

Understanding multi-stage journeys and what enables them

Qualitative research report V7

05 July 2024

Ipsos UK



Contents

1	Executive summary	1
1.1	Background and methodology	1
1.2	Considerations when planning for multi-stage journeys	1
1.3	Enablers of multi-stage journeys	2
1.4	Considerations and enablers for participants who reported a health condition and/or identified as neurodiverse	3
2	Background and methodology	5
2.1	Background	5
2.2	Research objectives	5
2.3	Methodology and sampling	7
2.4	How to read this report	9
3	Considerations when planning multi-stage journeys	10
3.1	Time-sensitivity of the journey	10
3.2	Frequency and availability of services	10
3.3	Reliability of journey options	11
3.4	Access to journey information	12
3.5	Interchange convenience and experiences	15
3.6	Cost considerations	18
3.7	Comfort of mode	19
3.8	Personal safety	20
4	Enablers of multi-stage journeys	23
4.1	Providing frequent, reliable and affordable services	23
4.2	Enabling easy planning for multi-stage journeys	24
4.3	Ensuring access to clear and accurate journey information	25
4.4	Enabling good interchange facilities and experiences	26
5	Our standards and accreditations	28

1 Executive summary

1.1 Background and methodology

The Department for Transport commissioned Ipsos to conduct qualitative research to explore people's experiences of multi-stage journeys - journeys which involve more than one stage and one or more modes of transport. The research explored how people plan for multi-stage journeys, what influences their decision-making, modal and interchange experiences. A key aim was to identify multi-stage journey pain points and potential mitigations.

Ipsos identified six of the nine Transport Choices segments which contained people who use multiple modes of transport. This was used as a proxy for likelihood of making multi-stage journeys, alongside an allocation tool to recruit participants with a high probability of belonging to these segments. To explore experiences of accessibility of multi-stage journeys, recruitment also included participants who reported a physical and/or mental health condition and/or identified as neurodiverse.

Fifty-six people, who reported carrying out at least one multi-stage journey a week, completed a one-week diary of their journey experiences, using their mobile or on paper. They also took part in an initial 30-minute interview and a final 45-minute interview.

1.2 Considerations when planning for multi-stage journeys

Participants described various combinations of eight key factors which influenced their multi-stage journey experiences and decision-making. These (in no particular order) are summarised below:

- 1. Time sensitivity of journey:** where there was concern about arriving at a destination by a specific time, participants sought the fastest, most reliable, and most convenient route to complete their journey.
- 2. Frequency and availability of services:** where services were perceived to be infrequent, participants sought to minimise long waiting times at interchanges and arrive early/use earlier services to mitigate any disruption. Where services were considered frequent and reliable, with a range of options for completing a journey, planning was typically described as less rigorous.
- 3. Reliability of journey options:** lack of reliability could lead to stressful and frustrating experiences including missed connections, the need to change route, increased journey cost and late arrival at a final destination. Previous experience of unreliable/disrupted services could lead to building in journey 'buffer' time or choosing a single-stage option (e.g., taxi or private car), even if more costly.
- 4. Access to journey information:** online and offline sources were used to inform and plan multi-stage journeys. Ease of planning across modes, provision of accurate and live information (both in advance and at stations/stops) and access to staff for information (particularly noted by older participants) was important for planning in advance and for 'in the moment' planning during disruption.
- 5. Interchange convenience and experiences:** participants preferred, where possible, routes with few interchanges, short walking distances and simple and familiar navigation between connecting services. Disruption leading to long waiting times or walking distances at interchanges influenced journey experiences negatively.
- 6. Cost considerations:** multi-stage journey costs were balanced against the other seven considerations and raised as a particular concern by people from lower socio-economic groups.

Participants described considering the cost of tickets, fuel, parking, travelling at cheaper times of the day, the number of people travelling and making use of savings through travel cards and offers.

7. **Comfort of mode:** on-board comfort and feelings of wellbeing were balanced with the other seven considerations. Avoiding busy services to increase the chance of getting a seat was a particular concern for those travelling with luggage and/or children and people who reported a health condition.
8. **Personal safety:** associated with travelling after dark, in isolated or rural areas and when alone, safety concerns were shaped by the provision of facilities such as shelter, lighting and seating at interchanges, and the presence of other people and other people's behaviour. Female participants and participants who reported a health condition were most likely to spontaneously voice such concerns. Safety concerns could lead to avoiding a multi-stage journey.

1.3 Enablers of multi-stage journeys

Across the research, participants described positive experiences of, and barriers to, making successful multi-stage journeys. The following enablers have been identified by bringing these experiences and considerations together and reflecting on what factors are likely to support good experiences and positively influence decisions to travel via multi-stage journeys.

1. Providing frequent, reliable, and affordable services:

- These characteristics of services were highlighted as important enablers of good multi-stage journey experiences and key to influencing decisions to take a multi-stage journey.

2. Enabling easy planning for multi-stage journeys through:

- Clear provision of key information about timeframes/timetabling, including number of interchanges, walking distances, ability to board a service with bikes, equipment, pushchairs/buggies, accessibility features, cost/ticketing, parking availability and associated cost, and ability to book travel or parking (accessibility features are covered further in 1.4).
- Provision of, and raising awareness about, planning apps that enable users to search and identify different travel options across modes of transport, to support multi-modal journey planning and decision-making for multi-stage journeys.
- Access to staff at stations/stops to provide assistance with ticket purchases at stations as an alternative for online booking platforms.
- Clear information provision regarding the use of travel cards, travel discounts, travel passes, ticket types, offers and parking fees to enable cost-effective decision-making for multi-stage journeys.

3. Ensuring access to clear and accurate journey information through:

- Providing live information regarding disruption, timings, determining fastest routes, accurate information about walking distances at interchanges and how busy a service is likely to be. This should be provided on reliable websites/apps including via push notifications, at stations/stops digital displays and from staff.
- Providing clear navigational signage at interchanges.
- Ensuring the presence of staff and communications particularly where there is limited internet connectivity. This presence could more broadly help mitigate personal safety concerns or support interchange navigation.

4. Enabling good interchange facilities and experiences through:

Including shelter, comfortable seating, lighting, functioning toilets, escalators, and lifts. These facilities are also likely to positively impact feelings of comfort and safety.

1.4 Considerations and enablers for participants who reported a health condition and/or identified as neurodiverse

Whilst reflecting the considerations for multi-stage journeys described above, participants who reported a health condition and/or identified as neurodiverse further highlighted key factors that were important in shaping journey planning and experiences. These are summarised below.

- **Reliability of journey options:** noted particularly for participants who reported having anxiety and other mental health conditions, concern regarding lack of reliability had a direct impact on planning. Checking service updates, developing familiarity with routes, and identifying alternative ways to complete journeys were described as important steps in building a sense of reassurance.
- **Access to journey information:** alongside online sources for journey information, access to staff was identified as important to support with journey options, ticketing and information (especially during disruption), navigating interchanges, and to provide assistance between connecting services.
- **Interchange convenience and experiences:** accessibility of interchanges/facilities shaped decision-making and experiences. Walking distances, the need to stand at interchanges, having enough time to complete interchanges and the potential impact of disruption (longer waits/walking distances) were concerns for participants who reported health conditions impacting stamina and/or mobility. Access to facilities such as seating, toilets, lifts and step-free access were also important.
- **Comfort of mode:** feelings of comfort when travelling focused on the accessibility of services. Both those with a health condition and those who identified as neurodiverse noted the impact of busy services on journey comfort. Busy services could limit access to a seat and/or cause feelings of anxiety or being overwhelmed.
- **Personal safety:** this was often spontaneously raised by participants who reported a health condition and/or identified as neurodiverse. Safety concerns included but were not limited to lack of shelter at stations/stops leaving people exposed to weather conditions, lack of seating on busy services which could lead to discomfort or pain for those who reported physical conditions, and concerns about other people's behaviour, including anti-social behaviour.

Enablers for these participants echoed those detailed above. Additionally, participant experiences suggest that the following factors are likely to support positive multi-stage journey experiences:

- Reliable services and access to accurate and live information is likely to be particularly important to build confidence in and reassurance around multi-stage journeys.
- Ensuring information provision includes accurate detail about the number of interchanges in a journey, accurate walking distances at interchanges and accessibility features. Information about busyness of services could also be useful, particularly when participants wished to avoid busy services.
- Ensuring access to live and accurate information. For example, via push notifications about disruption and via digital displays at stations/stops.

- Ensuring access to staff at stations/stops to support feelings of safety, provide guidance about changes to routes and how to navigate interchanges, help with ticket purchasing at stations/stops and provide other passenger assistance.
- Providing accessible facilities at interchanges – these include accessible shelter, lighting, seating, and the presence of functioning accessibility facilities such as lifts, step-free access, ramps at stop/stations and toilets.

2 Background and methodology

2.1 Background

The Improving Transport for the User (ITU) Strategic Aim puts users at the forefront of the Department for Transport's policy making. It is instrumental in helping the Department deliver and maintain a transport system that meets user needs and addresses what they care about most.

Following the validation of the Transport Choices Segmentation (TCS)¹ and the creation of the Transport User Personas², the Department sought to explore and gain a better understanding of multi-stage journeys – that is, journeys which involve more than one stage and one or more modes of transport. It also sought to identify user priorities for an improved journey experience. Further information on the Travel Choice Segmentation and its' 2022 validation and the Transport User Personas including how they were developed can be found on the Department for Transport website (see footnotes).

The Department for Transport commissioned Ipsos to conduct qualitative research aimed at exploring the experiences of people who undertake multi-stage journeys. The research focused on identifying journey 'pain points' and how these could be avoided and/or mitigated against. The research also explored accessibility of multi-stage journeys.

2.2 Research objectives

The research aimed to explore experiences of multi-stage journeys, including how people plan for these journeys and what influences their decision-making, how they experience switching between different modes (interchanges), experiences of different modes, and in which circumstances they would choose not to make a multi-stage journey.

The research aimed to answer the following questions:

- How do people plan and where do they find information about a multi-stage journey?
- What is the purpose of people's multi-stage journeys and are they travelling alone or with others?
- What do people consider when choosing how to travel during a multi-stage journey? How do factors such as trip purpose; price; interchanges; timetables; infrastructure; accessibility (e.g., using steps with a pushchair, taking a bike on a train); parking; ticketing; and time of day affect people's mode choice? How do they weigh up/trade off different factors/drivers?
- How do perceptions of reliability, safety, comfort and speed influence choices?
- What are the specific 'pain points' or points of friction in people's journeys? What are their behavioural responses (e.g., do they set off earlier, avoid certain routes, avoid making a journey all together)? How can these pain points be avoided or mitigated?
- What works well or makes a multi-stage journey work well for users?
- What do people do, and how do they continue their journeys, if part of their journey fails? For example: paying for a taxi or abandoning their commute and working from home?

¹ Department for Transport, (2023), *Transport Choices Segmentation and personas – Technical report*. Available at: <https://assets.publishing.service.gov.uk/media/65673742312f400013e5d5b5/dft-personas-technical-report.pdf>

² Department for Transport, (2023), *Transport user personas: understanding different users and their needs*. Available at: <https://www.gov.uk/guidance/transport-user-personas-understanding-different-users-and-their-needs> (Accessed: 14 May 2024)

- To explore any reported differences in experiences across participant groups with protected characteristics, specifically age, sex and disability.

2.3 Methodology and sampling

Ipsos asked 56 people (who all reported carrying out at least one multi-stage journey a week) to complete a diary of their journey experiences over a one-week period. Participants were asked to document their journey experiences using the Ipsos proprietary app, AppLife, via their mobile phone. This allowed participants to share their experiences when and in ways (including video, photo, audio and text) that best suited them. Where participants expressed a preference or were unable to take part using an app, they completed a paper diary.

Each participant took part in an initial 30-minute interview where they talked about transport in their local area and their use of transport. At the end of the interview, participants were introduced to the online diary app. Next, they completed the diary over one-week during which they recorded their planning activities and experiences of multi-stage journeys. At the end of the online diary, participants took part in a final interview, which allowed for reflection on their diary entries and further exploration of journey scenarios e.g., experiences of disruption during journeys. The final interviews lasted for 45 minutes.

The research was organised in two separate stages, and they involved different approaches to recruitment.

Stage one involved 40 participants and focused on exploring the experiences of multi-stage journeys of those who belonged to six of the nine segments of the TCS. The segments were selected based on reported use of multiple modes of transport, which was used as a proxy for likelihood of making multi-stage journeys. The segments included a mix of car owners (segments 1 – less mobile, car reliant, 2 – young urban families, 4 – comfortable empty-nesters, and 6 – heavy car users, frequent flyers) and non-car owners (segments 8 – urban professionals without cars and 9 – young low income without cars).

Participants were recruited to segment using an allocation tool developed by Ipsos. This uses the segmentation algorithm to calculate each individual's probability of belonging to a segment of interest. Additional demographic quotas were included to ensure a mix of people took part in the research. Quotas were set to ensure that all participants regularly carried out a multi-stage journey. Stage one was organised in two separate cohorts:

- cohort one involved 24 car owners belonging to segments 1 – less mobile, car reliant, 2 – young urban families, 4 – comfortable empty-nesters, and 6 – heavy car users, frequent flyers.
- cohort two involving 16 non-car owners belonging to segment 8 – urban professionals without cars and segment 9 – young low income without cars.

Stage two involved a total of 16 participants who were recruited to boost demographics across the Stage 1 sample and to include participants who reported a physical and/or mental health condition and/or identified as neurodiverse. This included a sample boost to ensure that a variety of multi-stage journey experiences were captured from the perspective of those who reported a physical and/or mental health condition and/or identified as neurodiverse. The boost sample was also designed to increase the number of young people aged 18-24 years taking part in the research, to ensure their views were captured. Quotas were also set for demographics, regardless of segment allocation. Table 2.1 shows a summary of the sample on key demographics across the two stages of the project.

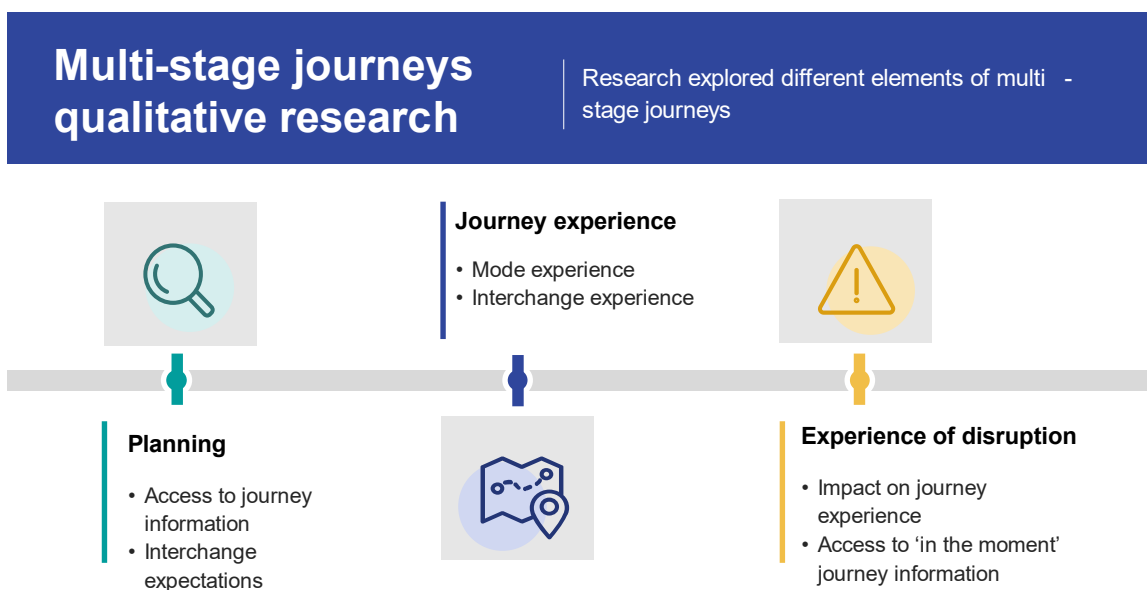
Table 2.1: Sample summary for key demographics

Demographics of interest	Sample breakdown
Gender	
Males	25
Females	31
Ethnicity	
White British	41
British	1
Ethnic minority background	14
Age	
18-24	10
25-34	14
35-44	8
45-54	8
55-64	7
65+	9
Report a health condition and/or identify as neurodiverse	
Physical health condition or illness	15
Mental health condition or illness	9
Self-identify as neurodiverse	9
Location	
Urban	32
Rural	5
Suburban/semi-urban	19

Fieldwork was conducted between October and December 2023 for stage one and between February and March 2024 for stage two.

Topic guides for interviews, and a schedule for the diary was designed in collaboration with DfT. Figure 2.1 below, presents a summary of the key topics explored.

Figure 2.1: Summary of topics explored during the research



Source: Ipsos UK

2.4 How to read this report

This report provides an overview of the key themes from across the two stages of the research.

When considering the qualitative research findings, it is important to bear in mind that a qualitative approach is designed to provide a detailed exploration of the range and diversity of participants' attitudes and opinions, delivering insight into the key reasons underlying participants' views. As such, the findings of qualitative research are descriptive and illustrative, not statistically representative. Also, individual views can sometimes be contradictory, often described as 'cognitive dissonance'.

We refer to 'participants' throughout and provide evidence through verbatim comments, which have not been attributed, to protect anonymity. These should not be interpreted as defining the views of all participants but have been selected to provide insight into views expressed at a particular point in time.

Quotations have been attributed to individuals identified by key characteristics including the segment they were more likely to belong to, their gender and whether they reported a health condition or illness or identified as neurodiverse.

Report terminology:

- **Multi-stage journeys** are defined as: a journey which involves more than one stage and involves one or more modes of transport. The multi-stage element should be part of reaching a specific destination (e.g., driving from home to a destination and then driving home again would not be regarded as a multi-stage journey).
- **Single-stage/single-mode journey** – the two terms can be used interchangeably and refer to a door-to-door journey made by a single transport mode – for example, driving from one location to another or walking/cycling all the way to a destination.
- **Interchanges** refer to the action of switching between two modes of transport – for example, travelling by bus for one stage of the journey, then walking to a train station or a different bus stop to catch a different service for the remainder of the journey.

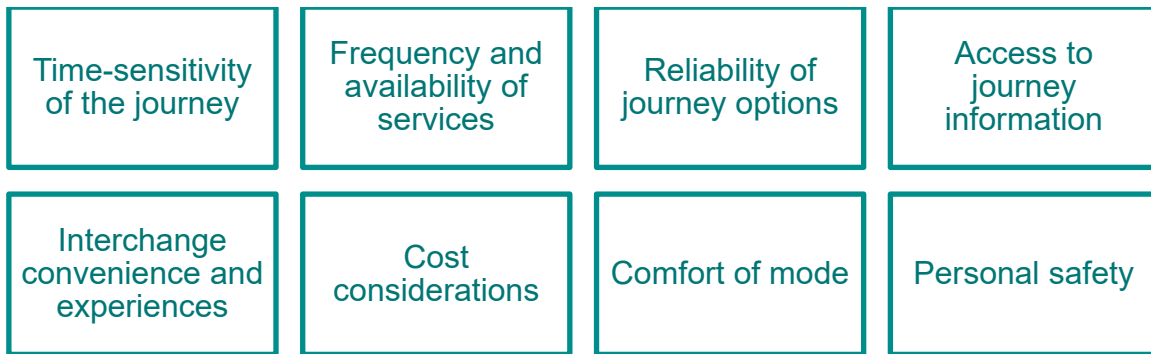
The report includes views and experiences from participants who reported a health condition or illness, or travelled with someone who had a health condition or illness. This includes participants who reported a mental health condition (e.g., anxiety, depression) or identified as being neurodiverse (e.g., ADD/ADHD, Dyslexia, Dyspraxia, Dyscalculia, Dysgraphia) or on the Autistic Spectrum (including Asperger's syndrome). It also includes participants with a health condition or illness that impacted mobility for example, balance, stamina and/or breathing difficulties which made it difficult to walk or stand for prolonged periods. In some instances, participants used a mobility scooter or walking frame.

We use 'health condition' as a generalised term to contextualise findings about participants who reported either a physical health condition, a mental health condition or both. Where the findings are specific to a group who reported one of the two types of health condition mentioned above, we have used terminology which differentiates the two groups – for example, participants who reported a physical health condition or participants who reported a mental health condition.

Views expressed about travel apps or specific transport companies, or transport modes, are those of participants and not of Ipsos or the Department for Transport.

3 Considerations when planning multi-stage journeys

This chapter sets out the key factors influencing multi-stage journey decision-making. These include (in no particular order) the following:



Participants described a combination of these as influencing multi-stage journey decision-making. These considerations were inter-linked and shaped by positive and negative previous experiences, including experiences of disruption. Considerations were prioritised or balanced against each other, depending on the type of journey being made and situational factors such as time of day and weather.

3.1 Time-sensitivity of the journey

Where there was a need to arrive at a destination at a specific time, a journey was considered to be time-sensitive. Types of time-sensitive journeys varied across participants. They included familiar journeys such as commuting for work, taking children to school and travelling for routine appointments (e.g., medical appointments) and less familiar journeys such as travelling for a work or timed social event. Key decision-making factors for how to complete a time-sensitive journey were the reliability of the route or mode, and how quickly or conveniently the journey could be completed within the required timeframe.

Journeys related to leisure pursuits were often considered to be less time-sensitive and, resultantly, participants felt that they generally had more freedom to prioritise aspects of their journey that would make the experience more comfortable and cost-effective, such as travelling during off-peak hours or travelling via a cheaper route.

3.2 Frequency and availability of services

Where services were **infrequent**, participants described being mindful of ensuring that timings of different parts of their multi-stage journey 'lined up' to minimise long waiting times at interchanges. This was particularly noted by participants in rural areas where services were perceived to be less frequent.

Concerns around disruption were heightened when multi-stage journeys involved infrequent services and/or where participants did not live in close proximity to the station/stop. Participants described setting out early or travelling on earlier services to minimise any potential impact of disruption and ensure timely arrival for interchanges at their final destination. Where services were frequent, participants reflected that, whilst disruption was frustrating, they expected a short wait for the next service.

The **availability of different services** to complete a multi-stage journey also influenced experiences and planning. Those who described multiple modes of transport available locally (typically urban areas and cities) noted that if they were unable to complete their journey due to disruption for a specific mode, they had alternative options available. Where services were considered frequent and reliable, and there were multiple ways to complete the journey available, participants tended to describe a less rigorous approach to planning, with the assumption that they could ‘turn up and go’.

“I have so many options [...] I think this area is so well served for public transport. I mean, our buses, you barely have to wait ten minutes. It's the same with trains, I mean, even during the middle of the day, actually. 10 minutes is about the longest you have to wait, which, I'm fully aware is not the case further down the road.” (Segment 4 – Comfortable Empty-nesters, Female)

3.3 Reliability of journey options

Lack of reliability was defined as situations where services did not run to timetable, ran with service cancellations or where travel conditions, e.g., traffic, led to delays. Where experienced, this could significantly impact multi-stage journey experiences by leading to missed interchanges, the need to change route, increased cost of the journey and, ultimately, late arrival at a final destination. These situations were often described as stressful and frustrating.

Where participants had previous experience of unreliable or disrupted services, they planned additional ‘buffer time’ into their multi-stage journey, for example, by leaving early for the first part of their journey to give extra time to ensure they successfully made interchanges and completed their journey on time.

“I like to always make sure I have at least 30 minutes spare time when completing my journey and if I get to my destination early then it's a bonus and much better than being late. By allowing this spare time I am able to accommodate a late service, busy traffic, or a missed bus.” (Segment 8 – Urban Professionals Without Cars, Female)

Concerns regarding lack of reliability strongly influenced planning behaviour. Planning, as a way to feel prepared for any potential journey disruption, was specifically mentioned by participants who reported having anxiety and other mental health conditions. These participants described front-loading their journey planning, by checking timetables and live service updates, to provide them with greater assurances that services would run smoothly. They also described researching alternative ways to complete their journey so they would know what options would be available, should they experience disruption.

“I struggle with the unknown and the unpredictable. Life is always going to have that but if I can minimise that as much as possible, then that reduces my anxiety. So, by planning like I do, it keeps my anxiety levels as low as they can be given that I have Asperger's.” (Male, identifies as neurodiverse)

Amongst participants in this group there were also mentions of feeling reassured, particularly for new multi-stage journeys, when they trialled the journey in advance to help them build familiarity with navigating interchanges, for example, to ensure they do not miss connections.

Across the research, concern regarding reliability could lead to participants choosing to use less preferred modes and routes such as choosing to travel via a mode considered to be more reliable but more expensive (e.g. via taxi or private car) or deciding to avoid a multi-stage journey entirely.

Whilst important across all multi-stage journeys, reliability was a particular concern for time-sensitive journeys where a key priority was arriving at a destination by a particular time or making a service-specific interchange (particularly where this involved interchanging to a pre-booked, costly service).

Case study 1 – Segment 9 – Young Low Income Without Cars, making a time-sensitive multi-stage journey.

Participant takes their child to school every morning. The second part of the journey includes making their way to work after the school drop-off. The usual route involves walking to the bus stop, a bus journey and then walking to the school entrance. After drop-off, the participant walks back to the bus stop and takes a bus close to work, walking the final distance to the office.

The participant does not own a car, so making sure they are able to catch the bus in the morning is crucial to ensuring on-time arrival at school and at work. The participant checks the local bus app either the night before or early in the morning to check if the services are running on time. On a good day, things go to plan and the journey is completed on time. Today, however, she notices there are delays with the service due to poor weather conditions and traffic congestion along the route. Recalling previous experiences of delays, she knows that it is likely that they will not be able to board the first bus that arrives and waiting for the next service will make them late for the school drop-off and, consequently, work too.

Participant makes the decision to call a taxi and travel this way to school and then on to work despite the fact that the cost for using this mode is significantly higher than the cost of the two bus tickets. This is a trade-off they do occasionally when they are concerned about timely arrival at school and work, though it is not something they can afford on a regular basis.

3.4 Access to journey information

Information sources (including apps and websites, paper-based information, information displays at stations/stops and information from staff) were used to inform journey choices, check or preview routes in advance of travelling, book tickets or parking and support decision-making during disruption.

Participants reported different ways in which they planned journeys with mentions of mode-specific apps/websites and multi-modal apps/websites. Multi-modal apps/websites such as Google Maps and Citymapper were mentioned as helpful in identifying and comparing different options for completing a multi-stage journey, including where the journey might involve different modes. Participants valued where these apps/websites included live information about disruptions (e.g., road diversions), the option to include additional stops as part of a route and the ability to look for parking at interchanges.

“(Citymapper) can either start from where your home is and if you give it your end destination, it will give you all of the options, whether you want to get on the bus, a taxi, a walk, a drive or the trains and it will tell you how long it will take door to door.” (Segment 6 – Heavy Car Users, Frequent Flyers, Male)

Others used a range of different apps/websites or paper-based sources to access journey information about different modes. Whilst there were participants who felt comfortable and confident planning across information sources, others found this process stressful. This was particularly an issue if one app did not work, meaning that participants did not have all the timetable information they needed.

“It [planning] can be stressful if you’re going to different destinations and using different types of transport. Making sure you’ve got exact times and locations.” (Segment 9 – Young Low Income Without Cars, Female)

Participants reporting a physical health condition, such as a condition impacting stamina and/or mobility, noted the importance of access to information about timings and walking distances at interchanges and the availability of facilities such as lifts. They drew on their own previous experience of routes, stations and stops as well as seeking this information online and from apps.

Access to accurate live information was considered important both to confirm that the journey would be running on time (and interchanges could successfully be made) on the day of travel, and to support any ‘in the moment’ planning due to disruption. Participants described how they checked that services would be running on the day of travel and during journeys to confirm timings for connecting services. This was noted as a key part of a thorough planning process, to mitigate against instances of disruption, by participants who reported a health condition and/or identified as neurodiverse. These participants, as well as others across the research, noted that alerts and push notifications from apps were useful in highlighting disruption.

“I wake up in the morning and I'll check to make sure, first thing, are there any delays? Although you do get an email to say there's some disruption planned or whatever and then I check that just to make sure the train I've booked is running on time.” (Segment 6 – Heavy Car Users, Frequent Flyers, Female)

When experiencing disruption, participants described feelings of pressure and anxiety due to having limited time to work out alternative routes, compare prices and wait for subsequent services to reach their destination. This was particularly the case where the journey was time-sensitive and/or the disruption occurred during bad weather.

Familiarity with the journey and local transport infrastructure could help inform how to complete a disrupted journey. Where disruption resulted in having to make an interchange at an unfamiliar station/stop, access to accurate live information via apps, websites, information displays and information and guidance from staff was considered important. Participants who reported a health condition and/or identified as neurodiverse suggested highlighting disrupted services on digital boards at stations to bring this information to the attention of those who wear headphones (e.g. to listen to music or to avoid feeling overwhelmed).

Case study 2 – Segment 8 – Urban Professionals Without Cars, making multi-stage journeys to different locations for work.

Participant is young and their work involves making multi-stage journeys to different locations during the week, some locations which they are familiar with, while other journeys are to new locations.

To help them plan for their multi-stage journeys, they make use of travel apps as well as reflecting on knowledge from previous experiences of making similar journeys.

They like using travel apps because they feel they are easy tools which provide them with a step-by-step route, including walking distances in minutes, numbers for bus services and names of stops in the form of a list across all stages of a multi-stage journey. They also like the fact that they can track a

bus service by following the bus stops down the route, allowing them to identify the stop they need to get off the services. This is particularly useful on unfamiliar multi-stage journeys.

However, unreliable live app information is frustrating and can lead to services not turning up, or missed connections and, consequently, longer waiting times. Today, they use an app to plan a journey. The app tells them that they have a 2-minute wait before the bus arrives, but the bus suddenly disappears from the app and the waiting time for the next service is 20 minutes. This waiting time would mean late arrival at a work meeting, and they opt to take a taxi instead (even though their workplace will only cover public transport travel expenses), as getting to the meeting on time is a priority concern.

Whilst participants across the research typically described using online sources for journey planning, both in advance of making a journey and on the day itself, having **access to staff for support and guidance** was also noted as useful. Access to staff was particularly valued by older participants and participants who reported a health condition and/or identified as neurodiverse.

Access to staff to support journey planning, arrange tickets (including at ticket offices) and to provide advice during disruption was raised by older participants, those less confident in travelling alone, using technology or navigating ticket machines. These participants valued being able to discuss their journey, ensuring that they felt well-informed about required interchanges and ticketing.

“(...) I usually prefer to buy a ticket from a ticket office than online and you can explore the options more carefully with a real person.” (Segment 4 – Comfortable Empty-nesters, Male)

Presence of staff, including presence of ticket offices, was also noted as important for offering advice and guidance (for example, on route options) during interchanges especially during times of disruption.

The presence of staff was also raised by people who reported a mental health condition and/or identified as neurodiverse in relation to having access to support and guidance when feeling overwhelmed or to prevent instances of anti-social behaviour. Having a ‘safe space’ was mentioned by a participant in the context of having a place to take a break when feeling overwhelmed.

“Having a safe space is important as someone who identifies as neurodiverse and LGBTQ+. (...) having a point to go to where you could talk about multi-stage journeys or the onward experience, like wherever you're going next might help just because if I was getting overwhelmed at this end then I could go there. (...) Having a safe space is important.” (Male, reported a mental health condition and identifies as neurodiverse)

Case study 3 – Segment 6 – making multi-stage journeys for commuting, leisure travel and recreational activities.

The participant lives at home with family, identifies as neurodiverse and reports a degree of difficulty with reading and writing. Their multi-stage journeys consist of commuting for work, visiting friends and trips to walk their dog. They use a combination of driving, walking and making use of trains or tubes for their journeys.

Their journey to work involves driving to the nearest station, taking a train, then a tube. The final stage of the journey is walking to their work location. During the first interchange, there is no station staff at the ticket desk, so they need to use the ticket machine to purchase tickets for the next stage of their

journey. The participant finds the ticket machines are hard to read and navigate. To overcome this and buy the ticket, the participant asks a member of station security staff for assistance with the ticket machine. Unfortunately, the security staff and participant ended up purchasing the wrong ticket.

Having to use the ticket machine without station staff assistance was confusing for this participant. They noted that they would have felt more reassured if station staff were available to advise them on how to make their interchange and provide guidance with purchasing the correct tickets. Buying the wrong ticket the first time meant that the participant needed to purchase another ticket, spending more money on tickets to complete this multi-stage journey.

3.5 Interchange convenience and experiences

Convenient interchanges were defined as speedy and simple, comprising a short number of interchanges, short waiting times and simple navigation between connecting services. Speed and simplicity of interchange was a particular concern when there was a short timeframe to successfully complete a connection.

When deciding how to travel, participants sought to minimise the number of interchanges during a journey.

“There is a bus that takes me pretty much [there], a 2-minute walk to the bus, like 3-minute walk to the bus stop and then I can take the bus all the way to work. So, it's just one [bus] journey. So, I would prefer to have less changes if possible. And the least amount of journey time.” (Segment 8 – Urban Professionals Without Cars, Female)

Participants also favoured interchanges with short walking distances between connecting services and interchanges that were easy to navigate – for example, those that involved a quick and simple route between services or/and where signage (e.g. directional, electronic displays) facilitated navigation towards the next connecting service.

“It's easy just to, sort of, get from one bus to the next. They're literally next to each other. Even if you go into the stations, they are literally about 2-, or 3-minute walk.” (Segment 4 – Comfortable Empty-nesters, Female)

Familiarity with the route also impacted on the ease of navigating interchanges. Some participants who reported a mental health condition and/or identified as neurodiverse noted that familiarity with a journey and interchanges enabled them to make travel decisions more confidently, and this supported positive journey experiences.

Speedy and simple interchanges with short walking distances and routes with few interchanges - minimising the time needed to walk long distances or stand - were identified as important for participants who reported health conditions impacting stamina and/or mobility. There was also concern voiced by participants in this group about having time to complete interchanges that involved longer distances. Participants described using alternative modes of transport where possible (with shorter or no interchanges), using apps such as Google Maps to calculate walking distances, and starting journeys earlier to give more time to complete a longer walk at their own pace.

“I'd been walking from Victoria Station, coach station, 10 minutes into the tube station, down into the tube, getting two tubes and then a 25-minute walk which meant I was having to get the earlier coach because of all that.” (Segment 1 – Less Mobile, Car Reliant, Female, reported a physical health condition)

Unreliable services and disruption could negatively impact interchange experiences, particularly for participants with conditions impacting stamina and/or mobility. Disruption could lead to using routes which necessitated longer waiting times or walking distances.

Where participants sought passenger assistance, they described concerns regarding the availability of assistance for onboard/offboarding services at interchanges. Participants described booking assistance in advance where possible but noted the lack of assistance for some modes including buses. Lack of consistent assistance meant that decision-making for journeys involved arranging to travel with others to assist them with onboarding/offboarding.

Participants with a health condition that impacted their mobility also reported mixed experiences of accessible features at interchanges such as access to ramps, step-free access including lowering vehicles/ramps to the kerb, and wider doors to allow for onboarding/offboarding, and step-free access on services and at stops/stations. Similar concerns were expressed by those travelling with children in prams and buggies.

“But we [when travelling with a family member who used a wheelchair] tend to just make sure we don’t go to stops that haven’t got lifts really and haven’t got ramps.” (Segment 8 – Urban Professionals Without Cars, Male)

Overall, where accessibility needs were a priority for a journey, participants made use of ‘tried and tested’ routes to ensure needs were met and avoid unexpected situations, particularly at interchanges, which could become a pain point for a multi-stage journey.

Case study 4 – Segment 1 - Less Mobile, Car Reliant, making multi-stage journeys for leisure travel.

Participant uses a mobility scooter and makes multi-stage trips for leisure. They planned the journey to ensure fewer interchanges between the different modes of transport they need to take to arrive at the destination.

Previous experiences of travelling on public transport have been mixed. They have found onboarding/offboarding bus services at interchanges difficult, where bus drivers did not always lower the ramp or park close enough to kerbs. Additionally, they feel that design updates on some bus services, such as newly installed handrails, have made it more difficult to navigate and manoeuvre their mobility scooter when using the service. However, when travelling by tram they find that the services have wider doors, more space inside and step-free access allowing for a safe onboarding and offboarding experience.

The difference in accessibility provision across different modes makes for an inconsistent experience across different stages of their multi-stage journeys.

Concerns over accessibility means they feel dependent on having their partner travelling with them on multi-stage journeys, to assist with onboarding/offboarding different modes of transport at interchanges. When travelling on trains, they book assistance in advance to ensure station staff are ready at interchanges to help them onboard/offboard trains and advise on the best place to position the scooter. A consistent provision of accessibility across modes would improve journey experience and enable more independent travel.

Access to **facilities** at interchanges influenced multi-stage journey experiences, particularly during long and complex interchanges. Lack of shelter or seating at stops/stations during bad weather was a concern for participants across the research, and a particular concern for those who found it difficult to stand for long periods of time. They mentioned concerns associated with personal risk of exposure to poor weather conditions, such as contracting a cold or flu while waiting for different connections, or falling on slippery surfaces.

Access to safe, clean, and functioning toilets at interchanges and on board was also highlighted as an important factor impacting decision-making and journey experiences. Similarly, participants reflected on the importance of ensuring lifts were functional at stops/stations, to facilitate access for people with health conditions and those travelling with children in prams and buggies.

“And all the facilities are working, you know, the toilets are working and stuff like that. Someone was telling me the other day they were given the choice on a train, 'You can go on this train for 2 hours to London or something but there aren't any working toilets, or you can wait 45 minutes and get on the next train.' That kind of thing would ruin your journey as well.”
(Segment 4 - Comfortable Empty-nesters, Male)

These types of concern could result in participants choosing to avoid making a multi-stage journey and could lead to the decision to complete the journey in an alternative way – for example, a single-mode journey via taxi or private car.

Those driving or cycling for part of a multi-stage journey considered the convenience of parking their vehicle in close proximity to their connecting service. Awareness and availability of cost-effective and secure parking influenced their multi-stage journey decision-making.

Case study 5 – Segment 5 – Suburban Families, multi-stage journeys for commuting to work via school drop-off.

Participant has a child whom they drop to school on their way to work in the morning. They have two options to get to the school – either to drive their child to school in the car or travel by bus. Their ongoing commute involves two trains.

Taking public transport would involve two buses, so the participant decides to drive. By driving to school, the participant can take shortcuts on local roads where buses don't have access. This is more convenient and time-efficient because it reduces the number of interchanges for the overall journey.

After the drop-off, the participant is able to park the car free of charge near the train station, before taking the two trains on their commute to the office. The last leg of the journey involves walking from the station to the office.

The first part of the journey goes well, and they arrive at the train station on time for the first train. They step out of the car and open the National Rail app to check train times. They notice the first train is delayed and the participant realises this will impact on timings for the second train. They miss their connection and have to wait 20 minutes for the next connecting train. The participant was also 20 minutes late to work, however, by taking the car for the first part of the journey they reduce the number of interchanges and the potential risk of experiencing disruption.

3.6 Cost considerations

Identifying cost-effective ways to complete multi-stage journeys was a key part of journey planning and included booking parking or tickets in advance, considering the cost of fuel, identifying free or low-cost parking, travelling at cheaper times of the day and making use of savings through offers and travel cards (e.g., 60+ London Oyster photocard or having purchased an annual pass). Participants compared costs including the combined cost of group travel (where relevant) to help determine how best to travel. This was particularly noted by participants travelling with children or in family groups.

A number of factors influenced the extent to which cost was prioritised during decision-making including:

The frequency and availability of services: where there was range and high frequency of transport options available for their journey, participants felt that they had greater flexibility and opportunity to choose the most cost-effective route.

Time-sensitivity and speed of the journey: cost could be deprioritised where there was preference to complete a journey quickly and within a specific timeframe. This could lead to choosing to use modes or routes that were most time efficient.

"I mean, I've had a look in the past at getting, you know, the National Express or Megabus down [to City for work], which are cheaper and they're not too bad, it's just slower, you know what I mean? So, the train, 2 and a half hours, Megabus, National Express you're talking 4 and a half." (Segment 1 – Less Mobile, Car Reliant, Male, reported a physical health condition)

Where journeys were less time-sensitive (e.g., for leisure trips), participants reflected that they had greater flexibility to consider different journey and cost options and, therefore, the cost of travel could be a key deciding factor.

Convenience of the journey: where a speedy and simple journey was sought, cost could be deprioritised. This could include opting for a more expensive journey where the route or service was faster and/or involved more convenient interchanges. This was particularly noted as important for time-sensitive journeys and when travelling with children.

"When travelling with kids, convenience is the biggest factor. That might not always be the most cost-effective but if it makes the journey easier, we'll opt for that choice. If we were travelling just as a couple or solo the price would become a bigger factor. However, the time taken for a journey is also very important to me and it [is]...a 3-way trade-off between price, time and convenience, hoping for something in the middle of that Venn diagram." (Segment 6 – Heavy Car Users, Frequent Flyers, Male)

Feelings of personal safety: cost was deprioritised where safety was a key concern. For example, whilst cost effective, active travel was typically considered less attractive when travelling alone at night and there were often preferences to use a higher-cost mode e.g., taxi for part or all of the journey.

Completing journeys during disruption: where participants experienced disruption to a journey, finding an alternative route could mean choosing a costly option where this was considered the most pragmatic way to quickly complete the journey.

Planning from a financial perspective was noted as particularly important by those who described tight finances, particularly lower socio-economic grade participants. Using ticket offers (e.g., split-save tickets or saver tickets), combining journeys to avoid making multiple trips and getting lifts from friends or family

were all described as ways to help manage multi-stage journey costs. These participants described that they might dismiss more expensive (e.g. taxis) options to complete their journey, even if those would be more convenient or comfortable.

3.7 Comfort of mode

Previous experiences of on-board comfort for themselves and others they were travelling with, influenced participants' multi-stage journey decision-making. Comfort of mode was balanced against other considerations such as cost, convenience and safety when deciding how to complete a journey. Comfort was most likely to be prioritised where there was a range of options and therefore greater sense of modal choice, and where the journey was less time-sensitive, meaning that there was greater flexibility over how and when to complete the journey.

Busyness of services emerged as a key concern amongst participants, with a preference to, where possible, avoid busy services and increase the likelihood of getting a seat during the journey.

Participants who reported a health condition impacting mobility, balance and/or stamina described seeking to avoid busy services where there was concern that they would not get a seat. There were also concerns regarding the risk of exposure to illnesses. Busy modes were also identified as a pain point amongst participants who reported a mental health condition and/or identified as neurodiverse as busy spaces could cause anxiety or feelings of being overwhelmed.

“Probably when if I knew a train, if a line was going to be busy, I would just avoid going out, or going to wherever I was going, just because of how stressed it would make me, or anxious. I don't know. Just the feeling of a packed train, and having to stand up, I don't know. Not having space, it would just make me really overwhelmed.” (Female, reported a mental health condition and identifies as neurodiverse)

Those travelling with children voiced concerns about sitting together or finding space for prams/buggies on busy services. Travelling with shopping bags or heavy luggage could impact journey comfort due to lack of storage and space to navigate inside a vehicle, especially for those needing to travel on busy services and/or navigate long interchanges. In these instances, where participants had access to a car, they expressed a preference for single-mode journeys or, where possible, sought lifts from family and friends.

Feelings of wellbeing were also voiced in relation to journey decision-making and included a range of different issues:

Avoiding feelings of stress: previous experiences of feeling stressed during a multi-stage journey could shape preferences and decisions for subsequent multi-stage journeys. For example, where disruption had been experienced, participants chose – where possible – to avoid certain routes (e.g., driving in congested city centres) or built in buffer time to their journey.

Feelings on the day: mood/disposition on the day could influence participants' choice of mode for a multi-stage journey. This was particularly noted by participants who reported a mental health condition or identified as neurodiverse. For example, participants described times when they preferred to travel using modes that would reduce interaction with others.

“There's many things we can choose to avoid but I've got a luxury in that I can get in the car if I know I'm overwhelmed on a certain kind of day or whatever. That may overwhelm me slightly but it's not going to be as much as the social interactions that happen when I'm actually on it (public transport).” (Male, reported a mental health condition and identifies as neurodiverse)

Flexibility to choose a specific mode was influenced by whether participants were able to be flexible in when they travelled, and the range of modes available to them to complete their journey. In some instances, participants chose to postpone or avoid travelling.

Journey enjoyment: whilst not often described as a main priority for multi-stage journeys, participants appreciated opportunities to choose transport modes that they particularly enjoyed. This included choosing modes where groups could travel together, modes that were preferred by children/grandchildren (providing a chance to spend quality time together) or making use of active travel modes as an opportunity to exercise or align choices to environmental views.

Weather: comfort during different weather conditions could influence modal choice for a multi-stage journey. Good weather conditions could lead to decisions to use active travel such as walking or cycling. Poor weather conditions could lead to concerns about heating on board services and shelter at interchanges. Concerns about extreme weather conditions (heat waves and snowy weather) could be a deterrent to making any journey (multi-stage or single-stage).

3.8 Personal safety

Participants considered personal safety and the safety of others that they were travelling with, including children and elderly relatives. Personal safety was often considered in relation to travelling alone, travelling after dark or travelling in isolated or rural areas.

Feelings around personal safety were shaped by two factors:

- The physical environment including the provision of facilities such as shelters, lighting and seating at interchanges. There were also mentions of safety in relation to the accessibility and cleanliness of services.
- The presence of other people, and other peoples' behaviour with concerns regarding anti-social behaviour.

Concerns about safety were heightened when there was a long walk or wait at an interchange, where there was disruption (leading to longer waits at interchanges) and where the journey was unfamiliar.

Mentions of personal safety varied across the research depending on individual characteristics. Female participants across the research and male and female participants who reported a health condition or illness and/or who identified as neurodiverse were most likely to spontaneously raise concerns about safety.

Female participants across the research raised safety concerns both in relation to the physical environment and other peoples' behaviours. They recounted experiences of feeling unsafe especially when travelling or making interchanges after dark and/or in a location that felt isolated mentioning unstaffed stations and lack of other passengers.

"[Station name] I avoid after dark because it's isolated, and although they've got CCTV, you're just not going to take the risk of being there on your own, you know, and things like that." (Segment 1 – Less Mobile, Car Reliant, Female, reported a physical health condition)

"There was a scene on the train when I was coming home from work, so I feel safer in my car, safer because I'm on my own, there's a lot of random people you don't know." (Female, identifies as neurodiverse)

Whilst male participants who reported a mental health condition and/or identified as neurodiverse echoed some of these safety concerns, they expressed particular concern regarding other people's behaviours and anti-social behaviours on specific transport modes.

"Sometimes you can go, especially in the evenings on the bus or on the metro, you get people that come on that are aggressive, that are sometimes drunk. (...) people wearing balaclavas and things on there. And it does make you feel uncomfortable. I think there should be some sort of security, at least one, put on the bus as a presence. (...) You feel frustrated and frightened. It kicks off on the bus, you're trapped really because there's only one way out properly, when the bus driver opens the doors. (...) I've worked at nighttime as well, sometimes. And to have that presence, it gives you reassurance and it's a distraction. It stops people from getting on there causing disturbance or whatever on the bus. And safety for the driver as well, basically." (Male, reported a physical health, a mental health condition and identifies as neurodiverse)

Male and female participants who reported a mental health condition and/or identified as neurodiverse specifically mentioned concern related to the presence of other people when travelling on busy services and explained how these could spark anxiety and overwhelming feelings. These participants also described concerns related to unexpected changes to a planned journey, delays, disruption and having to navigate unfamiliar situations and places at short notice.

"I don't know why being late makes me feel so anxious, but even though I know that it's not the end of the world, it just stresses me out so much, and I end up, I don't know, just panicking, feeling overwhelmed, so feeling the worst thing that could go wrong is if I start to think that I might be late or I might not be able to get home. I don't know. I think it's the sense of not knowing, not feeling safe that I'm going to get to where I need to be, then that definitely just makes me feel really anxious. So, that's probably the worst thing that could happen." (Female, reported a mental health condition and identifies as neurodiverse)

Female participants and both male and female participants with a health condition or illness were also particularly likely to raise concerns about the cleanliness of services and described feeling aware of other people on services being ill, coughing and being wary about the potential of contracting an infection, especially during the cold weather season. Travelling on busy services and concern about the availability of seating also influenced feelings of safety amongst those who noted that standing on a moving service for longer periods of time could lead to physical pain and discomfort, or falling as a result of losing balance.

Previous experiences of feeling unsafe using a particular mode or when completing an interchange during a multi-stage journey influenced decision-making for how to make similar journeys in the future. Negative experiences could lead to the avoidance or prioritisation of particular routes or modes. Both female and male participants across the research mentioned certain routes and transport modes they would avoid or would prefer not to use, where these would take them through areas and locations they perceived as dangerous or unsafe.

Where safety was a key concern there was a preference amongst participants to use modes that would take them directly to their final destination/doorstep. For example, participants described using taxis, private car or lifts from friends and family for final stages of a multi-stage journey or choosing a single-mode option for the entire journey.

Case study 4 – Segment 4 – Comfortable Empty-nesters, multi-stage journeys for leisure and meeting friends.

Participant is close to retirement and in part time employment. They decide to meet friends in the city centre and go to the theatre. Their preference would be to drive and find a free place to park the car close to the meeting point. However, they know from previous experience that free parking is not available in the destination area, so they decide to travel by public transport instead and save on cost by using their free travel pass.

They walk to the closest station and take the two tube services and then walk to the theatre. On their way home it is dark outside. Despite living in an area with good transport connections and where they feel relatively safe, the participant explains carefully considering whether to walk home from their local tube station on their own after 10 or 11pm. With this in mind they decide to travel to a nearby train station with their friends as a group where they know they can easily access taxis. They then take individual taxis back to their homes. The participant feels safer travelling this way as the taxi goes directly to their doorstep.

In this situation the participant considered the cost of the journey and their feelings of safety and decided to use a more expensive mode which they perceived as being safer than walking the distance from the station to the house alone.

Other safety concerns that influenced decisions about how to complete multi-stage journeys included:

- Concern for the safety of children when travelling. This included ensuring prams/buggies were stable and the child secured when travelling on public transport, and having ramps or stopping closer to the kerb or platform to allow safe offboarding of the service.
- Concerns during poor weather conditions including avoiding driving or cycling when road surfaces were likely to be wet and slippery. These concerns could lead to avoiding certain modes during bad weather.

4 Enablers of multi-stage journeys

Across the research and as set out in the previous chapter, participants described positive experiences of, and barriers to, making successful multi-stage journeys. Bringing these experiences and considerations together, this chapter sets out the factors that are likely to **support good multi-stage journey experiences** and therefore **positively influence decisions to travel via multi-stage journeys**.

Enablers to emerge from the research can be grouped into four broad themes:

1. Providing frequent, reliable and affordable services.
2. Enabling easy planning for multi-stage journeys.
3. Ensuring access to clear and accurate journey information.
4. Enabling good interchange facilities and experiences.

4.1 Providing frequent, reliable and affordable services

More frequent and reliable services and more affordable fares were highlighted as potential enablers to making multi-stage journeys:

Availability of frequent services influenced planning and decision-making, providing participants with a range of options for travel and limiting the potential for unexpected delays or long waiting times at interchanges. Increased frequency of services could help mitigate concerns about using infrequent services or poor multi-stage journey experiences, particularly in relation to the risk of disruption leading to long waits for another service or missing a connection.

Reliability of services was a key factor in enabling successful interchanges and on-time multi-stage journey completion. With lack of reliability a clear pain point, and a key factor in choosing alternative ways to complete journeys, improved reliability could support greater confidence in, and use of, multi-stage routes.

Affordable fares and parking when using multiple modes of transport to complete a multi-stage journey, and affordable parking at interchanges, had a positive impact on the appeal of a multi-stage journey, as this was seen as a more cost-efficient way to complete a journey. However, multi-stage journeys were not always considered cost-effective and choice within a multi-stage journey sometimes felt to be limited by the cost of different modes. Improving the affordability of multi-stage journeys could support increased use of these journeys.

Information provision was identified as a way to help people navigate existing concerns regarding the frequency, reliability and affordability of services. Specifically:

- The provision of accurate live journey information to make clear where services may be disrupted and/or help plan around infrequent services.
- The provision of clear information to support cost-effective decision-making.

Ways in which to deliver good access to this type of information is discussed in the following sections.

4.2 Enabling easy planning for multi-stage journeys

Participant experiences of accessing information to support planning and booking for multi-stage journeys focused on what information was useful and where they accessed this. The following enablers emerged as important when thinking about the planning and booking process.

Enabling planning through clear provision of key information

A key part of planning was deciding how to complete a journey. Participants described taking into account a range of factors suggesting that clear provision of the following types of information will support multi-stage journey decision-making:

- Information about different options and timeframes/timetabling to complete the journey, including timeframes for interchanges.
- Accurate walking distances at interchanges (particularly important for those who reported a health condition impacting stamina, and /or mobility).
- Information about ability to board a service with storage space for bikes, equipment, pushchairs, and buggies.
- Accessibility features at interchanges including accessible onboarding/offboarding, step-free access and lifts.
- Clear costs/ticketing information.
- Parking availability and cost (for cars and bikes).
- Ability to book travel or parking.

Generally, participants drew on their own experiences to determine when services were more or less likely to be busy, and expressed a tendency to avoid busy services, when possible. The busyness of services could significantly shape the experiences and decision-making of participants who reported a health condition and /or identified as neurodiverse. This suggests that it may be useful to consider any scope and appeal for providing information related to busyness of services.

Enabling joined-up planning for multi-modal journeys

Where already used, apps that enabled participants to plan and book multi-stage journeys across multiple modes were considered helpful. These enabled participants to determine the different options available and to compare these before reaching a decision on their preferred way to complete their journey. However, use of this type of service was not mentioned by all participants. Whilst there were participants who described comfort in planning across information sources, for others this felt complex. This suggests that there is scope to raise awareness of platforms that enable multi-modal planning and to explore the broader appeal of providing platforms that offer this feature. Inclusion of the key information listed above as part of a multi-modal online information source is likely to support journey planning and decision-making.

Ensuring access to alternative ways to plan and book multi-stage journeys

The ability to discuss and book tickets with staff was particularly noted by older participants who voiced a preference for purchasing tickets at station offices rather than online. Ensuring this option is available is

likely to act as an important enabler for those who feel more comfortable speaking to someone about a multi-stage journey.

Providing clear information to support cost-effective decision-making

Cost was a key consideration when planning for a multi-stage journey. There is scope to support cost-effective decision-making by making clear information provision regarding the use of travel cards, travel discounts, travel passes, ticket types (and when/where they can be used), offers and parking fees.

4.3 Ensuring access to clear and accurate journey information

Access to clear and accurate journey information was identified as particularly important during multi-stage journeys especially for time-sensitive journeys, when making use of infrequent services, when making unfamiliar journeys or during times of disruption. Lack of clear or accurate journey information could lead to challenging multi-stage journey experiences such as late arrival at interchanges and missed connections, reinforcing the need for the following:

The provision of accurate live journey information

Participants valued accurate live information, and across the research, the following factors emerged as key enablers to positive experiences:

- Accurate live information about service arrival and departure times at specific stops, including the ability to track the location of specific services.

Information about large events (for example, sport and entertainment, protests), to signal locations and times when services/interchanges are likely to be busy.

- Information that provides accurate details regarding the fastest way to complete routes (this was not always considered correctly displayed by online tools) and accurate information about walking distances at interchanges.
- Real-time information that details delays and cancellations across a range of information sources including:

Online apps and websites including options for app and email alerts.

On digital displays at interchanges including ensuring the provision of digital displays, making sure that these are in working order and that these (alongside other station/stop information e.g. paper maps or timetables) are up to date. As part of this, consider how digital display information about disruption could best be brought to the attention for those wearing headphones.

Regular updates and announcements from staff at interchanges and onboard services.

Push notifications to alert people to disruption.

- Improved reliability of online tools - for example, minimising situations where these 'crash' or are 'down for maintenance'.

Providing clear navigational signage at interchanges.

Navigational signage at stations influenced interchange experiences, particularly when using unfamiliar routes. Where signage was clear it could help make an interchange more efficient and stress-free. The following signage emerged as useful and important to make clear: information about departure platforms, how to efficiently navigate to different services (including different modes and station exits), signage for lifts and step-free access and signage to facilities e.g., waiting room, refreshments, and toilets.

Ensure staff presence and communications where there is disruption or limited internet connectivity.

Access to live information during a multi-stage journey was important during the journey itself (to check progress in the light of upcoming interchanges) and during times of disruption (where an alternative route needed to be identified). Lack of internet connectivity (particularly mentioned in more rural areas), or lack of confidence or comfort in using technology created a barrier to accessing this information. Staff presence and communications were important in these situations to help people navigate the transport system with the following provision likely to shape positive experiences:

- Ability to speak to a knowledgeable member of staff when there is lack of connectivity and/or disruption to services.
- Clear station and on-board announcements made regularly to keep passengers up to date with journey progress and provide guidance for ways to manage disruption and the impact on interchanges.

Availability of staff at stations is likely to have wider positive impacts on multi-stage journey experiences including:

- Mitigating feelings of isolation or concerns around anti-social behaviour at interchanges and on services which can lead to concerns regarding personal safety.
- Providing guidance and support for those less confident in navigating interchanges (especially during disruption) and ticket machines.

4.4 Enabling good interchange facilities and experiences

The provision of interchange facilities was important to multi-stage journey experiences with the scope to improve these mentioned across the research. Where accessibility was important to an individual, poor previous experiences of a lack of accessible interchanges facilities could shape future multi-stage journey decisions. The following interchange facilities emerged as important in shaping positive multi-stage journey experiences and to help inform journey decision-making:

The provision of shelter, lighting, seating and functioning facilities

Shelter, good lighting, and available seating impacted feelings of comfort and safety at interchanges but were not universally experienced. Increasing this provision is likely to have positive impacts where the interchange involves a long waiting time (either planned or due to disruption), is being carried out during bad weather, late at night and/or in a location that feels isolated (for example, a more rural location). Ensuring provision of shelter (including waiting rooms), good lighting, safe and clean toilets, seating and availability of refreshments were identified as important in shaping positive multi-stage experiences and are likely to influence feelings of safety and comfort.

Ensuring accessible facilities and access to passenger assistance

For those who reported a health condition and/or identified as neurodiverse, accessibility at interchanges was a key factor influencing a positive multi-stage journey experience. Lack of good interchange facilities could act as a deterrent to using a particular mode/route.

Ensuring provision of working step-free access options including ramps and lifts, shelter and seating and accessible toilets were identified as important in shaping positive multi-stage experiences. These interchange facilities are also likely to be beneficial for those travelling with children and prams/buggies. Ensuring drivers respond to accessibility needs for example, by always lowering ramps and not starting the journey until people are seated and wheelchairs (and prams/buggies) are secured.

Participants who reported a physical health condition, noted that it was not always possible to book passenger assistance across modes which led to inconsistent multi-stage journey experiences, where it might be possible to book assistance for one mode but not another. A more consistent approach was identified as a way to improve the multi-stage journey experience which could influence decisions around how to travel.

Availability of parking when making an interchange

The availability and cost of parking for cars and bikes when making an interchange to a different mode of transport could influence decisions about using these modes as part of a multi-stage journey. Providing clear information about the availability of parking, how to book it (if relevant) and parking cost will support decision-making when considering using these modes.

More broadly, facilities for taking bikes onboard other modes of transport and storage for bikes, luggage, prams/buggies influenced appeal and comfort of multi-stage journeys; making clear these facilities could support journey decision-making.

5 Our standards and accreditations

Ipsos' standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Our focus on quality and continuous improvement means we have embedded a "right first time" approach throughout our organisation.



ISO 20252

This is the international specific standard for market, opinion and social research, including insights and data analytics. Ipsos in the UK was the first company in the world to gain this accreditation.



Market Research Society (MRS) Company Partnership

By being an MRS Company Partner, Ipsos UK endorse and support the core MRS brand values of professionalism, research excellence and business effectiveness, and commit to comply with the MRS Code of Conduct throughout the organisation & we were the first company to sign our organisation up to the requirements & self-regulation of the MRS Code; more than 350 companies have followed our lead.



ISO 9001

International general company standard with a focus on continual improvement through quality management systems. In 1994 we became one of the early adopters of the ISO 9001 business standard.



ISO 27001

International standard for information security designed to ensure the selection of adequate and proportionate security controls. Ipsos UK was the first research company in the UK to be awarded this in August 2008.



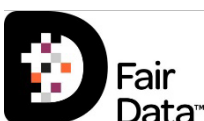
The UK General Data Protection Regulation (UK GDPR) and the UK Data Protection Act 2018 (DPA)

Ipsos UK is required to comply with the UK General Data Protection Regulation and the UK Data Protection Act; it covers the processing of personal data and the protection of privacy.



HMG Cyber Essentials

A government backed and key deliverable of the UK's National Cyber Security Programme. Ipsos UK was assessment validated for certification in 2016. Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet.



Fair Data

Ipsos UK is signed up as a 'Fair Data' Company by agreeing to adhere to twelve core principles. The principles support and complement other standards such as ISOs, and the requirements of Data Protection legislation.

For more information

3 Thomas More Square
London
E1W 1YW

t: +44 (0)20 3059 5000

www.ipsos.com/en-uk
<http://twitter.com/IpsosUK>

About Ipsos Public Affairs

Ipsos Public Affairs works closely with national governments, local public services and the not-for-profit sector. Its c.200 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. Combined with our methods and communications expertise, this helps ensure that our research makes a difference for decision makers and communities.

