OR 2 SELECTED AT GetToStop]
4. The bus stop or station had poor lighting [SHOW IF CODE 1 OR 2 SELECTED AT StopStnA]
5. The bus stop or station did not have seating I could use [SHOW IF CODE 1 OR 2 SELECTED AT StopStnA]
6. The bus stop or station did not have shelter I could use[SHOW IF CODE 1 OR 2 SELECTED AT StopStnA]
7. There was no timetable information I could access at the bus stop or station [SHOW IF CODE 1 OR 2 SELECTED AT StopStnA]
8. There was no live visual display that I could use showing me when my bus would arrive [SHOW IF CODE 1 OR 2 SELECTED AT StopStnA]
9. The bus stop was located outside a busy shop or café [SHOW IF CODE 1 OR 2 SELECTED AT StopStnB]
10. The bus stop was next to a cycle path that I needed to cross to access it [SHOW IF CODE 1 OR 2 SELECTED AT StopStnB]
11. The driver did not lower the bus for me to get on [SHOW IF CODE 1 OR 2 SELECTED AT BrdAlghtA]
12. The driver pulled away before I was seated{Show if MobTrv1=1-3: or positioned in the wheelchair space} [SHOW IF CODE 1 OR 2 SELECTED AT BrdAlghtA]
13. The driver forgot to tell me when to get off [SHOW IF CODE 1 OR 2 SELECTED AT BrdAlghtB]
14. {SHOW IF MobTrv1=1,2 or 3: The ramp to get onto the bus could not be operated or used } [SHOW IF CODE 1 OR 2 SELECTED AT BrdAlghtB]
15. The bus was crowded [SHOW IF CODE 1 OR 2 SELECTED AT JrnyA]
16. The bus aisle was narrow or obstructed by objects [SHOW IF CODE 1 OR 2 SELECTED AT JrnyA]
17. {SHOW IF DisabiltyDV=1: I couldn’t use a wheelchair space because it was occupied by objects or people} [SHOW IF CODE 1 OR 2 SELECTED AT JrnyA]
18. I couldn’t use the priority seating because it was occupied by other people or their belongings [SHOW IF CODE 1 OR 2 SELECTED AT JrnyA]
19. {SHOW IF MobTrv1=1,2 or 3: There was no wheelchair anchoring on the bus} [SHOW IF CODE 1 OR 2 SELECTED AT JrnyA]
20. There were limited handrails on the bus… [SHOW IF CODE 1 OR 2 SELECTED AT JrnyB]
21. There were no audio announcements of the next stop on the bus [SHOW IF CODE 1 OR 2 SELECTED AT JrnyB]
22. There were no visual displays identifying the next stop on the bus [SHOW IF CODE 1 OR 2 SELECTED AT JrnyB]

23. {SHOW IF TrvExtras= 1-3} There was no space for my {LIST CODES SELECTED AT TrvExtras OUT OF CODES 1 TO 3. ADD A COMMA BETWEEN EACH CODE AND THE WORD ‘OR’ BETWEEN THE LAST TWO LISTED } [SHOW IF CODE 1 OR 2 SELECTED AT JrnyB]

{ASK ALL}
{7 point scale}
SINGLE CODE PER STATEMENT
PhSafety [FLIP SCALE]
Thinking of the buses you generally use in your local area, please indicate how physically safe you typically feel in each of the following situations using the scale below.

By physically safe, we mean not at risk of injury, trips or falls.

Columns

1. Extremely safe
2. -
3. -
4. -
5. -
6. -
7. Not at all safe

99. Not applicable {ANCHOR}

Rows

1. Walking or wheeling to your local bus stop
2. Waiting at your local bus stop
3. Waiting at your local bus station
4. Travelling on your local bus

{ASK ALL}
{7 point scale}
SINGLE CODE PER STATEMENT
PerSafety [FLIP SCALE]
Still thinking of the buses you generally use in your local area, please indicate how safe you typically feel from harassment, discrimination or violence in each of the following situations using the scale below.

Columns

1. Extremely safe
2. -
3. -
4. -
5. -

6. -
7. Not at all safe

99. Not applicable {ANCHOR}

Rows

1. Walking or wheeling to your local bus stop
2. Waiting at your local bus stop
3. Waiting at your local bus station
4. Travelling on your local bus

{ASK ALL}
{SINGLE CODE
Night
Do you ever travel by bus when it is dark outside?

1. Yes
2. No, because I do not need to travel by bus when it is dark
3. No, because I avoid travelling by bus when it is dark

{ASK ALL}
{LOOP}
SC PER OPTION
CoachUse
Please now think about travelling by coach, either travelling alone or with those you regularly travel with.

For the scenario below, please indicate what impact, if any, it would have on how difficult you would find it to use the coach.

{Options to be shown one per screen; Randomise}

1. If there were no toilets that I could use on the coach…
2. If the coach was a high-floor vehicle with several steps to access the seating…
{Add link to vehicle image on the words 'Please click here to see an image of a high-floor vehicle': https://natcen.ac.uk/coach-steps A high-floor coach vehicle typically has several steps to reach the seating and space for luggage under the floor.}
3. {SHOW IF MobTrv1=1,2 or 3: If there was no lift or ramp to access the coach…}
{Add link to lift image with text: https://natcen.ac.uk/coach-lift Please click here to see an image of a coach lift.}
4. {SHOW IF MobTrv1=6: If there was no space for my assistance dog…}
5. If there were no priority seats designated for disabled passengers…
6. If there was no opportunity to leave the coach during a rest stop…

{Answer options to be shown on each screen}

1. …I would find it extremely difficult or impossible to use the coach
2. …I would find it very difficult to use the coach
3. …I would find it slightly difficult to use the coach

4. …it would have no impact on how difficult I find it to use the coach

Bonus features

{Ask ALL}
{Multicode}
BnsStop
The next few questions ask about things that could significantly improve your travel, either when travelling alone or with those you regularly travel with.

Please think about bus stops. Which of the following options related to bus stops would significantly improve your journey?

Please select all that apply.

{Randomise…1 to 6}

1. A completely enclosed shelter at the bus stop to provide better protection from bad weather
2. CCTV cameras at bus stops
3. Clearer information available online about the accessibility of bus stops
4. A Help Point button which you could press to communicate with a control room or call centre
5. A button you could press to show you want to board the next bus instead of hailing the driver
6. Audible announcements of live bus departures to tell me when my bus would arrive
7. None of the above {EXCLUSIVE; ANCHOR}

{Ask if 3+ options selected at BnsStop}
{RANK}
BnsStopR

You mentioned that the below options related to bus stops would significantly improve your journey. Please now rank the top 3 options that would improve your journey the most.

Please type a number 1 next to the option that would improve your journey the most, a number 2 next to your second choice and a number 3 next to your third choice.

{Show codes selected at BnsStop. Show in same order}

{Ask if 2 options selected at BnsStop}
{Single code}
BnsStopRB

You mentioned that the below options related to bus stops would significantly improve your journey. Please now select the option that would improve your journey the most.

{Show codes selected at BnsStop. Show in same order}

{Ask ALL}
{Multicode}
BnsStn
Please think about bus or coach stations. Which of the following options related to bus or coach stations would significantly improve your journey?

Please select all that apply

{Randomise…1 to 7}

1. Improved signs showing which stop to use at bus and coach stations
2. Assistance from staff available at bus and coach stations to help me on and off the vehicles and guide me through the station
3. Clearer information available online about the accessibility of bus and coach stations
4. Lifts available at bus and coach stations
5. Accessible toilets available at bus and coach stations
6. Larger accessible toilets (Changing Places toilets) available at bus and coach stations (changing places toilets are bigger accessible toilets, which include enough space for a carer and a larger wheelchair and other equipment like hoists and a changing bench)
7. Tactile paths available within bus and coach stations to help visually impaired people find their way
8. None of the above {EXCLUSIVE; ANCHOR}

{Ask if 3+ options selected at BnsStn}
{Rank}
BnsStnR

You mentioned that the below options related to bus and coach stations would significantly improve your journey. Please now rank the top 3 options that would improve your journey the most.

Please type a number 1 next to the option that would improve your journey the most, a number 2 next to your second choice and a number 3 next to your third choice.

{Show codes selected at BnsStn. Show in same order}

{Ask if 2 options selected at BnsStn}
{Single code}
BnsStnRB

You mentioned that the below options related to bus and coach stations would significantly improve your journey. Please now select the option that would improve your journey the most.

{Show codes selected at BnsStn. Show in same order}

{Ask ALL}
{Multicode}
BnsBus
Please continue to about things that could significantly improve your travel, either when travelling alone or with those you regularly travel with.

Please think about journeys on buses. Which of the following options related to bus vehicles would significantly improve your journey?

Please select all the apply.

{Randomise…1 to 13}

1. Better lighting on the bus
2. Seatbelts available
3. Clearer information available online about the accessibility of bus vehicles
4. More priority seats provided as single seats so that you would not need to sit next to another passenger
5. Priority seats with more legroom
6. A second wheelchair space provided on board the bus
7. Wheelchair space for forward facing wheelchairs
8. An interior colour scheme that avoids using very bright colours and overwhelming patterns
9. An induction loop to help people with hearing aids to be able to communicate with the driver
10. Better padding on seating to protect against bumps on the road
11. More handrails on the bus
12. A visual display that shows the full route a bus will take and its current location
13. An audio announcement at regular intervals sharing the full route a bus will take and its current location
14. None of the above {EXCLUSIVE;ANCHOR}

{Ask if 3+ options selected at BnsBus}
{RANK}
BnsBusR
You mentioned that the below options related to bus vehicles would significantly improve your journey. Please now rank the top 3 options that would improve your journey the most.

Please type a number 1 next to the option that would improve your journey the most, a number 2 next to your second choice and a number 3 next to your third choice.

{Show codes selected at BnsBus. Show in same order}

{Ask if 2 options selected at BnsBus}
{Single code}
BnsBusRB

You mentioned that the below options related to bus vehicles would significantly improve your journey. Please now select the option that would improve your journey the most.

{Show codes selected at BnsBus. Show in same order}

{Ask if CoachFrq=1-4}
{Multicode}
BnsCoach

Please think about journeys on coaches. Which of the following options related to coach vehicles would significantly improve your journey?

Please select all that apply.

{Randomise…1 to 9}

1. Lower or fewer steps to board the coach
2. Accessible toilets I can use available on the coach
3. Clearer information available online about the accessibility of coach vehicles
4. Priority seating available for people with health conditions or impairments
5. A lift to access the coach for people who are not in a wheelchair
6. An interior colour scheme that avoids using very bright colours and overwhelming patterns
7. An induction loop to help people with hearing aids to be able to communicate with the driver
8. Assigned seating
9. More regular comfort breaks during coach journeys
10. None of the above {EXCLUSIVE;ANCHOR}

{Ask if 3+ options selected at BnsCoach}
{RANK}
BnsCoachR
You mentioned that the below options related to coach vehicles would significantly improve your journey. Please now rank the top 3 options that would improve your journey the most.

Please type a number 1 next to the option that would improve your journey the most, a number 2 next to your second choice and a number 3 next to your third choice.

{Show codes selected at BnsCoach. Show in same order}

{Ask if 2 options selected at BnsCoach}
{Single code}
BnsCoachRB
You mentioned that the below options related to coach vehicles would significantly improve your journey. Please now select the option that would improve your journey the most.
{Show codes selected at BnsCoach. Show in same order}

1.2.5 Demographics

{ASK ALL}
{SINGLE CODE}
Ethnicity
What is your ethnic group?

Choose one option that best describes your ethnic group or background.

White

1. English/Welsh/Scottish/Northern Irish/British

2. Irish
3. Gypsy or Irish Traveller
4. Any other White background, please describe [OPEN TEXT]

Mixed/Multiple ethnic groups

5. White and Black Caribbean
6. White and Black African
7. White and Asian
8. Any other Mixed/Multiple ethnic background, please describe [OPEN TEXT]

Asian/Asian British

9. Indian
10. Pakistani
11. Bangladeshi
12. Chinese
13. Any other Asian background, please describe [OPEN TEXT]

Black/ African/Caribbean/Black British

14. African
15. Caribbean
16. Any other Black/African/Caribbean background, please describe [OPEN TEXT]

Other ethnic group

17. Arab
18. Any other ethnic group, please describe [OPEN TEXT]
19. Prefer not to say

{ASK ALL}
{SINGLE CODE}
Sexuality

This question is about your sexual orientation. Do you identify as:

1. Bisexual
2. Gay/lesbian
3. Heterosexual/straight
4. Don’t know
5. Prefer not to say
6. Other