



Department  
for Transport

# Disabled people's experiences of rail: qualitative research findings

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# Executive summary

## Introduction

### Social model of disability

This report uses the term ‘disabled people’ based on the [Social Model of Disability](#), which is the understanding that people are disabled by barriers in society, not by their impairment or difference. This definition was used to capture a wide range of experiences and access needs. However, it is acknowledged that this is not the legal definition of disability and that not all people with disabilities and impairments relate to this term at a more individual level.

### Research background

The Department for Transport (DfT) is committed to improving the accessibility of the railways. In 2017 and 2020, the Department commissioned research on disabled users’ and disabled non-users’ experiences of rail travel (DfT: [Experiences of disabled rail passengers \(2017\)](#); DfT: [Experiences of disabled non-users of rail \(2020\)](#)) which were useful in expanding DfT’s knowledge base of rail travel amongst disabled people. However, both pieces of research were conducted prior to COVID-19 and subsequent shifts in people’s travel behaviour and the emergence of cost-of-living pressures. As such, up to date evidence is required in this area. In 2024, DfT commissioned research agency Verian to undertake qualitative research to address this gap in the evidence base.

### Research aims and objectives

The overall aim of this research was to update DfT’s qualitative evidence base on the experiences, barriers, challenges and enablers for disabled users and non-users when travelling by train or considering doing so. The key objectives of the research were to:

- refresh the Department’s current qualitative understanding of the experiences, barriers and challenges that disabled rail users and non-users face when travelling by train, or considering doing so, across all journey stages
- inform policymaking aimed at improving the accessibility of the railways.

The research questions explored three key categories:

- barriers and enablers to rail travel
- confidence when travelling by train
- current initiatives: Passenger Assist and the Disabled Persons Railcard (DPRC).

## Methodology

To address the aims of the research, Verian undertook a short purposive evidence review followed by primary qualitative research.

The purposive evidence review was conducted between July and September 2024 and included a total of 25 qualitative, quantitative, and mixed methods UK studies from a range of sources, including industry, government, academic, research institutes and charities. Twenty of these studies were identified by DfT and five studies were identified through citation tracing (for further details regarding the evidence review please see Appendix 2: Evidence review summary report).

The evidence review formed the first stage of research and aimed to generate an understanding of the existing research on disabled users' and disabled non-users' experiences of rail travel. The evidence review informed the design of primary research and specifically aimed to:

- identify dominant themes and topics in the literature, where further primary qualitative research is unlikely to provide new insight
- identify themes and topics related to rail accessibility that are under-researched or worthy of further exploration through new primary qualitative research.

The primary research, conducted over the course of October and November 2024, consisted of 60 online interviews in total (30 interviews with disabled users and 30 interviews with non-users of rail including ten paired interviews with carers), and ten accompanied journeys with disabled users of rail. The core objective of the primary research was to generate an in-depth understanding of the experiences, barriers, challenges and enablers for disabled users and non-users when travelling (or considering travelling) by train, across all journey stages, as well as to address some of the gaps identified in the evidence review.

A purposive sampling approach was used to ensure a diverse and inclusive sample reflecting key characteristics of this audience. The primary recruitment criteria across the sample of both rail users and non-users required participants to:

- be at least 16 years old
- consider themselves to have one or more disabilities or impairments
- be able to travel by train
- have experienced at least some barriers to rail travel
- reside within reasonable distance of a train station.

The primary criterion for non-users of rail also required that they not used trains in the last 18 months.

In addition, the sample included a spread of impairment types, rail use purpose (including for leisure, commuting and for business), ages, genders and regions to ensure a broad

range of participant characteristics. The non-users sample was comprised of 27 lapsed users, and three participants that had never travelled by train.

## Evidence review

The evidence review identified three dominant themes in the literature:

- the physical and social barriers to rail travel encountered by disabled rail users and non-users
- negative experiences amongst disabled rail users and lapsed rail users
- low awareness and uptake of schemes and initiatives such as Passenger Assist and the Disabled Persons Railcard (DPRC)

Physical and social barriers to rail travel for disabled people were evidenced extensively and in detail across the literature. The topic of confidence in rail travel was also examined widely in the literature, particularly in terms of how confidence can be undermined by negative experiences and low expectations amongst disabled people. When considering disabled rail users' experiences, the literature drew out a range of experiences of travelling by rail, however, negative experiences were more pronounced in the qualitative studies. Experiences of rail schemes and initiatives, such as Passenger Assist and the DPRC, were limited in the literature examined. However, the evidence was highly consistent in outlining low awareness and uptake, together with regular reports of poor-quality service and a lack of confidence in assistance services amongst disabled people who used them.

Across the literature reviewed there was a focus on disability at a high level with limited granularity detailing the differences in experiences and confidence between disabled populations (i.e. different disabilities, impairments and multiple disabilities). In addition, although most stages of the rail passenger journey were consistently reported on in the literature, there was limited evidence on the full door-to-door journey experience. It was concluded that a more detailed exploration of disabled people's lived experiences of rail travel, from door to door, would support consideration of the specific needs and circumstances of passengers across all stages of travel.

In addition, the evidence review identified several areas with little representation in the literature. These included, but were not limited to, disabled people's 'likes' regarding rail travel, young disabled adults and teenagers' experiences of rail travel, and the impacts of the COVID-19 pandemic and cost of living pressures on disabled people's rail travel behaviour and experiences.

Reflecting these findings, key opportunities for the project's primary research were identified through the evidence review, which highlighted that there was a need for:

- the inclusion of young disabled adults and teenagers' experiences of rail travel
- greater granularity and detail regarding different experiences of rail travel across the population
- evidence on the full door-to-door journey experience for rail users with disabilities and impairments
- an exploration of impacts of the COVID-19 pandemic and cost of living on disabled people's rail travel behaviour and experiences.

## Research findings

### Perceptions and experiences of rail travel

Train services played an important role in participants' lives, and provided both functional and emotional benefits, such as connecting individuals to their employment as well as friends, family and hobbies. Participants also highlighted that train services were often a lifeline amongst individuals with disabilities and impairments who were reliant on public transport to travel independently.

Perceptions of rail travel differed significantly across rail users and non-users, with rail users holding a more positive view of rail travel. Rail users reported finding rail travel broadly accessible and convenient, although it could be challenging at times. However, non-users felt that rail travel was largely inaccessible, risky and challenging, and that private transport was a more convenient option. When considering the positives of rail travel participants across the sample felt that rail travel was a time efficient mode of transport, compared to other modes of public transport.

Many rail users reported very positive rail travel experiences, particularly with staff support. However, experience of rail travel varied across disabilities and impairments, visible and non-visible disabilities, age, and location. Across the sample both rail users and lapsed users reported negative experiences which, although infrequent, had significant impacts on perceptions of rail travel and the barriers to rail travel, as well as individual's confidence when it comes to rail travel. Negative rail travel experiences included incidents of service failures such as being unable to board or disembark trains because staff had ignored or forgotten about them.

The research identified that rail users' confidence levels varied within journeys, over time and by characteristics, as well as by experience and familiarity with rail travel, disabilities and impairments, as well as age. Across the sample non-users and young (16-18 year old) rail users had less confidence compared to rail users, and participants with a greater reliance on support from staff or others had comparatively lower levels of confidence.

### Changing experiences since the COVID-19 pandemic

When asked about changes since the COVID-19 pandemic, some participants reported feeling that rail travel had become less accessible, leading them to feel less inclined or less able to travel frequently by train. Rail users reported lower levels of staff presence at stations and at ticket counters, as well as increased ticket prices since the COVID-19 pandemic. Other rail users in the sample spontaneously highlighted that they had been experiencing increased anxiety when travelling by train.

### Barriers to rail travel

The research identified six core categories of barriers to rail travel amongst individual with disabilities and impairments, these were:

- physical

- social
- informational
- sensory and emotional
- motivational and confidence
- financial.

Findings regarding these six core barrier categories reinforce the existing literature, particularly in terms of physical and social barriers that disabled users and non-users experience.

A range of barriers to rail travel were experienced by rail users in the sample, however non-users felt that these barriers were insurmountable or simply that they could not travel by rail. Past experiences and anecdotal stories underpinned non-rail users' views that travelling by train would be exhausting, overwhelming and altogether too challenging and risky way to travel (particularly when compared to private car travel).

Across the sample barriers to rail travel were often multiple and overlapping, with most participants experiencing a range of barriers when travelling by train or considering doing so. Furthermore, barriers were not fixed and change over time, reflecting shifts in individual's disabilities and impairments, such as improvements, declines, new issues or conditions, and familiarity and experiences with rail travel.

### **Physical barriers**

Physical barriers to rail travel were reported across the sample but were of particular relevance to those with mobility and visual impairments. Barriers reported included issues related to terrain, such as steps, uneven surfaces and steep slopes, and spaces, for example limited accessible facilities and wheelchair carriage space.

### **Social barriers**

Social barriers were experienced by participants throughout the sample with frequent reports of encountering negative attitudes and inconsiderate behaviours from both train staff and other passengers. Rail users also felt that staff who could support them were not always easily identified and highlighted that staff were often busy or preoccupied.

### **Informational barriers**

Informational barriers to rail travel were encountered across journey stages and were widely reported by participants. Access to information was specifically an issue for those with sensory impairments whilst travelling, and for those with mobility issues at the planning stage. The informational barriers reported by participants included a lack of available information regarding station layout and facilities for journey planning, and inaccessible live information whilst at the station and travelling on the train.

### **Sensory and emotional barriers**

Sensory and emotional barriers to rail travel, such as sensory overload and heightened feelings of stress and anxiety were experienced across the sample. Sensory barriers were particularly relevant to individuals with neurodivergence and mental health impairments.



Emotional barriers were reported by the majority of participants in the sample but were a primary barrier to rail travel amongst those with mental health issues.

### **Motivational and confidence barriers**

Motivational and confidence barriers included a range of factors relating to individual knowledge and understanding of rail travel, the perceived reliability of train services and their accessibility, as well as individuals' perceptions of risk when travelling by train. Motivational and confidence barriers to rail travel were reported across the sample but were key barriers for non-users.

### **Financial barriers**

Financial barriers to rail travel were cited predominantly by non-users of rail, and included perceived expense and affordability of train tickets, especially when compared to other modes of transport. In addition, full price fares for travel companions were viewed as particularly burdensome amongst those that could not travel independently.

### **Enablers of rail travel**

Findings regarding the enablers of rail travel were comprised of three categories:

- passenger practices
- service provisions
- suggested mitigations for the barriers to rail travel.

#### **Passenger practices**

The research identified that passengers with disabilities and impairments were undertaking actions to make rail travel easier. These actions included advanced planning, contingency planning and individual resilience.

Advanced planning reported by participants included conducting research into routes as well as station and platform layout (where possible), booking assistance, and collecting tickets in advance. Contingency planning included being prepared to take a later train, use another stop on the line if required for step free access, and being prepared to abandon the trip if the journey becomes infeasible. In terms of individual resilience, the research identified that rail users had a patience and a pragmatism when confronted with challenges as well as a willingness to ask for help, both from staff and other passengers (which was very challenging for some).

#### **Service provisions**

Rail service provisions and initiatives emerged as an enabler of rail travel for those with disabilities and impairments. Service provisions facilitating rail travel included assistance, multi-modal information and tailored accessibility aids.

In terms of assistance, Passenger Assist was a vital service for many rail users in the sample. Rail users also reported that proactive and empathetic support from staff outside of the Passenger Assist service was highly valued at both a functional and emotional level,

enabling respectful and inclusive rail travel experiences. The provision of multi-modal information enabled participants to plan rail travel and feel confident when travelling.

Accessible information, where it was available, regarding routes, station layout and accessible facilities supported participants across the sample to engage in rail travel. In addition, information conveyed both visually and via announcements facilitated participants with sensory impairments to travel on trains with confidence. Tailored accessibility aids enabled individuals with mobility and sensory impairments to travel safely and confidently by train. Tailored accessibility aids included tactile paving for the visually impaired, spaces for wheelchairs in stations and on trains, wide gates for wheelchairs and mobility scooters, and hearing loop at ticket and information counters for the hearing aid users.

### **Suggested mitigations for the barriers to rail travel**

Participants suggested a number of potential provisions to mitigate and reduce the impact of barriers to travel and encourage disabled users and non-users to use rail more frequently. These included:

- more accessible infrastructure for people with mobility issues and visual impairments, as well as dedicated routes into and through the station to avoid crowds and quiet spaces to address **physical** as well as **sensory and emotional barriers**
- dedicated and visible support staff and spaces at stations and on trains, as well as staff training to improve understanding and empathy to mitigate against **social barriers**
- accessible and real time information on facilities at stations and on train, as well as multimodal information provision in stations and on-board trains, and multimodal station signage (tactile paving, coloured lines and arrows) to address **informational obstacles**
- guaranteed support and carriage spaces, as well as advance information to support journey planning (e.g. station layout, station and train facilities) to support **motivation and confidence**
- reduced burden of proof for the DPRC, and free travel for a carer or support companion to address **financial barriers**.

It should be noted that potential enablers proposed by non-users sometimes reflected their lack of awareness of existing provisions. Suggestions included, for example, support services that reflected Passenger Assist, and the provision of a quiet carriage and accessible toilets. This points to the potential benefit that increasing awareness of existing efforts to improve accessibility could have on encouraging non-users to use rail.

### **Passenger initiatives: Passenger Assist**

Awareness of Passenger Assist was high amongst rail users and low across non-users in this sample. Many rail users reported extremely positive experiences with Passenger Assist. These rail users highly valued Passenger Assist and perceived it as a crucial service for passengers with disabilities and impairments, as it alleviated many physical barriers to rail travel. However, most Passenger Assist users also reported instances of service failure. Furthermore, service users felt the service was under resourced and those without mobility impairments felt that it was geared towards physical disabilities.

## **Passenger initiatives: Disabled Persons Railcard**

There was a broad awareness of the DPRC amongst rail users, but little understanding of what the railcard offers and how to acquire one. Some participants reported finding the application and level of proof required to acquire the railcard too burdensome. Regular rail users felt the discounted fares were beneficial, although some participants felt that travel for carers and companions should be free as opposed to discounted. In addition, DPRC users felt it needed integrating with other apps, such as rail ticketing apps, 'wallets' and contactless payment, for ease of use when travelling.

## **Conclusions**

### **New insights from the primary research**

The primary research identified six categories of barriers to rail travel: physical, social, informational, sensory and emotional, motivational and confidence, and financial barriers. Whilst the findings regarding these barriers often reinforced the existing evidence the research identified new insights regarding the value of train services, barriers, enablers and experiences of Passenger Assist.

Rail users highly valued rail services and reported very positive experiences. However, there were poor experiences which had significant impacts on perceptions of rail travel, the barriers to rail travel and individual's confidence when it comes to rail travel.

Barriers were often multiple and overlapping, with most participants experiencing a range of barriers when travelling by train or considering doing so. Furthermore, barriers were not fixed, and could change over time, reflecting changes in an individual's disabilities and impairments as well as their experience with rail travel.

A range of enablers to rail travel were identified, these included: easily accessible information for advanced planning, real time information on facilities at stations and on trains, multi-modal provision of live rail travel information and more accessible infrastructure. Enablers also included the provision of joined up and integrated services, for example aligning ticket bookings with wheelchair and mobility scooter space reservations and/or Passenger Assist.

Passenger Assist had largely positive user experience feedback. However, there was a lack of awareness and understanding of the service, and service failures which had significant and profound impacts for users.

The primary research also addressed several evidence gaps identified in the evidence review. The research addressed disabled people's 'likes' regarding rail travel, young disabled adults and teenagers' experiences of rail travel, and the impacts of the COVID-19 pandemic and cost of living pressures on disabled people's rail travel behaviour and experiences. In addition, the primary research generated detail regarding different experiences of rail travel across the population and evidence on the full door-to-door journey experience for rail users with disabilities and impairments.

# 1. Introduction

## Social Model of Disability

This report uses the term ‘disabled people’ based on the [Social Model of Disability](#), which is the understanding that people are disabled by barriers in society, not by their impairment or difference. This definition was used to capture a wide range of experiences and access needs. However, it is acknowledged that this is not the legal definition of disability and that not all people with disabilities and impairments relate to this term at a more individual level.

## Research background

The Department for Transport (DfT) is committed to improving the accessibility of the railways. In 2017 and 2020, the Department commissioned research on disabled users’ and disabled non-users’ experiences of rail travel - DfT: [Experiences of disabled rail passengers \(2017\)](#); DfT: [Experiences of disabled non-users of rail \(2020\)](#). These two pieces of research were useful in expanding DfT’s knowledge base of disabled rail travel.

However, both pieces of research were conducted prior to COVID-19 and subsequent shifts in people’s travel behaviour and the emergence of cost-of-living pressures. As such, up to date evidence is required in this area. In 2024, DfT commissioned research agency Verian to undertake qualitative research to address this gap in the evidence base.

## Research aims and objectives

The overall aim of this research was to update the Department’s research on the experiences, barriers, challenges and enablers for disabled users and non-users when travelling by train or considering doing so. The key objectives of the research were to:

- refresh the Department’s current understanding of the experiences, barriers and challenges that disabled rail users and non-users face when travelling by train or considering doing so, across all journey stages
- inform policymaking aimed at improving the accessibility of the railways.

## Research questions

Specifically, the research aimed to explore three themes: barriers to travel, travelling confidently and current schemes and initiatives, covering the following research questions.

### Barriers to travel

- What are the main barriers and enablers to rail travel amongst disabled users and non-users?
- How do these barriers differ across those with different disabilities and multiple disabilities?
- Have disabled users' experiences of using rail changed since the COVID-19 pandemic?

### Travelling confidently

- What are disabled people's experiences of travelling by rail, at all journey stages, including rail replacement services?
- How confident do disabled users feel when travelling by rail?
- What would enable disabled users and non-users to feel more confident whilst travelling by rail?
- What do disabled users like and dislike about rail travel?
- How could the railway attract new disabled customers? What works well in other forms of transport?

### Current schemes and initiatives

- What schemes and initiatives to support rail travel do disabled people currently use, and what are their experiences?
- How is Passenger Assist experienced in practice, and how could the service be improved?
- If aware of them, where did users hear about current schemes and initiatives to support rail travel, including Passenger Assist and the Disabled Persons Railcard (DPRC)?

## Methodology

To address the aims of the research, Verian undertook a short purposive evidence review followed by primary qualitative research.

The purposive evidence review was conducted from July to September 2024 and included a total of 25 qualitative, quantitative, and mixed methods UK studies from a range of sources, including industry, government, academic, research institutes, charities. Twenty of these studies were identified by DfT and five studies were identified through citation tracing. The purpose of the evidence review was to generate a better understanding of the existing research on disabled users' and disabled non-users' experiences of rail travel, and to identify evidence gaps the primary research may seek to address (please see Appendix 2: Evidence review summary report).

The primary research, conducted over the course of October and November 2024, consisted of 60 online interviews with disabled users and non-users of rail (including ten

paired interviews with carers) and ten accompanied journeys with disabled users of rail. The core objective of the primary research was to generate in-depth understanding of the experiences, barriers, challenges and enablers for disabled users and non-users when travelling (or considering travelling) by train. In addition, the research sought to address some of the gaps identified in the literature through the evidence review by including:

- participants with a broad range of impairments and disabilities, including those with multiple disabilities
- young adults (16-18)
- exploration of the positives and enablers regarding rail use
- granular exploration of the differences in experiences and confidence between disabled populations (i.e. different disabilities, impairments and multiple disabilities) across the full door-to-door journey.

Participation in interviews was supported through a range of provisions and adjustments, such as offering the use of closed captions, British Sign Language (BSL) interpretation, in-person interviews, and flexible interviewing (including split interviews, and longer interviews with built in rest periods). Participants were also encouraged to bring along carers, personal assistants or others that assist them for support during the interview if needed. In addition, participants were asked to complete a pre-task, in preparation for the interview, which encouraged reflection on their rail travel experiences.

Participation in accompanied journeys was also facilitated by the inclusion of carers, personal assistants and supportive companions. All costs associated with accompanied journeys for participants were also covered by DfT.

Participants also received vouchers as a thank you for their time for both interviews and accompanied journeys.

## Sample

In total the research sample comprised 60 participants with disabilities and impairments and ten carers. Participants with disabilities and impairments consisted of 30 rail users and 30 non-users of rail. The ten carers participated in paired interviews with five users and five non-users of rail. The non-users of rail sample comprised 27 lapsed users, and three participants that had never used trains.

A purposive sampling approach was used to ensure a diverse and inclusive sample reflecting key characteristics of this audience. The primary recruitment criteria across the sample required participants to:

- be at least 16 years old
- consider themselves disabled or to have one or more impairments
- be able to travel by train
- have experienced at least some barriers to rail travel
- consider themselves to reside within reasonable distance of a train station (making train travel a feasible travel option).

Non-users were defined as those who had not used trains in the last 18 months. However, it should be noted that the non-user sample included one lapsed user who had last

travelled by train six months prior to the research; their inclusion in the sample was premised on their perceived unlikeliness to use trains again in the next 12 months.

In addition, the sample included a spread of disabilities and impairments, ages, genders and regions to ensure a broad range of participant characteristics. The sample also included a range of rail use purpose, travelling for leisure, commuting and for business, though primarily participants were travelling for leisure.

The sample for the ten accompanied journeys was drawn from the interview sample and included individuals with singular and multiple disabilities and impairments, together with a range of disabilities and impairments, typical journey lengths and journey purpose - though reflecting the main sample, primarily participants were travelling for leisure. In addition, the sample included a spread of ages, genders and locations (rural, town, city) to ensure a broad range of participant characteristics.

For the full sample stratification please see Appendix 1: Sample stratifications.

## Interpreting the primary research findings

The primary research was qualitative and as such it provides rich, in-depth insight into the spectrum of people's experiences, but does not give an indication of prevalence.

The report makes reference to 'disabled people' throughout. People were invited to take part in this research if they considered themselves to have a disability or impairment, however they may not necessarily identify with the term 'disabled person' or be legally defined as disabled under the UK Equality Act 2010. The research took this approach to capture a broad range of experiences of accessibility needs relating to rail, and to reflect the understanding of the [Social Model of Disability](#) that people are disabled by barriers in society rather than by their impairment or difference.

Participants included in the sample self-identified as being able to travel by rail and experiencing barriers when traveling by rail. As such, the findings do not cover those with disabilities and impairments who consider themselves unable to travel by rail, or those able to travel by rail but who don't feel that they experience any barriers. This ensured the research captured experiences which could provide insights on how barriers could be addressed, but it should be recognised that not all disabled people will experience the barriers identified in this report.

## Key definitions

Term	Definition
Disability	Disability is the experience of not being able to take part in society because of barriers you face with your impairment. For example, if a video doesn't have subtitles, and you can't hear it. See <a href="#">Social Model of Disability</a> .
Disabled person	This report uses the term 'disabled people' to refer to individuals with impairments or disabilities. This follows the <a href="#">Social Model of Disability</a> under which a person is disabled by barriers in society. However, it is acknowledged that this is not the legal definition of disability and that not all people with disabilities and impairments relate to this term at a more individual level.
Disabled Persons Railcard	The Disabled Persons Railcard is a railcard by National Rail that provides a third off adult train travel for those who qualify for the railcard. Individuals are eligible for a Disabled Persons Railcard if they have certain types of impairment, receive certain types of benefits or lease a vehicle through the Motability scheme. See <a href="#">Disabled Persons Railcard</a> .
Impairment	An impairment is a functional difficulty someone experiences in their body or mind. If you have a hearing impairment, for example, you might need sounds to be louder for you to hear them, or you may not be able to hear them at all.
Passenger Assist	Passenger Assist allows individuals to arrange help with rail journeys. Passenger Assist includes: a helping hand to navigate the station, help getting on or off the train, assistance relating to a non-visible impairments, the carrying of bag(s) and getting an Assistance Dog Under Seat card. See <a href="#">National Rail, Passenger Assist</a> .
Rail	Rail travel reported on here includes surface rail only (to the exclusion of underground and light rail services).
Rail User / Non-User	Rail users are defined in this research as having used rail in the last 18 months (prior to fieldwork), and non-users have not used rail in the last 18 months (prior to fieldwork).

## Acronyms

Acronym	Definition
BSL	British Sign Language
DfT	Department for Transport
TfL	Transport for London
DPRC	Disabled Persons Railcard



## 2. Evidence review: Key insights

This section sets out, at a high-level, the key insights drawn from the evidence review. The full evidence review is available in Appendix 2: Evidence review summary report.

### **Dominant themes in the literature**

The evidence review identified three dominant themes in the literature:

- the physical and social barriers to rail travel encountered by disabled rail users and non-users
- negative experiences of rail travel amongst disabled rail users and lapsed rail users
- low awareness and uptake of schemes and initiatives such as Passenger Assist and Disabled Persons Railcard (DPRC).

#### **The physical and social barriers to rail travel encountered by disabled rail user and lapsed rail users**

Physical and social barriers to rail travel for disabled people were evidenced extensively in detail across the literature. The topic of confidence in rail travel was also examined widely in the literature, particularly in terms of how confidence can be undermined by negative experiences and low expectations amongst disabled people.

#### **Negative rail travel experiences amongst disabled rail user and lapsed rail users**

Whilst the literature drew out a range of disabled people's experiences of travelling by rail, the qualitative studies included in the review highlighted the negative experiences of rail travel amongst disabled rail user and lapsed rail users.

#### **Low awareness and uptake of schemes and initiatives such as Passenger Assist and DPRC**

Although consideration of rail schemes and initiatives, such as Passenger Assist and the DPRC, was limited, the evidence was highly consistent in outlining low awareness and uptake; together with regular reports of poor-quality service and a lack of confidence in assistance services amongst disabled people who used them.

## Opportunities for primary research

The evidence review identified several gaps and under-represented themes in the literature. These included:

- granularity and detail of different experiences
- door-to-door journey experience
- disabled people's 'likes' regarding rail travel
- young disabled adults and teenagers' experiences of rail travel
- barriers to rail travel amongst disabled non-users
- disabled people's experiences of rail replacement services and managing service cancellations
- types of rail travel avoided by disabled people
- origin of awareness of current schemes and initiatives supporting disabled people's rail travel
- improving Passenger Assist/passenger assistance services
- complaints and redress
- what works well to attract disabled customers in other forms of transport
- the impacts of the COVID-19 pandemic and the cost of living on disabled people's rail travel behaviour and experiences
- sustainable travel as a motivator to rail travel amongst disabled people
- regional differences in disabled people's experiences of rail travel.

Reflecting on the gaps in the literature, four key opportunities for the primary research were identified. These were:

- granularity and detail of different experiences
- door-to-door journey experience
- disabled young adults and teenagers' experiences
- the impacts of the COVID-19 pandemic and the cost of living on disabled people's rail travel behaviour and experiences.

**Granularity and detail of different experiences:** Throughout the literature reviewed there was a focus on disability at a high level with limited granularity detailing the differences in experiences and confidence between disabled populations (i.e. different disabilities, impairments and multiple disabilities).

**Door-to-door journey experience:** Although most stages of the rail passenger journey were consistently reported on in the literature, there was limited evidence on the full door-to-door journey experience.

**Young disabled adults and teenagers' experiences:** Within the literature included in the evidence review there were few studies that included young disabled adults and teenagers' experiences of rail travel.

**The impacts of the COVID-19 pandemic and the cost of living:** The literature reviewed included little consideration of the impacts of the COVID-19 pandemic and the cost of living on disabled people's rail travel behaviour and experiences.

Reflecting on these insights it was concluded that a more detailed exploration of disabled people's lived experiences of rail travel, from door-to-door and including young adults and teenagers, would address the gaps in the evidence.

## 3. Primary research findings

This chapter outlines the qualitative findings from the primary research. Findings are set out under four categories: perceptions and experiences of rail travel, barriers to rail travel, passenger rail travel initiatives, and enablers to rail travel.

### Perceptions and experiences of rail travel

#### The value of rail services

Rail services played an important role in participants' lives, providing both functional and emotional benefits. Functional benefits reported by participants focused on train services connecting individuals to their employment and places of business as well as to central areas with a range of social infrastructure, such as shops and hospitals.

"The reason that I use the train [is] I travel up and down the UK, working...so that's how [I've come] to use the trains for day-to-day life. I have an extra journey to see my father-in-law."

Female rail user, 35-54: Wheelchair user

In addition, by connecting participants to friends and family, as well as to communities and hobbies, train services were delivering emotional benefits for participants. For example, one user described how they had used the train to follow their football club, taking the train to watch their team play, and how the train had served to connect them to their family and friends living along the train line. Emotional benefits also extended to accessing culture, arts, sports as well as new experiences and adventures in accessible spaces. For example, one wheelchair user described how the trains served to connect him to the cities, which were accessible, allowing him to explore new places spaces and have new experiences.

"I play in a deaf cricket team, and we play a lot around the country, so I'll get the train for that in the summer particularly, and then we've got friends and family around the country [that we use trains to visit]."

Male rail user, 19-34: Hearing impairment

Participants also highlighted that train services were often a lifeline amongst individuals with disabilities and impairments who were reliant on public transport to travel, or to travel independently. Indeed, when considering the positives of rail travel participants across the sample of rail users and non-users highlighted that trains offer the possibility for independent travel. Moreover, many participants with mobility issues and sensory impairments reported that the ability to travel independently was vital to their sense of self, quality of life and overall well-being.

## Perceptions of rail travel

Perceptions of rail travel differed significantly across rail users and non-users, with rail users holding a more positive view of rail travel. Rail users reported finding rail travel a convenient mode of transport and broadly accessible, even though it could be challenging at times. Furthermore, rail users felt that trains were the most time-efficient mode of public transport, compared to other public transport modes, particularly for medium to long distance journeys. In addition, modernisations such as step free access, accessible toilets and tactile paving, across the train network were felt to make rail travel more accessible and safer for people with disabilities and impairments.

“I generally feel like it's quite a practical way to travel.”

Male rail user, 19-34: Wheelchair user with multiple disabilities and neurodivergence.

However, whilst non-users of rail felt that trains were an efficient form of public transport, they perceived rail travel to be largely inaccessible as well as risky and felt that private transport was a more convenient option. Non-users' perceptions of the risks and challenges of rail travel were bolstered by negative past experiences and/or anecdotal stories of negative rail travel experiences.

“There's lots of horror stories that you hear from other disabled people, and you think oh gosh, no, I don't want to risk that.”

Female rail user, 35-54: Wheelchair User

## Experiences of rail travel

Many rail users reported very positive experiences, particularly with staff support. However, experiences of rail travel varied across disabilities and impairments, visible and non-visible disabilities, age, and location. Participants with different disabilities and impairments experienced different physical and social challenges, particularly in relation to encounters with staff and other passengers when travelling by train (for further detail see the **Social barriers** section). Specifically, younger participants and those with non-visible impairments tended to report more negative experiences with staff and other passengers, such as not having their need for support or priority seating being recognised and in some cases being challenged.

“Staff I met were proactive and helpful throughout, recognising my specific requirements. They were professional and showed compassion which suggested a high level of good quality accessibility training.”

Male rail user, over 55: Mobility scooter user with multiple disabilities and mental health impairments

“If you're in the wheelchair that day then you need to get someone to sort the ramp out...if you can't rely on that... it's a barrier.”

Female non-user, 19-34: Blindness and mobility impairment

In terms of variations in experiences by location, a distinction between smaller and more rural stations and large city stations was identified. Participants reported that smaller and more rural stations often had limited staff available to support those with disabilities and impairments – some were unstaffed meaning there was little to no support available, whereas larger stations tended to be well staffed. However, some participants travelling from small stations, where they were familiar with the station and the staff, reported being fully supported at their home station but encountering issues at larger stations, such as being ignored or being stuck on trains unable to get anyone's attention.

Negative experiences whilst travelling by train were reported across the sample of users and non-users (lapsed users). Although these events were infrequently experienced by individuals, they were reported to have occurred by the majority of participants in the sample. Negative rail travel experiences included incidents of service failure such as:

- being unable to board trains as staff ignore, miss, or have forgotten about them
- not being able to disembark at their destination station (and being stuck on the train)
- being unsupported by staff and left to deal with confrontational situations over booked seats or spaces.

Service failures had significant impacts on individuals and their perceptions of rail travel. Many participants reported finding these experiences degrading and that they had serious consequences in terms of their independence, sense of self and confidence to travel via train.

“[When the support is not there from train staff] it makes me feel more disabled and more like I'm a burden.”

Male lapsed rail user, 19-34: Wheelchair user with multiple mobility impairments

## Confidence when using rail

In line with the wider literature, the research identified that rail users' confidence levels varied across the sample. Specifically, within this sample, non-users had less confidence compared to rail users, and participants with a greater reliance on support from staff or others had comparatively lower levels of confidence. Young rail users (aged 16-18) also appeared to have less confidence than other rail users, on account of their inexperience with rail travel.

In addition, the research found that confidence fluctuated over time, reflecting greater experience with rail travel, negative experiences encountered and changes in individuals' conditions. Greater experience with rail travel tended to lead to increased confidence amongst participants in this sample. However negative experiences and perceived uncertainties regarding rail travel, such as the availability of support and accessibility, undermined confidence. Confidence also tracked with the improvements and declines in individuals' conditions.

"I'm a very confident traveller, but quite often stuff goes wrong. So, I'm a little bit nervous."

Female rail user, 19-34: Visual impairment and wheelchair user

Furthermore, disabled passengers' confidence often fluctuated throughout the journey stages. Participants described experiencing a range of high and low points of confidence when travelling by rail. Variations in confidence across rail journey stages often reflected participants experience with rail travel, and familiarity with the journey – with greater experience and familiarity often leading to high confidence. Past negative experiences at particular journey stages, such as boarding and disembarking trains, undermined confidence.

The research was unable to identify any patterns in confidence levels that isolated any single journey stage as particularly problematic across the sample.

### **Changes in perceptions and experiences since the COVID-19 pandemic**

Considering changes since the pandemic, some participants reported feeling that rail travel had become less accessible, leading them to feel less inclined or less able to travel frequently by train. Participants across the sample felt that increased ticket prices, combined with the increased cost of living, made rail travel less accessible. In addition, rail users reported observing lower levels of staff presence at stations and at ticket counters since the pandemic. As a result, some rail users felt that there was now less help available to support individuals with disabilities and impairments to travel by train. Some rail users in the sample also spontaneously highlighted experiencing increased anxiety when travelling by train since the pandemic.

"[Following the COVID-19 pandemic] I felt scared to actually go on a train, and it took a while before I felt comfortable to travel on a train again."

Male rail user, 35-54: With neurodivergence and mental health impairments

### **Barriers to rail travel**

This study identified six types of barriers to rail travel:

- physical
- social
- informational
- sensory and emotional
- motivational and confidence

- financial.

Please note that throughout this section of findings case studies are included to illustrate participants' views and experiences. All case studies use pseudonyms, these are not participants' real names.

## Barriers to rail travel: Overview

The research identified that across the sample the barriers to rail travel were often multiple and overlapping, with most participants experiencing a range of barriers when travelling by train or considering doing so. Furthermore, barriers were not fixed but could change over time, reflecting improvements or declines in individuals' mental, emotional and physical state, as well as familiarity and experience with rail travel.

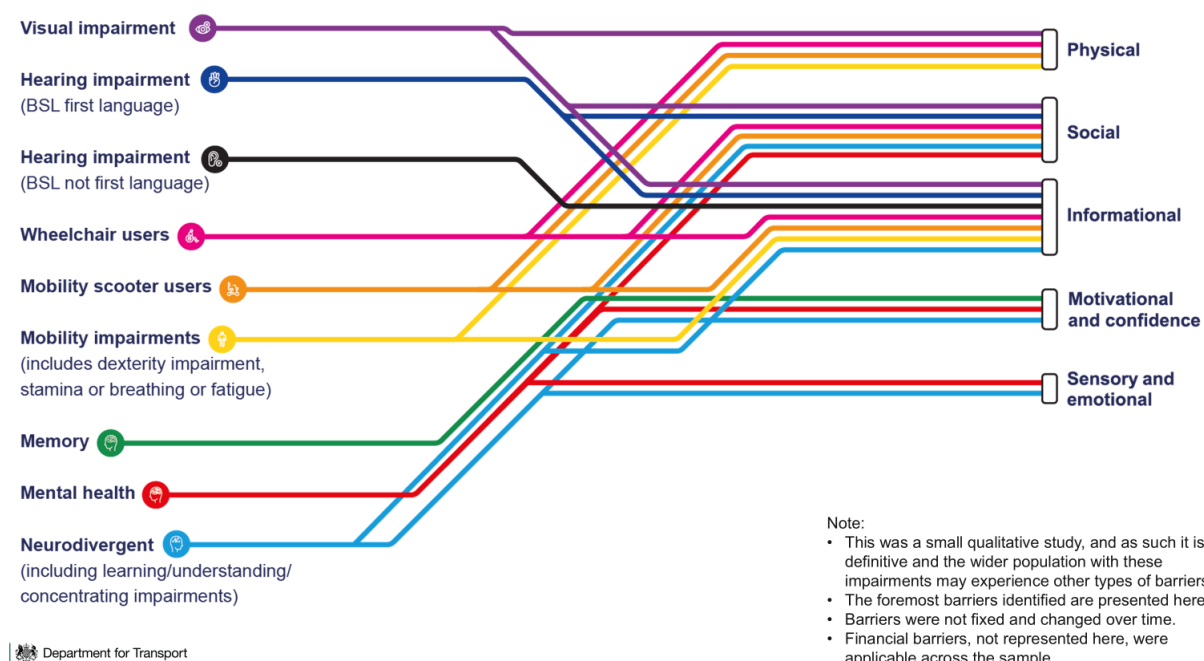


Figure 1: Overview of the multiple and overlapping barriers experience by participants when travelling by rail.

The research also found that the six types of barriers to rail travel were experienced by both users and non-users. However non-users often felt that these barriers were insurmountable and perceived that travelling by train would be too exhausting, overwhelming, challenging and risky (particularly when compared to private car travel).

"I'm capable of doing it, but by the end of it I'd be incapable - it would destroy me so much physically."

Female lapsed rail user, over 55: Other disability

Past experiences and anecdotal stories underpinned non-users' views, and included the belief that:

- the 'first and last mile', getting to the station and from the station would be exhausting



- there would be no, or limited, support and appropriate facilities for them
- the crowds, lights and noise at stations and on board the train would be overwhelming
- trains were not a convenient way to travel compared to private car travel.

Findings regarding the barriers outlined here reinforce the wider literature, particularly in terms of physical and social barriers that disabled users and non-users experience.

## Physical barriers

Physical barriers reported by participants across the sample included issues related to terrain, in and around stations, and spaces such as stations, platforms and train carriages. Broadly, physical barriers were the foremost barrier experienced by wheelchair and mobility scooter users as well as others with mobility impairments and visual impairments within the sample.

### Physical barriers: Terrain

Under the category of terrain, the research identified six primary barriers. An overview of the terrain barriers is set out in Table 1 below.

Table 1: Overview of terrain barriers

Barrier	Particularly relevant to	Journey stages
Steps and uneven surfaces	Users of wheelchairs and mobility scooters, and the visually impaired	From getting to the station all the way through to reaching their destination
Steep slopes (station and train access ramps)	Anyone with mobility issues who struggles to use stairs, but specifically users of wheelchairs and mobility scooters	From getting to the station all the way through to reaching their destination
Bridging the gap and step between the train and the platform edge	Users of wheelchairs and mobility scooters, anyone who struggles to use escalators or stairs including visually impaired	At the station and boarding/ disembarking the train
Out of service lifts		
Turnstile or narrow ticket gates	Users of wheelchairs and mobility scooters	At the station
Tunnels and narrow walkways	Users of wheelchairs and mobility scooters, and anyone slow moving or unsteady.	At the station

**Steps and uneven surfaces** were problematic for individuals with mobility issues, particularly users of wheelchairs and mobility scooters, as well as those with visual impairments. Some participants with mobility issues reported having to modify their journey to use alternative, more accessible, stations when they were unable to navigate steep slopes or steps.

Uneven surfaces presented a trip hazard for wheelchair users, individuals with mobility issues and the visually impaired. For example, during one accompanied journey a researcher observed an individual with mobility issues struggling to maintain balance when approaching to board the train having been thrown off balance by an uneven paving stone on the platform.



Figure 2: No step free access to platform 2

**Steep slopes**, such as station and train access ramps, were reported to be challenging amongst those with mobility issues, and specifically for users of wheelchairs and mobility scooters. Moreover, participants with mobility issues and manual wheelchair users highlighted that steep slopes were a hazard, specifically when descending. For those with mobility issues there was a danger that they might slip or trip and fall. Manual wheelchair users reported struggling to manage the speed of their descent and feared that they would lose control of their wheelchair and hurt themselves and/or others.

#### Case study 1: The challenges of steep slopes (user)

Lydia is a retiree (55+ years old) with multiple mobility impairments, including fibromyalgia, osteoarthritis and mental health conditions, including depression, anxiety and Post-Traumatic Stress Disorder (PTSD).

She lives alone and uses trains occasionally to visit family. Due to the worsening of her physical disability, she now relies on a wheelchair when using public transport.

When travelling by train she has to pass over a footbridge at her local station. There are no lifts, and the ramp is long and steep, which is not only challenging but feels risky too. Lydia also struggles to book wheelchair accessible taxis when returning and has had to wait for long periods in the dark and cold.

“Once I get off the train... it’s one hell of a climb [up the steps of the footbridge].”



Wheelchair user



Figure 3: Steep ramp

**Bridging the gap and step between the train and the platform edge** was a barrier for individuals with mobility issues, users of wheelchairs and mobility scooters, as well as those with visual impairments. Wheelchair and mobility scooter users were reliant on rail staff to provide ramps (in time) to board and disembark trains; participants reported that ramps were not always available, and some ramps were steep and difficult to navigate as outlined above. In addition, participants with mobility issues and sight impairments often cited being reliant on rail staff or others to board and disembark trains safely. Those with assistance dogs were also highly concerned for their dog’s safety, fearing the dog might fall or get pushed into the gap between the train and the platform edge.

“At some stations the gap [between the train and the platform edge] is insane and I can’t see it, so I’m relying on my guide dog...when I was a new guide dog owner, I

was terrified that I was gonna fall down the gap or that my guide dog was gonna fall down the gap, and a friend of mine, her dog did fall down the gap. I'm really worried about that."

Female non-user, 19-34: Blindness and mobility impairment

**Out of service lifts** were a barrier for anyone who could not use escalators or stairs, or struggled to do so, including the visually impaired as well as individuals with mobility issues, and users of wheelchairs and mobility scooters. Participants described at times having to use alternative accessible stations, which incurred additional time and costs, or even abandoning journeys on account of not being able to access platforms.

### **Case study 2: Difficulties navigating stations, steps and out of order lifts (user)**

Ben is a student with partial sight (16-18 years old), who recently relocated to the UK for university. On account of his impairment, he finds steps and stairs challenging and dangerous.

Ben uses the train to commute to and from his accommodation and the university campus. When commuting he struggles to navigate the station and is often unable to locate lifts and ramps. It is particularly difficult for him to navigate stations if lifts are out of order.

He highlighted how he has 'mastered' boarding trains, by getting to the platform ahead of other passengers. But once on board it is not always possible to get a seat or find his way to priority seating on the train.

"[The most difficult bit is] getting on the train, but I've mastered that by now."



Visual impairment



Figure 4: Lifts out of service

**Turnstiles or narrow ticket gates** presented an unnegotiable barrier for wheelchair and mobility scooter users. Some participants in the sample reported having to regularly use alternative stations on account of not being able to access or exit stations with turnstiles or narrow ticket gates.

“If it is a turnstile gate, I just can’t get through them... [when going into town] I have to get off one stop outside of the centre, and ride in, because of the [turnstile] gate.”

Male rail user, over 55: Mobility scooter user with multiple mobility impairments.

In addition, wheelchair and mobility scooter users in the sample highlighted that, unlike other automated barriers, they were reliant on staff to open the wide gate barrier.

“At some stations there's no way to open the disabled ticket barrier yourself, you're waiting for someone to let you through, so I feel like I lose my independence a bit.”

Female lapsed user, over 55: Mobility impairment

**Tunnels and narrow walkways** were reported to be problematic for individuals with mobility issues who were slow moving or unsteady on their feet as well as for wheelchairs and mobility scooter users. Participants highlighted that tunnels and narrow walkways could be very busy, making negotiation through them difficult and stressful.

“Getting to the train as I said it's very narrow. There's not much room to manoeuvre, and you're dependent on the goodwill of passengers to get to sort of let you go past them and things like.”

Female user, over 55: Mobility impairment

## Physical barriers: Spaces

Under the category of spaces, the research identified six primary barriers. An overview of the spatial barriers is set out in Table 2 below.

Table 2: Overview of spatial barriers

Barrier	Particularly relevant to	Journey stages
Busy roads	Anyone with mobility issues, including wheelchair users, as well as individuals with neurodivergence	Getting to/from the station
Accessible toilets and changing spaces (at stations and on trains)	Anyone with mobility issues, including wheelchair users, as well as individuals with neurodivergence	At the station and on board the train
Limited carriage spaces	Users of wheelchairs and mobility scooters	Boarding and on board the train
Overcrowding on board trains	Anyone who finds it physically hard to move in a crowd, including those with mobility issues, visually impaired, neurodivergence and some mental health issues (such as claustrophobia and anxiety)	On board the train
Navigating the station	The visually impaired and anyone with cognitive impairments, neurodivergence and some mental health issues (such as claustrophobia)	In the station
Crowded stations and platforms	Anyone who finds it physically hard to move in a crowd, including those with mobility issues, visually impaired, neurodivergence and some mental health issues (such as claustrophobia and anxiety)	In the station
Limited availability of wheelchair accessible taxis	Users of wheelchairs and mobility scooters	Getting to/from the station

**Busy roads on the approach and around stations** presented a barrier for a range of participants but specifically, within this sample, for individuals with mobility issues, wheelchair and mobility scooter users and those with neurodivergence. Participants frequently described feeling unsafe navigating busy roads around stations, particularly when step-free access required taking a route outside of the station beside a main road. In

addition, some participants recounted near-miss experiences when navigating busy roads just outside train stations.

### **Case study 3: The difficulties of getting to the station and making connections (user)**

Jason is a wheelchair user living in a rural area. He is a frequent rail user for business purposes and always travels independently using pre-booked passenger assistance.

Jason does not like the lack of step-free access he encounters when trying to make connections along his train journeys. Additionally, in order to get to his local station, he has to navigate busy roads that are difficult to cross safely.

Whilst he is generally confident travelling through his local train stations, he has had poor experiences when travelling through larger stations, such as being unable to disembark.

“[When a car rushed through a pedestrian crossing] I felt my body say wow, that's close because I was only a second away from being a wheelchair sandwich.”

Mobility impairments



**Limited availability of accessible toilets and changing spaces** at stations and on trains were reported as a barrier by a range of participants with incontinence as well as by those with mobility issues and neurodivergence. Participants reported that accessible toilets and changing spaces were frequently not provided at stations and on trains or were out of order. Some participants felt they could manage a short journey without access to these facilities, however having limited, or no access, for long journeys was not feasible. Within the sample there were participants who could not risk travelling without access to accessible facilities, and as such were unable to travel by train where facilities were not provided or not guaranteed.

### **Case study 4: The need for accessible platforms and facilities (user)**

Luke (34-54 years old) has arthritis and incontinence. Whilst not reliant on a wheelchair when travelling by train, he uses a stroller or walking stick.



Luke faces challenges when trying to access his local station as the step free access route is very long – taking him around 15 minutes. It also requires him to walk alongside a main road to access the platform, which makes him feel nervous. He also requires convenient access to a toilet when travelling. Not knowing where the working toilets are on trains can be a source of stress.

“It’s about a quarter of an hour to get from one platform to another... there’s no toilets there either.”

Mobility impairments



**Limited carriage spaces** were reported as a key barrier to rail travel for wheelchair and mobility scooter users. Here participants highlighted that not only were suitable carriage spaces for wheelchairs and mobility scooters extremely limited on trains they were often occupied by luggage, prams or other wheelchair or mobility scooter users, even when pre-booked.

Wheelchair and mobility scooter users also highlighted that the designated carriage spaces were not entirely fit for purpose. For example, tables, plug sockets and information displays were inaccessible and some participants reported that they had been unable to secure wheelchairs properly.

#### **Case study 5: The uncertainty of carriage spaces (non-user)**

Jane is a part-time student (19-34 years old) and uses a mobility scooter. She has multiple sclerosis and mental health impairments.



Rail travellers with mobility scooters are not always guaranteed passage on trains due to their size. For Jane, the potential risk of being refused entry is a serious consideration as she is often left fatigued from travelling short journeys.

Jane is hoping to travel by rail again in the future and would love to visit London on the train. She is saving up to purchase an electric wheelchair and, despite the cost, sees this as the most viable way to become an active train user.

“I know it's so inaccessible on a mobility scooter.”



Mobility scooter user

**Navigating the station** was found to be challenging for the visually impaired, as well as those with cognitive impairments, neurodivergence and some mental health issues such as claustrophobia. Participants described how many train stations had little clear accessible signage to support their navigation around station. The visually impaired in the sample recounted incidents of staff “pointing” them in the right direction but failing to physically guide them or describe the direction they needed to take. For example, one visually impaired user described being told to “head over there” and being unable to see what was meant. Amongst those with cognitive impairments, neurodivergence and mental health issues large and busy stations in particular were often found to be confusing and overwhelming. In addition, participants with mobility issues highlighted that large stations and stations where there were long distances to cover on foot could be challenging for them to navigate.

**Crowded stations and platforms** were problematic for those who found it physically hard to move in a crowd, including those with mobility issues, the visually impaired, as well as those with neurodivergence and mental health issues such as claustrophobia and anxiety. However, participants across the sample reported avoiding peak time rail travel specifically to avoid crowded stations, platforms and train carriages. Participants reported that crowded stations and platforms were physically challenging, and they were often seen to be risky too; participants with mobility issues cited concern that they would be pushed, shoved or jostled and that they may slip, trip or fall. As a result, participants described how crowded stations and platforms were stressful for them and often anxiety inducing.

#### **Case study 6: The challenges of crowds and unempathetic passengers (user)**

Damien is a Senior Administrator (35–54 years old) with Autism Spectrum Disorder (ASD). He struggles with social interaction and requires routine to navigate day to day life.

He finds rail travel highly taxing. The unpredictability of services leads to anxiety, and he finds the busyness of stations, and in particular the large “rugby scrum” crowds that form at train doors, especially stressful.

He has also experienced passengers pushing him or sighing at him because he is slow getting off the train. Damien feels that other passengers lack empathy and patience towards him, which he thinks is driven by the fact that his disability is “invisible”.

“There just isn’t the empathy. There isn’t the understanding at all.”



Wheelchair and mobility scooter users also highlighted that the **limited availability of wheelchair accessible taxis** was often a barrier when getting to and from the station.

## Social barriers

Social barriers were experienced by participants throughout the sample with frequent reports of encountering negative attitudes and inconsiderate behaviours from both train staff and other passengers.

The research identified five primary social barriers. An overview of the social barriers is set out in Table 3 below.

Table 3: Overview of social barriers

Barrier	Particularly relevant to	Journey stages
Train staff not recognising individuals’ support needs	Those with invisible impairments and young people	At the station, boarding and disembarking the train as well as on board the train
Train staff ignoring individuals who have support needs*	Those with mobility issues, including wheelchair and mobility scooter users, as well as those with hearing and visual impairments	At the station, buying their tickets, boarding and disembarking the train as well as on board the train

Passengers being intrusive	Wheelchair users and those with assistance dogs	At the station, boarding and disembarking the train as well as on board the train
Passengers being judgemental	Those with invisible impairments, especially young people, as well as the individuals with neurodivergence and/or mental health issues	
Passengers being inconsiderate	Anyone with mobility issues, sight impairments as well as individuals with neurodivergence	
* This is a barrier identified from the passenger perspective, since the research did not capture the perspectives of rail staff. Whilst there may be overlaps between this and the “train staff not recognising individuals’ support needs” barrier, this report has identified these as two distinct barriers in line with the perspectives of the research participants.		

The research identified two key social barriers relating to train staff. Across the sample participants described instances where **train staff failed to recognise individuals’ support needs**. However, young participants and participants with invisible impairments reported that train staff failed to recognise their need for support more frequently than others in the sample. Wheelchair and mobility scooter users also reported being left by staff to handle confrontational situations over booked seats or spaces when staff did not realise that were in need of support.

“Over the years, there is now more understanding than there used to be [among staff] - it is going in the right direction, it is just happening far too slowly”

Male user, 35-54: Neurodivergence and Mental health impairment

In addition, those with mobility issues, including wheelchair and mobility scooter users, as well as those with sensory impairments reported **train staff ignoring their need for support**. Experiences reported by participants again included being unable to board or disembark trains on account of being ignored by staff or forgotten about.

#### Case study 7: Lack of support from station staff (user)

Mary is a Tutor (35–54 years old) with various conditions that lead her to use a wheelchair. Her conditions include osteoarthritis, left-sided weakness, chronic pain and a Functional Neurological Disorder and she uses a wheelchair full-time.

Mary uses Passenger Assist when travelling by train and has had mixed experiences, which she finds vary by station. She often finds that station staff are unwilling to help or are dismissive of her needs and she has been ignored whilst waiting for assistance at the ticket gate. For Mary, accessibility extends to staff

attitudes, and she will choose to travel from and to specific train stations based on her experiences of the staff attitudes there.

“You can make a station accessible, but if the people aren’t willing to...make it accessible then it's really difficult.”



Wheelchair user

### Case study 8: Lack of support from station staff (non-user)

Priya is a Data Analyst (19–34 years-old) who uses a wheelchair due to a mobility condition.

Priya is a lapsed train user who views train journeys as being inaccessible and unpredictable and has been put off using public transport. While she finds that some staff can be very helpful, others can be rude or dismissive. She has experienced staff ignoring her request to be let through the disabled barriers and often feels a sense of judgement or othering by staff, whereby she is “looked at up or down”. This inconsistent quality of assistance and attitudes of staff has contributed to her overall feeling of rail travel being too unpredictable for her to feel comfortable to travel.

“I would say that that factor of the staff is huge because they can literally make your day better or worse from the moment that you step inside the train station.”



Wheelchair user

The research also identified negative attitudes and inconsiderate behaviours from other passengers being experienced as a barrier to rail travel. These included passengers being intrusive, judgemental and inconsiderate. **Intrusive experiences** tended to be reported by wheelchair users and those with assistance dogs. These experiences included passengers pushing wheelchairs and climbing over wheelchair users; these were especially invasive events as wheelchairs were often expressed as an extension of the person across the wheelchair-using sample. The visually impaired with assistance dogs also reported that passengers often distracted their working dog.

**Judgemental behaviours and attitudes from other passengers** were reported across the sample. However, those with invisible impairments, especially young participants,

reported judgemental behaviours and attitudes to be a particular barrier to rail travel. Examples of judgemental behaviours and attitudes from other passengers experienced by participants included challenges regarding the use of priority seating and audible frustration at slow moving individuals.

Participants across the sample frequently reported that **other passengers were inconsiderate**, but this was a barrier to rail travel in particular for those with mobility issues, sight impairments and neurodivergence. Inconsiderate experiences reported by participants included: other passengers rushing around slow-moving individuals, leaving stowed luggage and coats hanging in wheelchair and mobility scooter users' spaces whilst they were being used, eating strong smelling foods, playing music aloud on phones and being loud or shouting.

Both users and non-users felt that social barriers were underpinned by a lack of understanding broadly, and specifically a lack of training for rail staff.

#### Case study 9: Judgemental passengers (user)

Gemma is a student (16–18 years old) with a Functional Neurological Disorder and struggles with standing or walking for long periods of time.

Gemma feels that her 'invisible' condition and young age mean that other passengers are judgemental and don't recognise or understand her need to sit down. In addition, older passengers often ask her to give up her seat for them. These instances have caused her distress, and she has adopted telling other passengers she feels faint to communicate her need to sit down.

"So... I just say, oh, please can I have your seat I feel like I'm gonna pass out. Because I just think that's an easier way to make them understand... because of... how I look...I just look like a normal 18-year-old girl."



Non-visible mobility impairments

#### Case study 10: Judgemental passengers (non-user)

Mavis is a retiree (55+ years-old) and has various mobility conditions, including arthritis of the spine. She uses crutches to walk and suffers from pain and discomfort when travelling.

As a lapsed train user, Mavis finds that other passengers have a lack of awareness when it comes to people with non-visible disabilities. She has experienced people being reluctant to assist or accommodate her needs, such as helping her with her bags. She has also had numerous experiences of other passengers being dismissive, including people tutting and sighing at her due to the longer time she requires to get on or off the train, which she describes as feeling like a “social condemnation”.

“People still think of disability, wheelchair... not all disabilities are visible...[I’m] just so fed up being invisible.”



Non-visible mobility impairments

## Informational barriers

Informational barriers were experienced throughout the journey, primarily by participants with mobility issues, including wheelchair and mobility scooter users, and those with sensory impairments.

The research identified four primary informational barriers. An overview of the informational barriers is set out in Table 4 below.

Table 4: Overview of informational barriers

Barrier	Particularly relevant to	Journey stages
Lack of information available regarding stations and trains for advanced planning (e.g. station layout)	Those with mobility issues, including wheelchair and mobility scooter users, as well as those with hearing and visual impairments	Planning their journey
No provision for live and up to date information on station and train facilities (including lifts, toilets, carriage spaces)	Those with mobility issues, including wheelchair and mobility scooter users	Across all stages of rail travel from planning their journey to leaving the destination station
Inaccessible live train information (audio announcements, information screens etc.)	Those with hearing and visual impairments	At the station and onboard the train

Inaccessible or limited signage		
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The **lack of information available regarding stations and trains for advanced planning** made rail travel challenging, if not infeasible, for those with mobility issues, including wheelchair and mobility scooter users, as well as those with sensory impairments. Participants across the sample frequently described carrying out detailed advanced planning for train journeys, especially when undertaking new or unfamiliar journeys. Advanced planning included not only establishing the stations, route and tickets but also investigating station layout and facilities as well as train facilities. Here, participants described trying to establish if the route was accessible, for example seeking out station layouts and if there was step-free access and lifts. Participants also sought out information to understand if their needs would be met throughout the journey, such as through the provision of accessible facilities and Passenger Assist. However, information regarding stations and trains for advanced planning was often felt to be lacking and, in some instances, not available.

#### Case study 11: The need for advanced station and train information (user)

Faye (19-34) has both visual and hearing impairments, as well as mobility issues. Her condition fluctuates which means that she may use a walking stick or a wheelchair when travelling. She primarily uses rail travel for leisure purposes, travelling with her assistance dog and sometimes her boyfriend.

Faye's hearing loss and visual impairment makes accessing information at the station challenging, particularly if it is busy. She finds it especially hard to find directions to step free routes, and when boarding trains, she is often concerned for her dog's safety due to the gap between the train and the platform edge.

"The information isn't necessarily going to be accessible if they've just put up a little sign somewhere."

Hearing, sight and mobility impairments



#### Case study 12: The impacts of inaccessible information (non-user)

Ciara is a partially sighted lapsed train user (35-54). Her limited eyesight means she struggles to read information screens and other signs around stations.

Ciara has found some large stations overwhelming and hard to navigate, leading to her feel anxious about future rail use - she prefers to travel by car with her husband. These challenges are less pronounced in smaller quieter stations, which are easier to navigate.

Whilst she believes staff would be helpful if she were to travel by train, she feels unable to ask station staff for support.

“So those [city stations] just seem kind of massive and that they were even harder to access for me... The smaller stations are easier for me.”



Visual impairment

Participants also highlighted a need for **live and up to date information on station and train facilities** (including lifts, toilets, carriage spaces) to support both planning and execution of train journeys. Participants across the sample felt that the lack of provision of this was a barrier specifically for those with mobility issues, including wheelchair and mobility scooter users. Some described significant disruption to planned journeys, and abandoning journeys, when discovering at the station that lifts were out of service, or immediately prior to boarding finding there to be no suitable seat or carriage space, or that the accessible toilet facilities were out of order.

**Inaccessible live train information** was a barrier to rail travel for those with hearing and visual impairments. Here, information provided in just one format, such as just via audio announcements or information screens in stations and on-board trains, failed to support those with hearing and visual impairments. Inaccessible live train information was reported to be especially problematic when there were issues with train services, such as delays and cancellations, where participants felt 'left in the dark'.

In addition, some wheelchair and mobility scooter users reported that ticket machines in stations were not always at an accessible height. As such they were unable to use these machines to purchase tickets or view ticket information.

### Case study 13: The inaccessibility of live train information (user)

Joe (19-34) enjoys the convenience and speed of rail travel, as well as being able to relax while travelling.

Joe has a hearing impairment and struggles to access live train information. He is rarely able to understand information announced across station audio systems. Live information on the train also poses a challenge when it is not provided in a visual format or is inaccurate.



Joe struggles to understand other people unless he can read their lips. This presented a significant hurdle during the COVID-19 pandemic when face masks were mandatory on public transport.

“It's announced that they're not calling at the station that I want to get off at...I wouldn't hear that.”



Hearing impairment



Figure 5: Visual information unavailable [left]

Figure 6: Broken help point at a station without Tannoy announcements [right]

**Inaccessible and limited station signage** (as highlighted in **Physical barriers: Spaces**), was cited as a barrier for those with hearing and visual impairments. Participants reported struggling to navigate stations as well as service disruptions and platform changes on account of inaccessible signage. In addition, absent temporary signage highlighting step-free routes when lifts were out of service was particularly challenging for wheelchair and mobility scooter users, and those with mobility impairments. This was observed during an accompanied journey where a participant with mobility issues was left to work out how to exit the station and was faced with either abandoning their plans and taking the train home, taking the train to an alternative station and incurring the additional time and costs, or climbing a number of stairs to exit the station. The participant chose to climb the stairs, which not only took a long time (making them late) but was exhausting for them.

### Sensory and emotional barriers

Sensory and emotional barriers to rail travel, such as sensory overload and heightened feelings of stress and anxiety, were reported by participants across the sample.

The research identified two primary sensory and emotional barriers. An overview of the sensory and emotional barriers is set out in Table 5 below.

**Table 5: Overview of sensory and emotional barriers**

<b>Barrier</b>	<b>Particularly relevant to</b>	<b>Journey stages</b>
Sensory overload: bright lights, loud noises, crowds of people	Individuals with neurodivergence	From getting to the station all the way through to reaching their destination
Heightened feelings: stress, anxiety	Individuals with mental health issues as well as the neurodivergence together with wheelchair and mobility scooter users	From getting to the station all the way through to reaching their destination

Sensory barriers were particularly relevant to individuals with neurodivergence and mental health issues such as anxiety. Here participants reported finding train stations and trains overwhelming on account of the bright lights, loud noises, crowds of people and a range of smells.

Emotional barriers were reported by the majority of participants in the sample but were a primary barrier to rail travel amongst those with mental health issues. Participants reported experiencing heightened feelings of stress and anxiety throughout the door-to-door journey.

#### **Case study 14: The challenges of sensory overload when using trains (user)**

Addie is a student (19-34 years old) with both ADHD and depression. She finds rail travel overstimulating and particularly anxiety-inducing.

Addie finds announcements, overcrowding, uncleanliness and loud groups of passengers especially challenging. Her sensitivities regarding train cleanliness have been exacerbated since the pandemic. In the past she has had to get off a train because a discarded used nappy was causing overwhelming anxiety and nausea.

She has often tried to find staff for assistance when she is feeling overwhelmed whilst at a station or on a train. But more often than not she is unable to find someone, which can increase her anxiety.

“COVID-19 made me more anxious getting on trains because of how dirty it can be.”



### **Case study 15: The challenges of sensory overload when using trains (non-user)**

Tom is a non-verbal autistic student (16-18 years old) whose mother is his primary carer.

Tom's mother is very apprehensive about the sensory overload her son could experience on a train journey – things like overcrowding, loud noises, food smells and harsh lighting – that could cause her son to have a “meltdown”.

She also worries that other passengers would stare and pass judgemental comments about her son, as he becomes physically aggressive during these episodes.

“Anything could trigger him... I don't want him to have a meltdown or, like, have challenging behaviour there... other people will obviously not understand as well.”



Neurodivergent

## **Motivational and confidence barriers**

Motivational and confidence barriers to rail travel were reported by participants across the sample. These included issues related to knowledge and understanding of rail travel, the unpredictability of train services and negative perceptions and experiences of rail travel. Broadly, motivational and confidence barriers were primary barriers amongst non-users and those with less experience of trains, such as young adults and infrequent users.

### **Motivational and confidence barriers: Knowledge and understanding**

The research identified five primary knowledge and understanding barriers. An overview of the knowledge and understanding barriers is set out in Table 6 below.

Table 6: Overview of knowledge and understanding barriers

Barrier	Particularly relevant to	Journey stages
Familiarity with rail travel	Non-users	All journey stages
Familiarity with train station facilities and layouts	Those with mobility issues, including wheelchair and mobility scooter users, as well as those with visual impairments and neurodivergence	All journey stages
Limited understanding of train tickets, how to buy them and how to book seats or spaces	Non-users and infrequent train users	Planning the journey and buying the ticket
Awareness of assistance and support available at stations	Non-users	Planning the journey
Two-step booking system for those that require passenger assistance	Anyone that requires, or would ideally use Passenger Assist	Planning the journey and buying the ticket

**A lack of familiarity with rail travel** at a high level emerged as a key barrier to rail travel amongst non-users. Non-users often reported feeling that they didn't understand how to undertake rail travel, expressing concerns that they would buy the wrong ticket, get off at the wrong station, or that they would not be able to find the help and support that they need to undertake rail travel. Similarly, rail users in the sample highlighted that unfamiliar journeys, incorporating new stations to navigate with unknown potential for challenges (such as steps and turnstile ticket gates), presented risks. As such, rail users often described avoiding unfamiliar journeys.

**Familiarity with train station facilities and layouts** was a key element to confidence across the sample when travelling by train or considering whether to do so. Participants highlighted how a lack of familiarity of the train station layout, and where facilities such as accessible toilets and lifts were located, undermined their confidence to travel by train. This was particularly prevalent amongst those with mobility issues, visual impairments and those with neurodivergence.

#### Case study 16: The need for familiarity with rail travel (user)

Sam (16-18 years old) primarily uses trains to get to college. They have endometriosis and often travel with a wheelchair and a walking stick. Sam mostly travels independently, although occasionally they need to travel with an essential companion.

Sam has little experience travelling by train and has limited physical ability to navigate stations or platform changes. They often feel they don't understand where

they need to go and feel too embarrassed to ask staff questions. Sam has started using coping strategies such as entering cafes to relax and mentally preparing for any changes to their journey.

“I usually sit at a cafe [to manage changes to the journey], have a little something to eat... It's a little bit more accessible for me now.”

Mobility impairments



### Case study 17: The need for familiarity with rail travel (non-user)

Maggie is a non-user with chronic illness (19-34 years old). She typically uses taxis for travel due to the convenience and ability to go from A to B, although she has travelled by train in the past.

Maggie has a limited amount of energy available to perform daily tasks and is reluctant to travel by train again because of the she finds it requires a lot of effort and energy. Planning train journeys is research-intensive, and Maggie finds it hard to locate accessibility information. Furthermore, Maggie has found train services to be unreliable, and unexpected challenges are more than she can cope with.

“If we run into an unexpected staircase, that is a day ruiner for us - one I didn't plan for.”

Non-visible mobility impairments



Participants with low levels of confidence and non-users in the sample also reported a **limited understanding of how to buy train tickets, ticket pricing tariffs and how to reserve seats and carriage spaces.**

“I find it odd to look for prices etc...it was a bit confusing for me [when I tried to look] because I've never done it before.”

Female non-user, 35-54: Mental health impairment

Non-users frequently cited the need for support to travel by train and were sometimes **unaware of Passenger Assist** and the availability of staff support to aid rail travel. Rail users and non-users in the sample who were aware of Passenger Assist felt that the separate booking process (from ticket and seat reservations) created a **two-step booking**

**system.** This two-step system was perceived to be a factor in limiting rail travel for people with disabilities and impairments by creating an unnecessary additional process (compared to other passengers).

"An able-bodied person can just book their ticket and that's it. Whereas I have to book my ticket and ring up and talk to someone."

Female rail user, 35-54: Wheelchair User

### Motivational and confidence: Unpredictability of rail travel

The research identified four primary barriers under the category of unpredictability of rail travel. An overview of the barriers regarding the unpredictability of rail travel is set out in Table 7 below.

Table 7: Overview of unpredictability of rail travel barriers

Barrier	Particularly relevant to	Journey stages
'Carriage space lottery' (wheelchair and mobility scooter space availability)	Wheelchair and mobility scooter users	Planning the journey, boarding the train and on board the train
Unreliability of train service (delays, cancellation)	Those with mobility issues, including wheelchair and mobility scooter users, as well as those with visual impairments, mental health issues and neurodivergence	All journey stages
Inaccessible replacement services	Wheelchair and mobility scooter users	Train replacement
Unreliability of train service support to facilitate rail travel	Wheelchair and mobility scooter users as well as the visually impaired	At the station, boarding and disembarking the train

Throughout the research, wheelchair and mobility scooter users reported experiencing a '**carriage space lottery**' when traveling by train due to the limited availability of suitable carriage spaces. Participants frequently described finding their reserved spaces already occupied by either other wheelchair and mobility scooter users or taken up with prams and luggage. On occasion this was easily resolved, with the support of train staff, however participants reported that "more often than not" if the space was already occupied, they would be left with no choice other than to wait for the next train.

The **unreliability of train services**, such as the occurrence of delays and cancellations, was a barrier to rail travel reported across the sample. However, the unreliability of train

services was a source of anxiety and stress especially for those with mobility issues, neurodivergence and mental health conditions (anxiety in particular). Service disruptions, including diversions to a different station were also reported to hinder accessibility and support arrangements such as Passenger Assist. For example, stations may not have step free access and Passenger Assist may not have been notified of the diversion, and as such would not be available to support passengers disembark.

“The unpredictability of what's going to happen...it can be a bit of stress ...the train is cancelled, but nobody tells me that its cancelled, different websites show different information, you get mixed messages”.

Male rail user, 35-54: Mental health impairment.

In addition, **rail replacement services** were often reported to be unsuitable for wheelchair and mobility scooter users and those with mobility issues. Here, some participants described rail replacement buses as being broadly inaccessible, with steep steps, uncomfortable and inconvenient, with very few accessible facilities.

The **unreliability of train service support** was also found to undermine confidence to travel by train, particularly amongst wheelchair and mobility scooter users and the visually impaired. Participants described feeling that they could not trust Passenger Assist or other train staff to be understanding and compassionate or even to turn up to support them in boarding and disembarking trains; this included staff or Passenger Assist arriving in time with ramps to boarding or disembarking trains.

#### **Case study 18: The unreliability of train services undermining confidence (user)**

Alison is a retiree (55+ years old) who has a hearing impairment and is a wheelchair user.

Alison struggles with the uncertain nature of rail travel and worries that: she won't hear announcements, that lifts will be out of order, that train staff won't show up to help board or disembark, that the train will be overcrowded, and her seat reservation won't be showing.

Past experiences have undermined her confidence in using trains and as a result she opts to use trains only for familiar journeys.

“I don't feel confident at all...The reason I would only do familiar journeys is you don't know what the station's gonna be like. You don't know how accessible it's gonna be. You don't know what the staff are gonna be like.”

Wheelchair user, with hearing impairments



### Case study 19: Uncertainty as a barrier to rail travel (never used)

Julie (35–54 years old) has a mobility condition, uses a walking stick to get around and has an assistance dog. She has never taken the train and lacks confidence to use trains.

Julie's lack of confidence stems from feeling uncertain about how to use trains and book tickets, particularly online or with an app. She is concerned that there might not be suitable support available to help her navigate the station and with getting on and off the train. She is also unsure whether there will be accessible facilities, such as disabled toilets on the train, and worries that her assistance dog will not be allowed on the train or in stations. She is unaware of Passenger Assist and of ticket machines.

“When I looked online [at tickets] it was a bit confusing for me because I've never done it before.”



Mobility impairments

## Motivational and confidence: Perception and experience

The research identified three primary barriers under the category of perception and experience. An overview of the barriers regarding the unpredictability of rail travel is set out in Table 8 below.

Table 8: Overview of perception and experience barriers

Barrier	Particularly relevant to	Journey stages
Perceptions of risk undermining confidence	Non-users, together with rail users with mobility issues, specifically wheelchair and mobility scooter users, as well as the visually impaired	All journey stages



Lack of experience with the rail travel undermining confidence	Non-users and infrequent train users	All journey stages
Unfamiliarity with the journey undermining confidence	Wheelchair and mobility scooter users, as well as those with visual impairments and neurodivergence	All journey stages

**Perceptions of risk undermined confidence** for participants across the sample, but specifically amongst non-users and rail users with mobility issues, wheelchair and mobility scooter users, as well as the visually impaired. Participants perceived rail travel to be risky on account of unreliable train services, assistance and support either experienced directly or through anecdotal experiences shared by friends or in online communities (as highlighted in **Perceptions and experiences of rail travel**).

Experiences reported often consisted of poor service from Passenger Assist or other train staff, such as inconsiderate attitudes or service failures. Participants shared stories of their own and that they had heard from others about journeys being delayed or abandoned, and of being unable to disembark trains at their destination stations and being stuck on the train until the end of the line – where they were finally able to get staff attention. Other passengers' attitudes and behaviours also presented a risk, with stories being shared of confrontations with other passengers over seats and spaces.

"The amount [of people] that I see in the disabled forums who are [saying] there wasn't anyone there, or they didn't turn up, or saying [that] because I wasn't ten minutes early for my train, although they're there with the ramp, they wouldn't let me get on... I [personally] have had a woman with a pushchair tell me that she's not moving [because] there's nowhere else for her to go with the pushchair. I've had luggage there [in the wheelchair space] and there's no one around... Both of those times I've asked the conductor to help me, and they've said no."

Female rail user, 35-54: Wheelchair User

As highlighted in the knowledge and understanding section both a **lack of experience with rail travel** and **unfamiliarity with the journey** were found to undermine confidence to travel by train. Participants across the sample reported overall experience with rail travel and familiarity with the journey being undertaken to be the primary drivers of confidence levels. As such, non-users, infrequent and young rail users tended to have lower levels of confidence when travelling by train.

"The routes I take are quite familiar to me now - no risk of surprises."

Mail rail user, 19-34: Mobility impairment

#### **Case study 20: Perceptions of risk undermining confidence (user)**

Billy is a blind musician (19-34 years old) and primarily uses trains to visit his family. He has a personal assistant, who often accompanies him to the train station, though he is able to travel independently with the help of Passenger Assist.

Billy is a confident user of trains however he has experienced unreliable service from Passenger Assist. As a result, he does not feel confident using Passenger Assist if he has not pre-booked it or on unfamiliar journeys.

“The main anxiety for me is... whether the passenger assistance turn up or not.”



Visual impairment

### **Case study 21: The unreliability of train service support when using trains (user)**

Kathy is a retiree (55+ years old). She is blind and uses a cane and a guide dog.

Kathy spoke of the risks she has faced when Passenger Assist has failed her. On one occasion Passenger Assist “forgot her” and didn’t come to escort her off the train.

This led to her missing her stop and having to navigate the gap between the train and the platform herself at the next stop. As a result, not only were her plans for the day disrupted but she has lost confidence in the service. Now she will only wait a short moment before choosing to disembark herself, rather than assuming Passenger Assist will eventually show up.

“They forgot me and then I missed my station. I would never stay on the train...I’m able to get off the train, so I always get off.”



## Visual impairment

### Financial barriers

Financial barriers to rail travel were predominantly cited by non-users of rail. However, across the sample rail travel was often perceived to be an expensive mode of transport compared to other modes of public transport, or travelling via private car.

“Cost is [one of the top barriers]. Our electric car is cheaper... for us to get to Manchester [and back] the was price was about £180, whereas I drove us to Birmingham [an equivalent distance], and it cost a maximum of £28.”

Female lapsed rail user, 35-54: Multiple mobility impairments

“It was £80 return for the pair of us to get into London... that’s horrendously expensive, I can fly to Barcelona for that.”

Female lapsed rail user, over 55: Multiple mobility impairments

Cost of living pressures were also reported by some participants to have exacerbated financial barriers to rail travel, leading some to feel less willing or able to travel by train. Some participants described travelling by train less on account of the affordability of train tickets, while others cited altering journeys or ticket purchasing to save money, such as purchasing split tickets.

“It feels like we all have less money and then the prices of the train tickets are just going up and up...so I am definitely getting the train less.”

Female rail user, 19-34: Visual impairment

Participants also reported that paying full price for a required travel companion was a particular financial burden and barrier to rail travel amongst those that could not travel independently.

“The reason we went on [the coach] is the carer travels for free...And on buses, also the carer goes for free. Trains, no... if somebody needs care with them, the essential carer doesn't necessarily want to take the journey. You know? They have to be there.”

Female non-user, 55+: Mobility impairment

### Passenger support and rail travel initiatives

This section sets out the findings regarding passenger support and two initiatives: Passenger Assist and the Disabled Persons Railcard (DPRC). The research explored

participants' awareness and perceptions of Passenger Assist and DPRC, as well as any experiences of using them.

## Passenger support

Before looking at perceptions of Passenger Assist, it is worth considering perceptions of support more broadly. When reflecting on train service passenger support, staff availability and visibility emerged as a barrier amongst rail users. Across the sample unstaffed stations were seen as risky, with there being no in-person provision for support. Rail users frequently cited that low levels of staff present at stations (particularly since the pandemic as outlined in the section on **changing experiences since the COVID-19 pandemic**) hindered the accessibility of rail services. In addition, rail users highlighted that staff were often busy or appeared preoccupied and were therefore perceived as being unable to provide assistance or support. The limited availability of staff to provide assistance or support was a particular concern amongst participants with mobility issues and visual impairments.

“The assistant staff seem to be more overworked and less inclined to be helpful.”

Female rail user, 35-54: Wheelchair user

In addition, rail users and some non-users felt that staff that could support them were not always easily identified, and this was specifically problematic for individuals in the sample that found it difficult to ask for help.

## Passenger Assist

Awareness of Passenger Assist was high amongst rail users and low across non rail users in this sample. Sources of awareness reported by participants included ticket counter staff, advertisements and accidental discovery when seeking out other rail travel information via internet searches. Notably, amongst rail users, those without mobility impairments often felt that it was geared towards physical disability and as such felt that the service was not available to them.

Rail users who used Passenger Assist highly valued the service, perceiving it to be a crucial source of support for passengers with disabilities and impairments. Passenger Assist experiences were for the most part extremely positive, and users felt that when the service delivers it works to alleviate many physical barriers to rail travel. Participants also mentioned the ease of booking Passenger Assist to be particularly valuable to their overall travel experience.

“I think that the passenger assistant app has been worth its weight in gold... If you initially make planning the journey positive... that could really encourage more people to feel like trains are accessible to them.”

Male rail user, 19-34: Mobility impairment

However, Passenger Assist users often felt that the service was under resourced, and most reported instances of service failure. Service failures included Passenger Assist:

- failing to board or disembark passengers
- booked wheelchair / mobility scooter spaces not being available
- leaving passengers to deal with confrontational situations over booked seats or spaces.

“Often, they say we've radioed ahead and they're expecting you. But then no one comes with the ramp, and you get left on the train.”

Female rail user, 19-34: Visual impairment and wheelchair user

The impacts of service failure were often significant both in the moment and longer term. In the moment, participants reported that plans were abandoned, and the costs incurred “written off” mentally. Longer term, participants described how these incidents could undermine their independence, confidence and sense of self (as outlined in perceptions and experiences of rail travel). Furthermore, Passenger Assist service failures were widely shared, via social media and community platforms, leading to wider impacts for others’ perceptions of risk and expectations of service failure whilst travelling by train.

### **Case study 22: Passenger Assist is an invaluable service (user)**

Bert is a retired (55+ years old) wheelchair user.

Bert has developed a good relationship with the Passenger Assist team at his local station and finds the service to be accommodating and easy to organise.

In his experience, the booking process has been simple and quick. He also spoke highly about Passenger Assist staff being willing to accommodate adaptations for him. On one occasion when the lifts were out of service, they arranged for a train to divert to another platform to accommodate him.

“Yeah, they're just great. Yeah. And put the ramp down. Off you go.”



Wheelchair user



**Figure 7: Passenger Assist supporting a wheelchair user board a train**

### **Case study 23: Passenger Assist is a critical service, but it can go wrong (user)**

Ethan is a wheelchair user (19–34 years old) who usually pre-books Passenger Assist via an App.

Ethan feels that Passenger Assist is “worth its’ weight in gold”. He finds it easy to plan a journey and book Passenger Assist. Ethan was also very positive about one member of staff in particular who was very understanding of his conditions and supported him appropriately throughout his journey through the station and on to the train.

However, he has had incidents where his wheelchair space has not been booked properly, assistance has been unconfirmed and there have been delays on the ramp service for him to disembark, which caused him some anxiety.

“Passenger Assist has been brilliant...[but] a wheelchair space is very rarely guaranteed.”



Wheelchair user

## Disabled Persons Railcard

There was a broad awareness of the DPRC amongst rail users, but little uptake amongst those that were interviewed. Sources of awareness reported by participants included ticket counter staff and advertising.

However, those interviewed had little understanding of what the railcard offers and how to acquire one. In addition, some were unsure if the railcard was free.

In terms of views regarding DPRC, regular rail users across the sample felt the discounted fares were beneficial, but some felt that travel for carers and companions should be free.

Reflecting on their experiences, some DPRC users reported finding the application and level of proof required to acquire the railcard too burdensome. DPRC users also felt it needed integrating with other apps, such as rail ticketing apps, 'wallets' and contactless payment, for ease of use when travelling.

"It is so frustrating to have to get a million different cards."

Female rail user, 35-54: Multiple impairments

One DPRC user reported experiencing questioning regarding the legitimacy of her card ownership from rail staff.

"What you want to be is like everybody else. You've been issued that card, so that's your eligibility. [There should not be a] risk of arguments with train drivers."

Female rail user, over 55: Multiple mobility impairments

## Enablers to rail travel

The research identified three categories of enablers to rail travel:

- current passenger practices
- current service provisions
- suggested mitigations for the physical, social and informational barriers to rail travel.

### Current passenger practices

The research identified that passengers with disabilities and impairments were undertaking actions to make rail travel easier. The actions identified included:

- advance planning

- contingency planning
- individual resilience.

## Advance planning

Across the sample users and lapsed users described carrying out detailed planning in advance of train journeys. Advanced planning included conducting research into fares and routes as well as station and platform layout (where possible). As a final element to advanced planning, participants also reported pre-booking Passenger Assist and collecting tickets from the station in advance.

Research into stations and platform layout was most prevalent amongst individuals with mobility issues, who were seeking to establish the route that they would need to take through the station. In doing so, participants reported identifying physical barriers (steps, escalators, ticket gates etc.) and provisions for access, such as lifts and wide ticket gates. For some participants, advance planning was required to establish if they could travel independently or if they would need support from a travel companion or Passenger Assist.

Planning to travel off-peak was frequently cited as an element of advanced planning. Participants across the sample described a preference to travel off-peak to limit the risks associated with rail travel and to avoid crowded stations, platforms and trains.

## Contingency planning

Rail users in the sample often described having contingency plans in place when travelling by train, to be prepared for disruption to their planned journey (including extra time, costs as well as being prepared to reschedule). Participants reported planning for various scenarios including:

- trains being delayed or cancelled
- trains being busy or overcrowded and having no seats or suitable carriage spaces available
- there being no staff available to support boarding/disembarking or Passenger Assist service failure.

For example, participants with mobility impairments described being prepared to use another stop on the line if support failed to provide a ramp or if the station did not have step free access (which might be the case if a lift was out of service). Whilst wheelchair and mobility scooter users reported being prepared for their space to be occupied and having to wait for the next train. Other participants described being equipped for complete service failure (and being unable to complete the journey) when travel by rail, such as ensuring they knew where hotels were located along the journey route and having enough money with them to cover the cost of an overnight stay.

“I always have to have extra money in case I can't go on my train and I need to book a hotel.. because... I've had that. They can't get my chair on and so I had to do that. So that's my biggest sort of back up that I use is making sure I've got money for a hotel and know where the local hotels are on any of my stations that I'm passing by.”



Female rail user, 35-54: Wheelchair user

Across the sample both rail users and lapsed users reported leaving for the train station with contingency time planned into that first leg of the journey. Participants with neurodivergence and mental health conditions often described arriving up to an hour early at their departure station. The early arrival was designed to alleviate anxiety and allow plenty of time to navigate the train station, identify and find a place to wait on the platform as well as meet up with Passenger Assist where needed.

“I'll always get to the station ridiculously early so if anything does happen then the stress is kept as minimal as possible.”

Male rail user, 19-34: Hearing impairment

## Individual resilience

The research identified individual resilience as being a key enabler amongst rail users. Rail users demonstrated patience and pragmatism when confronted with the challenges of travelling by train. Many participants expressed frustration and felt that train services ought to be more inclusive and accessible, but on the other hand were understanding of services failures and the challenges of accessibility across an out-dated rail network. Furthermore, rail users were often willing to ask for help from both rail staff and other passengers, although this was very challenging for some.

“I'm quite confident in saying to someone ... I'm deaf. I didn't hear. Is there an announcement? ... but I haven't always been confident in doing that.”

Male rail user, 35-54: Hearing impairment

## Current service provisions

Rail service provisions and initiatives emerged as an enabler of rail travel for those with disabilities and impairments. Three key service provisions facilitating rail travel were identified:

- assistance
- multi-modal information
- tailored accessibility aids.

## Assistance

Assistance from staff was reported as a vital enabler for users, including Passenger Assist and the staff who provided help navigating stations, boarding and disembarking trains as well as offering information and support whilst on board trains. Participants with mobility impairments in particular highlighted that assistance often worked to alleviate barriers to rail travel. In addition, participants described that patient, knowledgeable and friendly staff were especially supportive and vastly improved rail travel experiences.

## Multi-modal information

Multi-modal information was also identified as being crucial to positive rail travel experiences, particularly amongst rail users with sensory impairments and neurodivergence. Rail users reported benefitting from information conveyed via multiple formats such as visually on screens and boards as well as audibly over announcement systems in stations, on platforms, as well as on trains. Some participants also cited using apps and the national rail website and finding the live updates especially valuable.

“[When text on the information board] is actually matching with what the train driver says or what the train driver announces. That's a positive.”

Female rail user, 19-34: Hearing impairment

## Tailored accessibility aids

Tailored accessibility aids were also felt to enable rail travel, with examples including tactile paving for the visually impaired, spaces for wheelchairs and hearing loops at ticket and information counters. These aids supported participants to navigate stations safely and access support as well as information.

“Some stations have tactile paving now at the edge of the platforms, which is really helpful. So at least you know where you are.”

Female rail user, over 55: Sight impairment and mobility issues

## Suggested mitigations for the barriers to rail travel

Rail users and non-users across the sample suggested a number of mitigations that could alleviate some of the barriers to rail travel.

It should be noted that potential enablers proposed by non-users sometimes reflected their lack of awareness of existing provisions. Suggestions included, for example, support services that reflected Passenger Assist, and the provision of a quiet carriage and accessible toilets. This points to the potential benefit that increasing awareness of existing efforts to improve accessibility could have on encouraging non-users to use rail.

## Mitigating the barriers to rail travel: Physical enablers

Suggested enablers from those who were impacted by physical barriers included a range of adjustments for people with mobility issues and visual impairments. These included:

- a dedicated physical drop-off area for disabled passengers arriving to the station by car
- an entrance away from crowds of people to allow for ease of mobility
- dedicated routes into and through the station to avoid crowds
- dedicated lanes in the station for slow movers
- early boarding to avoid crowds and allow for the extra time needed to board as a passenger with a mobility impairment

- ticket machines at an accessible height for wheelchair and mobility scooter users
- advance information on whether lifts are working
- use of a buggy on long and/or high gradient ramps
- automatic ramps between the train and the platform
- clips for wheelchairs to add stability
- 'dog free' carriages for assistance dogs to avoid interference from other dogs.

### **Mitigating the barriers to rail travel: Social enablers**

Participants suggested a range of potential enablers that could mitigate social barriers. Proposed enablers were thought to support those who might feel uncomfortable or anxious asking for help, as well as those who may have previously experienced inconsiderate or hostile behaviour from other passengers, and included:

- make it explicit which staff are there to help with 'happy to help' badges or lanyards as is done in supermarkets
- provide dedicated staff to support anyone with a disability, with training on equality and empathy
- provide dedicated spaces for disabled passengers at the station and on the train, and ensure these spaces aren't occupied with other passengers' belongings so those with accessibility needs don't have to engage in confrontational conversations with other passengers.

### **Mitigating the barriers to rail travel: Informational enablers**

A range of informational provisions were suggested to facilitate those with sensory impairments as well as individuals that struggle to process information. These included:

- making conversations at the ticket counter more accessible, through the use of a hearing loop, wheelchair accessible counters, and removal of the screen
- captions for announcements that are being made at the station
- real time information available online throughout the journey
- tactile paving to aid navigation at stations
- use of NaviLens (an app for the visually impaired that scans QR codes with directional instructions that can then be read out to the user) and coloured lines or arrows to aid navigation at stations
- on board announcements also shown on the screen
- a community forum to create an accessibility map by disabled travellers for disabled travellers.

### **Mitigating the barriers to rail travel: Sensory and emotional enablers**

Potential enablers suggested by participants impacted by sensory and emotional barriers included providing station entrances away from crowds and early boarding as well as quiet waiting rooms (with an assistance button), and air conditioning on trains to mitigate discomfort.

## **Mitigating the barriers to rail travel: Motivational and confidence enablers**

A range of support facilities and advance information provision were proposed by participants to support journey planning. Potential enablers included:

- one point of contact to help people plan their journey and organise assistance
- certainty that booked assistance will be provided
- accessing information on station layout in advance through detailed mapping, images and videos
- guaranteed seating for disabled people
- clearly signed opportunity to get help while on the train, such as a clearly marked button to be able to speak to the conductor
- videos on social media to show disabled people's typical journeys, illustrating what services are available.

## **Mitigating the barriers to rail travel: Financial enablers**

Two potential enablers were suggested by participants to mitigate financial barriers. These were to reduce the burden of proof for the DPRC, and to offer reduced, or free, travel for a carer or support companions for those that cannot travel independently.

## **Improving current train passenger schemes and initiatives**

The research also explored how passenger schemes and initiatives could be improved to facilitate rail travel amongst individuals with disabilities and impairments.

## **What works well in other forms of transport**

During interviews, participants were asked what works well, in terms of supporting accessibility, in other forms of public transport.

Support received whilst using air travel was frequently cited as an example of effective service, especially at airports. Participants described support at airports to be reliable and seamless, with fast-track lanes, buggy transportation, assistance with bags and reserved disabled waiting areas. Airport assistance staff were also described as easily identifiable, due to their visible uniform and clearly marked meeting points, as well as particularly knowledgeable and empathetic.

“[At the airport] the assigned support staff was carrying a screen which had live information about us - our access needs, the flight information, what we needed to do, and they tapped that screen each time we got to a milestone - our progress was being looked after. We were greeted by name - made me feel like I'm a person. I'm not a hindrance they're trying to get rid of - this is staff that understood our particular conditions.”

Female lapsed rail user, over 55: Multiple mobility impairments.

Positive experiences of accessible rail travel in other countries, such as in Japan and Europe, were also reported. Participants described train services in other countries as

being timely, reliable and efficient. Furthermore, participants felt that train services were more accessible with automatic ramps, wide gates and passageways, as well as greater numbers of lifts and escalators. In addition, participants felt these services were safer with visible support staff and barrier systems on platforms to reduce the risk of falling.

“I like the Japanese train [barrier] system. The train pulls in, they've got a barrier across, and then when the doors open the barrier goes down, and it's to stop people from accidentally walking onto the track.”

“[In Japan] they had people on the platforms, so if anyone who was elderly or in a wheelchair, they could use the ramp really quickly...they had a slot for the ramp on the side of the train, they opened the lock, pulled the ramp out, used the ramp and put it back.”

Male rail user, 16-18: Neurodivergence

Accessibility provisions outside of rail travel in the UK were also seen as good reference points by participants who felt that these could be adopted by rail services. These included free access for carers, which is offered in the entertainment industry, and the presence of staff with 'here to help' signposting and uniform, as is present at supermarkets. One participant suggested that live text updates from delivery services could be applied to Passenger Assist to provide reassurance that support was on its way.

“[You could have some] sort of alert on your phone that says your destination station has now been notified that you're on the train. A bit like you know when [delivery service] are delivering it says your parcels been just been delivered.”

Female rail user, over 55: Sight impairment

## **Improving Passenger Assist and the Disabled Persons Railcard passenger initiatives**

The research identified areas of improvement for both Passenger Assist and the DPRC passenger initiatives.

Reflecting on their experiences of Passenger Assist participants suggested three potential improvements. First, participants felt that Passenger Assist and the DPRC could be integrated with other apps to allow seamless travel bookings. Similarly, participants suggested that services could be integrated to remove the two-step booking system and ensure Passenger Assist works at both ends of the journey. Lastly, participants felt that their experience could be improved through the availability of a Passenger Assist app with real time information and assurances that service is being delivered.

Reflecting on their experiences of the DPRC participants suggested that the initiative could be improved by reducing the burden of proof to acquire the card, and by offering free travel for a carer or support companion via the card.

In addition, the research findings suggest that the Passenger Assist and the DPRC passenger initiatives could be more effective if there was increased awareness and understanding of both initiatives amongst both rail users and non-users. Furthermore, that

Passenger Assist could be improved through increased staffing and working to reduce service failures.

## 4. Conclusions

### New insights from this research

#### Experiences of rail travel

The primary research identified that the ability to travel independently was important to participants' sense of self, quality of life and overall well-being, and that train services offered the possibility for independent travel. Furthermore, train services provided both functional as well as emotional benefits and were highly valued by individuals with disabilities and impairments. Moreover, train services were often a lifeline amongst participants who were reliant on public transport to travel independently.

Rail users in the sample often described very positive experiences, particularly with rail support staff. However, there were poor experiences reported including support and Passenger Assist service failures. Although infrequent, service failures had significant impacts on perceptions of rail travel, the barriers to rail travel and individual's confidence when it comes to rail travel. Wheelchair and mobility scooter users as well as young disabled adults and teenagers cited more negative experiences with both staff support and other passengers.

#### Changes since the COVID-19 pandemic

The primary research identified three changes in disabled people's perceptions and experiences of rail travel in since the COVID-19 pandemic. First, participants reported increased anxiety about being in public spaces and travelling via trains, and participants with mental health and cognitive impairments often reported that returning to using public transport was overwhelming. Second, participants felt that staffing levels had reduced at stations and at ticket counters, impacting the availability of staff to support rail travel for those with disabilities and impairments. Third, the cost of rail tickets was reported to have increased, which together with the cost of living had led some participants to feel less inclined or less able to travel frequently.

## Barriers to rail travel

The primary research identified six categories of barriers to rail travel: physical, social, informational, sensory and emotional, motivational and confidence and financial barriers. Barriers were often multiple and overlapping, with most participants experiencing a range of barriers when travelling by train or considering doing so. Furthermore, barriers were not fixed, and could change over time, reflecting changes in an individual's disabilities and impairments as well as their experience with rail travel.

The findings regarding physical and social barriers that disabled users and non-users experienced reinforced the existing literature. However, the research identified four additional themes in relation to barriers:

- a lack of knowledge, confidence and certainty regarding rail travel
- the importance of negative perceptions of rail travel based on anecdotal or personal experiences
- fluctuations in individuals' condition leading to variations in accessibility to rail travel
- the importance of staff availability and visibility to support accessibility.

## Travelling confidently

In line with the wider literature, the research identified that confidence to travel by train varied across the sample. Perceptions of rail travel differed significantly across rail users and non-users: rail users viewed rail travel more positively, although it could be challenging at times, whilst non-users felt that rail travel was largely inaccessible, risky and challenging.

In addition, this research has identified that confidence can fluctuate by journey and by day amongst individuals with disabilities and impairments. Furthermore, the research found that confidence varied over time, reflecting changes in participants' conditions. The findings suggest that confidence is related to experience and familiarity of rail travel, the perceived certainties (and uncertainties) of train services and facilities, undermining past negative rail travel incidents, and individuals' physical, mental, and emotional state.

Furthermore, the research identified key factors underpinning train use, these included need, accessibility, convenience, certainty, confidence, and a pragmatic positive attitude.

## Enabling greater rail travel

This research has identified a number of existing enablers of rail travel for users as well as a wide range of potential future enablers suggested by participants across the sample. Existing enablers identified included passenger-led and service-led. Passenger-led enablers included advanced planning, contingency planning and individual resilience. Service-led enablers included assistance, multi-modal information and tailored accessibility aids.

Participants suggested a number of potential provisions to mitigate and reduce the impact of barriers to travel and encourage disabled users and non-users to use rail more frequently. These included:



- more accessible infrastructure for people with mobility issues and visual impairments, as well as dedicated routes into and through the station to avoid crowds and quiet spaces to address **physical** as well as **sensory and emotional barriers**
- dedicated and visible support staff and spaces at stations and on trains, as well as staff training to improve understanding and empathy to mitigate against **social barriers**
- accessible and real time information on facilities at stations and on train, as well as multimodal information provision in stations and on-board trains, and multimodal station signage (tactile paving, coloured lines and arrows) to address **informational obstacles**
- guaranteed support and carriage spaces, as well as advance information to support journey planning (e.g. station layout, station and train facilities) to support **motivation and confidence**
- reduced burden of proof for the DPRC and offer free travel for a carer or support companion to address **financial barriers**.

## Improving current schemes and initiatives

The research identified eight points of improvement for Passenger Assist and the DPRC passenger initiatives.

- increase awareness and understanding of both Passenger Assist and the DPRC
- integrate Passenger Assist and the DPRC with apps such as rail ticketing apps, 'wallets' and contactless payment to allow seamless travel bookings
- joined up and integrated services to remove the two-step booking system and ensure Passenger Assist works at both ends of the journey
- Passenger Assist App with real time information and assurances that service is being delivered
- increase Passenger Assist staffing
- work to reduce Passenger Assist service failures
- reduce the burden of proof for the DPRC
- offer free travel for a carer or support companion via the DPRC.

## Suggestions for future research

To conclude, this section outlines suggested areas for future research to explore and learnings to consider when conducting research in this area with individuals with disabilities and impairments.

### Areas for future research

Reflecting on the research we have five suggestions for future research in this area. These are to explore:

- Passenger Assist usage and experiences including amongst those that don't pre-book the service at a granular level
- views on the availability of Passenger Assist amongst passengers without physical disabilities and impairments

- train journeys that are abandoned, modified or not undertaken on account of barriers amongst passengers with disabilities and impairments
- young adults' experiences through quantitative research
- train staff perspectives on the barriers they face when trying to support people with disabilities and impairments to use rail services
- communication approaches to encourage greater awareness, understanding and empathy amongst fellow rail users.

### **Learnings for future research in this area to consider**

Two learnings relevant to future research in this area were identified.

First, the future research in this area would benefit from considering the appropriate application of the Government Statistical Service's [Impairment harmonised standard](#). Through the course of this research, the high-level categorisations of impairments, such as 'vision', were found to offer insufficient nuance regarding the experiences of rail travel and the severity of barriers to rail travel for individuals with disabilities and impairments. Particularly for sensory impairments, mental health conditions and neurodivergence, more nuanced categorisation would serve to support a more detailed understanding of experiences regarding rail travel.

Second, future research in this area would benefit from having the capacity in analysis to consider different periods for 'lapsed-users' (i.e. 6 months, 2 years etc.).

## 5. Appendices

### Appendix 1: Sample stratifications

#### Interview sample

In reviewing the interview sample stratification it is important to acknowledge that there were some challenges in recruiting the following populations:

- Individuals with singular disabilities or impairments
- Non-user of rail (individuals with disabilities and impairments that had never used rail travel)
- BSL first language non-users of rail
- Non-users who had not used trains in the last 18 months - it should be noted that the non-user sample included one lapsed user who had last travelled by train six months prior to the research, their inclusion in the sample was premised on their perceived inability to use trains again in the future.

		Users of public rail [including 5 paired depths with carers]	Non-users of public rail [including 5 paired depths with carers]
		30	30
Primary criteria			
Impairment	Vision (blindness)	3	2
	Vision (partial sight / visual impairment)	2	3
	Hearing (BSL first language)	2	0
	Hearing (BSL not first language)	3	5
	Mobility (wheelchair users)	10	7
	Mobility (non-wheelchair users)	10	11
	Dexterity (for example lifting and carrying objects, using a keyboard)	5	9
	Learning or understanding or concentrating	3	5
	Memory	2	4

	Mental health	13	15
	Stamina or breathing or fatigue	13	12
	Social or behavioural (for example associated with autism spectrum disorder (ASD), or attention deficit hyperactivity disorder (ADHD)	13	10
	Other	2	3
<b>Region</b>	England	18	27
	North East	0	1
	North West	2	4
	Yorkshire and the Humber	0	3
	East Midlands	2	3
	West Midlands	3	5
	South East	4	3
	South West	3	3
	East of England	2	2
	Greater London	2	3
	Scotland	6	2
	Wales	6	1
<b>Use of rail</b>	Primarily using rail to commute for work or education	7	Not applicable
	Primarily using rail for leisure	21	
	Primarily using rail to travel for business	2	
<b>Non-use of rail</b>	Never used public rail	0	3
	Lapsed user of public rail	0	27
<b>Secondary criteria</b>			
<b>Rail user support</b>	Users of Passenger Assist	11	Not applicable
	Disabled Persons Railcard holders	12	
	Have used rail replacement buses	8	
<b>Working pattern</b>	Working full-time	7	7
	Not working	8	4
	Working part-time	2	4
	Retired	2	5
	Student	8	6
	Other	3	4
<b>Gender</b>	Female	17	21
	Male	12	9
	Non-binary	1	0
<b>Age</b>	16-18	7	5
	19-34	9	5
	35-54	8	13
	55 and over	6	7
<b>Location</b>	Rural	7	9
	Town	15	13
	City	8	8
	Less than 30 minutes door to door	3	Not applicable

<b>Rail journey duration</b>	30 minutes to an hour door to door	4	
	1 to 1.5 hours door to door	5	
	1.5-2 hours door to door	6	
	More than 2 hours door to door	12	

### Accompanied journey sample

		Users of public rail
		10
Primary quotas		
Multiple/ singular impairments	Multiple disabilities and impairments	6
	Single disability/ impairment	4
Impairment	Vision (blindness)	2
	Vision (partial sight / visual impairment)	2
	Hearing (BSL first language)	
	Hearing (BSL not first language)	3
	Mobility (wheelchair and mobility scooter users)	4
	Mobility (non-wheelchair users)	3
	Dexterity	2
	Learning or understanding or concentrating	1
	Memory	1
	Mental health	4
	Stamina or breathing or fatigue	5
	Social or behavioural (includes ASD and ADHD)	6
	Other	0
Rail user support	Use Passenger Assist (Pre-booked)	4
Secondary quotas		
Rail journey duration	Less than 30 minutes door to door	1
	30 minutes to an hour door to door	4
	1 to 1.5 hours door to door	2
	1.5-2 hours door to door	2
	More than 2 hours door to door	1
Region	England	8
	North East / West	1
	Yorkshire and the Humber	
	East/West Midlands	2
	South East/West	3
	East of England	1
	Greater London	1
	Scotland	1
	Wales	1

Tertiary quotas		
Gender	Female	5
	Male	5
Age	16-18	2
	19-34	4
	35-54	1
	55 and over	3
Location	Rural	2
	Town	4
	City	4
Rail journey purpose	Journey to commute for work or education	2
	Journey for leisure	7
	Journey for business	1

# Appendix 2: Evidence review summary

## Executive summary

### Introduction

The evidence review forms the first stage of research that aims to update DfT research on the experiences, barriers, challenges and enablers for disabled users and non-users when travelling by rail or considering doing so. The purpose of this evidence review is to generate a better understanding of the existing research on disabled users' and disabled non-users' experiences of rail travel. The evidence review will inform the design of primary research and specifically aims to:

- identify dominant themes and topics in the literature, where further primary qualitative research is unlikely to provide new insight
- identify themes and topics related to rail accessibility that are under-researched or worthy of further exploration through new primary qualitative research

### Method

The evidence review utilised a purposive approach, with 20 sources identified by DfT stakeholders for review. A further five sources were identified through citation tracing. The review was undertaken in the following four stages: identification of the literature for inclusion; development of the data extraction database; data extraction and quality assurance; and the review and synthesis of the evidence.

The evidence review included qualitative, quantitative, and mixed methods studies from a range of sources. Studies covered a broad geographic area within the UK and examined rail use either as the sole objective of the research or as part of a wider consideration of disabled people's experiences of transport. Studies also varied in terms of the population in focus: a minority of studies dealt with a specific group of disabled people whilst most studies considered multiple groups or the disabled population as a whole.

## Findings summary

### Barriers to rail travel

The evidence examined suggested that disabled people's experiences of travelling by rail varied, however negative experiences were more pronounced in the literature.

The literature outlined that disabled users of rail services experienced a range of barriers to rail travel. The key barriers reported included: the physical infrastructure of stations and carriages together with limited provision of adequate facilities; difficulty in accessing up to date and live information throughout the journey experience; and social attitudes leading to rude and discriminatory behaviour from staff and other passengers. The evidence

suggested these barriers restricted accessibility and undermined disabled people's confidence in rail travel.

Evidence regarding the barriers to rail travel amongst disabled non-users was limited in the literature reviewed. The key barriers to rail travel for non-users included perceived cost, lack of easily understood information across journey stages, and physical accessibility.

Throughout the literature it was evidenced that barriers to rail travel varied across disabled populations, however there was little granularity within the evidence reviewed. Three barriers were reported as being common to all disabled populations to rail travel emerged. These were a lack of confidence to engage in rail travel, limited or lack of accessible information throughout the journey, and a lack of reliable support and assistance.

In terms of variation, the literature outlined that disabled people with mobility and sensory issues faced a range of primarily physical barriers at each stage of the rail journey. In addition, the evidence suggested that barriers to rail travel were more complex amongst disabled people with cognitive impairments and mental health issues. The studies reviewed highlighted that individuals with cognitive impairments, mental health issues and neurologically diverse conditions experienced a range of challenges at each stage of the journey. However, the nature and severity of these challenges varied significantly at an individual level.

There was limited evidence regarding how disabled users' experiences of using rail had changed since the pandemic. However, three themes were drawn out. First, that disabled people's use of public transport has changed. Second, that disabled people's anxiety around travel increased. Third, that barriers to using rail travel had been exacerbated for disabled people since the COVID-19 pandemic.

## **Travelling confidently**

The evidence suggested that disabled people's experiences of travelling by rail varied. However, there was limited evidence across the literature examined that explicitly reported disabled people's positive experiences and likes regarding rail travel. Disabled people's dislikes regarding rail travel on the other hand were frequently and directly addressed, through the barriers to rail travel and the negative experiences outlined in the literature. In summary, key dislikes included the lack of appropriate space in rail carriages, lack of staff presence, requirements to pre-book assistance, and poor attitudes amongst staff and other rail users towards disabled rail users.

## **Improving current schemes and initiatives**

Studies examining rail travel schemes identified low awareness amongst disabled passengers of assistance services (Passenger Assist, and 'Turn up and go' services) available when travelling by rail. Studies also identified a lack of understanding regarding eligibility for assistance services, as well as uncertainty around how services worked. In terms of experiences, one study outlined that assistance services were found to generally work well for disabled users, however, more commonly studies highlighted a broad dissatisfaction amongst service users. Predominantly studies showed disabled people



experiencing inconsistent availability and unreliability and failures in service delivery in passenger assistance services.

The literature on discount travel cards, including the Disabled Persons Railcard, also commonly highlighted low uptake.

## **Key insights and conclusions**

### **Dominant themes in the literature**

Dominant themes in the evidence included the physical and social barriers to rail travel for disabled people throughout the rail passenger journey. Physical barriers to rail travel for disabled people have been evidenced extensively in detail and included: the physical infrastructure of stations and carriages together with limited provision of adequate facilities; difficulty in accessing up to date and live information throughout the journey experience; and social attitudes leading to rude and discriminatory behaviour from staff and other passengers. The evidence suggested that these barriers restricted accessibility and undermined disabled people's confidence in rail travel. The social barriers experienced by disabled users, including broad societal norms leading to stigma and discrimination, and passenger and staff attitudes, have also been comprehensively reported. Relatedly, the topic of confidence in rail travel has been examined widely in the literature, particularly in terms of how confidence relates to experiences and expectations as well as reluctance to travel amongst disabled people.

The literature examined also worked to draw out a range of disabled people's experiences of travelling by rail. However negative experiences were more pronounced in the literature on account of the weight of the impact for disabled people.

Considerations of rail schemes and initiatives, such as Passenger Assist and the Disabled Persons Railcard, were less frequently a focus in the literature examined. However, the evidence was highly consistent, outlining low awareness and uptake together with regular reports of poor-quality service and a lack of confidence in assistance services amongst disabled people that used them.

### **Opportunities for future primary research**

The evidence examined for the review highlights that there are several opportunities for future primary research. These include generating granular evidence detailing the differences in disabled people's full door-to-door journey experiences as well as disabled people's likes about rail travel, barriers to rail travel amongst disabled non-users, young disabled adults' experiences, and the impacts of COVID-19 and the cost-of living crisis.

### **Recommendations**

Given the gaps in the evidence outlined it is recommended that the following themes are taken forward for exploration in primary qualitative research:

- granular exploration of the differences in experiences and confidence between disabled populations (i.e. different disabilities, impairments and multiple disabilities) across the full door-to-door journey
- disabled people's 'likes' regarding rail travel
- disabled people's experiences of rail replacement services and managing service cancellations
- barriers to rail travel amongst disabled non-users
- types of rail travel avoided by disabled people
- origin of awareness of current schemes and initiatives to support rail travel
- improving Passenger Assist services
- what works well to attract disabled customers in other forms of transport
- the impacts of the COVID-19 pandemic on disabled people's rail travel behaviour and experiences
- the impacts of the cost-of-living on disabled people's rail travel behaviour
- young disabled adults and teenagers' experiences of rail travel
- sustainable travel options as an enabler to rail travel amongst disabled people

# 1. Evidence review: Introduction

## Research background

The Department for Transport is committed to improving the accessibility of railways. In 2017 and 2020, the Department commissioned research on disabled users' and disabled non-users' experiences of rail travel - [DfT: Experiences of disabled rail passengers \(2017\)](#); [DfT: Experiences of disabled non-users of rail \(2020\)](#). These two pieces of research were useful in expanding DfT's knowledge base of disabled rail travel. However, both pieces of research were conducted prior to COVID-19 and the emergence of cost of living pressures. As such up to date evidence is required in this area.

## Evidence review aims and objectives

The evidence review forms the first stage of research that aims to update DfT research on the experiences, barriers, challenges and enablers for disabled users and non-users when travelling by train or considering doing so. The purpose of this evidence review was to generate a better understanding of the existing research on disabled users' and disabled non-users' experiences of rail travel. The evidence review will inform the design of primary research and specifically aims to:

- identify dominant themes and topics in the literature, where further primary qualitative research is unlikely to provide new insight
- identify themes and topics related to rail accessibility that are under-researched or worthy of further exploration through new primary qualitative research

The evidence review sought to address the research questions set out in Table A2-1 below:

### Research Questions

#### Barriers to rail travel

What are the main barriers to rail travel amongst disabled users and non-users?

How do these barriers differ across those with different disabilities and multiple disabilities?

Have disabled users' experience using rail changed since the pandemic?

What are disabled people's experiences of travelling by rail, at all journey stages, including rail replacement services?

#### Travelling confidently

How confident do disabled users feel when travelling by rail?

What would enable disabled users and non-users to feel more confident whilst travelling by rail?

What do disabled users like and dislike about rail travel?

How could the railway attract new disabled customers? What works well in other forms of transport?

### **Improving current schemes and initiatives**

What schemes and initiatives to support rail travel do disabled people currently use, and what are their experiences?

How is Passenger Assist experienced in practice, and how could the service be improved?

If aware of them, where did users hear about current schemes and initiatives to support rail travel, including Passenger Assist or the Disabled Persons Railcard?

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Table A2-19: Research questions

## **Evidence review methodology**

### **Approach**

The evidence review presented here was conducted in four stages: identification of the literature for inclusion; development of the data extraction database; data extraction and quality assurance; and the review and synthesis of the evidence.

Please note that this review uses the Vancouver referencing style, which is a numeric citation. The numbered sources are listed in section 4 Bibliography.

### **Identification of the literature for inclusion**

The evidence review utilised a purposive approach, with 20 sources identified by DfT stakeholders for review. A further five sources were identified through citation tracing, working from citations in the initial 20 sources. The additional five sources were reviewed and agreed with DfT stakeholders before moving into data extraction.

For inclusion in the evidence review studies were required to focus on disabled users and non-users' experiences of public transport in the UK, with significant coverage of rail travel, and to have been published since 2017.

### **Data extraction**

The data extraction database was developed using the key research questions, and was designed to ensure appropriate insights were captured from the evidence under review. The data extraction database was reviewed by DfT stakeholders prior to data extraction.

To ensure quality and consistency of data extraction between evidence reviewers, data extraction from two of the sources was conducted by all researchers. The resulting data extraction was then reviewed, and feedback was provided to all researchers on approach to ensure alignment across the research team.

## Overview of the evidence

The evidence review was comprised of qualitative, quantitative, and mixed methods studies from a range of sources, including government, academia, third and private sector research. Studies covered a broad geographic area within the UK and examined rail usage either as the sole objective of the research or as part of a wider consideration of disabled people's experiences of transport. Studies also varied in terms of the population in focus: a minority of studies dealt with a specific group of disabled people whilst most studies considered multiple groups or the disabled population as a whole.

## Quality of the evidence

All 25 studies were assessed on the quality of evidence, using information collected on the research approach, sample size and analytical framework. The quality assessment was based on five key principles: transparency, appropriateness, validity, reliability, and cogency. Assessment criteria included research design, sample size and composition, credibility of the data and findings reported [26].

Overall, the quality of the sources was relatively high, however sample size in qualitative studies tended to be small. Other notable limitations included the use of secondary analysis only, an insufficient focus on disabled users in some of the larger quantitative studies and limited application of theoretical frameworks.

Table A2-2 shows the evidence used for the evidence review.

Title	Publisher	Year	Approach	Transport mode	Research population	Sample size	Geographic scope	Type of evidence
Passenger Accessibility Research	Network Rail	2020	Qualitative	Rail	Hearing, Crohn's, mobility, Social and behavioural	16 interviews	England	Industry
Research on experiences of disabled non-users of rail	Department for Transport	2021	Mixed method	Rail	Vision, mobility, mental health, socially or behavioural, cognitive, hearing	865 survey respondents 40 interviews	UK	Government
Research on experiences of disabled rail passengers	Department for Transport	2019	Mixed method	Rail	Mobility, vision, hearing, learning	1550 questionnaire respondents 50 interviews	UK	Government
Accessibility Mystery Shopping All station summary report Wave 2 results	Network Rail Research & Insights Team	2023	Qualitative	Rail	Mobility, learning, dexterity, metabolic	153 survey respondents	UK	Industry
Experiences of Passenger Assist	Office of Rail and Road	2024	Quantitative	Rail	Vision, mobility, hearing, dexterity	9450 survey respondents	UK	Government
Rail passengers with access needs and disabilities: experiences of complaints	Office of Rail and Road	2024	Mixed method	Rail	Not specified	1153 survey respondents 12 interviews	UK	Government
Britain's railway: what matters to passengers	Network Rail and Transport Focus	2022	Quantitative	Rail	Multiple disabilities	15000 survey respondents	UK	Industry
Williams Rail Review Barriers to travel: How to make rail more attractive to infrequent and non-users	Transport Focus	2019	Evidence review	Rail	Not applicable	Not applicable	UK	Industry
Mental health and travel: Report on a survey	Centre for Transport Studies, UCL	2019	Quantitative	Mixed	Mental health	385 survey respondents	England	Academic
The journey experience of visually impaired people on public transport in London	Transport Policy	2020	Qualitative	Mixed	Vision	23 interviews	London	Academic

Transport accessibility for wheelchair users: A qualitative analysis of inclusion and health	International Journal of Transportation Science and Technology	2019	Qualitative	Mixed	Mobility, stamina	34 interviews	London	Academic
Inclusive Transport Strategy: evaluation baseline report	Department for Transport	2022	Mixed method	Mixed	Mixed	1140 (sub-sample) survey 198 assistance dog users survey 40 interviews 23 stakeholder survey	UK	Government
Barriers to Sustainability? Disabled and older people's experiences of being 'green'.	Research Institute for Disabled Consumers	2021	Quantitative	Mixed	Mobility, physical, sensory, neurodivergence, behaviour and communication	485 survey respondents	UK	Research institute
Step-free railway station access in the UK: the value of inclusive design	European Transport Research Review	2021	Mixed method	Rail	Multiple disabilities	10 interviews Data from 17 railway stations	Buckinghamshire	Academia
Building Confidence – Improving travel for people with mental impairments.	Department for Transport	2017	Evidence review	Mixed	Mental health, learning, social and behavioural, multiple disabilities	Not applicable	UK	Academia and government
People with non-visible impairments barriers to travel	Department for Transport	2019	Qualitative	Mixed	Learning, mental health, social and behavioural, memory	20 interviews including 10 paired with carers	England	Government
Inclusive Transport Strategy: Lived experience	Department for Transport	2023	Qualitative	Mixed	Mobility, hearing, vision, cognitive	40 interviews	England, Scotland, Wales	Government
Accessible and Inclusive Transport	Innovate UK	2022	Quantitative	Mixed	Mobility, dexterity, vision, hearing, cognitive	1033 survey respondents	UK	Industry
Evidence Review on Accessible Transport: Informing our innovation priorities	Motability Foundation	2023	Evidence review	Mixed	Not applicable	41 sources 6 interviews	UK	Charity
Transport needs for disabled people	Motability Foundation	2020	Mixed method	Mixed	Physical, visual, hearing, mental health, social and behavioural, memory, learning, long-term conditions	1504 survey respondents 42 online community 5 interviews	UK	Charity
Travel Fair	Scope	2019	Mixed method	Mixed	Mixed	2004 survey respondents 21 workshops	England, Wales	Charity

Accessible transport: unlocking a better normal	Transport Focus	2021	Quantitative	Mixed	Mixed	3466 survey respondents	UK	Industry
Are we there yet? Barriers to transport for disabled people in 2023	Transport for all	2023	Mixed method	Mixed	Mobility, mental health, social or behavioural, hearing, visual, learning, chronic illness	521 survey respondents A series of workshops	England	Charity
Disability and Transport 2021	Transport Scotland	2023	Quantitative	Mixed	General population	Approx.10000 survey respondents	Scotland	Government
Travelling with a Guide Dog: Experiences of People with Vision Impairment	Sustainability	2021	Qualitative	Mixed	Visual impairments	27 Interviews	UK	Academic

**Table A2-210: Evidence reviewed**



## 2. Evidence review: Findings summary

### Overview: Key findings

#### Barriers to rail travel

The evidence examined suggested that disabled people's experiences of travelling by rail varied. However, negative experiences were more pronounced in the literature on account of the weight of the impact for disabled people.

The literature outlined that disabled users of rail services experience a range of barriers to rail travel. The key barriers reported included: the physical infrastructure of stations and carriages together with limited provision of adequate facilities; difficulty in accessing up to date and live information throughout the journey experience; and social attitudes leading to rude and discriminatory behaviour from staff and other passengers. The evidence suggested these barriers restrict accessibility and undermined disabled people's confidence in rail travel.

Evidence regarding the barriers to rail travel amongst disabled non-users was limited in the literature reviewed. The key barriers to rail travel for non-users included perceived cost, lack of easily understood information across journey stages, and physical accessibility.

Throughout the literature it was evidenced that barriers to rail travel vary across disabled populations, however there was little granularity within the studies reviewed. Three barriers were reported as being common to all disabled populations to rail travel emerged. These were confidence to engage in rail travel, the availability of accessible information throughout the journey, as well as the availability and reliability of support and assistance.

In terms of variation, the literature outlined that disabled people with mobility and sensory issues faced a range of primarily physical barriers at each stage the rail journey. In addition, the evidence suggests that barriers to rail travel were more complex amongst disabled people with cognitive impairments and mental health issues. The studies reviewed highlighted that individuals with cognitive impairments, mental health issues and neurologically diverse conditions experienced a range of challenges at each stage of the journey. However, the nature and severity of these challenges varies significant at the individual level.

There was limited evidence regarding on how disabled users' experiences of using rail has changed since the pandemic. However, three themes were drawn out: First that disabled people's use of public transport has changed. Second that disabled people's anxiety around travel increased. Third that barriers to using rail travel have been exacerbated for disabled people since the COVID-19 pandemic.

## **Travelling confidently**

The evidence suggested that disabled people's experiences of travelling by rail varied. However, there was limited evidence across the literature examined that explicitly reported disabled people's positive experiences and likes regarding rail travel. Disabled people's dislikes regarding rail travel on the other hand were frequently and directly addressed through the barriers to rail travel, and the negative experiences outlined in the literature. In summary, key dislikes included the lack of appropriate space in rail carriages, lack of staff presence, requirements to pre-book assistance, and poor attitudes amongst staff and other rail users towards disabled rail users.

## **Improving current schemes and initiatives**

Studies examining rail travel schemes identified low awareness amongst disabled passengers of assistance services (Passenger Assist, and 'Turn up and go' services) available when travelling by rail. Studies also identified a lack of understanding regarding eligibility for assistance services, as well as uncertainty around how services work. In terms of experiences, two studies outlined that assistance services were found to generally work well for disabled users, however, more commonly studies highlighted a broad dissatisfaction amongst service users. Predominantly studies showed disabled people experiencing inconsistent availability and unreliability and failures in service delivery in passenger assistance services.

The literature on discount travel cards, including the Disabled Persons Railcard, also commonly highlighted low uptake.

## **Barriers to rail travel**

### **What are disabled people's experiences of travelling by rail, at all journey stages, including rail replacement services?**

The evidence examined suggested that disabled people's experiences of travelling by rail varied. However, negative experiences were more pronounced in the literature on account of the weight of the impact for disabled people. The literature also highlighted that overall disabled people were less likely to undertake any form of public transport [14]. Furthermore, disabled people were more likely to be on lower incomes, and as such the costs involved in rail travel (including travel to and from stations, station parking and rail tickets) were a barrier for disabled people [12,15], and in particular for rail non-users [2]. One study included in the review reflected on the current cost of living crisis, and highlighted that disabled people were disproportionately impacted. This study concluded that disabled people were more likely to have to cut back on all but essential travel,

compounding existing barriers to travel [19]. Furthermore, the literature highlighted that disabled travellers had fewer travel options due to accessibility, that spontaneous travel was often not possible, and that disabled people accepted more personal and financial risk when travelling [19,20]. Together these factors could have wider reaching impacts for disabled people's social connections and employment [19].

Across the literature disabled users' experiences of travelling by rail varied significantly. Several studies cited that more than half of disabled people and people with impairments who used rail services reported broadly positive experiences and felt that both stations and trains meet their needs [6,15,20], although people with behavioural impairments and mental health conditions tended to feel less satisfied [15]. However, the evidence also highlighted that disabled people travelling by rail often experienced a poor-quality service. The literature that explored disabled people's experiences of rail travel commonly reported negative experiences, as well as negative emotions such as frustration, anxiety, doubt and uncertainty with regard to rail travel [3,11,19,20]. Common negative experiences included lack of information provision and challenges with live information updates, physical inaccessibility, a lack of facilities that met individual needs (such as toilets, carriage spaces, platform waiting rooms), a lack of support negotiating stations, as well as for boarding and alighting trains, and poor attitudes (with disabled people experiencing rude and discriminatory behaviour from staff and other passengers) [1,2,3,4,5,6,7,17,25]. Moreover, it was reported that where service failures were experienced, the impacts on the journey and on individuals' health and well-being could be severe, and that these events could also negatively affect individuals' confidence in using rail travel [6].

As a result of the barriers to, and uncertainties of, rail travel it was reported that some disabled people simply did not undertake rail travel [20,23]. Alternatively, as one study reported, disabled people avoided certain types of journeys including long distances, peak time travel, complex journeys with multiple forms of transport and journeys to unfamiliar places [20].

The literature consistently highlighted issues regarding disabled people's confidence in rail services and their ability to access those services and have a positive experience. Across the evidence examined pre-journey planning emerged as a critical stage in disabled people's rail travel experience; with detailed pre-journey planning being undertaken as a strategy to limit any barriers and challenges they might face and mitigate against travel related anxiety [2,20,21]. However, the literature also outlined that there were many 'unknowns' for disabled people travelling by rail that cannot be planned for or made known through research. It was reported that these 'unknowns' induced feelings of anxiety and even fear amongst disabled rail users [2,20,21]. Furthermore, it was reported that disabled rail users anticipated problems with future rail travel, with those travelling for commuting purposes being the most likely to anticipate barriers [3,18].

It is important to note that studies highlighted that disabled people would like to travel by rail more frequently [3,23]. Additionally, two studies outlined that the barriers to public transport, and rail in particular, hindered disabled people's attempts to reduce their impact on the environment from transport [6,13].

Disabled people's experiences of travelling by rail replacement was not reported in the evidence reviewed.

## **What are the main barriers to rail travel amongst disabled users?**

The literature outlined that disabled users of rail services experience a range of barriers to rail travel. The key barriers reported included: the physical infrastructure of stations and carriages together with limited provision of adequate facilities; difficulty in accessing up to date and live information throughout the journey experience; and social attitudes leading to rude and discriminatory behaviour from staff and other passengers. The evidence suggested that these barriers restricted accessibility and undermined disabled people's confidence in rail travel.

Across the literature examined most journey stages were strongly evidenced. However, the literature lacked significant evidence in terms of disabled people's experiences regarding their journeys to and from the station and with complaints and/or redress.

### **Pre-journey planning**

Pre-journey planning emerged as a critical stage in disabled people's rail travel across the literature examined [2,3,4,5,6,7,9,10,15,17,18,19,20]. The evidence highlighted that pre-journey planning was often highly detailed and meticulous, but that there were often challenges in acquiring all the relevant information and securing appropriate support services [2,5,8,13,21]. Limited information detailing station layouts existed and the information available was difficult to find online [2,4,17]. Alongside limited information, one study cited disabled people receiving incorrect information [17].

### **Ticket purchasing**

The cost of rail travel was the primary barrier to ticket purchasing reported in the literature examined. Seven sources identified the cost of rail travel to be a major barrier for disabled people [2,7,9,10,13,15,17]. Relatedly, ticket options were also cited as a barrier to rail travel in four studies [3,4,9,12], and one study highlighted that some disabled populations, with fluctuating conditions, were precluded from booking travel tickets in advance, and accessing the cheapest fares [12].

In addition, four studies [2,4,9,10] highlighted a lack of suitable seating or space availability when booking seats in advance. This was reported as a significant barrier to those with physical disabilities [4,9,10].

There was limited evidence in the literature to suggest that the process of buying a ticket was a significant barrier for disabled people. However, one study reported that some disabled rail users experienced issues when using vending machines at station platforms, and that station staff assistance was not always constructive and, in the case of unmanned platforms, wholly unavailable [9].

### **Journey to/from station**

Within the literature examined a range of challenges were reported regarding disabled people's travel to and from stations. Challenges for disabled people that were cited included the limited availability of accessible taxis, Blue Badge parking and step-free access to stations [1,2,3,9,12,16,19,22].

## **Journey through the station**

The journey through the station was considered by 11 sources citing potential barriers to transport by rail [3,4,6,7,8 9,10,15,16,17,18,19,21,22]. Within this, physical barriers were identified when moving through the station such as limited lift or step-free access to platforms, issues with ticket barriers, difficulties navigating busy crowds, and a lack of staff helpfulness [4,6,10].

Limited station facilities and assistance were also consistently cited as a barrier to rail travel for disabled people [4,8,17]. Here studies highlighted a lack of confidence amongst disabled people regarding the provision of accessible toilets [4,7,9,15]. Other studies reported the inconsistent availability and unreliable delivery of passenger assistance as a barrier to rail travel for disabled people [2,5,8,13,21]. In addition, several studies reported that for some disabled people stations were difficult to navigate due to their layout or unfamiliarity or disorienting and difficult to manage due to noise and crowds of people [9,11,16].

## **Waiting and travel information**

A number of studies highlighted a lack of confidence amongst disabled people regarding the provision of waiting areas [4,7,9,15].

Seven studies reported that accessing live and up to date information was a key barrier for disabled people. The literature outlined that the provision of accessible live and up to date information would alleviate stress and anxiety regarding potential journey disruption amongst disabled people [3,4,9,10,15,16,17].

## **Boarding / Disembarking**

Primarily the barriers to boarding and disembarking trains for disabled people reported in the literature were physical and included the requirement for equipment such as ramps or other types of support (such as sighted assistance for the visually impaired) [5,9,10,11,12,13,14,20,23,24,25]. The evidence also outlined that the necessary staff, equipment and assistance required for disabled people to board/disembark was often not available, exacerbating physical barriers to rail travel [9,11,12,13,14,24]. For example, one study reported that disabled people using rail services experienced these issues regularly; and had developed coping strategies such as carrying their own equipment [11]. Other studies highlighted that disabled people often experienced failures in assistance services, leading to a lack of confidence in the service and a barrier to rail use [2,5,8,13,21].

Five studies [1,2,3,15,18] highlighted that for people with cognitive and mental health impairments boarding and disembarking were particular pinch points; wherein people with cognitive and mental health impairments experienced severe anxiety.

Boarding and disembarking trains also emerged in the evidence as a key point in the journey where disabled people experienced poor attitudes and rude and discriminatory behaviour from staff and other passengers. Such experiences were cited as barriers to rail travel for disabled people across the literature [1,2,3,4,5,6,7,17,25].

## **The ride / rail travel**

Evidence regarding the barriers to rail travel for disabled people related to the onboard experience focussed on seating/space availability, accessible facilities and staff availability [1,3,4,5,7,8,9,11,12,15,16,17,18,19,20,21,23,25]. 10 studies highlighted that the limited availability of priority seating and wheelchair spaces for disabled passengers were key barriers to rail travel for disabled people [3,4,5,7,8,12,20,21,23,25]. Relatedly, overcrowded and busy trains, leading to a lack of adequate space on board trains, were also cited as a barrier for many disabled people [4,9,15,16,17,20,21,23]. In addition, a lack of facilities that met individual's needs such as accessible toilets and refreshment services were also cited frequently in the literature. Several studies also highlighted that rude and discriminatory behaviour that disabled rail users experienced from other rail users whilst on board, particularly in relation to seat and space allocations, created barriers to rail travel [3,4,9,11,18,19,20,21,23].

## **Complaints/ redress**

Across the literature examined, few studies addressed the use of rail operator complaint and redress systems. The evidence suggested low awareness amongst disabled people of complaints and redress systems and processes to be the key barrier [5,6,9,20,21]. One study went on to highlight that disabled people who were aware of the systems and processes were not always able to raise complaints due to a lack of time or energy or feeling that they would not be taken seriously [9].

## **What are the main barriers to rail travel amongst disabled non-users?**

Evidence regarding the barriers to rail travel amongst disabled non-users was more limited in the literature reviewed. A total of six sources [2,17,18,20,21] explored barriers to rail travel amongst disabled non-users (lapsed users). The key barriers to rail travel for non-users included perceived cost, lack of easily understood information across journey stages, and physical accessibility.

One study reported the barriers for disabled non-users of rail to include the perceived cost of travel tickets, inadequate provision of information and difficulties understanding ticket options [2].

Several other studies highlighted a lack of easily understood information across journey stages as a barrier [17,18,20]. These studies outlined that often too much information was provided, for example on ticket-purchasing websites or information display screens at the station, leading to difficulties for disabled people unfamiliar with rail travel to discern the information needed for the journey.

In addition, studies suggested that rail travel was perceived to be inconvenient, compared to other forms of transport, on account of the challenges disabled people were faced with. Challenges regarding the physical accessibility of rail travel presented barriers for those with mobility and sensory disabilities and impairments, leading to the decision to not use rail travel [21]. Whilst the busy public spaces and fluctuating services of the railway network were reported to be confusing, overwhelming and anxiety-inducing for those with cognitive impairments and mental health issues [2,17]. Furthermore, these studies

reported that lapsed users, having experienced poor and unreliable rail services, lacked confidence that their needs could be met when travelling by rail.

### **How do barriers to rail travel differ across those with different disabilities and multiple disabilities?**

The barriers to rail travel vary across disabled populations, however there was little granularity within the evidence reviewed.

Across the literature three barriers common to all disabled populations to rail travel emerged. These were a lack of confidence to engage in rail travel, limited or lack of accessible information throughout the journey, and a lack of reliable support and assistance.

### **Mobility and sensory impairments**

The literature outlined that disabled people with mobility and sensory issues faced a range of barriers at each stage the rail journey. Primarily barriers were physical, relating to station and carriage layouts as well as station and train facilities. In addition, poor attitudes, rude and discriminatory behaviour from staff and other passengers were cited as barrier for disabled people with mobility and sensory issues [1,5,9,12,13,15].

### **Cognitive impairments and mental health issues**

The evidence suggests that barriers to rail travel were more complex amongst disabled people with cognitive impairments and mental health issues. The studies reviewed highlighted that individuals with cognitive impairments, mental health issues and neurologically diverse conditions experienced a range of challenges at each stage of the journey. However, the nature and severity of these challenges varied significantly at an individual level. For example, studies reported that those with learning disabilities struggled with communication and found access to information hard, especially in busy and noisy environments [4], whilst individuals with mental health impairments suffered from anxiety in busy stations and those with autism struggled to manage travel planning, potential change, and the navigation of stations [16]. In addition, those with social or behavioural disabilities and mental health conditions experienced 'considerable anxiety' due to crowding at stations and on trains [20].

### **Have disabled users' experience using rail changed since the pandemic? Have the main barriers to rail travel changed since the pandemic?**

Of the 25 studies included in the review 18 were conducted between 2020 and 2024, since the onset of the COVID-19 pandemic. Only five studies included insights on how disabled users' experiences of using rail has changed since the pandemic [1,18,19,20,23]. Critically, none of the studies included in the review focused on developing detailed findings on how disabled users' experiences of using rail has changed since the pandemic.

Across the five studies, three themes were highlighted. First, that disabled people's use of public transport had changed. Second, that disabled people's anxiety around travel



increased. Third, that barriers to using rail travel had been exacerbated for disabled people since the COVID-19 pandemic.

Many disabled people changed the way they used public transport following COVID-19, on account of vulnerabilities and the risks of contracting the virus and have not returned to their pre-pandemic travel behaviour [18,19,23]. One qualitative study reported that nearly all participants described having completely ceased using public transport, and that respondents felt it would be a long time before they would feel comfortable travelling by public transport again [20]. Relatedly, another study highlighted that since the pandemic, disabled people's anxiety around travel had increased, creating an additional psychological barrier particularly for immunocompromised individuals [19]. In addition to experiencing new barriers, it was reported that the pre-existing barriers to using rail travel had been exacerbated for disabled people since the COVID-19 pandemic. For example, during the years of restriction transport operators cut back on staff numbers, leading to a lack of support and assistance for disabled people using rail travel [19].

## **Travelling confidently**

### **What do disabled users like and dislike about rail travel?**

The evidence suggested that disabled people's experiences of travelling by rail varied. However, only one study included in the review explicitly reported positive experiences of rail travel amongst disabled people [3], and studies highlighted that disabled people wanted to undertake more rail journeys [3,23]. Similarly, disabled people's 'likes' regarding rail travel were infrequently detailed. One study reported that travelling by rail was perceived to be a fast mode of transport, particularly when travelling long distances, rail was also reportedly felt to be a comfortable way to travel [1]. Another study suggested that rail travel presented fewer barriers and greater flexibility for travel than buses and that disabled people viewed rail travel as relatively straightforward to plan, particularly in the case of short or direct route journeys [16]. Beyond this, no specific likes regarding rail travel were drawn out in the literature.

Disabled people's dislikes regarding rail travel on the other hand were frequently and directly addressed through the barriers to rail travel, and the negative experiences outlined in the literature. In summary, key dislikes included the lack of appropriate space in rail carriages, lack of staff presence, requirements to pre-book assistance, and poor attitudes amongst staff and other rail users towards disabled rail users [1,2,3,5,6,7 8,9,10,11,12,14, 15,16,17,18,19,20,21, 23,25].

### **What trains are doing better than other forms of transport**

Rail apps emerged in the literature as a key area of support to rail travel appreciated by disabled rail users. Six sources [1,4,10,12,16,21] identified that rail apps were being used to support both pre-journey planning, and live navigation of journeys. The apps allowed users to book tickets, highlight any changes required during a journey, show live updates of journey progress, and give estimates of any delays in real time. This evidence reported that the access to information provided by apps increased the confidence of disabled users in using rail travel.



## **What would enable disabled users and non-users to feel more confident whilst travelling by rail?**

The examined literature highlighted that disabled people's confidence when travelling by rail was undermined by the barriers and negative occurrences that are experienced. The evidence highlighted that addressing the key barriers, and targeting efforts to enhance the service, would enable disabled users and non-users to feel more confidence whilst travelling by rail. Enablers outlined in the literature included:

- the provision of accessible information in multiple formats (visibly on screens and audio), maps should also be more readily available and more user-friendly [1,2,4,5,6,7,8,9,10,15,16,17,21]
- improved physical accessibility of trains and stations including step free access to trains, more space on trains, and more appropriate seating and spaces [7,8,9,13,14,17]
- improved facilities including accessible toilets and waiting rooms [7,8,9,13,14,17]
- enhanced staff training to enable better understanding of disabilities and impairments as well as disabled people's needs [1,5,9,13,15,16,17,20]
- ensuring that staff were visible and available both at stations and on trains [4,5,9,10,15,16,17,20,21]
- provision of more reliable and consistent rail services and support services such as Passenger Assist and 'Turn up and go' [1,2,3,5,6,8,9,10,13,15,17,18,19,21,23]
- the enforcement of carriage rules such as those around the use of priority seating and maintaining 'quiet carriages' [9,20,21]
- guaranteed seating or space [2,4]

## **How confident do disabled users feel when travelling by different forms of public transport?**

Throughout the literature examined confidence was highlighted as a key factor in disabled people's use of public transport. The evidence suggested that disabled people's confidence varied across populations (i.e. disabilities and impairments) and transport modes [1,2,3,5,6,7,9,10,11,12,15,16,17,18,20,21]. Common themes in the literature included the relationship between disabled people's experience of using public transport (i.e. how long they have been using public modes of transport), their expectations of public transport services (such as its reliability), and their confidence in using public transport [1,2,5,6,7,9,10,11,12,15,16,17,20,21].

Of the 25 studies examined, eight studies documented the overall lack of confidence amongst disabled rail users [3,5,9,15,17,18,19,20].

Twelve reported on disabled people's confidence when using the UK bus network [9,10,11,12,15,16,17,18,20,21,23,24]. These studies outlined that buses with audio announcements, such as London's talking buses, and buses that were lower to pavement level increased disabled users' confidence [10,17,21]. In addition, it was reported across these studies that multiple factors undermined confidence, which overlap with issues experienced during rail travel. These factors included: challenging infrastructure (requiring assistance from the driver to board and disembark, travelling backwards and feeling insecure during travel); a lack of accessible information about ticketing and timetables and (for those travelling by buses without audio announcement) knowing where they are in

their journey so they can request to get off; poor attitudes amongst staff and other bus users towards disabled users as well as overcrowding.

In addition, four sources [2,3,16,17] considered disabled people's experiences of taxis. These studies reported that taxis were felt to be the most accessible and trusted form of public transport, when taxis were familiar, trusted services that understood the needs of disabled people. However, it was also highlighted that the limited availability, and uneven distribution, of accessible taxis, together with the cost, presented key barriers for many disabled people.

### **How could the railway attract new disabled customers? What works well in other forms of transport?**

A total of 16 studies considered other forms of public transport; however, few offered insights into how the railway might attract new disabled customers.

One study reported that TfL services, including automatic ramps on buses, 'Turn up and go' assistance on the Underground and 'Please offer me a seat' badges, were cited as good examples of accessibility which enabled disabled passengers to travel more confidently and independently [21]. Another study highlighted that trams were viewed positively by disabled users, reporting trams to be reliable, spacious, comfortable with audio and visual information provisions [16].

Another study suggested that the 'Safe Place Schemes', an initiative that provides people with dementia and other cognitive disabilities safe spaces they know they can go when they are lost, could be rolled out at stations to encourage disabled people to feel confident when using trains [15].

## **Improving current schemes and initiatives**

### **What schemes and initiatives to support rail travel do disabled people currently use, and what are their experiences?**

Across the evidence reviewed a total of 14 studies cited public transport schemes and initiatives used by disabled people [1,2,3,5,6,9,10,12,15,16,17,19,20,23], nine of which considered rail travel schemes. These studies highlighted that disabled people with a wide range of different health conditions and impairments had used assistance services, including Passenger Assist, TfL's 'Turn up and go' and 'Travel Support card', and discount travel cards, such as the Disabled persons rail card and TfL's Freedom card. Primarily, the literature highlighted low uptake and awareness of schemes and initiatives to support rail travel used by disabled people.

Five studies that considered rail travel schemes reported low awareness amongst disabled passengers of assistance services (Passenger Assist, and 'Turn up and go' services) available when travelling by rail [3,16,17,20,23]. As an example, the most recent study conducted in 2023 outlined that 51% of respondents had never heard of the Passenger Assistance mobile app (launched in 2021), 24% respondents had not heard of the Passenger Assistance service in general, and 61% had not heard of 'Turn up and go' [23]. Studies also identified a lack of understanding regarding eligibility for assistance services

[17,3], as well as uncertainty around how services work [2], particularly amongst young disabled people and those with non-visible health conditions, such as mental health conditions [17].

Whilst two studies outlined that assistance services were found to generally work well for disabled users [6,3], more commonly studies highlighted a broad dissatisfaction amongst service users [5,6,9,10,17,21,23]. Here the evidence reported a range of issues for disabled users of rail travel, including services not always being available and delays in support. In addition, 'Turn up and go' services were reportedly perceived to be 'risky' given the potential for staff to be unavailable [19].

Of the evidence reviewed four studies reported on discount travel cards, including the Disabled Persons Railcard [3,9,12] and TfL's Freedom pass [10]. These studies commonly highlighted low uptake of the Disabled Persons Railcard. One study, conducted in 2022, outlined that just 10% of disabled people who had travelled by train in the last year had a Disabled Person's Railcard [12]. Across these studies, drivers of low uptake were identified, including low awareness and understanding of eligibility and how to obtain a card [9,12] and, for the Freedom Pass, restrictions on peak time use [12]. Only one study reported on disabled people's experiences of discount travel cards. TfL's Freedom Pass was reported to be very useful and appreciated by visually impaired people [10].

### **How is Passenger Assist experienced in practice, and how could the service be improved?**

Ten studies reviewed presented evidence on disabled people's experiences of Passenger Assist [1,3,5,6,10,15,17,19,21,23]. Whilst three studies highlighted broadly positive feedback and instances of excellent service [3,5,6], the qualitative studies generally reported disabled people's experiences of Passenger Assist to be dissatisfying [1,3,10,12,17]. Predominantly the qualitative studies showed disabled people experiencing inconsistent availability, unreliability and failures in service delivery in Passenger Assist services.

Experiences described in the literature included disabled people being informed they were 'not on the list', pre-booked support not 'showing up', disabled people being left on a train at a terminal, or not being met at the departure and/or alighting station and experiencing rude and discriminatory behaviour from staff. [1,3,5,6,15,17,21,23]. Importantly, a study conducted in 2023 reported that failures in the Passenger Assist service were rarely one-off instances. Moreover, failures in service were regularly part of disabled people's experiences of travelling by rail [23].

Notably, two studies outlined the impact of failures in assistance services for disabled people, highlighting that these were emotionally draining for passengers and could lead to negative experiences of rail travel [3] and have knock-on effects, causing users to miss trains and connections [17]. One study highlighted that people with hidden disabilities experienced particular issues with customer-facing staff failing to understand their needs, requirements and entitlement to support, resulting in failures to provide assistance [15].

In addition, a broad resentment about the requirement to pre-book staff assistance was identified in the literature [1,10,16,17,20,21] (although, it should be noted that in 2022

there was a reduction, from six hours to two, in the amount of notice required for disabled passengers to book Passenger Assistance).

### **Improving Passenger Assist services**

Whilst several studies identified low awareness of Passenger Assist and reported issues experienced by disabled people using Passenger Assist services, only two studies outlined ways in which the service might be improved [5,17]. These two studies suggested that, in the first instance, awareness of the Passenger Assist service and redress options ought to be improved, and that easier to understand and more transparent information about how to book and access staff assistance ought to be made available. Secondly, these studies recommended that failures in service should be addressed, with targeted efforts to improve the reliability of the service, including enhanced training for staff. It was also suggested that Passenger Assist could be improved by providing a way for users to contact members of staff, for example via an accessible app or text messaging service [5].

### **If aware of them, where did users hear about current schemes and initiatives to support rail travel, including Passenger Assist or the Disabled Persons Railcard?**

A total of nine studies considered rail travel schemes and initiatives, however none explored or identified where users heard about these schemes and initiatives.

### 3. Evidence review: Conclusions and implications for the primary research

#### Key insights and conclusions

Reflecting on the literature reviewed we can map several dominant themes and multiple areas where more research and evidence is required. Dominant themes in the evidence included the physical and social barriers experienced by disabled people when travelling by rail throughout the passenger journey. Gaps in the evidence, offering opportunities for future primary research, included granularity in disabled people's full door-to-door journey experiences, as well as disabled people's likes about rail travel, barriers to rail travel amongst disabled non-users, young disabled adults' experiences, and the impacts of COVID-19 and the cost-of living crisis.

It is important to highlight that the evidence examined also demonstrated that there are complex interactions between disability, employment, income, and transport that should be borne in mind when designing and conducting primary research into the experiences disabled people face when travelling by rail or considering doing so. Furthermore, the evidence suggested that future primary research should carefully consider the social model of disability and how thematic frameworks can be applied in research to support the model.

#### Dominant themes in the literature

The literature examined worked to draw out disabled people's experiences of travelling by rail. However, negative experiences were more pronounced in the literature on account of the weight of the impact for disabled people.

Across the literature the physical and social barriers for disabled people to rail travel throughout the rail passenger journey were consistently drawn out. Physical barriers to rail travel for disabled people have been evidenced extensively in detail and included: the physical infrastructure of stations and carriages together with limited provision of adequate facilities; difficulty in accessing up to date and live information throughout the journey experience; and social attitudes leading to rude and discriminatory behaviour from staff and other passengers. The evidence suggested that these barriers restricted accessibility and undermined disabled people's confidence in rail travel. The social barriers experienced by disabled users, including broad societal norms leading to stigma and

discrimination, passenger and staff attitudes, have also been comprehensively reported. Relatedly, the topic of confidence in rail travel has been examined widely in the literature, particularly in terms of how confidence relates to experiences and expectations as well as reluctance to travel amongst disabled people.

Considerations of rail schemes and initiatives, such as Passenger Assist and the Disabled Persons Railcard, were less frequently a focus in the literature examined. However, the evidence was highly consistent, outlining low awareness and uptake together with regular reports of poor-quality service and a lack of confidence in assistance services amongst disabled people that used them.

## Opportunities for future primary research

The evidence examined for the review highlighted that there are several opportunities for future primary research and valuable knowledge contribution.

Across the literature reviewed there was a focus on accessibility at a high level with limited granularity detailing the differences in experiences and confidence between disabled populations (i.e. different disabilities, impairments and multiple disabilities). Similarly, although most stages of the rail passenger journey were consistently reported on in the literature, there was limited evidence on the full door-to-door journey experience. In addition, although there was some qualitative evidence on the strategies and techniques disabled people have developed to overcome barriers to rail travel (such as jumping the gap, carrying equipment) more could be done to explore and document this. A more detailed exploration of disabled populations lived experiences of rail travel, from door to door, would support consideration of the specific needs and circumstances of passengers across all stages of travel.

Furthermore, reflecting on the literature reviewed there are several areas with little representation in the evidence that future primary research might. These were:

- disabled people's 'likes' regarding rail travel
- disabled people's experiences of rail replacement services and managing service cancellations
- barriers to rail travel amongst disabled non-users
- types of rail travel avoided by disabled people
- origin of awareness of current schemes and initiatives supporting disabled people's rail travel
- improving Passenger Assist services
- what works well to attract disabled customers in other forms of transport
- the impacts of the COVID-19 pandemic on disabled people's rail travel behaviour and experiences
- the impacts of the cost-of-living crisis on disabled people's rail travel behaviour
- complaints and redress
- young disabled adults and teenagers' experiences of rail travel
- sustainable travel as an enabler to rail travel amongst disabled people
- regional differences in disabled people's experiences of rail travel

## Recommendations

Given the gaps in the evidence outlined it is recommended that the following themes are taken forward for exploration in primary qualitative research:

- granular exploration of the differences in experiences and confidence between disabled populations (i.e. different disabilities, impairments and multiple disabilities) across the full door-to-door journey
- disabled people's 'likes' regarding rail travel
- disabled people's experiences of rail replacement services and managing service cancellations
- barriers to rail travel amongst disabled non-users
- types of rail travel avoided by disabled people
- origin of awareness of current schemes and initiatives to support rail travel
- improving Passenger Assist services
- what works well to attract disabled customers in other forms of transport
- the impacts of the COVID-19 pandemic on disabled people's rail travel behaviour and experiences
- the impacts of the cost-of-living crisis on disabled people's rail travel behaviour
- young disabled adults and teenagers' experiences of rail travel
- sustainable travel options as an enabler to rail travel amongst disabled people

We suggest that the following themes may also be explored through quantitative research:

- quantitative study on the origin of users' awareness of rail schemes and initiatives to support rail travel
- regional differences in disabled people's experiences of rail travel



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