Research into Passengers' Awareness of Planned Disruption

Final Study Report VERSION 2

ORR

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Quality information

Revision of Market Segments

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Executive Summary

Introduction

Schedule 4 of the franchised passenger operator track access contract compensates train operators for the impact of planned service disruption (which principally occurs as a result of engineering possessions).

In Schedule 4, Network Rail is incentivised to plan possessions early by receiving a discount on the amount of formulaic Schedule 4 revenue loss compensation it pays to franchised passenger operators. The discount reflects the reduced impact on operators' revenues where passengers receive early notice of service disruption, and is calculated in track access contracts by applying a notification discount factor (NDF). The NDF is a function of assumed levels of passenger awareness of disruption prior to travelling, and the discount is greater for earlier notification. This is because passengers who are aware of service disruption before travelling are perceived to be less disrupted and the revenue loss is assumed to be less as a result.

In preparing for the 2018 Periodic Review, ORR consulted with the rail industry on the effectiveness of Schedule 4. This identified areas for improvement, and concerns, including:

- Notification Discount Factors (NDFs) are inaccurate and may not incentivise good possession planning.
- Some stakeholders were also concerned that the regime had poor incentives with respect to avoiding cancellation of possessions once notified.

Previous studies carried out to inform the PR08 review had estimated passenger awareness of disruption ranging from 53% to 75%. In addition, ORR considered that it was important to update estimates of passenger awareness of disruption due to:

- Changes in the ways in which, and when, passengers source travel information, notably through the increasing use of internet (including via smart phones).
- Increased use of advance-purchase and other dedicated tickets.

ORR commissioned this study as part of its wider review of NDF to provide information:

- to update the understanding of passenger awareness of planned service disruption of less than 60 hours; and
- to find out how and when passengers become aware of possessions.

Methodology

A mixed methodology approach was taken.

Disrupted Travellers Survey: with people travelling over periods of disruption - those who continue to travel when services are disrupted provides information on the timing of their awareness

Online Panel survey: with rail users, focusing on those who had experienced planned disruption

Disrupted Traveller (DT) Survey

The approach taken was to identify possessions occurring in March 2017, and arrange to undertake surveys at a sample of stations where:

- Rail replacement buses were due to be operating; or
- Rail services were re-scheduled.

A self-completion questionnaire was designed to capture:

- How many of those still travelling at times of planned disruption had been aware of it in advance?
- Of those who were aware, how long in advance did they know and how had they become aware?

Including two pilot surveys, 144 shifts were undertaken, predominantly at weekends, but also including some late night disrupted services. Options for completion were offered to maximise the sample, including paper questionnaires and return envelopes, a web-link, and face to face interview where the conditions on site were suitable.

1434 responses were received for analysis.

Online Panel Survey

The ***"Research Now"*** Panel was used to survey a large sample of rail users. The Panel included screening questions to ensure respondents had used rail in the last five years, and asked a series of questions to confirm that they had experienced planned disruption. The survey (self-completion, on-line) recorded information about a planned trip, including:

- Timeline for planning, buying ticket and becoming aware of disruption;
- Source of information on disruptions;
- Actions on becoming aware; and
- Stated intentions in respect of checking for travel disruption.

Over 5000 surveys were completed. The resultant sample was weighted to NRPS for age and gender, and by frequency of rail travel.

Colour coding has been used throughout this summary and the main report, to identify which survey the results are from. Findings from the Disrupted Traveller survey are highlighted in **pink** and findings from the Panel survey are shown in **grey**.

Where appropriate, results to questions common to both surveys are presented. The larger sample size for the Panel survey provides a smaller margin of error, and allows for greater segmentation. Panel respondents include both those who continued to travel during planned disruption and those who did not; these are termed 'potential passengers'.

Understanding the Survey Samples

Disrupted Traveller Survey

- Sample restricted to those passengers who continue to travel during disruption
- Low numbers of passengers at some survey stations (possessions planned when fewer passengers, and many passengers have decided not to travel)
- Not always possible to intercept disrupted travellers due to arrangements at stations
- Hence sample size restricts analysis by sub-samples, larger margins of error than from a large sample

Online Panel Survey

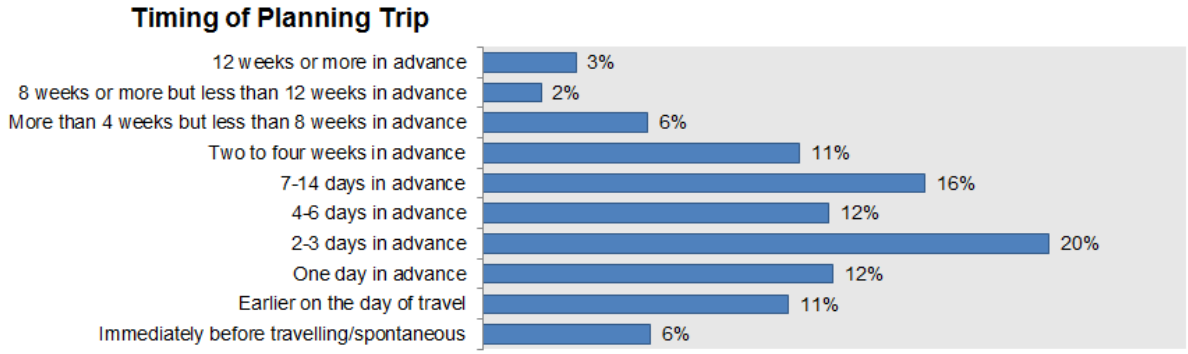
- Reliant on recall of travel during planned disruptions, may tend to be biased towards disruption events that they directly experienced, rather than changed their plans to avoid
- Respondents may not have differentiated between planned and unplanned disruption and therefore recalled disruption events that are beyond the scope of the survey
- Panel may have higher than average access to digital information sources

Survey Results

How far in advance did respondents plan their journeys?

Regular trips such as commuting trips are not 'planned' in advance in the same way as other, less regular trips. Excluding these:

- PANEL: The number of days ahead of travel that non-commuting journeys were planned varied widely; half (51%) of journeys were planned more than 4 days in advance, and 23% were planned more than 2 weeks in advance (median=5 days).
- DT: The sample produced the same median of 5 days for planning in advance.



Base: 5155 Panel Sample Potential Passengers (Weighted) EXCLUDING COMMUTERS

PANEL: 2% of 'potential passengers' (excluding commuters) planned ahead by 8-12 weeks and 3% by 12 weeks or more. This differed for some traveller groups:

- Airport Segment:
  - 3% planned 8-12 weeks ahead; and
  - 10% planned 12 weeks or more ahead.
- Make trip once a year or less:
  - 5% planned 8-12 weeks ahead; and
  - 9% planned 12 weeks or more ahead.
- Bought advance ticket for specific train:
  - 12% planned 8-12 weeks ahead; and
  - 8% planned 12 weeks or more ahead.

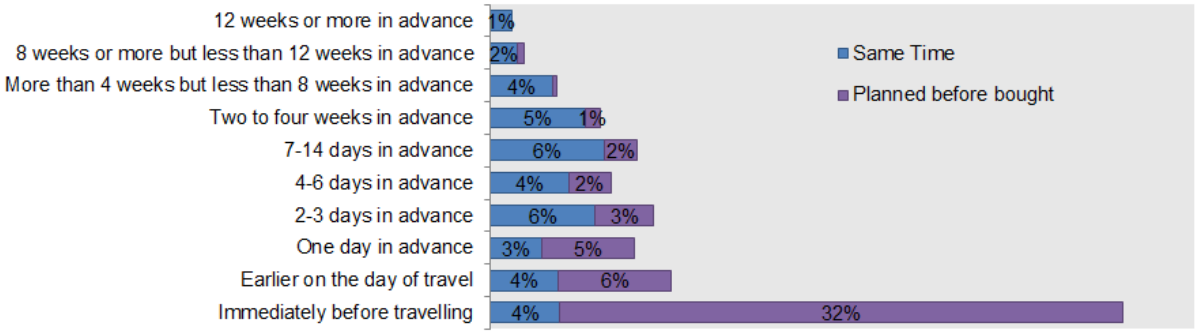
Long distance trips (over 20 miles) were planned further in advance than short trips, for example, the median planning period for long London and the South East (SE) trips was 10.0, and 5.0 for long trips elsewhere, compared with 2.5 for short trips in both regions.

How far in advance did respondents buy their tickets?

Season tickets are not generally bought with specific trips in mind. Excluding season ticket users and commuters:

- PANEL: 54% of other respondents bought tickets one day or more in advance. This proportion rose to 86% for those travelling to/from an airport.
- 41% bought tickets at the same time as planning the trip.
- Half of potential passengers bought a ticket for their journey 1.0 day in advance of travel. This median figure is lower than the mean number of days (8.4).
- DT: The sample produced the same median of 1 day for buying ticket in advance.

Timing of Buying Ticket



Base: 3229 Panel Sample Potential Passengers (Weighted) EXCLUDING COMMUTERS and SEASON TICKETS and where tickets were bought in advance of planning [1]

How far in advance did respondents find out about disruption?

- PANEL: Half of potential passengers found out about disruption day in advance of travel and half had less notice. This median figure is lower than the mean number of days (7.9).
- 32% of potential passengers found out at the same time as planning trip.
- 15% of trips were planned AFTER becoming aware of disruption (excluding commuting trips).
- DT: 33% found out when planning their trip; half found out 1 day in advance of travel.

[1] There were some instances where tickets were bought in advance of 'planning', other than for commuting and where season tickets were used. This includes several advance tickets and Pay as You Go - possibly where bought in advance of making detailed trip plans.

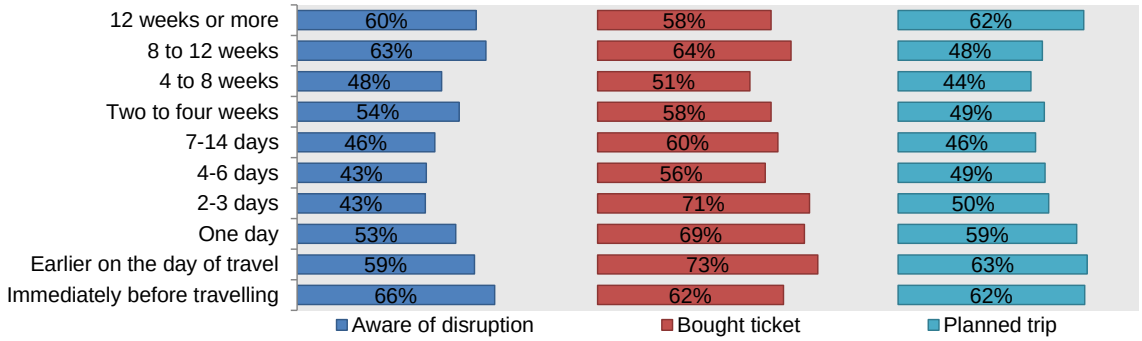
How did respondents find out about disruption?

- PANEL: 33% via information displayed at rail station.
- 10% from announcements made at stations.
- 43% had found out by some digital means:
  - 23% when checking for disruption via a website or app;
  - 8% when buying their ticket on a website or app;
  - 1% when checking train times via a website or app;
  - 6% by email alert; and
  - 5% on social media.
- 10% from other sources.
- DT: 42% found out by digital means.

When did respondents to the Panel survey find out about disruption and what did they do as a result?

- 54% continued to travel by rail as they had planned:
  - This figure was 66% for respondents only finding out on arrival at the station.

Proportion of respondents who continued to travel by timing of journey stage



"Potential passengers" identified from Panel survey

- 46% made other arrangements, of which:
  - 24% used an alternative mode;
  - 6% changed the timing of their trip to when services were running normally; and
  - 16% chose to not travel at all.

What proportion of respondents to the disrupted passenger survey was aware of disruption in advance of travel?

Of those who continued to travel during possessions of less than 60 hours duration[2]:

- 75% were aware before arriving at the station to make their trip:
  - 72% if commuting; and
  - 75% other trips.
- Proportion increased if respondents had experienced disruption on same trip previously.

By Segment

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	**All**
Proportion aware in advance	77.8%	76.3%	75.6%	68.3%	70.6%	74.6%
+ / -	4.7%	4.7%	4.4%	5.6%	12.5%	2.4%
Base	297	316	361	268	51	1311

Identified from DT survey (Those who travelled during planned service disruption of less than 60 hours)

Taking a subsample of the Panel data where it is likely to be comparable to the DT survey, the proportion that were aware before arriving at the station was slightly higher at **76%**.

The subsample was comprised of those who:

- Continued to travel when learning of the planned disruption; and
- Where the disruption was of less than 60 hours duration and at either weekends or late on weekdays.

By Segment

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	**All**
Proportion aware in advance	81.0%	78.0%	68.1%	72.3%	69.1%	76.5 %
+ / -	3.0%	3.5%	6.1%	5.5%	11.4%	2.0%
Base	657	527	221	256	63	1803

Identified from Panel survey (Those who travelled during planned service disruption of less than 60 hours)

The overall proportion is similar, and for both data samples, the London and SE long distance segment shows the highest proportion, followed by the London and SE short distance segment. Outside of London and the SE, there is greater discrepancy.

Although information on this proportion can be inferred from both the Panel and DT surveys, it is considered that the DT survey is best placed to derive this metric, given that there is certainty that the disruption encountered was unplanned.

[2] Although information on this proportion can be inferred from both the Panel and DT surveys, it is considered that the DT survey is best placed to derive this metric, given that there is certainty that the disruption encountered was unplanned, whereas there may be some doubt for the Panel survey, which in any case includes possessions of more than 60 hours in duration.

Conclusions

The surveys have provided a wealth of information on passenger awareness in relation to the timing of planning, and buying tickets.

The key factors that influenced awareness levels were:

- Ticket type:
  - Higher awareness where advance tickets were used
- Segment:
  - Highest in London and the South East, especially for longer trips (over 20 miles)

Around one in twenty non-commuting trips were planned more than 8 weeks in advance, meaning that some passengers would benefit from information on disruptions well ahead of this. This is especially true for trips with an Airport destination.

A longer period of advance notice allows more people time to consider other arrangements, especially for trips such as shopping or leisure. The period of advance notice correlates positively with satisfaction; just 33% stated that they were satisfied when they had only just become aware of disruption, compared with 60% who had more than 4 days' notice.

Of those who only found out about disruption immediately before travel, 78% found out by non-digital means (mainly seeing information at the station). This contrasts with 39% of those finding out earlier that day, via digital means. This may suggest that checking digitally reduces the risk of just turning up, but the data does not allow checking whether there is a relationship between the use of digital means and propensity to check in advance.

The use of digital means as a source of information tended to decrease as the period in advance increased. For example, only 19% of respondents who found out 8-12 weeks in advance did so via digital methods. Similarly, only 26% of respondents who found out 12 weeks or more in advance did so using this method.

By market segment, the proportion becoming aware through digital sources was lower outside London and the SE, at 32% for short distance trips and 35% for long distance trips, significantly lower than trips to/from London and the SE (50% long distance 47% short).

The proportion becoming aware through digital sources was much higher where the tickets were advance off peak (54%).

Of disrupted passengers who continued to travel, 75% were found to be aware of the disruption prior to travelling. This is likely to be an underestimation, as it does not include passengers that were aware of disruption prior to travelling and who subsequently changed their travel plans.

From the Panel survey, the proportion of the equivalent sample that was aware (i.e. those who continued to travel during planned disruption of more than 60 hours duration) was slightly higher, at 76%.

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1 Introduction

1.1 Rationale for Research

Both passengers and freight customers care about disruption to their service. It is important that Network Rail and train operators are incentivised to work in the best interests of passengers and customers by minimising disruption, or providing appropriate notice to passengers so that they can adequately plan around the disruption.

Schedule 4 of the franchised passenger operator track access contract compensates train operators for the impact of planned service disruption. This principally occurs as a result of engineering possessions. Compensation is intended to cover fare revenue losses and certain costs, such as those associated with running replacement buses.

In preparation for the 2018 Periodic Review of Network Rail (PR18), in November 2015 ORR wrote to the industry seeking views on the effectiveness of Schedule 4, including aspects that are working well, the scale of any potential problem, and what the priority areas for improvements should be.

Respondents tended to support the regime but set out some specific areas for possible improvement. These included incentives created by notification discount factors (NDFs) as part of the Schedule 4 regime. Stakeholders expressed concern that NDFs may not accurately reflect customer needs and may not incentivise good possession planning. Some stakeholders were also concerned that the regime did not provide appropriate compensation for cancelled possessions.

As part of its review of charges, RDG developed an option for reforming NDFs. In the option assessment, the consultants noted that ***"the viability of the option critically rests on how much difference early notifications make in reducing the disruptive impact of possessions and whether reducing discounts will alter Network Rail's possessions planning processes".***

The level of assumed passenger awareness of disruption has been estimated in a number of studies. In 2006, SDG for PDFH[3] estimated that 53% of passengers were aware of possessions before travelling. Another study by NERA for ORR[4] estimated awareness levels of 75%.

The level of assumed passenger awareness has possibly changed due to:

- Increasing use of the internet and very high levels of smartphone ownership, which has transformed how passengers now source travel information; and
- The significant increase in the use of advance-purchase and other dedicated tickets.

ORR therefore required more information on how much difference early notification makes in reducing the disruptive impact of possessions on passengers. Research was commissioned to provide data to inform Schedule 4 policy on incentivising Network Rail to notify operators sufficiently early regarding planned service disruption.

Together with other information from industry, for example regarding the time operators need to notify passengers, this will allow ORR to update the notification discount factors in Schedule 4 if it is concluded that it was beneficial do so as part of PR18.

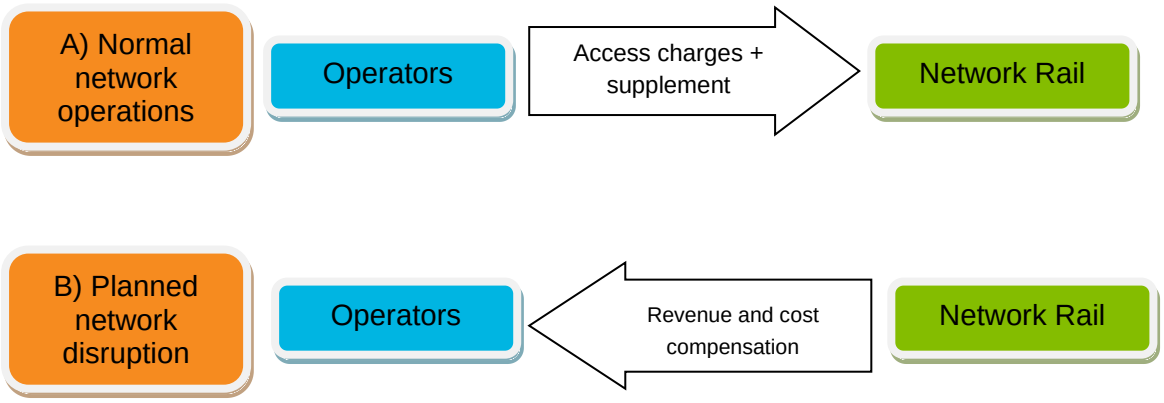
3 SDG, 2006, 'The Demand effect of Possessions'.

4 NERA 2007"Cost Benefit Appraisal of EEA Possession Strategy"

1.2 Background

It is important that Network Rail and train operators are incentivised to work in the best interests of passengers and customers by minimising disruption, or providing appropriate notice to passengers so that they can adequately plan around the disruption.

In return for the payment of an access charge supplement, franchised passenger operators currently receive formulaic revenue and cost compensation for all possessions, but with additional compensation available depending on the level and impact of disruption.



The level of compensation currently depends on a number of factors;

- The duration of possession (e.g. single possession less than 60 hours (i.e. Type 1) / up to 120 hours / more than 120 hours);
- The period of notice of service disruption and hence level of passenger awareness of disruption prior to travelling (e.g. 22 weeks in advance, day before); and
- Market segmentation (e.g. inter-urban, long distance, commuting, non-commuting).

1.2 Objectives

The aim of this study was to update the understanding of passenger awareness of planned service disruption of less than 60 hours; including how and when passengers become aware of possessions using market research to derive robust quantitative estimates regarding the timing and of level passenger awareness of planned disruption.

1.3 Structure of Report

Following this introduction we describe our methodologies to meet the objectives in Section 2. Section 3 presents results of the analysis of data collected on behaviour at periods of disruption.

An analysis of possible future behaviour in the event of disruptions is presented in Section 4.

Appendices to the report present further information on the fieldwork programme undertaken, field issues encountered and lessons learned, as well as tabulations of results.

Throughout this report, colour coding is used to denote which of the two survey types conducted is under discussion: *Disrupted Travellers Survey in pink* and *Online Panel survey in grey.*

2 Methodology

2.1 Introduction and overview

In this section we present our approach to data collection to meet the project objectives of:

Providing understanding of the level of passenger awareness of planned service disruption before travelling, including how and when passengers become aware of possessions

A mixed methodological approach was applied to meet the study objectives. While conducting research amongst those who continue to travel when services are disrupted provides information on the timing of their awareness, this would not reveal how many have made alternative arrangements on becoming aware of disruption. Therefore to address this requirement the study included two phases of primary research:

- ***Disrupted Travellers Survey: with people travelling over periods of disruption*** Those who continue to travel when services are disrupted provides information on the timing of their awareness
- ***Online Panel survey: with rail users, focusing on those who had experienced planned disruption***

2.2 Questionnaire Design

Disrupted Travellers Self-Completion Questionnaire

The objective of the survey was to quantify how many of those still travelling at times of planned disruption had been aware of it in advance, and of those who were aware, how far in advance did they know and how had they become aware.

The questionnaire content was designed for self-completion by rail/replacement bus passengers. The final questionnaire agreed with the client, and notes on development and testing can be found in Appendix A. The topics included:

- Date and time of survey/travel;
- Leg of travel, trip origin and destination, and where disrupted;
- Nature of disruption;
- Frequency of making trip, and use of rail in general;
- Impacts of the disruption;
- Satisfaction with information and arrangements;
- Type of ticket used;
- Timing of planning trip, buying ticket and becoming aware of disruption;
- Sources of information about disruption;
- Alternative modes available;
- Frequency of encountering disruption;
- Impacts on future rail travel; and
- Demographics (age, gender, internet access, car ownership).

Panel Questionnaire

The objective of the survey was to identify the propensity to check for travel disruption when making a rail journey, propensity to choose not to travel and timelines for planning, buying tickets and becoming aware of disruption.

The final questionnaire as agreed with the client can be found in Appendix B. The topics included:

- Frequency of encountering disruption – both planned and unplanned;
- Demographics (age, gender, region of residence, internet access, car ownership);
- Time since last used rail;
- For most recent occasion of planned disruption:
    - Course of action taken;
    - Time periods affected;
    - Nature of disruption;
    - Timing of planning trip, buying ticket and finding out about the disruption;
    - Source of information on disruption;
    - Reason for travel and frequency of making trip; and
    - Trip origin and destination, and where disrupted.
- Rail travel patterns in general;
- Propensity to check for disruption for range of times of travel, sources used, and timing;
- Hypothetical scenarios to establish likely behaviours for weekend travel behaviour at times of disruption; and
- Satisfaction with disruption and qualitative comments.

2.3 Fieldwork

Disrupted Travellers Survey

The first stage of the planning process was a review of the planned disruption possessions in place over the proposed fieldwork period (over March 2017) using the National Rail Enquiries website. This showed typically ten potential engineering possessions on weekdays, with the possessions of less than 60 hours of interest impacting on very late or very early rail services, and typically 20-30 possessions over the weekend days.

Selection criteria were applied to ensure a mix of:

- Possessions of less than 60 hours;
- Route types (e.g. Airport, urban/inter-urban);
- Timing (weekday/weekend/overnight);
- Severity of disruption (e.g. many services, potentially large numbers of affected customers to minor disruption);
- Replacement bus services provided; and
- Diversions.

Through the fieldwork period, several stations were affected by engineering works over several weekends, which resulted in some being surveyed several times. The majority of

the weekday possessions had only one or two disrupted services, very late at night when few passengers were expected. The fieldwork effort was therefore primarily targeted at weekends to yield greater numbers of respondents.

Ultimately, inclusion in the sample depended on arrangement of authorisations to work at stations, requiring liaison, via ORR with a large number of TOCs.

The questionnaire content was designed for self-completion, with the option of completing on paper or on line, supported by face to face interviews where passengers were at stations for sufficient time in advance of bus/train departures. This approach sought to maximise the number of responses achieved.

A total of 140 shifts had been allowed for; 142 were actually completed. Details of the locations, times and dates and number of questionnaires returned by survey shift are included in Appendix C.

- Of the 1434 responses received and processed for analysis:
- 962 questionnaires were completed by travellers using freepost option;
- 206 were completed online; and
- 266 were completed via face to face survey.

Weighting procedures are shown in Appendix F and additional information relating to the fieldwork approach for the Disrupted Travellers Survey can be found in Appendix G

Panel Survey

The target sample size for the Panel survey was 5000 rail users; this was set to ensure that sufficient numbers per segment would exist when the data was broken down into subsets (different markets and geographies).

The **Research Now**'s research panel was used to conduct the survey. The survey went live on 8th March 2017 and was completed by 17th March. The data was checked and cleaned, resulting in a small number of records being discarded as the rail travel described was not in the UK. The final sample size was 5121, which included the pilot responses.

2.4 Data – notes for interpretation

Both the Panel and DT surveys recorded information for a trip affected by disruption. Using the origin and destination stations given, the trips were coded to one of five **market segments**; namely:

- London and South East Long Distance (origin or destination in London or South East (SE), distance over 20 miles);
- London and SE Short Distance (origin or destination in London or SE, distance 20 miles or less);
- Not London and SE Long Distance (neither origin nor destination in London or SE, distance over 20 miles);
- Not London and SE Short Distance (neither origin nor destination in London or SE, distance 20 miles or less); and
- Airports (origin or destination station is airport station).

In a small number of cases, the information was missing or illegible for one or more trip origin/destination. This reduced the number of cases available for analysis when results were broken down by market segment.

Note that there are some trips recorded by respondents with a stated purpose of 'to/from airport' but airport stations were recorded, hence the number of cases shown for airports may differ when broken down by trip purpose, as opposed to by segment.

In both surveys, questions relating to the timing of planning, buying tickets and becoming aware of disruption were asked, on a nominal scale. The results from this have been converted to a number of days, to allow the calculation of means and medians for comparison across sub-samples of the data:

Response	*Number of Days*
Immediately before travelling/spontaneous	0
Earlier on the day of travel	0.5
One day in advance	1
2-3 days in advance	2.5
4-6 days in advance	5
7-14 days in advance	10
Two to four weeks in advance	21
More than 4 weeks but less than 8 weeks in advance	42
8 weeks or more but less than 12 weeks in advance	70
12 weeks or more in advance	100

The Panel survey included a number of questions to establish whether respondents had ever encountered planned disruption, by asking a series of questions about different possible types of disruption. Of the 5121 cases, 338 had no experience of planned disruption, hence were routed past some of the survey questions by the survey script.

2.5 Limitations of the data

A number of issues arose in the course of the fieldwork which should be considered in the interpretation of the survey results, as follows:

Disrupted Travellers Survey

- The sample of possessions was limited by those in place over the fieldwork period. It is not known to what extent these were representative of all possessions over a year.
- Some of the possessions covered in the survey had been ongoing for some weeks in advance of the survey. Long running disruption, even where categorised as less than 60 hours in duration is likely to give rise to higher levels of awareness for travellers.
- Self-completion surveys, by their nature are self-selecting. Response rates were lower than expected compared with our previous experience of rail surveys. Hence the resultant sample size limits the degree to which data can be broken into sub groups and there is potential bias in responses.
- There were often very few passengers at the surveyed stations. This potentially reflects high levels of awareness of the planned disruption and subsequent propensity to change behaviour. It is also indicative of the fact that possessions are normally planned for times when fewer passengers will be affected, which ultimately meant the survey had a much smaller sample size than anticipated.

- The survey was restricted to only those travelling during the planned disruption and therefore omitted the majority of passengers that actually changed their behaviour, e.g. those that did not to make journey at all or opted to travel on a different day or at a different time. It would however, have picked up some behavioural changes, e.g. passengers that allowed more time for their journey.

Panel Survey

- The survey relied on passengers' recall of travel during planned disruptions. This may not have been recent and recall could be imperfect. Also, recall may tend to be biased towards disruption events they directly experienced, rather than changed their plans to avoid.
- Respondents may not have differentiated between planned and unplanned disruption and therefore recalled disruption events that were beyond the scope of the survey.
- In spite of weighting, Panel respondents may be atypical in their access to digital information sources.

Other issues affecting the fieldwork that may inform any future such surveys with disrupted travellers are discussed in Appendix G.

Both data sets

The samples from each survey produced different results for metrics such as timing of awareness, as there were a number of variables that were of influence that could not be controlled for, including:

- For how long the scheme referred to had been on-going; and
- How far in advance the scheme was announced and whether it was subject to revisions.

2.6 Weighting of data

A number of questions were asked of both Panel respondents and respondents travelling at times of disruption. These included gender, age, number of cars, vans in household, access to internet, on phone and at home; and satisfaction with how the disruption to the journey was communicated and managed.

Appendix D presents a comparison of the sample profiles for these questions. For the Panel sample, this is broken down by those who said they continued to make their journey in the event of disruption (as comparable to the Disrupted Traveller (DT) sample).

The Panel sample includes a much higher proportion of males (52%) compared with the Disrupted Traveller (DT) sample (42%). The age range is less diverse for the Panel sample, with more in the 25-44 age bracket; however, the mean age for both sample groups is the same (43).

The Panel sample has higher levels of car ownership, and this proportion among the Panel sub-sample who did not continue to travel during disruption higher still.

Unsurprisingly the Panel sample had greater access to the Internet. Half of both samples said they were satisfied with how the disruption to their journey was communicated and managed.

Analysis of the Panel sample of rail travellers showed that the age and gender profile was skewed towards males and younger people, when compared with National Rail Passenger Survey (NRPS) data. Weights were applied such that the Panel data more closely matched NRPS for age and gender.

A further weight was also applied to include frequency of rail travel, to take into account that some passengers were more frequent rail travellers. All figures shown for the Panel survey in this section of the report are for weighted data.

Details of the weighting can be found in Appendix F. Since the DT survey only included people travelling during planned disruption, it was not appropriate to weight to NRPS proportions. No weights were applied to the DT sample.

3 Survey Results

3.1 Introduction

In the following sections, we explore:

- How far in advance did respondents plan their journeys and buy their tickets?
- How far in advance and by what means, did respondents find out about disruption?
- When did respondents find out about disruption and what did they do as a result?

In the analysis which follows, results are drawn from each survey as appropriate. The source survey and number of cases available for analysis is shown beneath each chart. In addition, colour coding has been used to identify which survey the results are from. Findings from the *Disrupted Traveller* survey are highlighted in *pink* and findings from the Panel survey are shown in grey.

The size of some of the sub-samples is small and hence the margins of error for metrics derived at these levels may be high. Samples consisting of fewer than 100 cases should be treated with caution.

For the Panel survey, where the analysis is of the sample including both those who made other plans on becoming aware of planned disruption as well as those who continued to travel, the sample is referred to as **'potential passengers'**. Where the analysis is of just those who continued to travel, we refer to **'travellers'**. Data for the Panel is weighted as described in Chapter 2.

Tables in Appendix E provide further information on responses.

3.2 How far in advance did respondents plan their journeys and buy their tickets?

As the DT survey included only those who continued to travel at times of disruption, the following results on how far in advance of travel journeys were planned and tickets were bought are drawn primarily from the Panel survey data.

The timelines for planning trips and buying tickets vary widely, with some being planned weeks in advance and others being more spontaneous. Regular trips such as commuting trips have no pre-planning as such, and season tickets are not bought with specific trips in mind and are therefore excluded from the analysis in Table 3.1 below:

- Other than commute trips, half of journeys were planned 5 or more days in advance.
- Other than season tickets, half of tickets were bought more than one day in advance.

Table 3.1 Number of days in advance for planning and buying tickets

Number of days in advance of travel that potential passengers	Median Days	Mean Days	Base
➢ plan their journeys (excluding commuters)	5	12.5	5288
➢ buy tickets (excluding season tickets and commuters)	1	8.4	3799

Base: Panel Sample Potential Passengers (Weighted)

The median number of days for planning was also 5 for non-commuters in the Disrupted Traveller survey, while the mean was slightly longer at 17 days, For buying tickets, the median value also matched (1) with a slightly longer mean of 9.0.

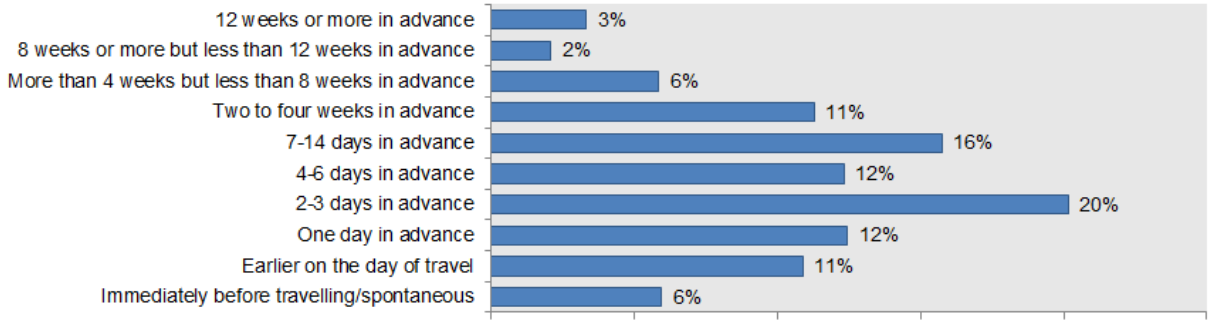
Planning Trips

The number of days ahead of travel that non-commuting journeys are planned varied widely; 51% of journeys were planned more than 4 days in advance, and 23% were planned more than 2 weeks in advance.

Relatively few were planned a long way in advance. As shown in Figure 3.1 5% of trips were planned more than 8 weeks in advance, including 3% more than 12 weeks in advance. Of those who planned more than 8 weeks in advance:

- Almost half (49%) were making leisure trips;
- 17% were visiting friends or relatives;
- 65% were making journeys less frequently than monthly; and
- Over a quarter used Advance tickets.

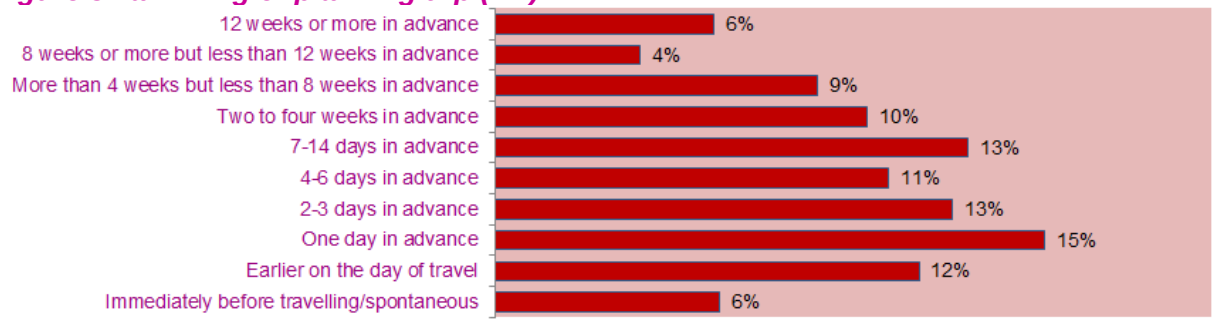
Figure 3.1 Timing of planning trip (Panel)



Base: 5155 Panel Sample Potential Passengers (Weighted) EXCLUDING COMMUTERS

The profile of the time line was similar for non-commuters in the Disrupted Traveller survey, as shown in Figure 3.1a.

Figure 3.1a Timing of planning trip (DT)



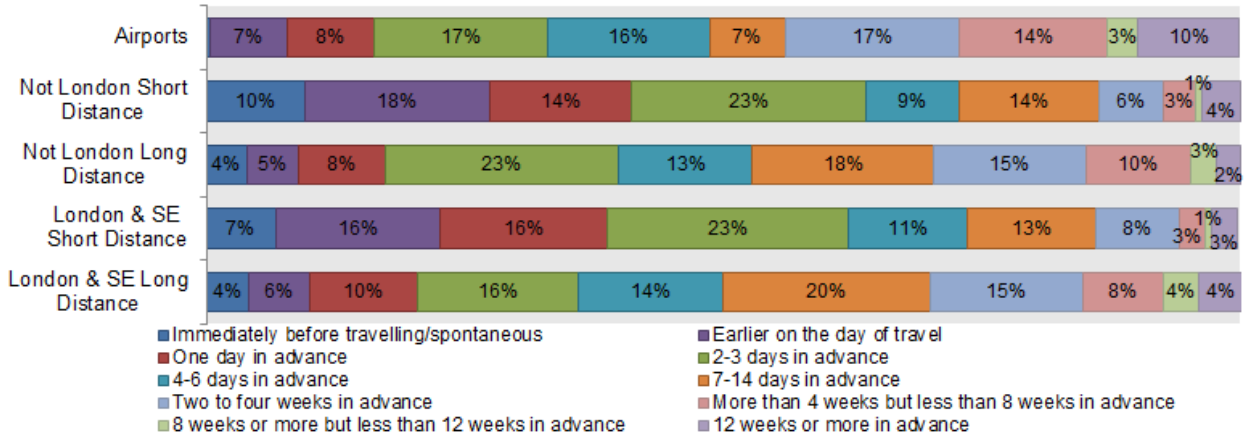
Base: 1165 DT Sample EXCLUDING COMMUTERS

Note, the smaller sample size for the DT survey means that margins of error are larger for this sample, hence the Panel survey provides a more robust result. The DT data is not appropriate for further segmentation.

The timing and degree of forward planning varied by: journey purpose; market segment; and ticket type used.

Note that commuters are not included in the following analysis of Panel data.

Figure 3.2 Timing of planning trip by market segment (excluding commuters)



	London & SE > 20 miles	London & SE <= 20 miles	Not London > 20 miles	Not London <= 20 miles	Airports
Base	**1665**	**1609**	**800**	**671**	**169**
Mean number of days	16.1	8.4	14.5	9.4	23.4
Median number of days	10.0	2.5	5.0	2.5	10.0

As might be expected, Airport segment trips had the longest planning period (23 days mean and 10 days median), with none of these being spontaneous, and just 7% planned on the day. One in ten were planned 12 weeks or more in advance, twice as many as for non-Airport trips (see Appendix E for more details).

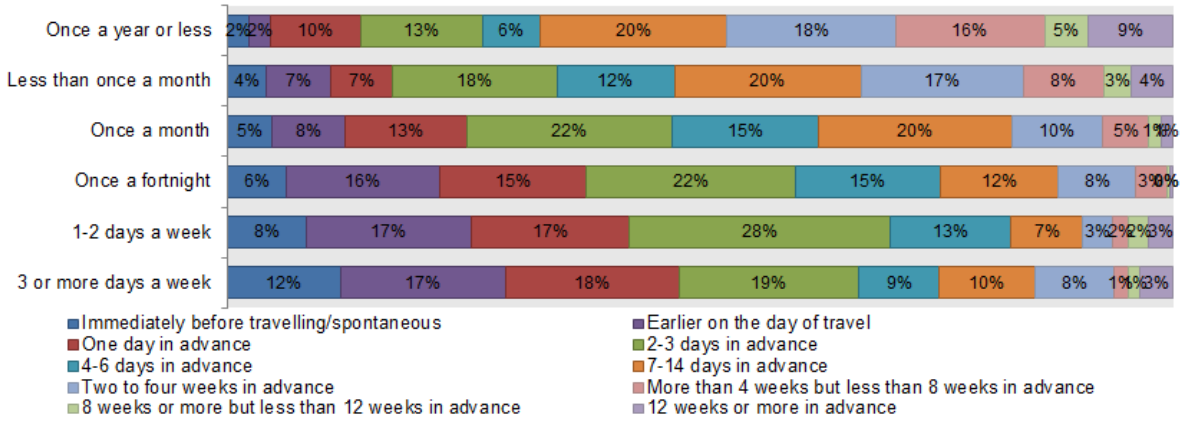
The pattern of planning was similar for long and short distance trips, regardless of origin/destination area, as shown in Figure 3.2, although the median number of days for planning in advance of travel was 10 for London and the South East (SE) Long distance compared with 5 for trips outside the region.

Those potential passengers with advance tickets planned a median of 21.0 days in advance, with 20% planning more than 8 weeks ahead.

The planning period increased for those making an infrequent trip; those who travelled less than once a month planned a median of 10.0 days in advance, 5.0 days for those who travelled once a month and 2.5 days for those who travelled more often.

Frequent travellers were more likely to undertake spontaneous travel; 29% of those who travelled more than 3 times a week by rail planned their trips on the day of travel, as shown in Figure 3.3.

Figure 3.3 Timing of planning trip by frequency of making trip



Base: 3 or more days a week, 678 1-2 days a week, 734 Once a fortnight, 786 Once a month, 983 Less than once a month, 1442 Once a year or less 532

Panel Sample Potential Passengers (Weighted) EXCLUDING COMMUTERS

Further analysis relating to journey planning can be found in tables E1, E2 and E3 in Appendix E.

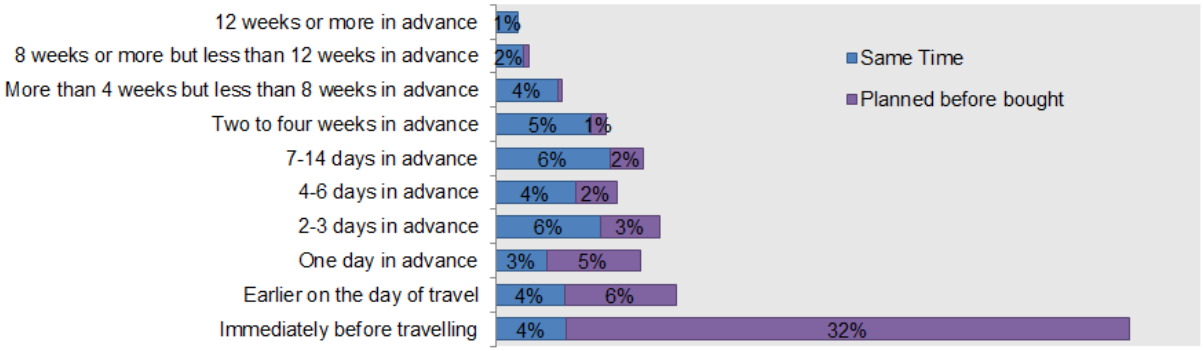
Buying tickets

The propensity to buy tickets in advance of travel also varied by journey purpose, market segment and ticket type used.

Note that commuters and season ticket holders are not included in the following analysis.

As Figure 3.4 shows, more than a third of tickets (36%) were bought immediately before travel, although most of these trips had been planned before this point in time. Just 1% of tickets were bought 12 weeks in advance and 2% 8-12 weeks in advance.

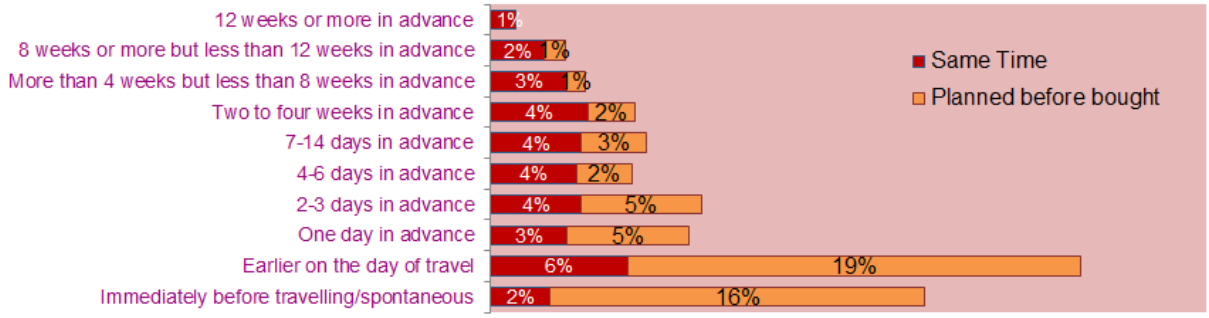
Figure 3.4 Timing of buying tickets (excluding season tickets) Panel



Base: 3229 Panel Sample Potential Passengers (Weighted) EXCLUDING COMMUTERS and SEASON TICKETS and where tickets were bought in advance of planning

The profile of the time line for planning and buying tickets for the Disrupted Traveller survey is shown in Figure 3.4a. While broadly similar, there are differences for those trips planned only a short time before travel.

Figure 3.4a Timing of buying tickets (excluding season tickets) (DT)



Base: 1060 DT Sample EXCLUDING COMMUTERS and SEASON TICKETS and where tickets were bought in advance of planning

Note, the smaller sample size for the DT survey means that margins of error are larger for this sample, hence the Panel survey provides a more robust result. The DT datais not appropriate for further segmentation.

Two fifths (41%) of potential passengers bought their tickets at the same time as they were planning their journey.

Over half (51%) of those planning business trips bought tickets at the time of planning, and just 36% did this for shopping trips.

There were some instances where tickets were bought in advance of 'planning', other than for commuting and where season tickets were used. This includes several advance and Pay as You Go tickets - possibly where bought in advance of making detailed trip plans.

Half of potential passengers bought a ticket for their journey 1.0 day in advance of travel. This median figure is lower than the mean number of days (8.4).

The median number of days for buying tickets for trips of 20 miles or less was 0, and 2.5 for trips of more than 20 miles, regardless of region.

For London and SE Long Distance trips, 62% had been bought at least one day in advance of travel, with this proportion rising to 71% for Airport trips and long distance trips outside London & the SE. For shorter distance trips, 30% had been bought at least one day in advance of travel for London and SE trips, similar to the 26% for outside the region.

By market segment, 16% of tickets for Airport trips were bought before planning, higher than for other segments:

- London & SE > 20 miles 6%;
- London & SE <= 20 miles 7%;
- Not London > 20 miles 7%; and
- Not London <= 20 miles 2%.

More than three quarters (77%) of those travelling on advance tickets bought when planning their trip and 14% bought afterwards. Conversely, 63% of those travelling with Pay as You Go tickets bought tickets after planning, typically 8 days after. This is detailed in Table 3.2.

Table 3.2 Timing of planning trip and buying ticket

Ticket Type		Plan before buying	Buy at same time as plan	Buy before planning	Base
Anytime day single or day return	Row %	63%	32%	5%	767
	Days between	10	0	11	
Anytime return	Row %	52%	41%	8%	708
	Days between	11	0	18	
Pay as you go - Oyster / contactless card	Row %	63%	28%	9%	317
	Days between	8	0	30	
Off-peak/super off-peak single or day return	Row %	56%	38%	6%	491
	Days between	7	0	13	
Off-peak/super off-peak return	Row %	57%	38%	4%	444
	Days between	12	0	9	
Advance (specific train)	Row %	14%	77%	9%	348
	Days between	19	0	17	

Panel Sample Potential Passengers (Weighted) EXCLUDING COMMUTERS. "Days between" figures shown are MEANS

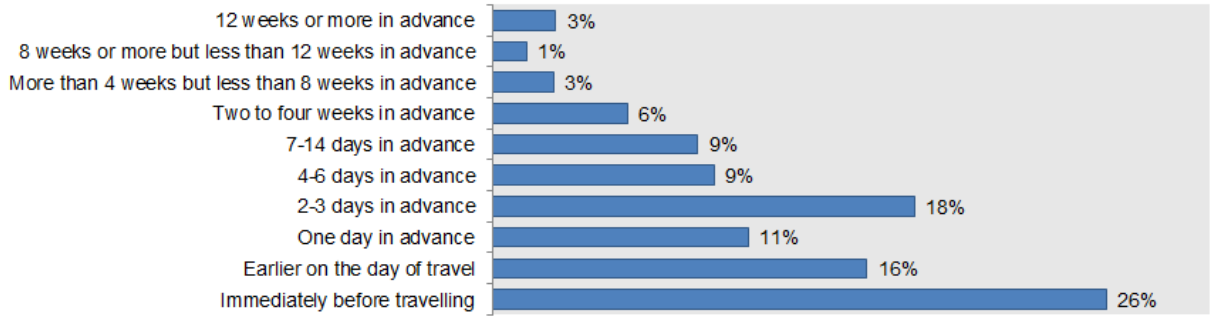
Further analysis relating to buying tickets can be found in tables E4, E5, E6 and E7 in Appendix E.

3.3 How far in advance and by what means did respondents find out about disruption?

As the DT survey included only those who continued to travel at times of disruption, the following analysis on how far in advance of travel they became aware of disruption is drawn primarily from the Panel survey data.

As Figure 3.5 shows, 26% of respondents had become aware of disruption immediately before travel, and 22% more than 7 days in advance.

Figure 3.5 Timing of awareness (Panel)



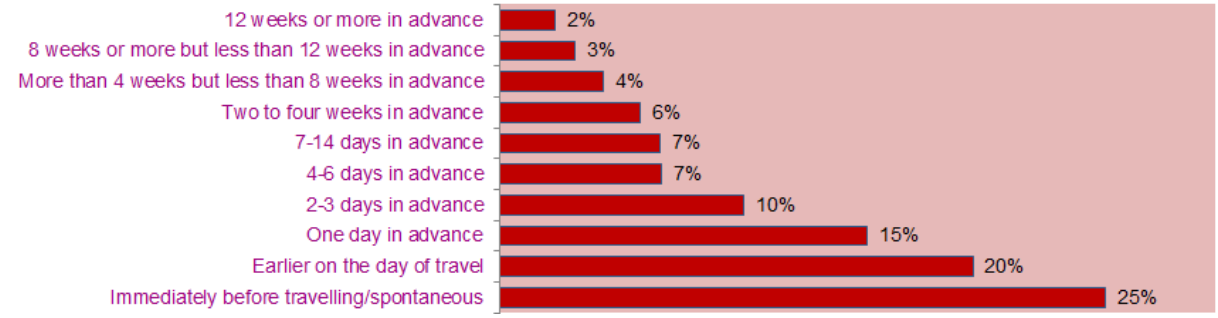
Base: 9290 Panel Sample Potential Passengers (Weighted)

Half of potential passengers found out about disruption 1 day in advance of travel and half had less notice. This median figure is lower than the mean number of days (7.9).

The profile of the time line for becoming aware of disruption for the Disrupted Traveller survey is shown in Figure 3.5a and is broadly similar.

Of Disrupted Travellers, half found out about disruption 1 day in advance of travel. This median figure is lower than the mean number of days (9.1).

Figure 3.5a Timing of awareness (DT)



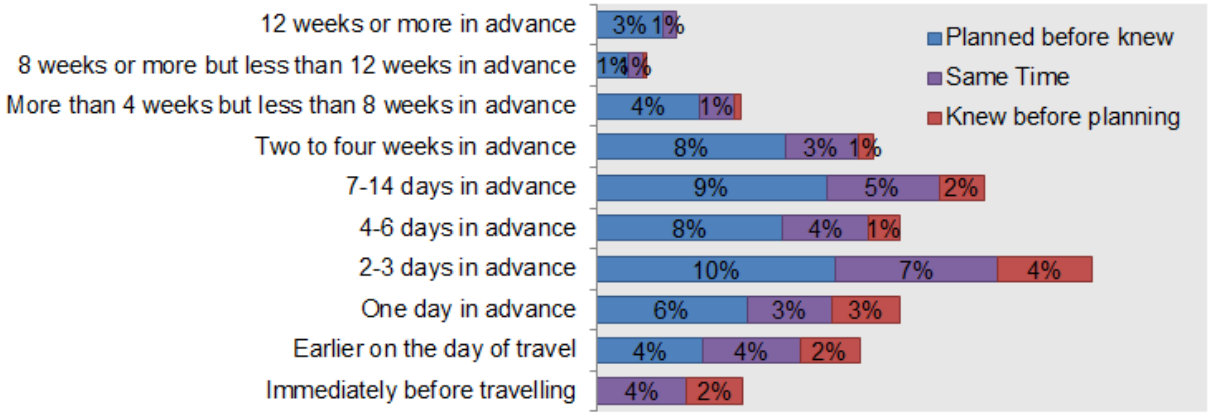
Base: 1060 DT Sample EXCLUDING COMMUTERS and SEASON TICKETS and where tickets were bought in advance of planning

Almost a third (32%) of potential passengers found out about disruption at the same time as they planned their trip. Slightly fewer, 29% found out when buying their ticket.

Of Disrupted Travellers, 33% found out about disruption at the same time as planning their trip, and 42% found out at the same point in time as buying their tickets.

Of those who planned 12 weeks in advance (excluding commuters), four fifths had planned in advance of finding out, and none planned after knowing. Relatively few trips were planned once disruption was known about; 15%. This is illustrated in Figure 3.6.

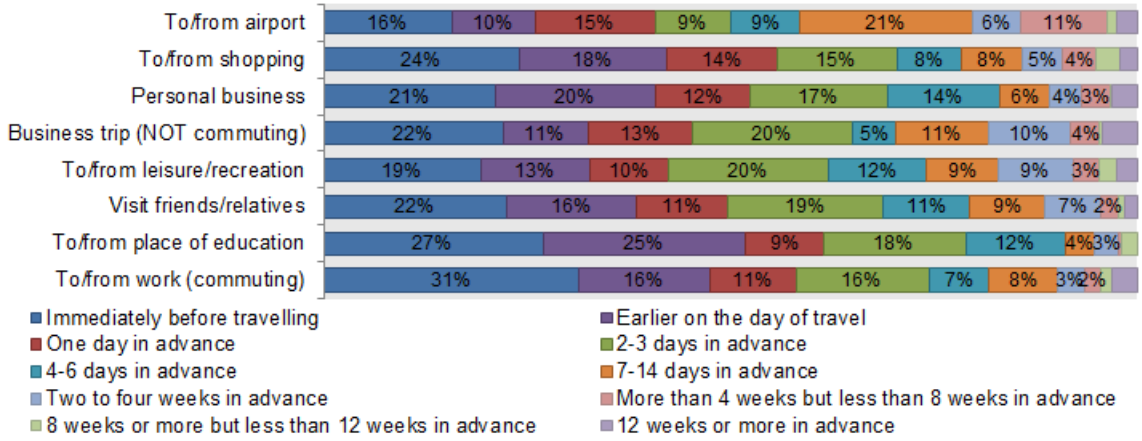
Figure 3.6 Timing of Planning and awareness



Base: 5122 Panel Sample Potential Passengers (Weighted) EXCLUDES COMMUTERS

The length of time that respondents FIRST found out about disruption to their rail service varied by journey purpose as Figure 3.7 illustrates: 50% of those travelling to or from airports knew more than 4-6 days in advance.

Figure 3.7 Timing of Awareness by journey purpose

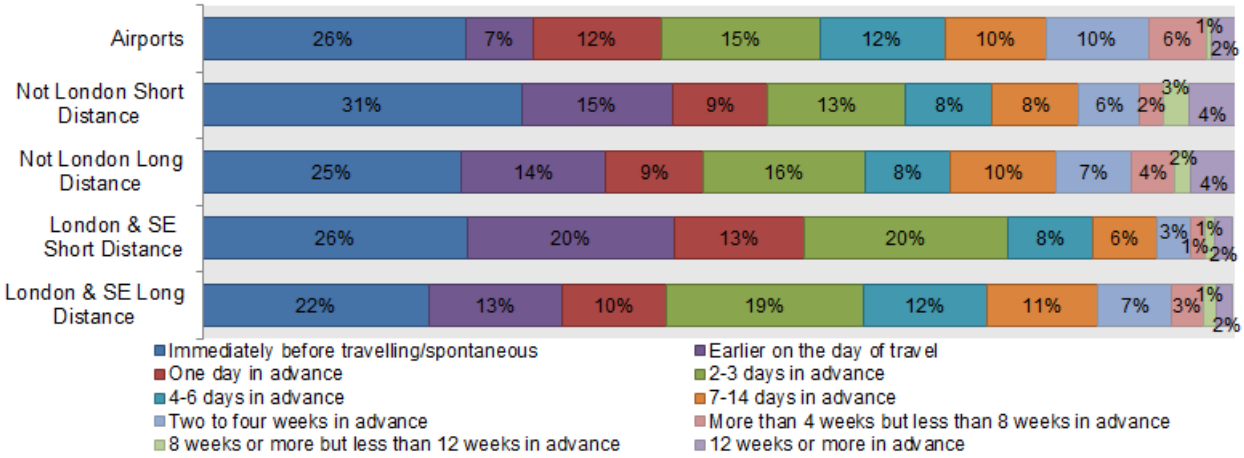


Base: To/from work (commuting) 4067, To/from place of education 272, Visit friends/relatives1662, To/from leisure/recreation 2012, Business trip (NOT commuting) 405, Personal business 398, To/from shopping 342, To/from Airport 105.
Panel Sample Potential Passengers (Weighted)

More than a quarter of all potential passengers found out about disruption just prior to intended travel, and a further 16% found out earlier that day. Compared with the 53% of commuters who found out about disruption before the day of travel, 63% did so for other journeys. For non-commuting journeys, the proportion that arrived at the station unaware of disruption was 21%.

By segment, awareness in advance was notably higher for trips of less than 20 miles, with the median number of days being 1, compared with 2.5 for long distance and airport trips. Awareness in advance of travel was lowest for short trips outside London and SE, where 69% did not know in advance of travel, and highest for long distance trips with a trip end in London or SE, at 78%, as shown in Figure 3.8..

Figure 3.8 Timing of Awareness by market segment



	London & SE > 20 miles	London & SE <= 20 miles	Not London > 20 miles	Not London <= 20 miles	Airports
Base	**2642**	**2892**	**1301**	**1734**	**254**
Mean number of days	8.1	5.0	10.9	11.0	11.7
Median number of days	2.5	1.0	2.5	1.0	2.5

Those who planned to travel with advance tickets knew a median of 2.5 days in advance, with 27% of these knowing more than two weeks ahead of travel. Those with Pay as You Go tickets knew the closest to day of travel; (0.5 day), with almost half (49%) learning on the day of travel.

Those who travelled infrequently by rail were more likely to find out about disruption further in advance than those who travel more regularly; just 17% of those travelling less than once a month found out immediately before travelling and 13% earlier on the day (median 2.5 days) while the majority of those who travelled less frequently tended to find out earlier.

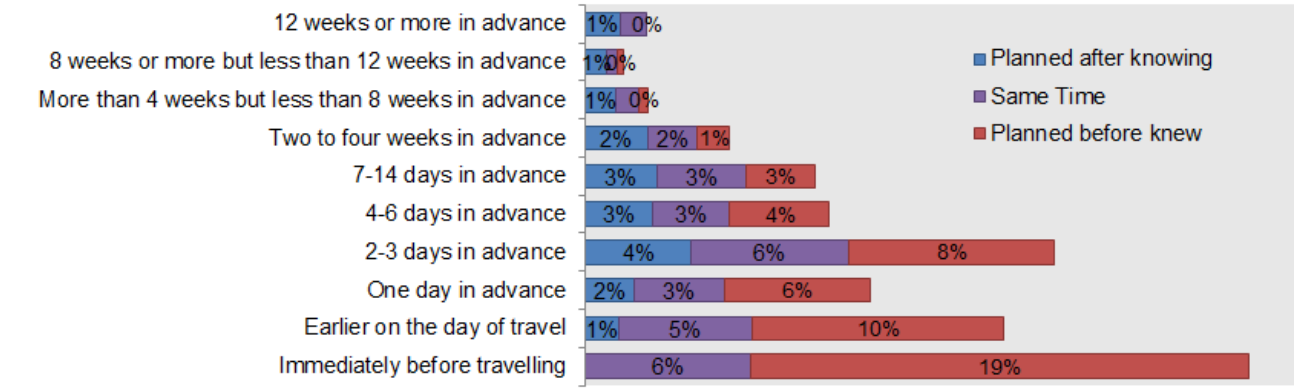
Further analysis relating to timing of planning and awareness can be found in tables E8, E9, E10, E11, E12, E13 and E14 in Appendix E.

Apart from commuters, most potential passengers: planned; then bought tickets; then found out about disruption. The timing of planning and buying trips was close for most trips, but planning was significantly further in advance for Airport trips, and less than the period for buying tickets for commuters.

Three-quarters of potential passengers knew before arriving at the station of the disruption (70% of commuters, 79% other journeys). For the 25% of trips where disruption was known only immediately before travel, most (75%) had been planned in advance.

Disruption was known about 12 weeks or more in advance for just 2% of journeys, and 1% between 8 and 12 weeks in advance. This is shown in Figure 3.9.

Figure 3.9 Timing of Awareness

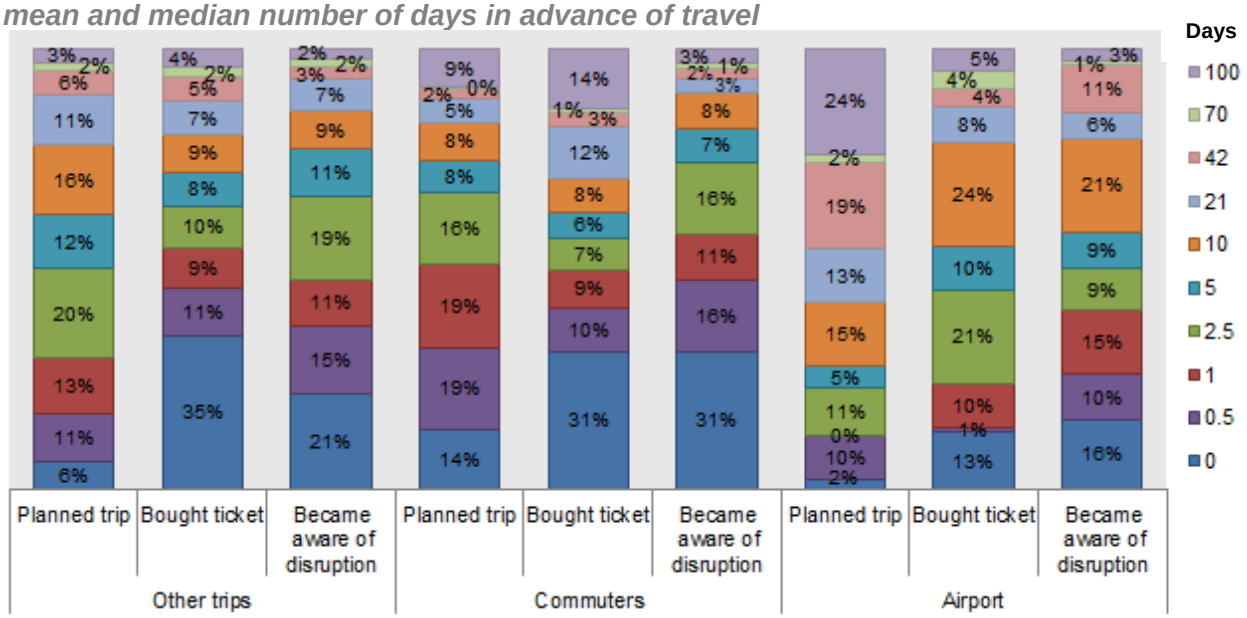


Base: 8783 Panel Sample Potential Passengers (Weighted)

Figure 3.10 shows the number of days in advance of travel for planning, buying tickets and becoming aware of disruption for airport trips, commuting trips and other purpose trips. Both the mean and median number of days are shown for information.

Airport trips were planned a long way in advance of buying, with little difference between buying and becoming aware of disruption. Other non-commuting trips were planned only shortly before buying tickets (median of 2.5).

Figure 3.10 Sequence of planning, buying tickets and becoming aware of disruption – mean and median number of days in advance of travel



Days	Other trips Base=5117			Commuters Base=4068			Airport trips Base=106		
	Planned trip	Bought ticket	Became aware	Planned trip	Bought ticket	Became aware	Planned trip	Bought ticket	Became aware
Median	5.0	1.0	2.5	1.0	2.5	1.0	21.0	5.0	5.0
Mean	11.9	11.2	8.1	12.9	19.3	7.4	38.0	14.6	12.1

Panel Sample Potential Passengers (Weighted)

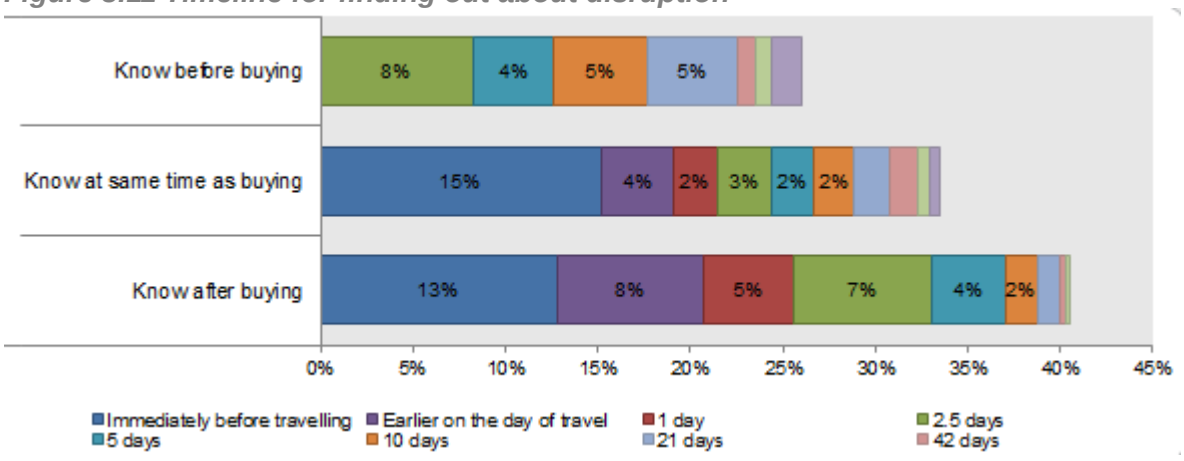
Overall, almost a third (32%) of potential passengers knew about planned disruption at the same time as buying their ticket, and almost half, 47% knew only after buying their ticket. This proportion was higher for trips to/from Airports, but lower for other non-commuting trips.

Figure 3.11 shows that for those neither commuting nor travelling to or from Airports, 15% found out about disruption immediately before travelling and at the same time as buying their ticket, and a further 13% found out immediately before travelling but after buying their ticket.

Almost one in five (18%) had found out about disruption 2-3 days before they travelled, including:

- 8% who knew before getting their ticket;
- 3% who knew at the same time; and
- 7% who found out after buying their ticket.

Figure 3.11 Timeline for finding out about disruption



Base: Know after buying, 1339, Know at same time as buying, 1107, Know before buying, 861
Panel Sample Potential Passengers (Weighted) EXCLUDES COMMUTERS AND AIRPORT TRIPS

The above patterns did not vary by frequency of making the journey, but there were differences according to the type of ticket bought:

- 29% of those with Pay as You Go tickets knew about disruption after buying their ticket, and 28% knew before.
- 67% of those with advance tickets only knew about disruption after buying their ticket:
    - Where the advance ticket was bought 2-4 weeks in advance, half knew of the disruption 16 days in advance of travel;
    - Where the advance ticket was bought 4-8 weeks in advance, half knew of the disruption 32 days in advance of travel;

For those segments for trips of more than 20 miles, higher proportions, (42% for London and SE, and 47% for other regions) knew after buying compared with 34% for trips under 20 miles (regardless of region).

Further analysis relating to the timing of awareness and buying tickets can be found in tables E15, E16, E17 and E18 in Appendix E.

Table 3.3 reveals that the timelines of planning, buying and finding out about disruption were varied. Excluding those with season tickets, and making commuting trips:

- 19% planned, bought tickets AND found out about disruption 2-14 days in advance of travel; and
- 28% were aware of disruption in advance of buying their ticket.

Table 3.3 Timing of planning trip, buying ticket and awareness of disruption

How far in advance of travel had you bought a ticket for the journey?	How far in advance of travel had you FIRST found out there was disruption to your rail service?	How far in advance of travel had you planned to make the journey?			
		More than 14 days	2-14 days	Earlier on the day of travel	Immediately before travelling/ spontaneous
More than 14 days	More than 14 days	6%	0%	0%	0%
	1-14 days	6%	1%	0%	0%
	Earlier on the day of travel	1%	1%	0%	0%
	Immediately before travelling	2%	0%	0%	0%
2-14 days	More than 14 days	1%	1%	0%	0%
	1-14 days	3%	19%	1%	0%
	Earlier on the day of travel	0%	5%	0%	0%
	Immediately before travelling	1%	5%	0%	0%
Earlier on the day of travel	More than 14 days	0%	1%	0%	0%
	1-14 days	0%	3%	1%	0%
	Earlier on the day of travel	0%	2%	2%	1%
	Immediately before travelling	0%	1%	2%	0%
Immediately before travelling	More than 14 days	1%	3%	0%	0%
	1-14 days	1%	9%	1%	1%
	Earlier on the day of travel	0%	4%	2%	0%
	Immediately before travelling	1%	8%	3%	3%

Base: 3129 PANEL potential passengers (Weighted) EXCLUDES SEASON TICKETS AND COMMUTERS

Further analysis relating to timing of planning, buying and awareness can be found in tables E19, E19a and E19b in Appendix E.

By what means did respondents find out about disruption?

The following analysis on how potential passengers became aware of disruption is drawn primarily from the Panel survey data.

A third (33%) of potential passengers found out about disruption to their rail journey via information displayed at rail stations, and a further 10% from announcements made at stations.

More than two fifths (43%) had found out by some digital means, including:

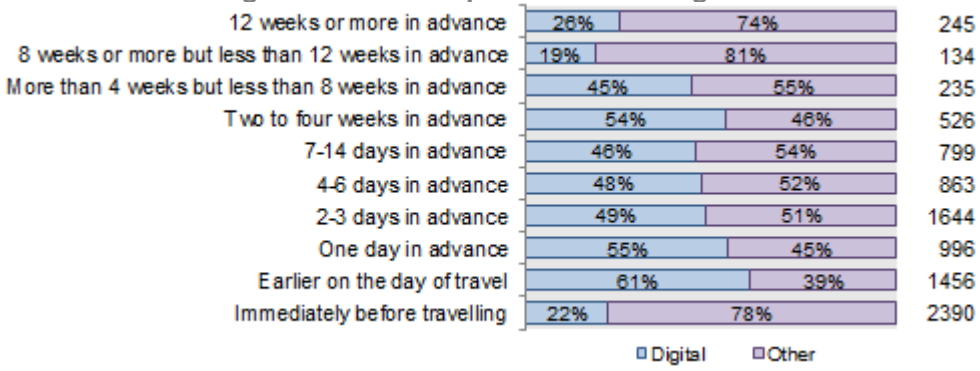
- 23% when checking for disruption via a website or app;
- 8% when buying their ticket on a website or app;
- 1% when checking train times via a website or app;
- 6% by email alert; and
- 5% on social media.

Of Disrupted Travellers, 42% found out by some digital means, including 22% while buying their ticket, and 18% when checking for disruption.

Of those who only found out about disruption immediately before travel, 78% found out by non-digital means (mainly seeing information at the station) as Figure 3.12 highlights. This contrasts with 39% of those finding out earlier that day, via digital means.

This may suggest that checking digitally reduces the risk of just turning up, but the data does not allow for exploring whether there is a relationship between the use of digital means and the propensity to check in advance.

Figure 3.12 Becoming aware of disruption – use of digital methods



Panel Sample Potential Passengers (Weighted)

By market segment, the proportion becoming aware through digital sources was lower outside London and the SE, at 32% for short distance trips and 35% for long distance trips, significantly lower than trips to/from London and the SE (50% long distance 47% short).

The proportion becoming aware through digital sources was much higher where the tickets were advance off peak (54%).

Further analysis relating to means by which respondents became aware of disruption can be found in tables E20, E20a, E21, E22, E23, E24 and E25 in Appendix E.

3.4 When did respondents find out about disruption and what did they do as a result?

The following analysis on what respondents chose to do on finding out about disruption is drawn from the Panel survey data.

While most potential passengers (54%) continued to travel after finding out about planned disruption, almost half, 46% made other arrangements, including:

- 24% used an alternative mode to make their journey;
- 6% changed the timing of their trip to when services were running normally; and
- 16% decided to not travel at all.

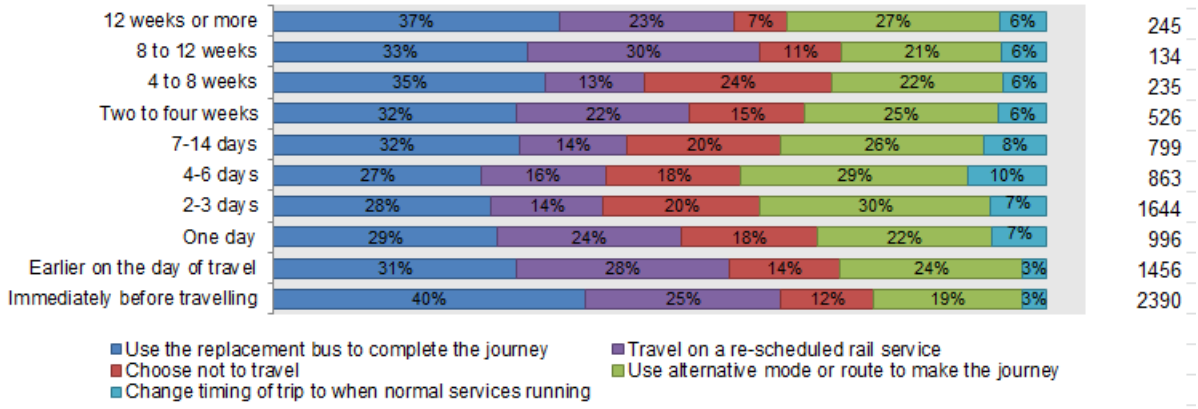
For possessions of less than 60 hours, travellers were more likely to choose not to travel (19%), use alternative modes (26%) or retime their trip (7%).

The decision was determined by a number of factors, including the duration of the closure and the trip purpose, but not knowing about disruption in advance of arriving at the station was the biggest factor as Figure 3.13 highlights

Of those finding out on arrival at the station:

- 66% continued to travel when only finding out on arrival at the station;
- 19% used an alternative mode to make their journey;
- 3% changed the timing of their trip to when services were running normally; and
- 12% decided to not travel at all.

Figure 3.13 Becoming aware of disruption – behaviour choice



Panel Sample Potential Passengers (Weighted) Total base=9290. INCLUDES COMMUTERS

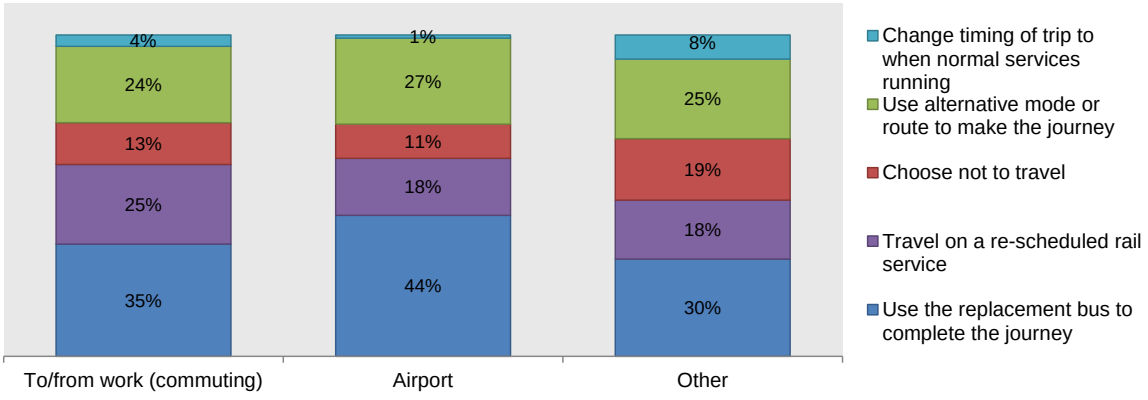
The options varied by market segment as shown in Table 3.4. Outside London and the SE, higher proportions used a replacement bus to complete their journeys than the 26% for short London and SE trips, and 31% of long London and SE trips. Almost a third of short London and SE trips (32%) were able to use an alternative mode, higher than elsewhere.

Table 3.4 Behaviour Choice – by Segment (Panel sample)

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
Use the replacement bus to complete the journey	31%	26%	41%	39%	40%
Travel on a re-scheduled rail service	23%	20%	23%	19%	21%
Choose not to travel	19%	17%	13%	12%	16%
Use alternative mode or route to make the journey	20%	32%	18%	27%	18%
Change timing of trip to when normal services running	8%	6%	6%	2%	6%
Base	**2677**	**2948**	**1316**	**1750**	**258**

Figure 3.14shows the actions depending on the journey purpose; 62% of those who made an airport related trip continued to travel while just 48% did so for trips other than commuting.

Figure 3.14 Behaviour on becoming aware of disruption



Base: work, 4138 Airport, 114, Other purpose, 5178 Panel Sample Potential Passengers (Weighted)

Figure 3.15 shows how the proportions of potential passengers who continued to travel varied depending on

(i) when they became aware of the disruption;

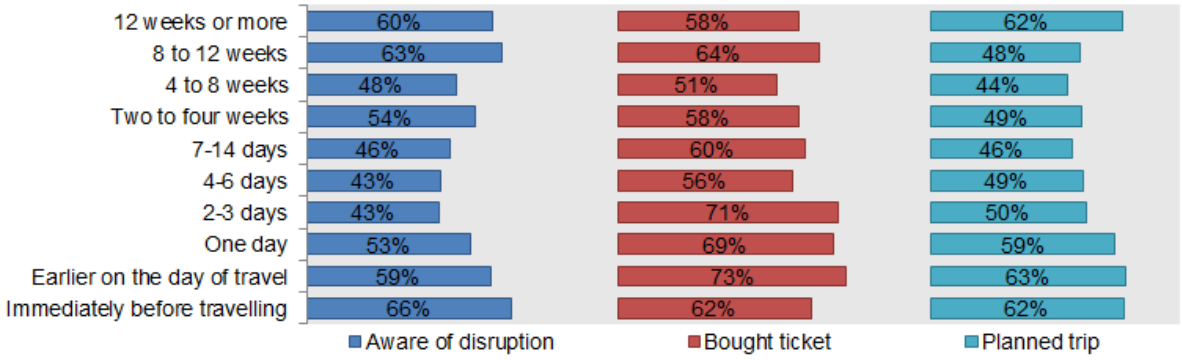
(ii) when they bought their ticket; and

(iii) when they planned their trip.

For example, 73% of respondents who bought their ticket earlier on the day of travel, continued to travel when they found out about the disruption to their journey. .

Journeys planned close to departure time were more likely to continue than those made some time before, except where planned 12 weeks or more in advance (62%). Less than half of those who had planned 4 days to 12 weeks in advance continued once disruption was known of.

Figure 3.15 Continue to travel on becoming aware of disruption – by timing of process



Panel Sample Potential Passengers (Weighted) Base Aware, 9290; Bought ticket 7085; Planned trip 8841 INCLUDES COMMUTERS

Table 3.5 shows the choices for combinations of planning, ticket buying and becoming aware timelines.

Knowing well in advance of planned travel increased the chance of alternative arrangements being made, whereas spontaneously arranged trips were more likely to use re-scheduled services or replacement buses.

Table 3.5 Timeline and behaviour (Panel sample)

Panel Sample	Continue to travel	Choose not to travel	Use alternative mode or route to make the journey	Change timing of trip to when normal services running	Base
Planned and bought ticket earlier in day, found out on arrival	82%	4%	12%	2%	115
Planned on day of travel, bought ticket and found out on arrival	82%	11%	6%	2%	200
Planned in advance, found out on arrival (no ticket info)	75%	11%	10%	4%	518
Unplanned trip, already had ticket and found out on day	74%	15%	8%	3%	163
Planned long time before, bought ticket and found out earlier on day	73%	15%	7%	5%	99
Unplanned trip, bought ticket and found out on arrival	73%	11%	9%	7%	325
Knew in advance, bought ticket on day, spontaneous trip	70%	10%	15%	5%	189
Knew in advance, had ticket, spontaneous trip	65%	7%	21%	7%	165
Knew before buying, planned or bought more than 2 days ahead	62%	10%	26%	2%	312
Unplanned trip, found out on day and bought ticket	61%	13%	23%	3%	294
Planned more than 2 days before, bought ticket after finding out on arrival	60%	12%	24%	4%	213
Unplanned trip, already had ticket and found out on arrival	60%	7%	32%	0%	179

Panel Sample	Continue to travel	Choose not to travel	Use alternative mode or route to make the journey	Change timing of trip to when normal services running	Base
Planned in advance, bought in advance, found out at same time	59%	16%	18%	8%	1428
Planned long time before, bought ticket on day and found out on arrival	59%	14%	26%	2%	546
Knew long time in advance of buying ticket	58%	10%	26%	7%	936
Planned in advance, found out on day	56%	14%	26%	3%	524
Knew before travel but after planning and buying ticket	48%	17%	28%	7%	674
Planned week before, found out on arrival	42%	18%	35%	4%	259
Planned same day, no ticket bought and found out on arrival	28%	25%	47%	0%	174
Unplanned trip, no ticket bought and found out on day	27%	25%	47%	1%	103
Knew in advance, no ticket bought, spontaneous trip	34%	19%	47%	0%	95
Knew long time in advance (no ticket)	20%	30%	37%	12%	1207

Further analysis relating to behaviour change in the event of disruption can be found in tables E26, E27, E28, E29 and E30 in Appendix E.

3.5 What proportion of respondents was aware of planned disruption in advance of travel?

Previous studies have estimated the proportion of passengers aware of possessions before travelling between 53% and 75%. An objective of this study was to identify whether this level of assumed passenger awareness has possibly changed due to:

- Advances and greater availability of digital means of ticket buying and finding information; and
- Increased use of advance-purchase and other dedicated tickets.

DT Survey

Amongst the DT respondents, **74.6%** (+/- 2.3% at the 95% confidence interval) were aware before arriving at the station:

- 72.0% (+/- 5.8%) if commuting; and
- 74.8% (+/- 2.3%) for other journey purposes.

Levels of awareness varied by market segment as shown in Table 3.6.

Table 3.6 DT Sample -Awareness of disruption before arriving at the station by Segment

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	**All**
Proportion aware in advance	77.8%	76.3%	75.6%	68.3%	70.6%	74.6%
+ / -	4.7%	4.7%	4.4%	5.6%	12.5%	2.4%
Base	297	316	361	268	51	1311

Panel Survey

There may be some doubt for the Panel survey regarding the duration of the disruption encountered. However, taking a subsample of the Panel data where it is likely to be comparable to the DT survey, the proportion that was aware before arriving at the station was slightly higher, at 76.5%, as shown in Table 3.6a. The subsample comprises of those who:

- Continued to travel when learning of the planned disruption; and
- Where the disruption was of less than 60 hours duration and at either weekends or late on weekdays.

Table 3.6a Panel sample Awareness of disruption before arriving at the station by Segment (subgroup who continued to travel during disruption of less than 60 hours)

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	**All**
Proportion aware in advance	81.0%	78.0%	68.1%	72.3%	69.1%	76.5 %
+ / -	3.0%	3.5%	6.1%	5.5%	11.4%	2.0%
Base	657	527	221	256	63	1803

The overall proportion is similar, and for both data samples, the London and SE long distance segment shows the highest proportion, followed by the London and SE short distance segment. Outside of London and the SE, there is greater discrepancy.

Although information on this proportion can be inferred from both the Panel and DT surveys, it is considered that the DT survey is best placed to derive this metric, given that there is certainty that the disruption encountered was unplanned.

The following analysis focuses on those who continued to travel during planned disruption of less than 60 hours and is drawn from the DT survey data.

As shown in Table 3.7, awareness was higher where trips were planned and tickets bought in advance rather than just before travel. Where a journey was being made spontaneously with no ticket bought in advance, just 30% were aware of disruption in advance.

Further analysis relating to the timing of planning, buying tickets and becoming aware of disruption can be found in tables E19c and E20b in Appendix E.

Table 3.7Awareness of disruption before arriving at the station by timing of planning and buying ticket

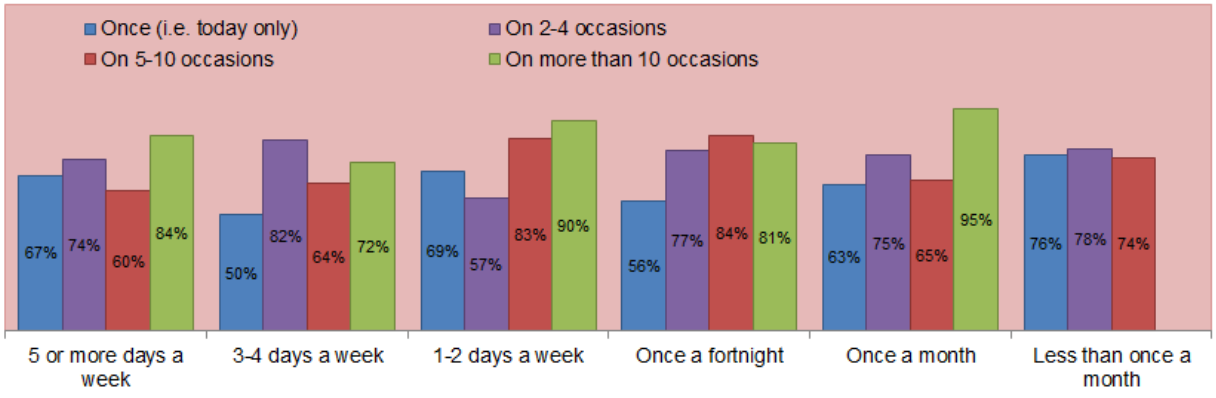
How far in advance of travel had you bought a ticket for the journey?		Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey?				
		More than 14 days	2-14 days	Earlier on the day of travel	Immediately before travelling/spontaneous	Total
More than 14 days	Knew in advance	82%	80%	80%	78%	81%
	Base	**159**	**20**	**10**	**9**	**198**
1-14 days	Knew in advance	84%	85%	86%	53%	83%
	Base	**88**	**260**	**7**	**17**	**372**
Earlier today	Knew in advance	78%	85%	76%	60%	81%
	Base	**51**	**163**	**63**	**10**	**287**
Just now	Knew in advance	61%	62%	44%	30%	54%
	Base	**28**	**120**	**34**	**30**	**212**

Where respondents had made previous journeys that had been affected by disruption, 28% said they had not been aware in advance on any of those occasions, while 38% said they had been on all occasions.

The proportion aware differed by how often respondents said they had been affected by disruption on their journey, and how often they travelled. Almost one in six were making the journey for the first time; 74% of these were aware in advance.

Almost a third were making trips made less than once month, and overall 75% of these were aware in advance. This did not vary by whether they had been affected by disruption on other occasions, suggesting the experience had not prompted any change in checking propensity. Those who travelled more frequently however, were more likely to check when previous journeys had been affected as Figure 3.16 highlights.

Figure 3.16 Proportions aware in advance; frequency of travel and previous experience of disruption



Proportion Aware in advance, by Frequency of making trip

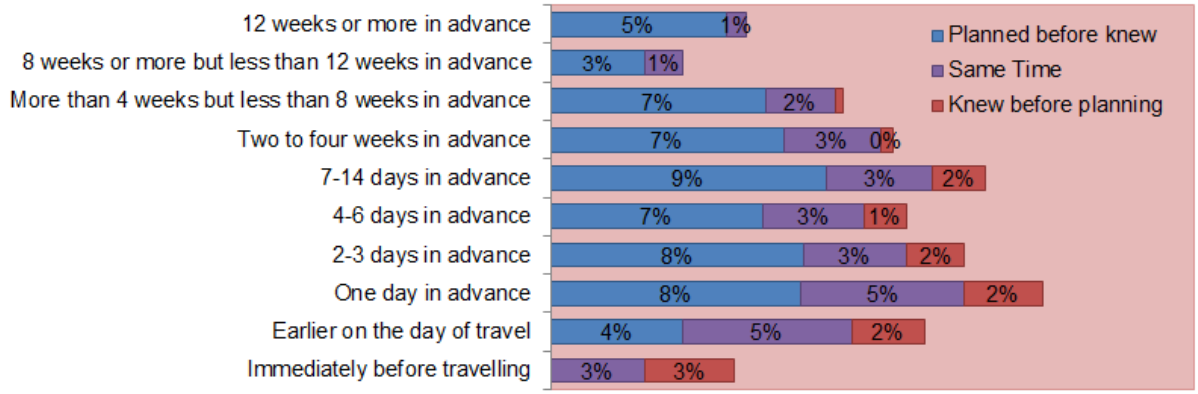
Bases: 5 or more days 120, 3-4 days 54, 1-2 days 183, once a fortnight, 171, once a month 206, less than once a month 435
Base: DT sample – note: within cells small N hence proportions should be treated as indicative.

Further analysis relating to awareness levels of planned disruptions can be found in tables E33, E34 and E35 in Appendix E.

Commuting trips were being made by 8% of the DT sample. Of those who were making trips other than for commuting, 6% were making a spontaneous trip, for which half had known about the disruption in advance. Three in ten had planned their trip at the same time as finding out about the disruption and 57% had planned before they knew. This information is displayed in Figure 3.17.

Of the 6% of trips planned 12 weeks or more in advance, the minority (10%) had known about disruption at the time.

Figure 3.17 Timing of Planning and awareness of disruption



Base: Non-Commuting 1,119 - work, DT Sample (Those who travelled during planned service disruption of less than 60 hours)

Table 3.8 shows both the median and mean number of days disruption was known about in advance of travel by the type of trip being made. The median value for most subgroups was 1, that is, half of respondents were aware 1 or more days in advance. This is:

- Lower for those who used Anytime or PAYG tickets (0.5); and
- Higher for those with Advance tickets (10);
- Higher for those who found out about the disruption via a website/app when buying ticket (5.0).

Table 3.8 DT Sample – Period of advance notice of disruption

		Days in advance of travel -aware of disruption		Valid N	Col %
		Mean	Median		
What is your main reason for making this journey?	To/ from work (commuting)	10.7 +/- 4.9	1.0	109	8%
	Visit friends/ relatives	8.6 +/- 1.7	1.0	504	38%
	To/ from leisure/ recreation	11.3 +/- 2	1.0	464	35%
	To/ from shopping	4.7 +/- 2.5	1.0	66	5%
	Other	7.3 +/- 2.7	0.5	180	14%
How often do you make this journey by train?	5 or more days a week	7.7 +/- 4.3	1.0	96	7%
	3-4 days a week	9.9 +/- 7	1.0	47*	4%
	1-2 days a week	12.1 +/- 4	1.0	157	12%
	Once a fortnight	10.2 +/- 3.2	1.0	162	12%
	Once a month	9 +/- 2.9	1.0	194	15%
	Less than once a month	9.1 +/- 1.8	1.0	424	32%
	First time	8.1 +/- 2.3	1.0	235	18%

DT Survey. * note small N

		Days in advance of travel -aware of disruption		Valid N	Col %
		Mean	Median		
And how often do you travel by rail for any purpose?	5 or more days a week	7.6 +/- 2.4	1.0	242	18%
	3-4 days a week	11.8 +/- 5.6	1.0	82	6%
	1-2 days a week	9.9 +/- 2.9	1.0	229	17%
	Once a fortnight	10.2 +/- 3	1.0	192	15%
	Once a month	8.2 +/- 2.6	1.0	210	16%
	Less than once a month	10.1 +/- 2.1	1.0	322	25%
Market Segment	London & SE Long Distance	10.0 +/- 2.4	1.0	297	23%
	London & SE Short Distance	6.0 +/- 2.0	1.0	316	24%
	Not London Long Distance	11.5 +/- 2.2	1.0	361	28%
	Not London Short Distance	7.9 + / -2.3	0.5	268	21%
	Airport	13.1 +/- 7.3	1.0	51	4%
Flexible ticket - no fixed time train	Anytime day single or day return	7.6 +/- 2.2	0.5	305	23%
	Anytime return	6.3 +/- 2.2	1.0	198	15%
	Pay as you go - Oyster/ contactless card	8.5 +/- 5.9	0.5	61	5%
Fixed time/ Off peak/ specific train	Off-peak/ super off-peak single or day return	10.3 +/- 3.6	1.0	159	12%
	Off-peak/ super off-peak return	8.4 +/- 2.8	1.0	147	11%
	Advance (specific train)	19.1 +/- 4.4	10.0	132	10%
Season Ticket	Weekly season ticket	5.9 +/- 7.7	1.0	25*	2%
	Monthly or longer season ticket	6 +/- 3.9	1.0	46	4%
How had you FIRST found out about the planned disruption?	Via website/app when buying ticket	17.1 +/- 2.9	5.0	294	22%
	Via website/app when checking for any disruption	5.4 +/- 1.6	1.0	246	19%
	Information displayed at rail station(s)	8 +/- 2.7	0.5	242	18%
	Word of mouth/from other passengers	4.6 +/- 1.9	1.0	74	6%
	Announcements made at the station	3.2 +/- 2.7	0.5	84	6%
	Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	4.6 +/- 1.9	0.5	123	9%
	Asked a member of staff if there was any disruption	2.1 +/- 1.5	0.0	65	5%
	Other source of information	13.7 +/- 5.1	1.0	104	8%

DT Survey. * note small N

The most frequently mentioned journey types that were made during planned disruption were for visiting friends and relatives (38%) and for social and leisure purposes (35%). Just 8% were commuting trips (as might be expected given the high proportion of surveys conducted at weekends and late at night), and 5% of trips were for shopping.

Half of those making work trips knew about the disruption one or more days in advance (mean 10.7 days) while those who were shopping knew 4.7 days on advance.

While the mean number of days varied widely by market segment, the median number was 1 for all segments other than those outside London and the SE short distance segment. For Airport trips, the mean period was highest at 13.1 days.

By ticket type, expressed as a mean, those using season tickets knew 6.7 days in advance, while those on fixed time type tickets knew 12.2 days in advance and those using Advance tickets on specific services knew 19.1 days in advance.

The main way respondents had first found out about disruption was via the website or app when buying their ticket (22%) and these travellers had become aware of disruption 17.1 days in advance.

A further 19% were made aware via the website/app when checking for any disruption and these travellers found out a mean of 5.4 days in advance of travel.

The 18% whose information came from displays at rail stations knew a mean of 8.0 days in advance.

Those travelling very often (5 or more days a week) or for the first time appeared to be less likely to check journey viability as far in advance as those in between.

4 Stated Intentions

4.1 Introduction

In this section the possible future behaviour of rail travellers is explored. This includes:

- In what travel circumstances would advance checks most likely be made?
- What methods would be used for checking?
- What would be the impact of the timing of awareness on stated intentions on travelling at periods of disruption?
- Are those who have been affected by disrupted travel more likely to check in the future?

4.2 Propensity to check for disrupted travel

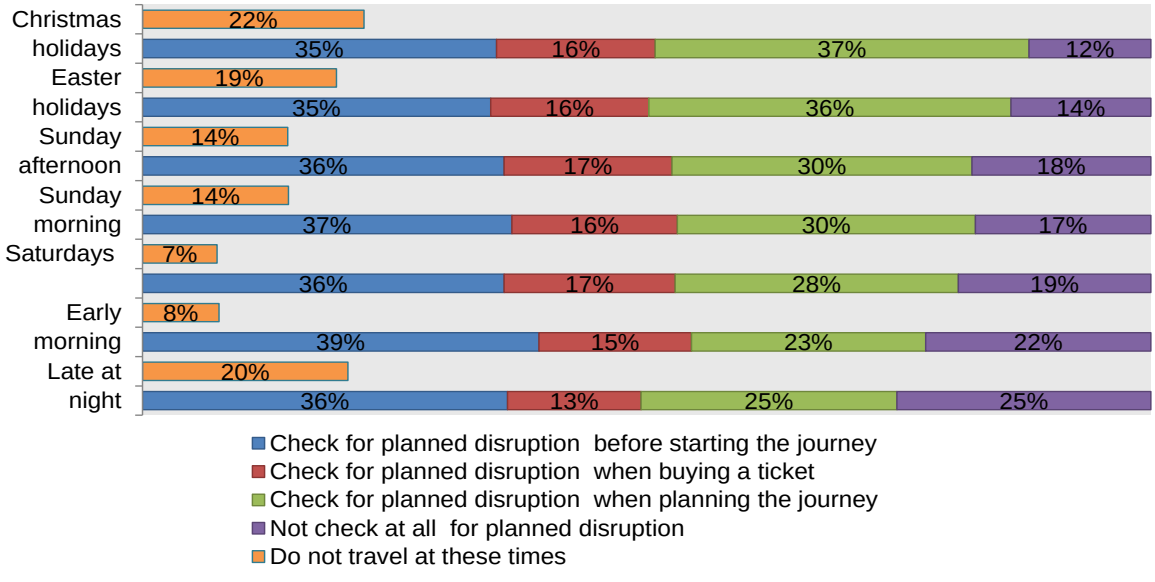
The following analysis is drawn from the Panel survey data.

Panel respondents were asked whether they would check for planned disruption when planning to travel at a range of times, including late at night, and Christmas holidays. As shown in Figure 4.1, a fifth said they would never travel by rail late at night, and 22% would never travel over the Christmas holidays.

Of those that would travel at these times, most said they would check for disruption in advance, from 75% checking for late night services, rising to 88% if travelling over Christmas holidays. Propensity to check was higher amongst those who had experienced planned disruption in the past, for example just 70% of those with no experience of it would check at Christmas, compared with 89% with experience.

It would appear that the Christmas and Easter periods are perceived as being the times when disruption might be most expected. More than a third would check when planning their journeys at these times, and similar proportions would do so before starting their journeys. For late night services, just a quarter would check when planning such a journey.

Figure 4.1 Panel Sample – Propensity to check in advance for different time periods



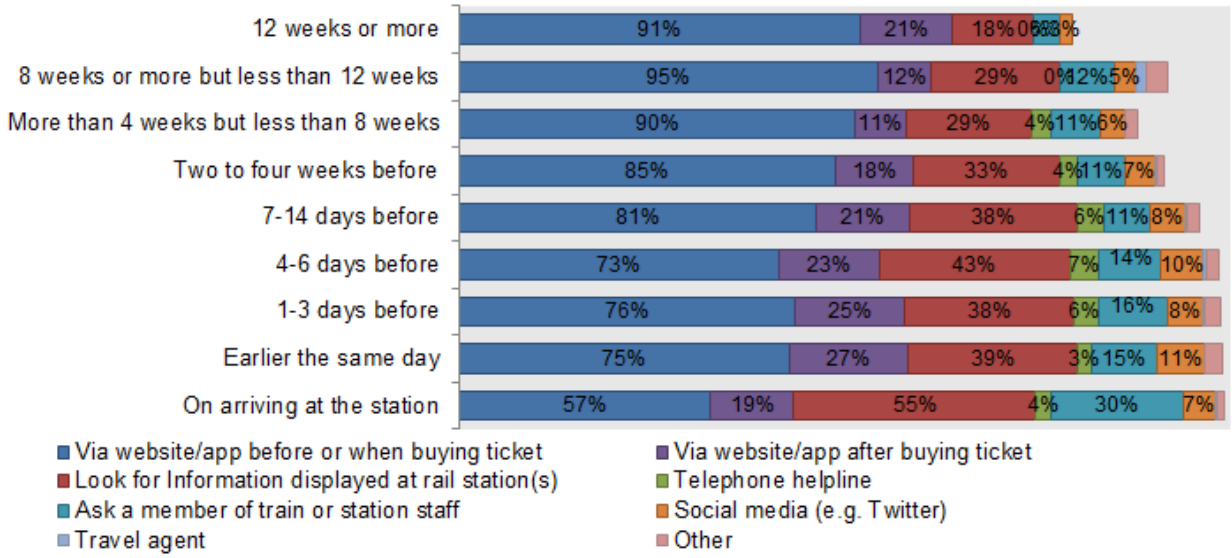
Base: 5122 Panel Sample (Weighted)

The primary source of information for 75% of passengers to check for disruption would be a website or app, before or when buying their ticket. As Figure 4.2 demonstrates, as the period in advance of travel increases, so does this proportion; from 57% who would use this if they checked only on arriving at the station, up to 90% where checks would be made more than four weeks in advance.

Almost two in five (39%) would look for information displayed at stations, with this proportion decreasing as the period in advance increases. Just 18% would do this 12 weeks in advance of travel and 55% would do so on arrival at the station prior to travel.

One in ten would not use any source of information, 48% would use one source and 42% would use multiple sources.

Figure 4.2 Source of information by when checking for disruption



Base: 4593 Panel Sample who would check (Weighted)

When asked how far in advance they would check for disruption, 7% said they would only do so on arriving at the station and a further 32% said they would check earlier the same day.

4.3 Impact of timing of awareness on travelling at periods of disruption

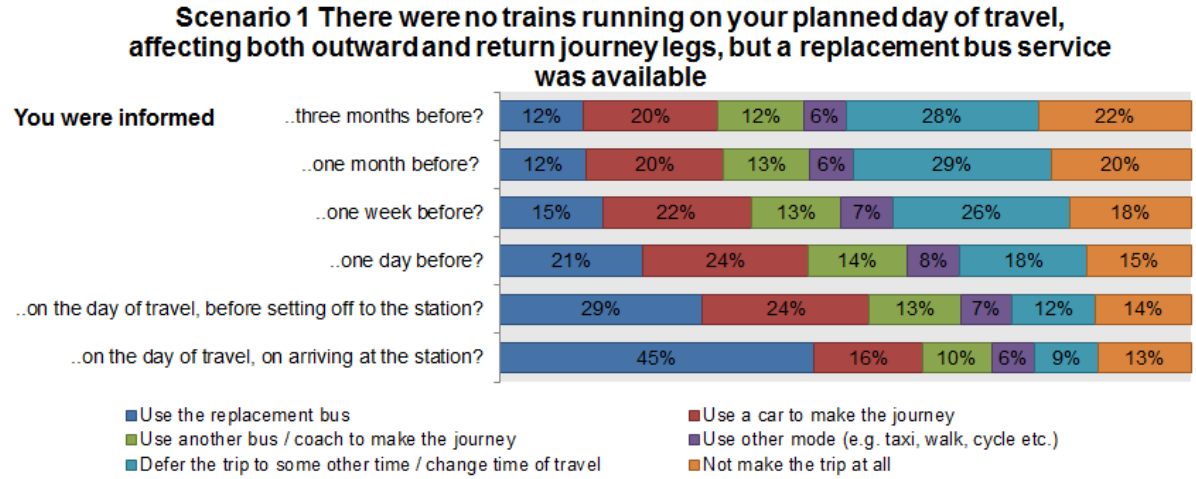
The following analysis is drawn from the Panel survey data.

Panel respondents were asked to consider a series of hypothetical scenarios of patterns of planned disruption and asked how they would respond depending on the timing of the disruption. They were asked to think of a recent weekend rail trip as the basis for their decisions.

The first example described a situation where no trains were running on the planned day of travel, affecting both outward and return legs.

As shown in Figure 4.3, longer periods of awareness would tend to reduce the tendency to travel at all, with 13% saying they would cancel their trip on finding out when they arrived at the station, to 22% saying this if informed 3 months earlier. Longer periods of awareness also appeared to significantly reduce the tendency to accept travelling on replacement buses, with just 12% saying they would continue to travel by this means if informed one month or more in advance.

Figure 4.3 Panel Sample – Using replacement bus – both legs of journey

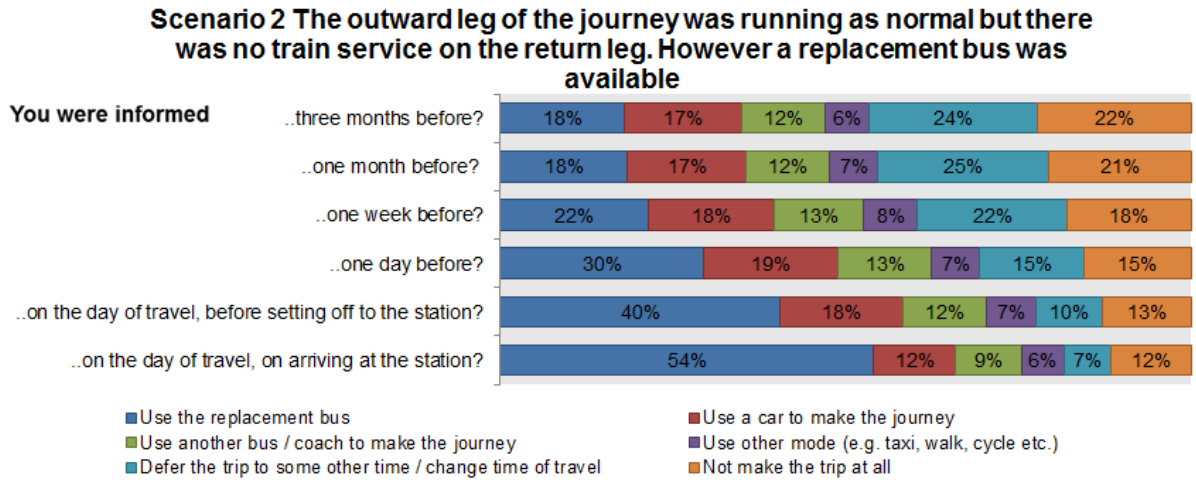


Base: 4874 Panel Sample (Weighted)

The second example described a situation where on the outward leg of the journey trains were running as normal, but no trains were running on the return leg. However a replacement bus was available for this.

As shown in Figure 4.4 the effect on the propensity to cancel the trip altogether was similar to the scenario where both legs are affected, however, more would use the replacement bus in this situation.

Figure 4.4 Panel Sample – Using replacement bus – return leg only

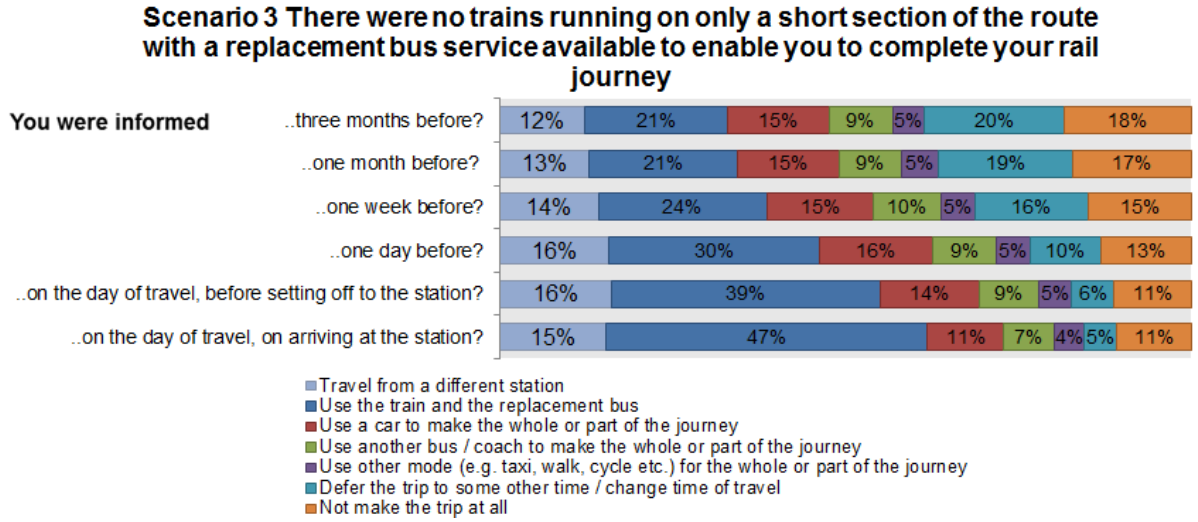


Base: 4874 Panel Sample (Weighted)

The third example described a situation where the disruption affected only a short section of the overall rail journey. As well as the replacement bus option, travel from an alternative train station was a possibility.

As shown in Figure 4.5, this reduced the inclination to cancel the trip altogether. The period of advance notice had only a small impact on the choice of switching to an alternative station to make the trip.

Figure 4.5 Panel Sample – Using replacement bus – part of journey only



Base: 4874 Panel Sample (Weighted)

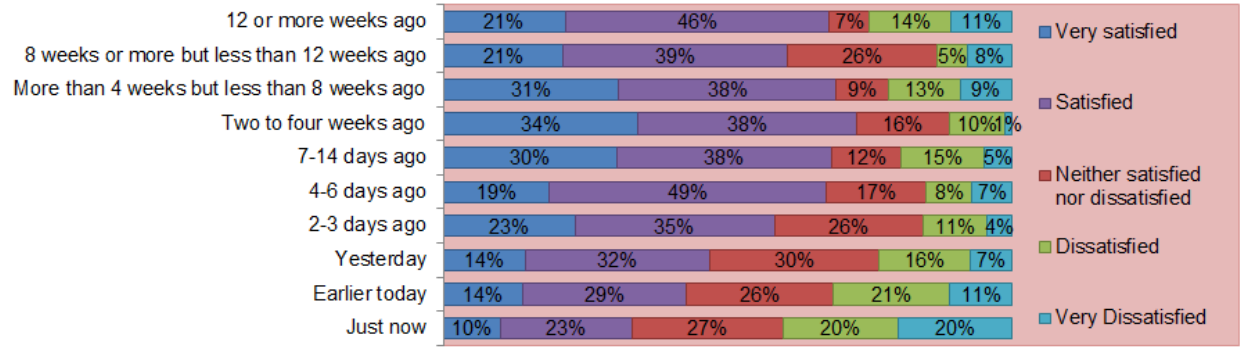
Further analysis relating to behaviour change during rail service disruptions can be found in tables E36, E37 and E38 in Appendix E.

4.4 Satisfaction with communication and management of disruption

The following analysis is drawn from the DT survey data; the same question was asked in the Panel survey, which provides a larger sample but did not have the certainty of being recent. It should not read as satisfaction with replacement buses amongst all potential passengers.

The period of advance notice correlated positively with satisfaction, as shown in Figure 4.6, with just 33% being satisfied when they had only just become aware of disruption, increasing to 73% where it was known about more two weeks in advance.

Figure 4.6 DT Sample – Satisfaction with communication and management of disruption by when became aware



Base 1282 DT Survey

Half of those who used a replacement bus service were satisfied, whereas just 42% of those who had longer rail journeys were satisfied and just 35% of those whose departure or arrival times had changed as a result of the disruption were satisfied.

Over half (51%) said they had no other option but to continue to travel during the disrupted period, and this group was less satisfied with the experience than others (47% satisfied).

A fifth could have used a car to make the trip, 21% could have used a different bus or coach and 7% could have used alternative stations.

Satisfaction was higher amongst the 23% who found out about the disruption via a website/app when buying ticket – this indicates the importance of information being available early and available at this source.

As a result of travelling during service disruption of less than 60 hours, 16% of travellers felt they would be less likely to travel by rail in the future (DT Survey), while 40% said they would be more likely in the future to check for planned disruption.

Further analysis relating to satisfaction with communications during rail service disruptions can be found in tables E31 and E32 in Appendix E.

Appendix A – DT Survey Questionnaire

Introduction

The objective of the survey was to quantify how many of those still travelling at times of planned disruption had been aware of it in advance, and of those who were aware, how long in advance did they know and how had they become aware.

The questionnaire content was designed for self-completion, with the option of completing on paper or on line, supported by face to face interviews where passengers were at stations for sufficient time in advance of bus/train departures. This approach sought to maximise the number of responses achieved.

As it was important to test both the survey methodology and the questionnaires for the disrupted traveller survey before use, a two day pilot survey was carried out on Saturday 11th February and Sunday 12th February 2017, at Chorley Station, where bus replacement services were operating.

This followed cognitive testing of the questionnaires to test comprehension, with 6 rail users.

The pilot survey indicated that the questionnaire was largely well understood and completed correctly. The response rates from the pilot were low – feedback from respondents was that there was little motivation to provide the information requested, so a question was introduced to provide an opportunity to express how satisfied they were with the experience. For the online version, there was also the option of adding comments. This was not included on the paper version due to space constraints.

REF:

AECOM

FOR INTERVIEWER USE ONLY	
Date:	
Location:	

RAIL PASSENGER SURVEY

From time to time, rail services are disrupted due to necessary engineering works, requiring the use of replacement buses, or changes to the timetable. We are conducting this survey to better understand passenger awareness and experience. Your feedback from the journey you are now making will help us to review current policy.

The Office of Rail and Road has commissioned us, AECOM**,** an independent research agency**,** to carry out the survey. Your responses are confidential and will not be used for any other purpose. This survey is being conducted in accordance with the Market Research Society (MRS) Code of Conduct. By taking part, you could win one of 8 prizes of £50 in Love2Shop vouchers.

You can complete this survey on line; simply enter **www.busrailsurvey.com** into your browser. It will only take you a few minutes. You don't need to wait until you have completed your journey to do this.

OR if you prefer, complete and return this questionnaire by post using the envelope provided (Freepost - no stamp required).

All questions relate to the journey you were making at the time you were given this questionnaire, i.e. the rail services affected by planned disruption. Please complete the survey as soon as possible (within seven days), to be included in the prize draw.

Q1	**When given the questionnaire, were you on…** *Please tick one box only*				
	The outward leg of a journey (e.g. from home)	❑1	The return leg of a journey (e.g. to home)	❑2
	Other	❑3		

Q2	**At which rail station had your rail journey started from on this leg?**	*Name of station*		
Q3	**At approximately what time?** *(please use the 24 hour clock, e.g. 5.15pm = 17 . 15)*	_____	Hours	_____ Minutes
Q4	**And which rail station did/will your rail journey finish on this leg?**	*Name of station*		
Q5	**And at approximately what time?** *(please use the 24 hour clock)*	_____	Hours	_____ Minutes

Q6	**What is/was the nature of the disruption to your journey?** *Please tick all that apply*					
	Replacement bus for part of a longer rail journey	❑1	Go to Q7	Change in service frequency	❑5	Go to Q11
	Replacement bus for all of my rail journey	❑2	Go to Q11	Other type of disruption (*please specify*)	❑6	Go to Q11
	Longer train journey	❑3	Go to Q11			
	Different departure time/arrival time	❑4	Go to Q11			

Q7	**Which station did/will the replacement bus take you from?** *(If different from Q2)*	*Name of station*		
Q8	**At approximately what time did/will this depart from there?** *(please use the 24 hour clock)* *(If different from Q3)*	_____	Hours	_____ Minutes
Q9	**And which station did/will it take you to?** *(If different from Q4)*	*Name of station*		
Q10	**And at approximately what time did you (will you) <u>get off</u> the replacement bus service?** *(please use the 24 hour clock)* *(If different from Q5)*	_____	Hours	_____ Minutes

Q11	**Which rail company operates the disrupted service you were travelling on?**	*Please write in the space below* ❑ tick box if Don't Know

Q12	**What is your main reason for making this journey?** *Please tick one box only*					
	To/from work (commuting)	❑1	To/from leisure/recreation	❑4	To/from shopping	❑7
	To/from place of education	❑2	Business trip (NOT commuting)	❑5	Other *(please specify)*	❑8
	Visit friends/relatives	❑3	Personal business e.g. hospital, bank	❑6	_____	

Q13	**How often do you make this journey by train?** *Please tick one box only*					
	5 or more days a week	❑1	1-2 days a week	❑3	Once a month	❑5
	3-4 days a week	❑2	Once a fortnight	❑4	Less than once a month	❑6
					First time	❑7
Q14	**And how often do you travel by rail for any purpose?** *Please tick one box only*					
	5 or more days a week	❑1	1-2 days a week	❑3	Once a month	❑5
	3-4 days a week	❑2	Once a fortnight	❑4	Less than once a month	❑6

Q15	**For the journey you were making when given the questionnaire, did the planned disruption have any of the following impacts on your journey?** *Please tick all that apply*			
	The journey took longer	❑1	I was unable to complete my journey	❑7
	I needed to get to my departure station earlier than I would have done otherwise	❑2	I arrived later than expected as the timetable had been changed	❑8
	I missed my planned departure time as the timetable had been changed	❑3	The delayed arrival time meant I missed connecting to another service	❑9
	I had to use an alternative means of transport to get to my start station because of the change in timetable	❑4	I had to use an alternative means of transport to get from my end station because of the change in timetable	❑10
	There were not enough seats on the replacement bus and I had to wait for a second vehicle	❑5	Other – please specify _____ _____ _____ _____ _____	❑11
	I had to re-schedule the other leg of my journey	❑6		

Q15a	**How satisfied are you with the way the disruption to rail services has been communicated and managed to help you complete your journey?** *Please tick one box only*					
	Very Satisfied	❑1	Neither satisfied nor dissatisfied	❑3	Dissatisfied	❑4
	Satisfied	❑2			Very Dissatisfied	❑5

Q16	**What sort of ticket are/were you using for the journey?**			
	Flexible ticket – no fixed time train	❑1	Anytime day single or day return	❑11
			Anytime return	❑12
			Pay as you go – Oyster / contactless card	❑13
	Fixed time / Off peak / specific train	❑2	Off-peak/super off-peak single or day return	❑21
			Off-peak/super off-peak return	❑22
			Advance (specific train)	❑23
			Pay as you go – Oyster / contactless card	❑24
	Season Ticket (including travelcard/travelcard on Oyster)	❑3	Weekly season ticket	❑31
			Monthly or longer season ticket	❑32
	Other type of ticket	❑4	Please specify	
	Don't know	❑5		

Q17	Thinking of the journey being made when you were given this questionnaire…	a) When did you plan to make the journey?	b) When did you buy the ticket for the journey?	c) When did you FIRST find out there was disruption to your rail service?
		Please tick one box only	*Please tick one box only*	*Please tick one box only*
	Not applicable, it's a journey I make regularly	❑0		
	Just now	❑1	❑1	❑1
	Earlier today	❑2	❑2	❑2
	Yesterday	❑3	❑3	❑3
	2-3 days ago	❑4	❑4	❑4
	4-6 days ago	❑5	❑5	❑5
	7-14 days ago	❑6	❑6	❑6
	Two to four weeks ago	❑7	❑7	❑7
	4 weeks or more but less than 8 weeks ago	❑8	❑8	❑8
	8 weeks or more but less than 12 weeks ago	❑9	❑9	❑9
	12 or more weeks ago	❑10	❑10	❑10
	Not applicable – no ticket bought		❑11	

Q18	How had you FIRST found out about the planned disruption? *Please tick one box only*		
	Via website/app when buying ticket	❑1	Go to Q19
	Via website/app when checking for any disruption	❑2	Go to Q19
	Social media (e.g. Twitter)	❑3	Go to Q19
	Email alert	❑4	Go to Q20
	Information displayed at rail station(s)	❑5	Go to Q20
	Word of mouth/from other passengers	❑6	Go to Q20
	Text alert from ticket provider	❑7	Go to Q20
	Announcements made at the station	❑8	Go to Q20
	Announcements made on the train	❑9	Go to Q20
	Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	❑10	Go to Q20
	Asked a member of staff if there was any disruption	❑11	Go to Q20
	Information in the press	❑12	Go to Q20
	Travel agent	❑13	Go to Q20
	Have used the station previously while the engineering works have been in progress	❑14	Go to Q20
	Other source of information (please specify) _____	❑15	Go to Q20

Q19	Which website/app was used? *Please tick one box only*			
	National Rail Enquiries website	❑1	Other (please specify) _____ _____ _____	❑4
	Train operating company website	❑2		
	Network Rail website	❑3		

Q20	What other options did you have for making this journey today? *Please tick all that apply*			
	I could have used a car to make the journey	❑1	I could have changed the time of travel	❑4
	I could have used a bus/coach to make the journey	❑2	I could have deferred the journey to another date	❑5
	I could have used a different rail route to reach the destination	❑3	I could have chosen not to travel at all	❑6
			I had no option but to use the disrupted service	❑7

IF YOU FOUND OUT ABOUT THE DISRUPTION MORE THAN 2 DAYS AGO, PLEASE GO TO Q22

Q21	If you had known about the disruption BEFORE YESTERDAY, what other options would have been available to you? *Please tick all that apply*			
	Not applicable – knew in advance	❑0	I could have deferred the journey to another date	❑5
	I could have used a car to make the journey	❑1		
	I could have used a bus/coach to make the journey	❑2	I could have chosen not to travel at all	❑6
	I could have used a different rail route to reach the destination	❑3	I would have had no option but to use the disrupted service	❑7
	I could have changed the time of travel	❑4		

Q22	Including your journey today, how many times in the last 12 months have you made a rail journey that has been affected by planned disruption, i.e. due to engineering works? *Please tick one box only*			
	Once (i.e. today only)	❑1	On 5-10 occasions	❑3
	On 2-4 occasions	❑2	On more than 10 occasions	❑4

Q23	Thinking about those rail journeys that were affected by planned disruptions, were you aware of the disruption in advance? *Please tick one box only*			
	Yes, on all occasions	❑1	Yes, on about a quarter of occasions	❑4
	Yes, on about three quarters of occasions	❑2	No, not aware in advance on any occasion	❑5
	Yes, on about half of occasions	❑3		

Q24	Thinking about your experience of rail journeys affected by planned disruptions and your awareness of those disruptions in advance of travelling, how would you describe the impact on your future behaviour? *Please tick all that apply*			
	I am less likely to travel by rail in future	❑1	I am more likely to check for planned disruptions	❑3
	I will travel by rail just as frequently as I do now	❑2	I will check as frequently as I do now	❑4

Q25	What is your gender? *Please tick one box only*					
	Male	❑1	Female	❑2	Prefer not to say	❑3

Q26	Into which of the following age groups do you fall? *Please tick one box only*									
	16-19	❑1	25-34	❑3	45-54	❑5	65-74	❑7	85 or over	❑9
	20-24	❑2	35-44	❑4	55-64	❑6	75-84	❑8	Prefer not to say	❑10

Q27	How many cars, vans and motorcycles are there in your household? *Please tick one box only*			
	None	❑1	Two	❑3
	One	❑2	Three or more	❑4

Q28	**Can you access the internet using your mobile phone?** *Please tick one box only*			
	Yes	❑1	No	❑2
Q29	**Can you access the internet at home?** *Please tick one box only*			
	Yes	❑1	No	❑2

If you wish to be entered into the prize draw, please return the questionnaire WITHIN SEVEN DAYS, and provide your name and a daytime contact telephone number below.

NAME: _____

TELEPHONE NUMBER: ____|____|____|____|____|____|____|____|____|____|____|

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY.

Please return it in the prepaid envelope provided.

If you need help completing the survey or need more information, you can call out Freephone 0800 6528646 – leave a message and we will get back to you.

For office use only Entered by_____ Date_____

Appendix B – Panel Survey Questionnaire

Introduction

The objective of the survey was to identify the propensity to check for travel disruption when making a rail journey, propensity to choose not to travel, identify timelines for planning, buying tickets and becoming aware of disruption.

Following drafting and agreeing with the client, the questionnaire was tested with a small sample of Research Now Panel members on 23rd February 2017.

The objectives of the small scale pilot survey were:

- Test response rates to the Panel survey;
- Test comprehension of the draft questionnaire; and
- Gather initial statistics to inform the study.

The survey was issued to a sample of ~160 Panel members on the 23rd February. Within one day, 111 complete responses were received, representing a 69% response rate. Respondents were given an incentive after they answered the survey.

A small number of changes were made to the draft Panel questionnaire prior to the main stage survey, as follows:

- Gender and age brought to the start of the survey rather than the end (as per usual practice);
- Question on region of residence added;
- Question to identify when last travelled by train (to screen out non-users); and
- The addition of a satisfaction rating and open comment question.

PANEL SURVEY
RAIL TRAVEL DISRUPTION – Questionnaire Script

This survey asks about rail travel and how your travel plans adapt to disruption.

Q21	**What is your gender?** *Please tick one box only*			
	Male	❑1	Prefer not to say	❑3
	Female	❑2		

Q22	**Into which of the following age groups do you fall?** *Please tick one box only*									
	16-19	❑1	25-34	❑3	45-54	❑5	65-74	❑7	85 or over	❑9
	20-24	❑2	35-44	❑4	55-64	❑6	75-84	❑8	Prefer not to say	❑10

D3. In which of the following regions do you live? **[Single select; Base: all]**

1. Scotland
2. Northern Ireland
3. North East
4. Yorkshire & Humberside
5. North West
6. West Midlands
7. East Midlands
8. East Anglia
9. South West
10. South East
11. Greater or Central London
99. None of the above – **TERMINATE AT END OF SCREENER**

ASK ALL

D4. When did you last travel by train (excluding underground / tram services)?

1. Less than 1 year ago
2. Between 1 - 2 years ago
3. Between 2 - 3 years ago
4. Between 3- 5 years ago
5. 5 or more years ago
6. Never - **TERMINATE**

IF D4=6 'Never' - terminate

ASK ALL

SC PER ROW

Q1 Relative to how often you travel by rail, how often have your journeys, or journey plans been affected by:

	Never	Rarely	Occasionally	Frequently	Don't know	
1.Overnight closures during the week for engineering works	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=PD*
2.Weekend closures for engineering works	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=PD*
3.Train services replaced by bus services while engineering works are in progress	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=PD*
4.Retimed or re-routed trains due to engineering works	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=PD*
5.Strike action on the rail network (not including tube)	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=UP*
6.Accidents on the rail network (including bridge strikes, animals on the line etc)	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=UP*
7.Weather incidents (e.g. snow or ice, leaves, high winds)	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=UP*
8.Over-running engineering works	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or 4=UP*
9.Operating issues, e.g. staff shortages, train /signal /points failure etc.	❑1	❑2	❑3	❑4	❑6	*If code 2, 3 or*

						4=UP

ROUTING

DQ1

MC

1. Q1_1,2,3,4=2,3 OR 4
2. Q1_5,6,7,8,9=2,3 OR 4
3. OTHER

DQ1REC:

1. If Planned Disruption (PD) and no Unplanned Disruption (NOT UP)	GROUP 1 - IF DQ1=1 ONLY
2. If Planned Disruption (PD) AND Unplanned Disruption (UP)	GROUP 2 - IF DQ1=1 AND DQ1=2
3. If Not Planned Disruption (Not PD) and only Unplanned Disruption (UP)	GROUP 3 – IF DQ1=2 ONLY
4. If Not Planned Disruption (Not PD) and Not Unplanned Disruption (NOT UP)	GROUP 4 – IF DQ1=3

IF GROUP 3 or GROUP 4 – skip to Q15

IF GROUP 1 or 2

INTRO2

This survey is only about PLANNED DISRUPTION - that is, where services are amended to allow engineering works to be carried out and changes to the timetable are made in advance.

Q2	**Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you…?** *(Code one only)*		
	Use the replacement bus to complete the journey	❑1	Go to Q4
	Travel on a re-scheduled rail service	❑2	Go to Q4
	Choose not to travel	❑3	Go to Q4
	Change travel plans to avoid using the replacement bus service or re-scheduled rail service	❑4	Go to Q3

Q3	**What course of action did you take on finding out about the planned disruption?** *(Code one only)*		
	I decided not to make the trip at all	❑1	
	I used a car to make the journey	❑2	
	I used an alternative bus /scheduled bus service / coach to make the journey	❑3	
	I changed the time of travel to when the normal services were running	❑4	
	Other (please specify)	❑98	

Q4	**What time periods/services had been affected by the disruption?** *(Code all that apply)*			
	Weekday services	❑1	Before 7am	❑11
			7am-7pm	❑12
			After 7pm	❑13
	Saturday services	❑2	Before 7am	❑11
			7am-7pm	❑12
			After 7pm	❑13
	Sunday services	❑3	Before noon	❑11
			12.00-7pm	❑14
			After 7pm	❑13
	Don't know	❑99		

Q5	**Do you know what changes had been made to the usual rail timetable/service as a result of the planned disruption?** *(Code all that apply)*		
	Some train services were replaced by bus services while engineering works were in progress	❑1	

	Retimed or re-routed trains due to engineering works	❑2	
	Other – please specify	❑3	
	Don't know	❑99	

Q6	**Do you know ~~for~~ how long the disruption went on for?** *(Code one only)*		
	Less than 12 hours	❑1	
	Between 12 and 24 hours	❑2	
	More than a day but less than three days	❑3	
	Three to seven days	❑4	
	Eight to fourteen days	❑5	
	Longer than a fortnight	❑6	
	Don't know	❑99	

CREATE 3 QIDS

Q7	**Thinking about that journey, how far in advance of travel …**	**a) …had you planned to make the journey?**	**b) …had you bought a ticket for the journey?**	**c) …had you FIRST find out there was disruption to your rail service**
		Please tick one box only	*Please tick one box only*	*Please tick one box only*
	Immediately before travelling (SHOW LABEL 'Immediately before travelling /spontaneous' only for Q7A)	❑1	❑1	❑1
	Earlier on the day of travel	❑2	❑2	❑2
	One day in advance	❑3	❑3	❑3
	2-3 days in advance	❑4	❑4	❑4
	4-6 days in advance	❑5	❑5	❑5
	7-14 days in advance	❑6	❑6	❑6
	Two to four weeks in advance	❑7	❑7	❑7
	More than 4 weeks but less than 8 weeks in advance	❑8	❑8	❑8
	8 weeks or more but less than 12 weeks in advance	❑9	❑9	❑9
	12 weeks or more in advance	❑10	❑10	❑10
	Not applicable	❑99	❑99	❑99

Q8	**How had you FIRST found out about the planned disruption?** *Code one only*		
	Via website/app when buying ticket	❑1	Go to Q9
	Via website/app when checking for any disruption	❑2	Go to Q9
	Social media (e.g. Twitter)	❑3	Go to Q9
	Email alert	❑4	Go to Q10
	Information displayed at rail station(s)	❑5	Go to Q10
	Word of mouth/from other passengers	❑6	Go to Q10
	Text alert from ticket provider	❑7	Go to Q10
	Announcements made at the station	❑8	Go to Q10
	Announcements made on the train	❑9	Go to Q10
	Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	❑10	Go to Q10
	Asked a member of staff if there was any disruption	❑11	Go to Q10
	Information in the press	❑12	Go to Q10
	Travel agent	❑13	Go to Q10
	Other source of information (please specify)	❑98	_____

			Go to Q10

Q9	Which website/app was used? *Code one only*			
	National Rail Enquiries website	❑1	Other (please specify)	❑98
	Train operating company website	❑2		
	Network Rail website	❑3		

Q10	What sort of ticket were you using for the journey? *Code one only* *(if Code 3 at Q2 –did not travel) -* ***What sort of ticket would have been used for the journey?***			
	Flexible ticket – no fixed time train	❑1	Anytime day single or day return	❑11
			Anytime return	❑12
			Pay as you go – Oyster / contactless card	❑13
	Fixed time / Off peak / specific train	❑2	Off-peak/super off-peak single or day return	❑21
			Off-peak/super off-peak return	❑22
			Advance (specific train)	❑23
			Pay as you go – Oyster / contactless card	❑24
	Season Ticket (including travelcard/travelcard on Oyster)	❑3	Weekly season ticket	❑31
			Monthly or longer season ticket	❑32
	Other type of ticket	❑97	Please specify	❑98
	Don't know	❑99		

Q11	What was the main reason for making this journey? (*Code one only)*					
	To/from work (commuting)	❑1	To/from leisure/recreation	❑4	To/from shopping	❑7
	To/from place of education	❑2	Business trip (NOT commuting)	❑5	To/from airport	❑8
	Visit friends/relatives	❑3	Personal business	❑6	Other *(please specify)*	❑98

Q12	How often do you make this journey? *Code one only*					
	3 or more days a week	❑1	Once a fortnight	❑3	Less than once a month	❑5
	1-2 days a week	❑2	Once a month	❑4	Once a year or less	❑6

Q13	Between which stations was your journey disrupted? *(please write in)*		
	Station A		❑ Tick if Don't Know
	Station B		❑ Tick if Don't Know

Q14	And between which stations was the entire journey being made? *(please write in)*		
	Station A		
	Station B		

Q14a	How satisfied were you with how the disruption to your journey was communicated and managed? ***(Tick one only)***		
	Very Satisfied	❑1	
	Quite satisfied	❑2	
	Neither satisfied or dissatisfied	❑3	
	Quite dissatisfied	❑4	
	Very dissatisfied	❑5	

Q14b	If you have any comments about your journey, please write below *(please write in)*

ASK ALL

Q15	**How often do you travel by rail, for any purpose (excluding underground / tram services) in Great Britain?** *(Code one only)*			
	Less than once a year	❑1		
	Less than once a month	❑2		
	Less than once a week	❑3		
	1-3 days a week	❑4		
	4 or more days a week	❑5		

Q16	**When planning to travel by rail, at the following times, would you…** *Code one per time period*	Not check at all for planned disruption	Check for planned disruption before starting the journey?	Check for planned disruption when buying a ticket?	Check for planned disruption when planning the journey?	Not applicable, never make journeys at these times
	Late at night	❑1	❑2	❑3	❑4	❑5
	Early morning	❑1	❑2	❑3	❑4	❑5
	Saturdays	❑1	❑2	❑3	❑4	❑5
	Sunday mornings	❑1	❑2	❑3	❑4	❑5
	Sunday afternoons	❑1	❑2	❑3	❑4	❑5
	Easter holidays	❑1	❑2	❑3	❑4	❑5
	Christmas holidays	❑1	❑2	❑3	❑4	❑5

IF CODES 2, 3 or 4 to any of Q16

Q17	**How would you check if journeys were affected by planned disruption?** *(Code up to three)*		
	Via website/app before or when buying ticket	❑1	
	Via website/app after buying ticket	❑2	
	Look for Information displayed at rail station(s)	❑3	
	Telephone helpline	❑4	
	Ask a member of train or station staff	❑5	
	Social media (e.g. Twitter)	❑6	
	Travel agent	❑7	
	~~Via website/app when checking for any disruption~~	❑8	
	Other source of information (please specify)	❑98	_____ _____

IF CODES 2, 3 or 4 to any of Q16

Q18	**How far in advance of travel would you check for disruption?** *(Code one only)*			
	On arriving at the station	❑1	Two to four weeks before	❑6
	Earlier the same day	❑2	More than 4 weeks but less than 8 weeks	❑7
	1-3 days before	❑3	8 weeks or more but less than 12 weeks	❑8
	4-6 days before	❑4	12 weeks or more	❑9
	7-14 days before	❑5	Not at all	❑10

IF Q4 =2 (Saturday services***) or Q4=3 (***Sunday services***), skip Q19. Else***

Q19 Have you ever travelled by rail on a Saturday or Sunday?

❑1 Never travelled by rail at weekend GO TO Q23

❑2 Yes CONTINUE

Please think about the most recent trip you made by rail that was at a weekend.

Q20a At which station did you start your journey? _____<OstationN>_____ Go to

Q20b At which station did your journey finish? _____<DstationN>_____ Continue

Q20c What was the expected length of the train journey (one way)? ____hours ____ minutes

Q20d	**What was the main reason for making this journey?** (*Code one only)*					
	To/from work (commuting)	❑1	To/from leisure/recreation	❑4	To/from shopping	❑7
	To/from place of education	❑2	Business trip (NOT commuting)	❑5	To/from airport	❑8
	Visit friends/relatives	❑3	Personal business	❑6	Other *(please specify)* _____	❑98

INTRO3

Thinking about planned disruptions, (that is, those due to engineering works), please consider the following scenarios in relation to your journey between <OstationN> **and** <DstationN>**,** and the likely course of action you would have taken in each situation, depending on how far in advance you were informed of the disruption.

SCENARIO A

For your journey between <OstationN> **and** <DstationN>**,** there were no trains running on your planned day of travel, affecting both outward and return journey legs, but a replacement bus service was available for the whole journey.

What would be your most likely course of action if you were informed of this…?	Use the replacement bus	Use a car to make the journey	Use another bus / coach to make the journey	Use other mode (e.g. taxi, walk, cycle etc.)	Defer the trip to some other time / change time of travel	Not make the trip at all
..on the day of travel, on arriving at the station?	❑1	❑2	❑3	❑4	❑5	❑6
on the day of travel, before setting off to the station?	❑1	❑2	❑3	❑4	❑5	❑6
..one day before?	❑1	❑2	❑3	❑4	❑5	❑6
..one week before?	❑1	❑2	❑3	❑4	❑5	❑6
..one month before?	❑1	❑2	❑3	❑4	❑5	❑6
..three months before?	❑1	❑2	❑3	❑4	❑5	❑6

SCENARIO B

For your journey between <OstationN> **and** <DstationN>**,** the outward leg of the journey was running as normal but there was no train service on the return leg. However a replacement bus was available for the return leg.

What would be your most likely course of action if you were informed of this…?	Use the replacement bus	Use a car to make the journey	Use another bus / coach to make the journey	Use other mode (e.g. taxi, walk, cycle etc.)	Defer the trip to some other time / change time of travel	Not make the trip at all
..on the day of travel, on arriving at the station?	❑1	❑2	❑3	❑4	❑5	❑6
on the day of travel, before setting off to the station?						
..one day before?	❑1	❑2	❑3	❑4	❑5	❑6
..one week before?	❑1	❑2	❑3	❑4	❑5	❑6
..one month before?	❑1	❑2	❑3	❑4	❑5	❑6
..three months before?	❑1	❑2	❑3	❑4	❑5	❑6

SCENARIO C For your journey between <OstationN> **and** <DstationN>**,** there were no trains running on only a short section of the route with a replacement bus service available to enable you to complete your rail journey – for both outward and return legs.							
What would be your most likely course of action if you were informed of this…?	Travel from a different station	Use the train and the replacement bus	Use a car to make the whole or part of the journey	Use another bus / coach to make the whole or part of the journey	Use other mode (e.g. taxi, walk, cycle etc.) for the whole or part of the journey	Defer the trip to some other time / change time of travel	Not make the trip at all
..on the day of travel, on arriving at the station?	❑0	❑1	❑2	❑3	❑4	❑5	❑6
on the day of travel, before setting off to the station?							
..one day before?	❑0	❑1	❑2	❑3	❑4	❑5	❑6
..one week before?	❑0	❑1	❑2	❑3	❑4	❑5	❑6
..one month before?	❑0	❑1	❑2	❑3	❑4	❑5	❑6
..three months before?	❑0	❑1	❑2	❑3	❑4	❑5	❑6

Q21 AND Q22 MOVED ABOVE

Q23	**How many cars, vans and motorcycles are there in your household?** *Please tick one box only*			
	None	❑1	Two	❑3
	One	❑2	Three or more	❑4

Q24	**Can you access the internet using your mobile phone?** *Code one only*			
	Yes	❑1	No	❑2
Q25	**Can you access the internet at home?** *Code one only*			
	Yes	❑1	No	❑2

Do you have any comments on your experiences of the way planned disruption to rail services has been communicated and managed to help you complete your journey?

Appendix C – Disrupted Traveller Survey

Shift Locations, Dates and Returns

	Survey Location	Date	Est number of affected services	Questionnaires Returned
Pilot	Chorley	Saturday 11th February	35	13
Pilot	Chorley	Sunday 12th February	26	
Week 1	Bolton	Saturday 4th March	19	14
Week 1	Preston	Saturday 4th March	50	19
Week 1	Preston	Sunday 5th March	37	18
Week 1	Wigan NW	Saturday 4th March	13	11
Week 1	Chorley	Saturday 4th March	36	8
Week 1	Neath	Saturday 4th March	32	24
Week 1	Neath	Sunday 5th March	20	9
Week 1	Swansea	Saturday 4th March	16	15
Week 1	Manchester Piccadilly	Saturday 4th March (am)	42	21
Week 1	Manchester Piccadilly	Saturday 4th March (pm)	43	
Week 1	Manchester Piccadilly	Sunday 5th March (am)	28	20
Week 1	Manchester Piccadilly	Sunday 5th March (pm)	37	
Week 1	Worthing	Sunday 5th March	85	22
Week 1	Ingatestone	Saturday 4th March (am)	19	15
Week 1	Ingatestone	Saturday 4th March (pm)	19	38
Week 1	Witham	Sunday 5th March	33	10
Week 1	Stratford	Saturday 4th March (am)	34	28
Week 1	Stratford	Saturday 4th March (pm)	37	7
Week 1	Stratford	Sunday 5th March	36	16
Week 1	Tunbridge Wells	Sunday 5th March	18	15
Week 1	Blackpool North	Saturday 4th March	19	12
Week 1	Woking	Saturday 4th March	42	13
Week 1	Shenfield (1)	Saturday 4th March	79	24
Week 1	Shenfield (2)	Saturday 4th March	79	
Week 1	Shenfield	Sunday 5th March	47	15
Week 2	Whitchurch	Saturday 11th March	18	0
Week 2	Brighton	Sunday 12th March	36	28
Week 2	Kilwinning	Sunday 12th March	10	15
Week 2	North Queensferry	Sunday 12th March	13	1
Week 2	Edinburgh	Sunday 12th March	14	16
Week 2	Cardiff Central	Sunday 12th March	19	21

	Survey Location	Date	Est number of affected services	Questionnaires Returned
Week 2	Cardiff Central	Sunday 12th March	19	
Week 2	Swansea	Sunday 12th March	11	14
Week 2	Bridgend	Sunday 12th March	8	1
Week 2	Dartford	Sunday 12th March (10-6)	36	15
Week 2	Southampton Central	Sunday 12th March	10	13
Week 2	Lewes	Saturday 11th March (am)	24	42
Week 2	Lewes	Saturday 11th March (pm)	24	
Week 2	Brockenhurst	Sunday 12th March	12	7
Week 2	Metrocentre	Sunday 12th March	24	10
Week 2	Whitchurch	Saturday 11th March	19	11
Week 2	Whitchurch	Sunday 12th March	13	1
Week 2	Market Harborough	Sunday 12th March	18	6
Week 2	Plumstead	Saturday 11th March (am)	50	25
Week 2	Plumstead	Saturday 11th March (pm)	50	
Week 2	London Bridge	Sunday 12th March	26	2
Week 2	Stratford	Sunday 12th March	104	18
Week 2	Ebbsfleet International	Sunday 12th March	14	2
Week 2	Camden Road	Sunday 12th March	37	6
Week 2	Kentish Town	Sunday 12th March	24	15
Week 3	Bradford Interchange	Sunday 19th March	40	31
Week 3	Brighton	Sunday 19th March	48	46
Week 3	Chester	Sunday 19th March	7	24
Week 3	Elgin	Saturday 18th March	8	8
Week 3	Elgin	Sunday 19th March	6	9
Week 3	Farnborough	Sunday 19th March	16	14
Week 3	Guildford	Sunday 19th March	13	0
Week 3	Halifax	Sunday 19th March	34	20
Week 3	Inverness	Saturday 18th March	9	3
Week 3	Inverness	Sunday 19th March	5	2
Week 3	London Paddington (1)	Wednesday 15th March	9	17
Week 3	London Paddington (2)	Wednesday 15th March	9	
Week 3	London Paddington (1)	Thursday 16th March	9	14
Week 3	London Paddington (2)	Thursday 16th March	9	
Week 3	London Waterloo	Saturday 18th March	38	11
Week 3	Pontypridd	Sunday 19th March	11	8
Week 3	Princes Risborough	Sunday 19th March	5	0
Week 3	Retford	Sunday 19th March	4	8
Week 3	Shoeburyness	Saturday 18th March	25	1
Week 3	Shoeburyness	Sunday 19th March	13	2
Week 3	Smethwick Rolfe Street	Thursday 16th March	12	0

	Survey Location	Date	Est number of affected services	Questionnaires Returned
Week 3	Stratford	Sunday 19th March	104	3
Week 3	Swansea	Sunday 19th March	11	10
Week 3	Swindon	Wednesday 15th March	10	4
Week 3	Swindon	Thursday 16th March	10	2
Week 3	Treherbert	Sunday 19th March	4	1
Week 3	Wakefield Kirkgate	Sunday 18th March	9	11
Week 3	York	Saturday 18th March	8	12
Week 4	Tipton	Wednesday 22nd March	14	1
Week 4	Tipton	Thursday 23rd March	14	0
Week 4	Smethwick Galton Bridge	Wednesday 22nd March	10	1
Week 4	Smethwick Galton Bridge	Thursday 23rd March	10	0
Week 4	Crewe (Shift 1)	Wednesday 22nd March	7	2
Week 4	Crewe (Shift 2)	Wednesday 22nd March	7	
Week 4	Crewe (Shift 1)	Thursday 23rd March	7	6
Week 4	Crewe (Shift 2)	Thursday 23rd March	7	
Week 4	St Austell/ Newquay	Saturday 25th March	11	3
Week 4	St Austell/ Newquay	Sunday 26th March	10	13
Week 4	Todmorden (Shift 1)	Saturday 25th March	24	25
Week 4	Todmorden (Shift 2)	Saturday 25th March	24	
Week 4	Todmorden (Shift 1)	Sunday 26th March	19	3
Week 4	Todmorden (Shift 2)	Sunday 26th March	17	
Week 4	York	Saturday 25th March	12	14
Week 4	Chester (Shift 1)	Saturday 25th March	26	51
Week 4	Chester (Shift 2)	Saturday 25th March	25	
Week 4	Chester	Sunday 26th March	12	12
Week 4	Ingatestone (Shift 1)	Saturday 25th March	19	30
Week 4	Ingatestone (Shift 2)	Saturday 25th March	19	
Week 4	Ingatestone (Shift 1)	Sunday 26th March	19	0
Week 4	Ingatestone (Shift 2)	Sunday 26th March	19	
Week 4	Dalston Kingsland	Saturday 25th March	21	3
Week 4	Dalston Kingsland	Sunday 26th March	20	3
Week 4	Brighton	Sunday 26th March	49	36
Week 4	Streatham (Shift 1)	Saturday 25th March	24	10
Week 4	Streatham (Shift 2)	Saturday 25th March	24	
Week 4	Streatham (Shift 1)	Sunday 26th March	24	6
Week 4	Streatham (Shift 2)	Sunday 26th March	24	
Week 4	Sutton (Shift 1)	Saturday 25th March	24	13
Week 4	Sutton (Shift 2)	Saturday 25th March	24	
Week 4	Sutton (Shift 1)	Sunday 26th March	24	23
Week 4	Sutton (Shift 2)	Sunday 26th March	24	
Week 4	Guildford	Sunday 26th March	22	25
Week 4	Port Talbot Parkway	Sunday 26th March	16	17
Week 4	Bicester North	Sunday 26th March	25	22

	Survey Location	Date	Est number of affected services	Questionnaires Returned
Week 4	London Victoria (Shift 1)	Sunday 26th March	13	1
Week 4	London Victoria (Shift 2)	Sunday 26th March	13	
Week 4	London Victoria (Shift 3)	Sunday 26th March	13	
Week 5	Bristol Parkway	Tuesday 28th March	1	1
Week 5	Swindon	Wednesday 29th March	3	4
Week 5	Cheltenham Spa	Thursday 30th March	2	0
Week 5	London St Pancras	Thursday 30th March	3	0
Week 5	Stockport	Thursday 30th March	7	1
Week 5	Beckenham	Thursday 30th March	2	0
Week 5	Crewe	Thursday 30th March	3	10
Week 5	Chester	Sunday 2nd April	11	18
Week 5	Chester	Sunday 2nd April	13	
Week 5	Ipswich	Sunday 2nd April	11	8
Week 5	Ipswich	Sunday 2nd April	10	
Week 5	Cardiff (1)	Saturday 1st April	30	10
Week 5	Cardiff (2)	Saturday 1st April	30	
Week 5	Cardiff	Sunday 2nd April	17	11
Week 5	Cardiff	Sunday 2nd April	17	16
Week 5	Halifax	Sunday 2nd April	18	32
Week 5	Todmorden (1)	Sunday 2nd April	17	19
Week 5	Todmorden (2)	Sunday 2nd April	18	
Week 5	Rainham (Kent)	Saturday 1st April	25	0
Week 5	Faversham	Saturday 1st April	25	10
Week 5	Sittingbourne	Saturday 1st April	25	7
Week 5	Hebden Bridge	Sunday 2nd April	37	16
Week 5	Glasgow Central (Shift 1)	Sunday 2nd April	38	27
Week 5	Glasgow Central (Shift 2)	Sunday 2nd April	39	
Week 5	Lanark	Sunday 2nd April	14	2
TOTAL				1429*

* Five returned questionnaires were missing date and shift information

Appendix D – Raw Sample Profile Comparison

In this section the Panel data is UNWEIGHTED

Table 1: Gender

	Disrupted Travellers	Panel Survey	
		Continued to travel when disrupted	Made other plans
Male	42%	52%	53%
Female	58%	48%	47%

Table 2 Age Group

	Disrupted Travellers	Panel Survey	
		Continued to travel when disrupted	Made other plans
16-19	9%	3%	2%
20-24	11%	7%	4%
25-34	18%	26%	18%
35-44	14%	24%	22%
45-54	14%	17%	23%
55-64	16%	14%	21%
65-74	12%	8%	10%
75-84	4%	1%	1%
85+	0%	0%	0%
Prefer not to say	2%	0%	0%
Mean Age	43	43	47

Table 3 How many cars, vans and motorcycles are there in your household?

	Disrupted Travellers	Panel Survey	
		Continued to travel when disrupted	Made other plans
None	39%	21%	20%
One	34%	49%	44%
Two	21%	23%	28%
Three or more	6%	6%	7%
Mean Cars/ Vans	0.92	1.14	1.22

Table 4 Can you access the internet using your mobile phone?

	Disrupted Travellers	Panel Survey	
		Continued to travel when disrupted	Made other plans
Yes	81%	92%	90%
No	19%	8%	10%

Table 5 Can you access the internet at home?

	Disrupted Travellers	Panel Survey	
		Continued to travel when disrupted	Made other plans
Yes	92%	99%	99%
No	8%	1%	1%

Table 6 How satisfied were you with how the disruption to your journey was communicated and managed?

	Disrupted Travellers	Panel Survey	
		Continued to travel when disrupted	Made other plans
Very satisfied	17%	12%	6%
Satisfied	33%	38%	26%
Neither satisfied nor dissatisfied	24%	28%	40%
Dissatisfied	18%	15%	17%
Very Dissatisfied	9%	7%	11%
All Satisfied	***50%***	***50%***	***32%***

Appendix E – Survey Results

In the following tables, column proportions are shown unles otherwise stated. Footnotes clarify any exclusions from the bases.

Where column/table proportions do not sum to 100% this is due to rounding.

All Panel tables use weighted data.

make this journey?	
E18: PANEL – Timing of awareness relative to buying ticket (created variable) by Journey Purpose groups	PANEL
E19: PANEL – Timing of planning, buying and awareness – potential passengers	PANEL
E19a: PANEL WHO CONTINUED TO TRAVEL – Timing of planning, buying and awareness Excludes season tickets and commuters.	PANEL
E19b: PANEL WHO CONTINUED TO TRAVEL – Timing of planning, buying and awareness Includes season tickets and commuters	PANEL
E19c: DISRUPTED TRAVELLERS – Timing of planning, buying and awareness	DT
E20: PANEL – Q8 How had you FIRST found out about the planned disruption? by Segment	PANEL
E20a: PANEL WHO CONTINUED TO TRAVEL – Q8 How had you FIRST found out about the planned disruption? by Segment	PANEL
E20b DISRUPTED TRAVELLERS – Q18 How had you FIRST found out about the planned disruption? by Segment	DT
E21: PANEL – Q8 How had you FIRST found out about the planned disruption? by Ticket Type	PANEL
E22: PANEL – Q8 How had you FIRST found out about the planned disruption? by Q12 How often do you make this journey?	PANEL
E23: PANEL – Q8 How had you FIRST found out about the planned disruption? by Trip Purpose	PANEL
E24: PANEL – Q8 How had you FIRST found out about the planned disruption? by Q15 How often do you travel by rail, for any purpose (excluding underground / tram services) in Great Britain?	PANEL
When did respondents find out about disruption and what did they do as a result?	
E25: PANEL – Q8 How had you FIRST found out about the planned disruption? by Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service?	PANEL
E26: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Segment	PANEL
E27: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Ticket	PANEL
E28: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Journey Frequency	PANEL
E29: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Purpose	PANEL
E30: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Frequency of using rail	PANEL
Satisfaction with communication and management of disruption	
E31: DISRUPTED TRAVELLER – How satisfied are you with the way disruption to rail services has been communicated and managed to help you complete your journey?... by c) When did you FIRST find out there was disruption to your rail service?	DT
E32: DISRUPTED TRAVELLER – How satisfied are you with the way disruption to rail services has	DT

been communicated and managed to help you complete your journey?... by How had you FIRST found out about the planned disruption?	
What proportion of respondents was aware of planned disruption in advance of travel?	
E33: DISRUPTED TRAVELLER –Thinking about those rail journeys that were affected by planned disruptions, were you aware of the disruption in advance?.. by How often do you make this journey by train?	DT
E34: DISRUPTED TRAVELLER –Thinking about those rail journeys that were affected by planned disruptions, were you aware of the disruption in advance?.. by Including your journey today, how many times in the last 12 months have you made a rail journey that has been affected by planned disruption?	DT
E35: DISRUPTED TRAVELLER – Including your journey today, how many times in the last 12 months have you made a rail journey that has been affected by planned disruption?.. by How often do you make this journey by train?	DT
Impact of timing of awareness on travelling at periods of disruption	
E36: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? When journey was planned	PANEL
E37: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? When ticket was bought	PANEL
E38: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? When ticket was bought	PANEL
Survey response rates by nature of disruption	
E39: PANEL – Aware in advance of travel by nature of disruption	PANEL
E39b: PANEL WHO CONTINUED TO TRAVEL – Aware in advance of travel by nature of disruption	PANEL
E39c: DISRUPTED TRAVELLER – Aware in advance of travel by nature of disruption	DT
E40: PANEL – Aware in advance of travel by duration of disruption	PANEL
E41: PANEL – Aware in advance of travel by duration and nature of disruption for disruption of 60 hours or less	PANEL

Table E1: PANEL – Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey? By market segment

How far in advance of travel had you planned to make the journey?	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Immediately before travelling/spontaneous	4%	7%	4%	10%	0%	6%
Earlier on the day of travel	6%	16%	5%	18%	7%	11%
One day in advance	10%	16%	8%	14%	8%	12%
2-3 days in advance	16%	23%	23%	23%	17%	20%
4-6 days in advance	14%	11%	13%	9%	16%	12%
7-14 days in advance	20%	13%	18%	14%	7%	16%
Two to four weeks in advance	15%	8%	15%	6%	17%	11%
More than 4 weeks but less than 8 weeks in advance	8%	3%	10%	3%	14%	6%
8 weeks or more but less than 12 weeks in advance	4%	1%	3%	1%	3%	2%
12 weeks or more in advance	4%	3%	2%	4%	10%	3%
Base	**1665**	**1609**	**800**	**671**	**169**	**5155**
Mean number of days	16.1	8.4	14.5	9.4	23.4	12.5
Median number of days	10.0	2.5	5.0	2.5	10.0	5.0

EXCLUDES COMMUTERS (Weighted) 242 cases missing segment

Table E1a: Disrupted Travellers –How far in advance of travel had you planned to make the journey? By market segment

	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Immediately before travelling/spontaneous	4%	8%	6%	9%	4%	6%
Earlier on the day of travel	10%	22%	5%	15%	9%	12%
One day in advance	8%	24%	14%	20%	2%	16%
2-3 days in advance	12%	14%	11%	15%	7%	13%
4-6 days in advance	11%	9%	13%	10%	9%	11%
7-14 days in advance	17%	10%	13%	11%	15%	13%
Two to four weeks in advance	13%	6%	15%	5%	13%	10%
More than 4 weeks but less than 8 weeks in advance	13%	2%	12%	6%	20%	9%
8 weeks or more but less than 12 weeks in advance	6%	1%	5%	3%	4%	4%
12 weeks or more in advance	7%	3%	7%	5%	17%	6%
Base	**283**	**250**	**344**	**225**	**46**	**1151**
Mean number of days	21.6	8.1	21.0	12.9	33.6	17.3
Median number of days	10.0	1.0	10.0	2.5	21.0	5

Excludes commuters

Table E2: PANEL – Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey? By Q10 What sort of ticket were you using for the journey?

How far in advance of travel had you planned to make the journey?	Flexible ticket – no fixed time train			Fixed time / Off peak / specific train				Season	
	Anytime day single or day return	Anytime return	Pay as you go - Oyster / contactless card	Off-peak/super off-peak single or day return	Off-peak/super off-peak return	Advance (specific train)	Pay as you go - Oyster / contactless card	Weekly season ticket	Monthly or longer season ticket
Immediately before travelling/spontaneous	7%	6%	8%	5%	1%	1%	9%	12%	9%
Earlier on the day of travel	14%	9%	16%	7%	9%	2%	21%	4%	13%
One day in advance	15%	11%	18%	11%	7%	3%	10%	13%	14%
2-3 days in advance	25%	26%	21%	21%	17%	4%	37%	26%	13%
4-6 days in advance	12%	13%	11%	15%	13%	12%	5%	9%	13%
7-14 days in advance	13%	15%	14%	21%	21%	16%	7%	10%	17%
Two to four weeks in advance	9%	10%	7%	12%	13%	30%	7%	15%	10%
More than 4 weeks but less than 8 weeks in advance	3%	6%	2%	5%	12%	14%	3%	4%	6%
8 weeks or more but less than 12 weeks in advance	0%	0%	0%	2%	3%	12%	1%	4%	2%
12 weeks or more in advance	3%	3%	3%	1%	3%	8%	1%	3%	4%
Base	**888**	**802**	**424**	**608**	**511**	**370**	**127**	**118**	**784**
Mean number of days	8.8	10.3	7.8	10.7	16.1	30.6	6.1	12.6	12.5
Median number of days	2.5	2.5	2.5	5.0	10.0	21.0	2.5	2.5	50

EXCLUDES COMMUTERS (Weighted)

Table E3: PANEL – Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey? By Q12 How often do you make this journey?

How far in advance of travel had you planned to make the journey?	Frequency of making this trip					
	3 or more days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	Once a year or less
Immediately before travelling/spontaneous	12%	8%	6%	5%	4%	2%
Earlier on the day of travel	17%	17%	16%	8%	7%	2%
One day in advance	18%	17%	15%	13%	7%	10%
2-3 days in advance	19%	28%	22%	22%	18%	13%
4-6 days in advance	9%	13%	15%	15%	12%	6%
7-14 days in advance	10%	7%	12%	20%	20%	20%
Two to four weeks in advance	8%	3%	8%	10%	17%	18%
More than 4 weeks but less than 8 weeks in advance	1%	2%	3%	5%	8%	16%
8 weeks or more but less than 12 weeks in advance	1%	2%	0%	1%	3%	5%
12 weeks or more in advance	3%	3%	0%	1%	4%	9%
Base	**678**	**734**	**786**	**983**	**1442**	**532**
Mean number of days	9.0	7.8	6.5	9.8	16.8	25.3
Median number of days	2.5	2.5	2.5	5.0	10.0	10.0

EXCLUDES COMMUTERS (Weighted)

Table E4: PANEL – Q7B Thinking about that journey, how far in advance of travel had you bought a ticket for the journey? By market segment

	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Immediately before travelling/spontaneous	27%	56%	24%	58%	21%	36%
Earlier on the day of travel	11%	15%	5%	16%	8%	11%
One day in advance	10%	9%	9%	4%	8%	9%
2-3 days in advance	11%	6%	17%	4%	16%	10%
4-6 days in advance	9%	4%	10%	7%	9%	8%
7-14 days in advance	10%	4%	14%	4%	16%	9%
Two to four weeks in advance	9%	2%	12%	2%	11%	7%
More than 4 weeks but less than 8 weeks in advance	7%	3%	5%	4%	3%	5%
8 weeks or more but less than 12 weeks in advance	4%	0%	3%	2%	6%	2%
12 weeks or more in advance	2%	1%	1%	0%	3%	2%
Base	**1230**	**695**	**642**	**418**	**135**	**3256**
Mean number of days	11.6	4.2	9.9	4.0	13.0	8.4
Median number of days	2.5	0.0	2.5	0.0	2.5	1.0

EXCLUDES COMMUTERS AND SEASON TICKET HOLDERS (Weighted)

Table E4a: Disrupted Travellers – how far in advance of travel had you bought a ticket for the journey? By market segment

	Market Segment					
	London & SE Long Distance	**London & SE Short Distance**	**Not London Long Distance**	**Not London Short Distance**	**Airports**	**All**
Immediately before travelling/spontaneous	12%	32%	14%	33%	9%	20%
Earlier on the day of travel	19%	45%	22%	35%	26%	28%
One day in advance	11%	8%	11%	6%	2%	9%
2-3 days in advance	16%	5%	12%	6%	19%	11%
4-6 days in advance	8%	3%	9%	5%	7%	7%
7-14 days in advance	8%	3%	11%	6%	12%	8%
Two to four weeks in advance	12%	2%	8%	2%	14%	7%
More than 4 weeks but less than 8 weeks in advance	7%	1%	6%	4%	2%	5%
8 weeks or more but less than 12 weeks in advance	5%	1%	5%	2%	5%	3%
12 weeks or more in advance	1%	0%	1%	2%	5%	1%
Base	**273**	**168**	**335**	**210**	**43**	**1033**
Mean number of days	12.0	2.3	11.2	6.4	13.9	8.9
Median number of days	2.5	0.5	2.5	0.5	2.5	1.0

EXCLUDES COMMUTERS AND SEASON TICKET HOLDERS

Table E5: PANEL – Q7B Thinking about that journey, how far in advance of travel had you bought a ticket for the journey? By Q10 What sort of ticket were you using for the journey?

How far in advance of travel had you bought a ticket for the journey?	**Ticket Types**					
	Anytime day single or day return	**Anytime return**	**PAYG**	**Off-peak/super off-peak single or day return**	**Off-peak/super off-peak return**	**Advance (specific train)**
Immediately before travelling/spontaneous	44%	34%	63%	37%	28%	0%
Earlier on the day of travel	17%	13%	11%	9%	11%	2%
One day in advance	9%	9%	8%	12%	12%	3%
2-3 days in advance	13%	14%	5%	12%	9%	6%
4-6 days in advance	7%	9%	4%	7%	12%	12%
7-14 days in advance	7%	10%	3%	9%	12%	16%
Two to four weeks in advance	1%	6%	2%	7%	8%	25%
More than 4 weeks but less than 8 weeks in advance	1%	3%	3%	5%	5%	17%
8 weeks or more but less than 12 weeks in advance	0%	1%	0%	1%	3%	14%
12 weeks or more in advance	1%	1%	2%	1%	1%	5%
Base	**799**	**729**	**329**	**503**	**453**	**350**
Mean number of days	2.9	6.3	4.4	7.2	9.0	30.1
Median number of days	0.5	1.0	0.0	1.0	1.0	21.0

EXCLUDES COMMUTERS AND SEASON TICKET HOLDERS (Weighted)

Table E6: PANEL – Q7B Thinking about that journey, how far in advance of travel had you bought a ticket for the journey? By Q12 How often do you make this journey?

How far in advance of travel had you bought a ticket for the journey?	Journey Frequency					
	3 or more days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	Once a year or less
Immediately before travelling/spontaneous	46%	43%	43%	30%	32%	23%
Earlier on the day of travel	21%	16%	11%	13%	9%	3%
One day in advance	14%	12%	10%	9%	6%	10%
2-3 days in advance	6%	10%	13%	13%	11%	7%
4-6 days in advance	8%	7%	9%	8%	8%	11%
7-14 days in advance	1%	4%	8%	15%	9%	18%
Two to four weeks in advance	0%	3%	6%	5%	11%	14%
More than 4 weeks but less than 8 weeks in advance	2%	4%	0%	5%	7%	7%
8 weeks or more but less than 12 weeks in advance	0%	2%	0%	2%	4%	4%
12 weeks or more in advance	2%	0%	0%	1%	2%	5%
Base	**286**	**472**	**493**	**661**	**907**	**344**
Mean number of days	4.0	4.8	3.6	7.8	12.0	15.5
Median number of days	0.5	0.5	0.5	1.0	2.5	5.0

EXCLUDES COMMUTERS AND SEASON TICKET HOLDERS (Weighted)

Table E7: PANEL – Q7B Thinking about that journey, how far in advance of travel had you bought a ticket for the journey? By Q11 What was the main reason for making this journey?

How far in advance of travel had you bought a ticket for the journey?	Journey Purpose								
	To/from work (commuting)	To/from place of education	Visit friends/ relatives	To/from leisure/ recreation	Business trip (NOT commuting)	Personal business	To/from shopping	To/from airport	Other
Immediately before travelling/spontaneous	31%	30%	33%	39%	21%	41%	46%	13%	7%
Earlier on the day of travel	10%	11%	10%	13%	5%	14%	12%	1%	0%
One day in advance	9%	12%	9%	9%	9%	11%	4%	10%	0%
2-3 days in advance	7%	9%	12%	8%	15%	7%	5%	21%	0%
4-6 days in advance	6%	17%	7%	7%	10%	5%	5%	10%	0%
7-14 days in advance	8%	2%	9%	6%	23%	7%	9%	24%	33%
Two to four weeks in advance	12%	1%	10%	6%	8%	5%	9%	8%	7%
More than 4 weeks but less than 8 weeks in advance	3%	8%	6%	5%	6%	3%	2%	4%	39%
8 weeks or more but less than 12 weeks in advance	1%	3%	2%	2%	3%	2%	4%	4%	14%
12 weeks or more in advance	14%	7%	2%	6%	1%	8%	3%	5%	0%
Base	**3326**	**234**	**1279**	**1294**	**367**	**307**	**185**	**75**	**17**
Mean number of days	19.3	13.9	9.5	12.4	10.0	12.0	10.0	14.6	31.4
Median number of days	2.5	1.0	1.0	0.5	5.0	0.5	0.5	5.0	2.0

Table E8: PANEL – Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service? By market segment

	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Immediately before travelling/spontaneous	22%	26%	25%	31%	26%	26%
Earlier on the day of travel	13%	20%	14%	15%	7%	16%
One day in advance	10%	13%	9%	9%	12%	11%
2-3 days in advance	19%	20%	16%	13%	15%	18%
4-6 days in advance	12%	8%	8%	8%	12%	9%
7-14 days in advance	11%	6%	10%	8%	10%	9%
Two to four weeks in advance	7%	3%	7%	6%	10%	6%
More than 4 weeks but less than 8 weeks in advance	3%	1%	4%	2%	6%	3%
8 weeks or more but less than 12 weeks in advance	1%	1%	2%	3%	1%	1%
12 weeks or more in advance	2%	2%	4%	4%	2%	3%
Base	**2642**	**2892**	**1301**	**1734**	**254**	**9290**
Mean number of days	8.1	5.0	10.9	11.0	11.7	7.9
Median number of days	2.5	1.0	2.5	1.0	2.5	1.0

Table E8a: Disrupted Travellers – how far in advance of travel had you FIRST found out there was disruption to your rail service? By market segment

	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Immediately before travelling/spontaneous	22%	24%	24%	32%	29%	25%
Earlier on the day of travel	20%	24%	15%	20%	20%	20%
One day in advance	14%	24%	12%	13%	8%	15%
2-3 days in advance	13%	9%	11%	9%	12%	10%
4-6 days in advance	6%	6%	8%	7%	2%	7%
7-14 days in advance	7%	4%	9%	7%	6%	7%
Two to four weeks in advance	6%	3%	9%	4%	12%	6%
More than 4 weeks but less than 8 weeks in advance	6%	2%	6%	4%	2%	4%
8 weeks or more but less than 12 weeks in advance	3%	1%	5%	3%	4%	3%
12 weeks or more in advance	2%	3%	2%	2%	6%	2%
Base	**297**	**316**	**361**	**268**	**51**	**1299**
Mean number of days	10.0	6.0	11.5	7.9	13.1	8.9
Median number of days	1.0	1.0	1.0	0.5	1.0	1.0

Table E9: PANEL – Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service? By Q10 What sort of ticket were you using for the journey?

How far in advance of travel had you FIRST found out there was disruption to your rail service?	Ticket Types							
	Anytime day single or day return	Anytime return	PAYG	Off-peak/super off-peak single or day return	Off-peak/super off-peak return	Advance (specific train)	Weekly season ticket	Monthly or longer season ticket
Immediately before travelling/spontaneous	35%	25%	28%	21%	17%	13%	35%	23%
Earlier on the day of travel	18%	20%	21%	13%	13%	11%	13%	14%
One day in advance	11%	10%	10%	9%	12%	12%	15%	9%
2-3 days in advance	15%	20%	21%	23%	14%	17%	17%	17%
4-6 days in advance	6%	8%	7%	7%	12%	10%	11%	13%
7-14 days in advance	6%	7%	6%	12%	14%	9%	4%	11%
Two to four weeks in advance	3%	5%	5%	8%	8%	13%	3%	6%
More than 4 weeks but less than 8 weeks in advance	2%	3%	1%	3%	6%	8%	2%	2%
8 weeks or more but less than 12 weeks in advance	1%	2%	0%	1%	2%	3%	1%	2%
12 weeks or more in advance	2%	1%	1%	4%	2%	4%	1%	4%
Base	**1661**	**1288**	**929**	**753**	**636**	**401**	**546**	**2398**
Mean number of days	5.7	5.9	4.2	9.4	10.3	13.6	4.6	9.7
Median number of days	0.5	1.0	0.5	2.5	2.5	2.5	1.0	2.5

Table E10: PANEL – Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service? By Q12 How often do you make this journey?

How far in advance of travel had you FIRST found out there was disruption to your rail service?	Journey Frequency					
	3 or more days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	Once a year or less
Immediately before travelling/spontaneous	30%	28%	26%	21%	17%	18%
Earlier on the day of travel	16%	21%	17%	15%	13%	9%
One day in advance	10%	12%	14%	13%	11%	7%
2-3 days in advance	17%	16%	18%	21%	19%	14%
4-6 days in advance	8%	9%	9%	10%	13%	13%
7-14 days in advance	8%	3%	6%	12%	10%	15%
Two to four weeks in advance	4%	5%	7%	4%	9%	14%
More than 4 weeks but less than 8 weeks in advance	2%	3%	2%	2%	4%	5%
8 weeks or more but less than 12 weeks in advance	1%	1%	1%	1%	2%	3%
12 weeks or more in advance	3%	3%	1%	1%	2%	3%
Base	**4269**	**1097**	**844**	**1039**	**1488**	**553**
Mean number of days	7.8	7.2	6.2	5.6	9.3	12.6
Median number of days	1.0	1.0	1.0	2.5	2.5	5.0

Table E11: PANEL – Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service? By Q11 What was the main reason for making this journey?

How far in advance of travel had you FIRST found out there was disruption to your rail service?	Journey Purpose								
	To/from work (commuting)	To/from place of education	Visit friends/ relatives	To/from leisure/ recreation	Business trip (NOT commuting)	Personal business	To/from shopping	To/from airport	Other
Immediately before travelling/spontaneous	31%	27%	22%	19%	22%	21%	24%	16%	42%
Earlier on the day of travel	16%	25%	16%	13%	11%	20%	18%	10%	0%
One day in advance	11%	9%	11%	10%	13%	12%	14%	15%	0%
2-3 days in advance	16%	18%	19%	20%	20%	17%	15%	9%	32%
4-6 days in advance	7%	12%	11%	12%	5%	14%	8%	9%	0%
7-14 days in advance	8%	4%	9%	9%	11%	6%	8%	21%	0%
Two to four weeks in advance	3%	3%	7%	9%	10%	4%	5%	6%	5%
More than 4 weeks but less than 8 weeks in advance	2%	0%	2%	3%	4%	3%	4%	11%	10%
8 weeks or more but less than 12 weeks in advance	1%	2%	1%	2%	0%	0%	3%	1%	11%
12 weeks or more in advance	3%	0%	2%	3%	4%	3%	2%	3%	0%
Base	**4068**	**273**	**1662**	**2013**	**405**	**399**	**342**	**106**	**23**
Mean number of days	7.4	3.8	6.6	9.5	10.2	7.5	8.7	12.1	13.7
Median number of days	1.0	0.5	2.5	2.5	2.5	1.0	1.0	5.0	2.5

Table E12: PANEL – Q7B Thinking about that journey, how far in advance of travel had you bought a ticket for the journey? By Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey?

	How far in advance of travel had you planned to make the journey?										
How far in advance of travel had you bought a ticket for the journey?	**Immediately before travelling/ spontaneous**	**Earlier on the day of travel**	**One day in advance**	**2-3 days in advance**	**4-6 days in advance**	**7-14 days in advance**	**Two to four weeks in advance**	**More than 4 weeks but less than 8 weeks in advance**	**8 weeks or more but less than 12 weeks in advance**	**12 weeks or more in advance**	**Total**
Immediately before travelling	6%	6%	6%	7%	2%	3%	2%	0%	0%	1%	**34%**
Earlier on the day of travel	1%	4%	1%	1%	1%	1%	0%	0%	0%	0%	**11%**
One day in advance	0%	1%	4%	2%	1%	1%	0%	0%	0%	0%	**9%**
2-3 days in advance	0%	1%	1%	5%	1%	0%	0%	0%	0%	0%	**9%**
4-6 days in advance	0%	0%	0%	1%	3%	1%	1%	0%	0%	0%	**7%**
7-14 days in advance	0%	1%	1%	1%	0%	5%	1%	0%	0%	0%	**9%**
Two to four weeks in advance	1%	1%	1%	1%	1%	1%	3%	1%	0%	0%	**10%**
More than 4 weeks but less than 8 weeks in advance	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	**5%**
8 weeks or more but less than 12 weeks in advance	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	**2%**
12 weeks or more in advance	1%	1%	1%	1%	0%	1%	0%	0%	0%	3%	**9%**
Total	**12%**	**18%**	**20%**	**24%**	**13%**	**17%**	**12%**	**6%**	**2%**	**7%**	**6806**

Table E13: PANEL – Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service? By Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey?

How far in advance of travel had you FIRST found out there was disruption to your rail service?	How far in advance of travel had you planned to make the journey?										
	Immediately before travelling/ spontaneous	Earlier on the day of travel	One day in advance	2-3 days in advance	4-6 days in advance	7-14 days in advance	Two to four weeks in advance	More than 4 weeks but less than 8 weeks in advance	8 weeks or more but less than 12 weeks in advance	12 weeks or more in advance	Total
Immediately before travelling	6%	5%	4%	4%	1%	2%	1%	0%	0%	1%	**35%**
Earlier on the day of travel	1%	5%	3%	3%	1%	1%	1%	0%	0%	0%	**21%**
One day in advance	1%	1%	3%	2%	1%	1%	1%	0%	0%	0%	**15%**
2-3 days in advance	0%	1%	3%	6%	2%	3%	2%	1%	0%	1%	**24%**
4-6 days in advance	0%	0%	0%	2%	3%	2%	1%	1%	0%	0%	**13%**
7-14 days in advance	0%	0%	1%	1%	1%	3%	1%	1%	0%	1%	**12%**
Two to four weeks in advance	0%	0%	0%	1%	0%	1%	2%	1%	0%	0%	**8%**
More than 4 weeks but less than 8 weeks in advance	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	**3%**
8 weeks or more but less than 12 weeks in advance	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**2%**
12 weeks or more in advance	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	**4%**
Total	**12%**	**18%**	**20%**	**24%**	**13%**	**17%**	**12%**	**6%**	**2%**	**7%**	**8783**

Table E14: PANEL – Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service? Q7B Thinking about that journey, how far in advance of travel had you bought a ticket for the journey?

How far in advance of travel had you FIRST found out there was disruption to your rail service?	How far in advance of travel had you bought a ticket for the journey?										
	Immediately before travelling/ spontaneous	Earlier on the day of travel	One day in advance	2-3 days in advance	4-6 days in advance	7-14 days in advance	Two to four weeks in advance	More than 4 weeks but less than 8 weeks in advance	8 weeks or more but less than 12 weeks in advance	12 weeks or more in advance	Total
Immediately before travelling	15%	3%	2%	2%	1%	1%	2%	1%	0%	1%	**35%**
Earlier on the day of travel	5%	4%	2%	1%	1%	1%	1%	0%	0%	1%	**21%**
One day in advance	3%	1%	2%	1%	1%	1%	1%	0%	0%	1%	**15%**
2-3 days in advance	4%	1%	2%	2%	2%	2%	1%	0%	0%	1%	**24%**
4-6 days in advance	1%	1%	0%	1%	2%	1%	1%	0%	0%	1%	**13%**
7-14 days in advance	2%	1%	1%	0%	0%	1%	1%	0%	0%	1%	**12%**
Two to four weeks in advance	1%	0%	0%	0%	0%	1%	1%	1%	0%	1%	**8%**
More than 4 weeks but less than 8 weeks in advance	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	**3%**
8 weeks or more but less than 12 weeks in advance	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**2%**
12 weeks or more in advance	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	**4%**
Total	**34%**	**11%**	**9%**	**9%**	**7%**	**9%**	**10%**	**5%**	**2%**	**9%**	**7046**

Table E15: PANEL – Timing of awareness relative to buying ticket (created variable) by Market Segment

	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Know after buying	51%	44%	46%	43%	51%	47%
Know at same time as buying	28%	36%	30%	33%	25%	32%
Know before buying	21%	20%	24%	24%	24%	22%
Base	1969	1575	1088	1233	196	**6060**

Table E15a: Disrupted Travellers – Timing of awareness relative to buying ticket (created variable) by Market Segment

	Market Segment					
	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Know after buying	35%	24%	29%	23%	39%	28%
Know at same time as buying	41%	37%	46%	42%	43%	42%
Know before buying	24%	40%	25%	36%	18%	30%
Base	**280**	**233**	**346**	**247**	**49**	**1161**

Table E16: PANEL – Timing of awareness relative to buying ticket (created variable) by Q10 Ticket Type

	Ticket Type								
	PAYG	Anytime day single or day return	Anytime return	Off-peak/super off-peak single or day return	Off-peak/super off-peak return	Advance (specific train)	Weekly season ticket	Monthly or longer season ticket	Other
Know after buying	29%	32%	37%	33%	35%	67%	58%	75%	27%
Know at same time as buying	43%	42%	39%	33%	30%	25%	27%	13%	46%
Know before buying	28%	26%	24%	34%	35%	8%	15%	11%	28%
Base	**464**	**1288**	**1069**	**587**	**499**	**378**	**483**	**1446**	**120**

Table E17: PANEL – Timing of awareness relative to buying ticket (created variable) by Q12 How often do you make this journey?

	Journey Frequency					
	3 or more days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	Once a year or less
Know after buying	53%	38%	40%	45%	40%	44%
Know at same time as buying	29%	37%	37%	31%	32%	33%
Know before buying	18%	25%	23%	24%	28%	23%
Base	**3074**	**710**	**542**	**721**	**957**	**393**

Table E18: PANEL – Timing of awareness relative to buying ticket (created variable) by Journey Purpose groups

	Q11 What was the main reason for making this journey?			
	Other	To/from work (commuting)	To/from airport	Total
Know after buying	40%	53%	56%	47%
Know at same time as buying	33%	29%	29%	32%
Know before buying	26%	17%	15%	22%
Base	**3307**	**3014**	**75**	**6396**

Table E19: PANEL – Timing of planning, buying and awareness – potential passengers

TABLE PROPORTIONS

Q7B How far in advance of travel had you bought a ticket for the journey?			Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey?			
			More than 14 days	**2-14 days**	**Earlier on the day of travel**	**Immediately before travelling/ spontaneous**
More than 14 days	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	6%	0%	0%	0%
		2-14 days	6%	1%	0%	0%
		Earlier on the day of travel	1%	1%	0%	0%
		Immediately before travelling	2%	0%	0%	0%
2-14 days	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	1%	0%	0%
		2-14 days	3%	19%	1%	0%
		Earlier on the day of travel	0%	5%	0%	0%
		Immediately before travelling	1%	5%	0%	0%
Earlier on the day of travel	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	0%	1%	0%	0%
		2-14 days	0%	3%	1%	0%
		Earlier on the day of travel	0%	2%	2%	1%
		Immediately before travelling	0%	1%	2%	0%
Immediately before travelling	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	3%	0%	0%
		2-14 days	1%	9%	1%	1%
		Earlier on the day of travel	0%	4%	2%	0%
		Immediately before travelling	1%	8%	3%	3%

Base: 3129 EXCLUDES SEASON TICKETS AND COMMUTERS

Table E19a: PANEL WHO CONTINUED TO TRAVEL – Timing of planning, buying and awareness

TABLE PROPORTIONS

Q7B How far in advance of travel had you bought a ticket for the journey?			Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey?			
			More than 14 days	**2-14 days**	**Earlier on the day of travel**	**Immediately before travelling/ spontaneous**
More than 14 days	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	6%	0%	0%	0%
		2-14 days	4%	0%	0%	0%
		Earlier on the day of travel	1%	1%	0%	0%
		Immediately before travelling	3%	0%	0%	0%
2-14 days	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	2%	0%	0%
		2-14 days	3%	18%	1%	0%
		Earlier on the day of travel	0%	5%	1%	0%
		Immediately before travelling	2%	6%	0%	0%
Earlier on the day of travel	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	0%	1%	0%	0%
		2-14 days	0%	3%	0%	0%
		Earlier on the day of travel	0%	2%	2%	1%
		Immediately before travelling	0%	1%	2%	1%
Immediately before travelling	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	3%	0%	0%
		2-14 days	1%	7%	1%	1%
		Earlier on the day of travel	0%	3%	1%	0%
		Immediately before travelling	1%	7%	3%	3%

Base: 1935 EXCLUDES SEASON TICKETS AND COMMUTERS

Table E19b: PANEL WHO CONTINUED TO TRAVEL – Timing of planning, buying and awareness

TABLE PROPORTIONS

Q7B How far in advance of travel had you bought a ticket for the journey?			Q7A Thinking about that journey, how far in advance of travel had you planned to make the journey?			
			More than 14 days	**2-14 days**	**Earlier on the day of travel**	**Immediately before travelling/ spontaneous**
More than 14 days	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	5%	1%	0%	0%
		2-14 days	4%	4%	0%	0%
		Earlier on the day of travel	1%	1%	1%	0%
		Immediately before travelling	2%	1%	1%	1%
2-14 days	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	1%	0%	0%
		2-14 days	2%	15%	1%	0%
		Earlier on the day of travel	1%	4%	1%	1%
		Immediately before travelling	1%	5%	1%	1%
Earlier on the day of travel	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	0%	0%	0%	0%
		2-14 days	0%	2%	1%	0%
		Earlier on the day of travel	0%	2%	2%	0%
		Immediately before travelling	0%	1%	2%	1%
Immediately before travelling	Q7C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	2%	0%	0%
		2-14 days	1%	6%	1%	1%
		Earlier on the day of travel	0%	3%	1%	0%
		Immediately before travelling	1%	6%	4%	6%

Base: 4231 INCLUDES SEASON TICKETS AND COMMUTERS

Table E19c: Disrupted Travellers – Timing of planning, buying and awareness

TABLE PROPORTIONS

Q17B How far in advance of travel had you bought a ticket for the journey?			Q17A Thinking about that journey, how far in advance of travel had you planned to make the journey?			
			More than 14 days	**2-14 days**	**Earlier on the day of travel**	**Immediately before travelling/ spontaneous**
More than 14 days	Q17C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	8%	1%	0%	0%
		2-14 days	3%	1%	0%	0%
		Earlier on the day of travel	2%	0%	0%	0%
		Immediately before travelling	3%	0%	0%	0%
2-14 days	Q17C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	2%	0%	0%
		2-14 days	5%	16%	0%	1%
		Earlier on the day of travel	1%	3%	0%	0%
		Immediately before travelling	1%	4%	0%	1%
Earlier on the day of travel	Q17C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	1%	0%	0%
		2-14 days	2%	6%	1%	0%
		Earlier on the day of travel	1%	6%	4%	0%
		Immediately before travelling	1%	2%	1%	0%
Immediately before travelling	Q17C how far in advance of travel had you FIRST found out there was disruption to your rail service?	More than 14 days	1%	1%	0%	0%
		2-14 days	1%	4%	0%	0%
		Earlier on the day of travel	0%	2%	1%	0%
		Immediately before travelling	1%	4%	2%	2%

Base: 1069

Table E20: PANEL – Q8 How had you FIRST found out about the planned disruption? by Segment

	Market Segment					
	London & SE Long Distance	**London & SE Short Distance**	**Not London Long Distance**	**Not London Short Distance**	**Airports**	**All**
Via website/app when buying ticket	9%	6%	10%	8%	11%	8%
Via website/app when checking for any disruption	28%	29%	14%	15%	25%	23%
Social media (e.g. Twitter)	5%	4%	6%	4%	6%	5%
Email alert	7%	8%	4%	4%	7%	6%
Information displayed at rail station(s)	28%	30%	36%	42%	27%	33%
Word of mouth/from other passengers	5%	4%	6%	6%	1%	5%
Text alert from ticket provider	0%	0%	1%	0%	0%	0%
Announcements made at the station	9%	12%	10%	10%	6%	10%
Announcements made on the train	1%	1%	2%	1%	2%	1%
Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	1%	1%	3%	2%	0%	2%
Asked a member of staff if there was any disruption	1%	0%	1%	0%	2%	1%
Information in the press	3%	4%	6%	6%	11%	5%
Travel agent	0%	0%	0%	0%	0%	0%
Website when checking train times	1%	0%	1%	1%	1%	1%
When RB turned up/got to station	0%	0%	0%	0%	0%	0%
Other source of information	1%	0%	1%	1%	0%	1%
All Digital	50%	47%	35%	32%	50%	43%
Not	50%	53%	65%	68%	50%	57%
Base	2677	2948	1316	1750	258	**9430**

Table E20a: PANEL WHO CONTINUED TO TRAVEL – Q8 How had you FIRST found out about the planned disruption? by Segment

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Via website/app when buying ticket	9%	7%	9%	8%	16%	9%
Via website/app when checking for any disruption	24%	25%	12%	16%	26%	21%
Social media (e.g. Twitter)	6%	7%	6%	3%	2%	5%
Email alert	6%	8%	5%	5%	6%	6%
Information displayed at rail station(s)	31%	31%	37%	41%	26%	34%
Word of mouth/from other passengers	5%	3%	5%	4%	2%	4%
Text alert from ticket provider	1%	0%	1%	1%	0%	1%
Announcements made at the station	10%	13%	10%	11%	6%	11%
Announcements made on the train	2%	1%	2%	1%	2%	1%
Told by a member of staff when buying the ticket (inc by phone, on train or ticket office)	1%	1%	5%	3%	0%	2%
Asked a member of staff if there was any disruption	1%	1%	1%	1%	2%	1%
Information in the press	2%	3%	5%	7%	10%	4%
Travel agent	0%	0%	0%	0%	0%	0%
Website when checking train times	1%	0%	0%	0%	1%	0%
When RB turned up/got to station	0%	0%	0%	0%	0%	0%
Other source of information	0%	0%	1%	1%	0%	0%
All Digital	47%	47%	33%	32%	52%	42%
Not	53%	53%	67%	68%	48%	59%
Base	1437	1344	832	1012	158	4782

Table E20b: Disrupted Travellers – Q18 How had you FIRST found out about the planned disruption? by Segment

	Market Segment					
	London & SE Long Distance	**London & SE Short Distance**	**Not London Long Distance**	**Not London Short Distance**	**Airports**	**All**
Via website/app when buying ticket	25%	11%	31%	17%	23%	21%
Via website/app when checking for any disruption	21%	23%	16%	14%	17%	18%
Social media (e.g. twitter)	1%	1%	0%	2%	0%	1%
Email alert	0%	3%	0%	0%	0%	1%
Information displayed at rail station(s)	17%	25%	12%	24%	26%	19%
Word of mouth/from other passengers	5%	6%	7%	6%	4%	6%
Text alert from ticket provider	0%	0%	0%	1%	0%	0%
Announcements made at the station	7%	9%	4%	7%	8%	7%
Announcements made on the train	6%	2%	2%	2%	2%	3%
Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	6%	5%	14%	12%	9%	9%
Asked a member of staff if there was any disruption	5%	7%	4%	4%	6%	5%
Information in the press	0%	1%	1%	2%	2%	1%
Travel agent	0%	0%	0%	0%	2%	0%
Have used the station previously while the engineering works have been in progress	0%	0%	1%	0%	0%	0%
Other source of information (please specify)	7%	5%	6%	7%	2%	6%
Website when checking train times	1%	1%	2%	0%	0%	1%
Found out when arrived and had to use RB etc	0%	1%	0%	2%	0%	1%
Base	316	349	376	294	53	**1407**
All Digital	48%	39%	50%	34%	40%	42%

Table E21: PANEL – Q8 How had you FIRST found out about the planned disruption? by Ticket Type

	PAYG	Anytime day single or day return	Anytime return	Off-peak/ super off-peak single or day return	Off-peak/super off-peak return	Advance (specific train)	Weekly season ticket	Monthly or longer season ticket	Other
Via website/app when buying ticket	5%	13%	8%	13%	15%	22%	9%	1%	2%
Via website/app when checking for any disruption	27%	18%	18%	25%	25%	19%	12%	27%	33%
Social media (e.g. Twitter)	2%	7%	7%	4%	4%	4%	4%	5%	2%
Email alert	9%	3%	5%	5%	5%	8%	7%	8%	5%
Information displayed at rail station(s)	30%	35%	36%	29%	28%	15%	44%	34%	34%
Word of mouth/from other passengers	5%	5%	6%	5%	5%	10%	3%	3%	2%
Text alert from ticket provider	1%	0%	1%	0%	1%	1%	0%	0%	0%
Announcements made at the station	10%	9%	11%	7%	6%	5%	13%	14%	12%
Announcements made on the train	2%	1%	2%	0%	1%	1%	0%	2%	0%
Told by a member of staff when buying the ticket (inc by phone, on train or ticket office)	2%	3%	3%	2%	2%	1%	1%	0%	1%
Asked a member of staff if there was any disruption	0%	1%	1%	1%	1%	3%	2%	1%	0%
Information in the press	7%	4%	3%	5%	4%	10%	3%	5%	5%
Travel agent	0%	0%	0%	0%	0%	0%	1%	0%	0%
Website when checking train times	0%	0%	1%	1%	2%	1%	0%	0%	2%
When RB turned up/got to station	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other source of information	0%	0%	0%	0%	0%	0%	0%	0%	0%
All Digital	44%	42%	40%	49%	0%	0%	1%	0%	45%
Not	56%	58%	60%	51%	52%	54%	32%	41%	55%
Base	**948**	**1672**	**1293**	**753**	**48%**	**46%**	**68%**	**59%**	**536**

Table E22: PANEL – Q8 How had you FIRST found out about the planned disruption? by Q12 How often do you make this journey?

	3 or more days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	Once a year or less
Via website/app when buying ticket	6%	6%	11%	8%	11%	13%
Via website/app when checking for any disruption	18%	19%	29%	29%	34%	24%
Social media (e.g. Twitter)	6%	5%	5%	4%	2%	3%
Email alert	7%	9%	7%	5%	4%	6%
Information displayed at rail station(s)	38%	32%	25%	33%	26%	27%
Word of mouth/from other passengers	4%	5%	4%	5%	6%	7%
Text alert from ticket provider	0%	0%	0%	1%	1%	0%
Announcements made at the station	13%	12%	10%	6%	7%	9%
Announcements made on the train	2%	2%	0%	1%	1%	1%
Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	2%	2%	2%	0%	2%	1%
Asked a member of staff if there was any disruption	1%	1%	2%	1%	1%	1%
Information in the press	4%	6%	5%	5%	5%	3%
Travel agent	0%	0%	0%	0%	0%	0%
Website when checking train times	0%	0%	0%	0%	2%	1%
When RB turned up/got to station	0%	0%	0%	0%	0%	0%
Word of mouth	0%	0%	0%	0%	0%	0%
Other source of information	0%	0%	0%	1%	1%	2%
Digital	37%	41%	52%	47%	53%	48%
Not Digital	63%	59%	48%	53%	47%	52%
Base	**4331**	**1113**	**860**	**1045**	**1507**	**574**

Table E23: PANEL – Q8 How had you FIRST found out about the planned disruption? by Trip Purpose

	To/from work (commuting)	To/from place of education	Visit friends/ relatives	To/from leisure/ recreation	Business trip (NOT commuting)	Personal business	To/from shopping	To/from airport	Other
Via website/app when buying ticket	7%	9%	9%	8%	12%	6%	2%	12%	26%
Via website/app when checking for any disruption	17%	15%	27%	32%	17%	33%	24%	28%	0%
Social media (e.g. Twitter)	6%	12%	5%	3%	2%	4%	2%	1%	6%
Email alert	7%	4%	6%	6%	7%	6%	9%	5%	4%
Information displayed at rail station(s)	36%	34%	29%	33%	32%	24%	30%	34%	29%
Word of mouth/from other passengers	4%	8%	6%	3%	5%	7%	7%	5%	0%
Text alert from ticket provider	0%	1%	1%	0%	1%	1%	1%	0%	0%
Announcements made at the station	13%	10%	9%	7%	6%	8%	10%	4%	34%
Announcements made on the train	2%	1%	1%	1%	0%	1%	1%	1%	0%
Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	2%	4%	2%	1%	2%	2%	2%	0%	0%
Asked a member of staff if there was any disruption	1%	0%	1%	0%	3%	1%	1%	0%	0%
Information in the press	5%	3%	4%	4%	10%	6%	6%	1%	0%
Travel agent	0%	0%	0%	0%	0%	0%	1%	4%	0%
Website when checking train times	0%	0%	1%	1%	0%	1%	2%	4%	0%
When RB turned up/got to station	0%	0%	0%	0%	0%	1%	0%	0%	0%
Word of mouth	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other source of information	0%	0%	0%	1%	2%	1%	2%	1%	1%
Digital	38%	41%	49%	50%	39%	50%	40%	51%	36%
Not Digital	62%	59%	51%	50%	61%	50%	60%	49%	64%
Base	**4142**	**275**	**1681**	**2032**	**409**	**400**	**354**	**114**	**23**

Table E24: PANEL – Q8 How had you FIRST found out about the planned disruption? by Q15 How often do you travel by rail, for any purpose (excluding underground / tram services) in Great Britain?

	Less than once a year	Less than once a month	Less than once a week	1-3 days a week	4 or more days a week
Via website/app when buying ticket	14%	12%	10%	8%	7%
Via website/app when checking for any disruption	20%	20%	24%	22%	23%
Social media (e.g. Twitter)	5%	6%	4%	6%	5%
Email alert	8%	6%	6%	7%	6%
Information displayed at rail station(s)	23%	24%	28%	32%	34%
Word of mouth/from other passengers	5%	6%	6%	5%	4%
Text alert from ticket provider	2%	1%	1%	1%	0%
Announcements made at the station	10%	9%	7%	9%	12%
Announcements made on the train	2%	2%	2%	1%	1%
Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	2%	2%	2%	2%	1%
Asked a member of staff if there was any disruption	1%	1%	1%	1%	1%
Information in the press	6%	9%	7%	5%	4%
Travel agent	0%	0%	0%	0%	0%
Website when checking train times	0%	0%	0%	1%	0%
When RB turned up/got to station	1%	0%	0%	0%	0%
Word of mouth	0%	0%	0%	0%	0%
Other source of information	1%	1%	1%	0%	0%
Digital	49%	46%	46%	44%	42%
Not Digital	51%	54%	54%	56%	58%
Base	**2**	**219**	**933**	**2177**	**6099**

Table E25: PANEL – Q8 How had you FIRST found out about the planned disruption? by Q7C Thinking about that journey, how far in advance of travel had you FIRST found out there was disruption to your rail service?

	Immediately before travelling	Earlier on the day of travel	One day in advance	2-3 days in advance	4-6 days in advance	7-14 days in advance	Two to four weeks in advance	More than 4 weeks but less than 8 weeks in advance	8 weeks or more but less than 12 weeks in advance	12 weeks or more in advance
Via website/app when buying ticket	8%	6%	8%	7%	5%	11%	12%	16%	12%	9%
Via website/app when checking for any disruption	11%	40%	33%	22%	26%	21%	28%	24%	6%	3%
Social media (e.g. Twitter)	2%	9%	8%	4%	7%	2%	6%	0%	0%	2%
Email alert	1%	5%	5%	13%	8%	9%	8%	4%	0%	9%
Information displayed at rail station(s)	44%	22%	22%	29%	34%	35%	28%	42%	56%	42%
Word of mouth/from other passengers	4%	5%	6%	6%	4%	4%	5%	3%	5%	4%
Text alert from ticket provider	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%
Announcements made at the station	21%	8%	5%	8%	7%	4%	6%	4%	3%	5%
Announcements made on the train	2%	1%	1%	1%	0%	2%	1%	0%	4%	0%
Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	4%	1%	3%	0%	1%	0%	0%	0%	0%	4%
Asked a member of staff if there was any disruption	2%	0%	1%	1%	1%	0%	0%	2%	0%	0%
Information in the press	1%	2%	8%	6%	5%	8%	6%	4%	10%	17%
Travel agent	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Website when checking train times	0%	0%	1%	1%	1%	2%	0%	2%	0%	1%
When RB turned up/got to station	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Word of mouth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other source of information	0%	0%	0%	1%	1%	0%	1%	0%	1%	3%
Digital	22%	61%	55%	49%	48%	46%	54%	45%	19%	26%
Not Digital	78%	39%	45%	51%	52%	54%	46%	55%	81%	74%
Base	**2390**	**1456**	**996**	**1644**	**863**	**799**	**526**	**235**	**134**	**245**

Table E26: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Segment

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports	All
Use the replacement bus to complete the journey	31%	26%	41%	39%	40%	33%
Travel on a re-scheduled rail service	23%	20%	23%	19%	21%	21%
Choose not to travel	19%	17%	13%	12%	16%	16%
Use alternative mode or route to make the journey	20%	32%	18%	27%	18%	25%
Change timing of trip to when normal services running	8%	6%	6%	2%	6%	6%
Base	2677	2948	1316	1750	258	9430

Table E27: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Ticket

	PAY G	Anytime day single or day return	Anytime return	Off-peak/super off-peak single or day return	Off-peak/super off-peak return	Advance (specific train)	Weekly season ticket	Monthly or longer season ticket	Please specify
Use the replacement bus to complete the journey	24%	41%	39%	33%	37%	34%	45%	25%	26%
Travel on a re-scheduled rail service	16%	21%	20%	20%	22%	23%	18%	26%	20%
Choose not to travel	18%	14%	18%	19%	13%	19%	13%	15%	19%
Use alternative mode or route to make the journey	37%	20%	18%	22%	21%	12%	22%	29%	28%
Change timing of trip to when normal services running	6%	4%	6%	7%	6%	12%	2%	5%	6%
Base	**948**	**1672**	**1293**	**753**	**638**	**406**	**552**	**2444**	**536**

Table E28: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Journey Frequency

	3 or more days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	Once a year or less
Use the replacement bus to complete the journey	35%	32%	35%	33%	27%	24%
Travel on a re-scheduled rail service	24%	23%	16%	17%	18%	19%
Choose not to travel	12%	16%	21%	17%	22%	25%
Use alternative mode or route to make the journey	25%	24%	22%	25%	24%	22%
Change timing of trip to when normal services running	4%	5%	5%	8%	10%	10%
Base	**4331**	**1113**	**860**	**1045**	**1507**	**574**

Table E29: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Purpose

	To/from work (commuting)	To/from place of education	Visit friends/relatives	To/from leisure/recreation	Business trip (NOT commuting)	Personal business	To/from shopping	To/from airport	Other
Use the replacement bus to complete the journey	35%	34%	37%	26%	28%	30%	22%	44%	36%
Travel on a re-scheduled rail service	25%	26%	17%	17%	23%	21%	19%	18%	11%
Choose not to travel	13%	11%	17%	21%	18%	17%	28%	11%	18%
Use alternative mode or route to make the journey	24%	21%	21%	29%	22%	25%	25%	27%	35%
Change timing of trip to when normal services running	4%	8%	8%	8%	10%	7%	5%	1%	0%
Base	**4142**	**275**	**1681**	**2032**	**409**	**400**	**354**	**114**	**23**

Table E30: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? by Frequency of using rail

	Less than once a year	Less than once a month	Less than once a week	1-3 days a week	4 or more days a week
Use the replacement bus to complete the journey	48%	35%	35%	34%	32%
Travel on a re-scheduled rail service	24%	24%	22%	19%	22%
Choose not to travel	13%	17%	17%	17%	16%
Use alternative mode or route to make the journey	12%	18%	20%	24%	25%
Change timing of trip to when normal services running	3%	6%	6%	6%	5%
Base	**2**	**219**	**933**	**2177**	**6099**

Table E31: DT Survey – How satisfied are you with the way disruption to rail services has been communicated and managed to help you complete your journey?... by c) When did you FIRST find out there was disruption to your rail service?

	Just now	Earlier today	Yesterday	2-3 days ago	4-6 days ago	7-14 days ago	Two to four weeks ago	More than 4 weeks but less than 8 weeks ago	8 weeks or more but less than 12 weeks ago	12 or more weeks ago
Very satisfied	10%	14%	14%	23%	19%	30%	34%	31%	21%	21%
Satisfied	23%	29%	32%	35%	49%	38%	38%	38%	39%	46%
Neither satisfied nor dissatisfied	27%	26%	30%	26%	17%	12%	16%	9%	26%	7%
Dissatisfied	20%	21%	16%	11%	8%	15%	10%	13%	5%	14%
Very Dissatisfied	20%	11%	7%	4%	7%	5%	1%	9%	8%	11%
Base	**328**	**257**	**201**	**134**	**86**	**82**	**73**	**55**	**38**	**28**

Table E32: DT Survey – How satisfied are you with the way disruption to rail services has been communicated and managed to help you complete your journey?... by How had you FIRST found out about the planned disruption?

	Via website/app when buying ticket	Via website/app when checking for any disruption	Information displayed at rail station(s)	Word of mouth/from other passengers	Announcements made at the station	Announcements made on the train	Told by a member of staff when buying the ticket (includes by phone, on train or ticket office)	Asked a member of staff if there was any disruption	Other source of information (please specify)
Very satisfied	26%	16%	17%	17%	12%	8%	18%	7%	16%
Satisfied	36%	36%	36%	18%	32%	32%	28%	27%	25%
Neither satisfied nor dissatisfied	24%	24%	24%	35%	22%	24%	21%	20%	20%
Dissatisfied	9%	17%	14%	21%	23%	16%	21%	21%	22%
Very Dissatisfied	5%	8%	9%	10%	10%	21%	12%	24%	16%
Base	**298**	**252**	**265**	**78**	**90**	**38**	**126**	**70**	**85**

Table E33: DT Survey –Thinking about those rail journeys that were affected by planned disruptions, were you aware of the disruption in advance?.. by How often do you make this journey by train?

	5 or more days a week	3-4 days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	First time	Total
Yes, on all occasions	35%	35%	35%	40%	33%	42%	39%	38%
Yes, on about three quarters of occasions	15%	24%	18%	9%	12%	10%	7%	12%
Yes, on about half of occasions	21%	10%	16%	15%	14%	9%	8%	12%
Yes, on about a quarter of occasions	14%	14%	9%	13%	9%	9%	6%	10%
No, not aware in advance on any occasion	15%	18%	21%	23%	32%	30%	40%	28%
Base	**118**	**51**	**179**	**167**	**197**	**393**	**220**	**1333**

Table E34: DT Survey –Thinking about those rail journeys that were affected by planned disruptions, were you aware of the disruption in advance?.. by Including your journey today, how many times in the last 12 months have you made a rail journey that has been affected by planned disruption?

	Once (i.e. today only)	On 2-4 occasions	On 5-10 occasions	On more than 10 occasions
Yes, on all occasions	48%	35%	33%	33%
Yes, on about three quarters of occasions	1%	11%	20%	23%
Yes, on about half of occasions	2%	16%	19%	17%
Yes, on about a quarter of occasions	2%	8%	17%	17%
No, not aware in advance on any occasion	48%	30%	12%	11%
Base	**377**	**459**	**245**	**235**

Table E35: DT Survey – Including your journey today, how many times in the last 12 months have you made a rail journey that has been affected by planned disruption?.. by How often do you make this journey by train?

	5 or more days a week	3-4 days a week	1-2 days a week	Once a fortnight	Once a month	Less than once a month	First time	Total
Once (i.e. today only)	4%	8%	11%	16%	24%	46%	58%	32%
On 2-4 occasions	22%	24%	24%	34%	45%	39%	28%	33%
On 5-10 occasions	25%	26%	31%	27%	20%	10%	10%	18%
On more than 10 occasions	49%	42%	35%	23%	12%	5%	4%	17%
Base	**118**	**50**	**180**	**167**	**199**	**426**	**240**	**1392**

Table E36: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? When journey was planned

	Immediately before travelling/ spontaneous	Earlier on the day of travel	One day in advance	2-3 days in advance	4-6 days in advance	7-14 days in advance	Two to four weeks in advance	More than 4 weeks but less than 8 weeks in advance	8 weeks or more but less than 12 weeks in advance	12 weeks or more in advance
Use the replacement bus to complete the journey	39%	41%	37%	33%	28%	27%	32%	27%	12%	29%
Travel on a re-scheduled rail service	23%	22%	22%	18%	21%	18%	16%	17%	36%	33%
Choose not to travel	13%	12%	13%	18%	19%	22%	16%	16%	13%	11%
Use alternative mode or route to make the journey	20%	23%	24%	26%	26%	23%	28%	34%	22%	24%
Change timing of trip to when normal services running	5%	2%	4%	6%	7%	10%	8%	6%	17%	3%
Base	**805**	**1243**	**1341**	**1638**	**914**	**1124**	**783**	**384**	**125**	**485**

Table E37: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? When ticket was bought

	Immediately before travelling/ spontaneous	Earlier on the day of travel	One day in advance	2-3 days in advance	4-6 days in advance	7-14 days in advance	Two to four weeks in advance	More than 4 weeks but less than 8 weeks in advance	8 weeks or more but less than 12 weeks in advance	12 weeks or more in advance
Use the replacement bus to complete the journey	41%	48%	41%	48%	35%	37%	32%	29%	24%	25%
Travel on a re-scheduled rail service	20%	25%	28%	23%	20%	23%	26%	22%	41%	33%
Choose not to travel	13%	7%	12%	9%	17%	13%	14%	18%	6%	16%
Use alternative mode or route to make the journey	21%	16%	17%	15%	23%	19%	23%	28%	20%	20%
Change timing of trip to when normal services running	4%	4%	2%	6%	4%	8%	6%	4%	10%	6%
Base	**2324**	**738**	**628**	**616**	**483**	**600**	**671**	**307**	**111**	**607**

Table E38: PANEL – Q2 Thinking about the most recent occasion you made or attempted to make a rail journey that was affected by PLANNED DISRUPTION, did you...? When ticket was bought

	Immediately before travelling/ spontaneous	Earlier on the day of travel	One day in advance	2-3 days in advance	4-6 days in advance	7-14 days in advance	Two to four weeks in advance	More than 4 weeks but less than 8 weeks in advance	8 weeks or more but less than 12 weeks in advance	12 weeks or more in advance
Use the replacement bus to complete the journey	40%	31%	29%	28%	27%	32%	32%	35%	33%	40%
Travel on a re-scheduled rail service	25%	28%	24%	14%	16%	14%	22%	13%	30%	25%
Choose not to travel	12%	14%	18%	20%	18%	20%	15%	24%	11%	12%
Use alternative mode or route to make the journey	19%	24%	22%	30%	29%	26%	25%	22%	21%	19%
Change timing of trip to when normal services running	3%	3%	7%	7%	10%	8%	6%	6%	6%	3%
Base	**2390**	**1456**	**996**	**1644**	**863**	**799**	**526**	**235**	**134**	**2390**

Table E39: PANEL – Aware in advance of travel by nature of disruption

	Replacement buses only	Diversions or retimed services only	RB and Diversions	Unknown Planned or no alternative provided	Total
Unaware in advance	23%	31%	24%	36%	26%
Aware in advance	77%	69%	76%	64%	74%
Base	**5246**	**1677**	**1479**	**803**	**9290**

Table E39b: PANEL WHO CONTINUED TO TRAVEL – Aware in advance of travel by nature of disruption

	Replacement buses only	Diversions or retimed services only	RB and Diversions	Unknown Planned or no alternative provided	Total
Unaware in advance	30%	32%	29%	52%	31%
Aware in advance	70%	68%	71%	48%	69%
Base	**2751**	**1098**	**887**	**244**	**5020**

Table E39c: Disrupted Traveller – Aware in advance of travel by nature of disruption

	Replacement buses	Diversions or retimed services	Total
Unaware in advance	24%	43%	25%
Aware in advance	76%	57%	75%
Base	**1227**	**84**	**1311**

Table E40: PANEL – Aware in advance of travel by duration of disruption

	Don't know	Less than 60 hours	More than 60 hours
Unaware in advance	36%	19%	17%
Aware in advance	64%	81%	83%
Base	**4046**	**3725**	**1519**

Table E41: PANEL – Aware in advance of travel by duration and nature of disruption for disruption of 60 hours or less

	Less than 60 hours			
	Replacement buses only	Diversions or retimed services only	RB and Diversions	Unknown Planned or no alternative provided
Unaware in advance	18%	23%	13%	28%
Aware in advance	82%	77%	87%	72%
Base	**2423**	**534**	**546**	**210**

Appendix F - Panel Survey – Weighting

Analysis of the Panel sample of rail travellers showed that the age and gender profile was skewed towards males and younger people, when compared with National Rail Passenger Survey (NRPS) data. Weights were applied such that the Panel data more closely matched NRPS for age and gender. A further weight was also applied to include frequency of rail travel, to take into account that some passengers were more frequent rail travellers.

The weights have been computed as follows:

Firstly the frequency of using rail was used to estimate the number of trips made per week

Q15 How often do you travel by rail, for any purpose (excluding underground / tram services) in Great Britain?				
	Frequency	Percent	Number of trips per year	Weight value = trips per week
Less than once a year	268	5.2	0.5	0.01
Less than once a month	1200	23.4	10.0	0.2
Less than once a week	1202	23.5	40.0	0.8
1-3 days a week	1117	21.8	100.0	2
4 or more days a week	1334	26.0	250.0	5
Total	5121	100.0		

This weight is then applied to the data and the gender profile calculated. This is compared with the gender profile for NRPS. The second weight is the ratio of the gender proportions

		Panel Percent weighted	NRPS percent	Weight 2
	Male	53.8	45.3	0.842327
	Female	46.1	54.6	1.183629
	Prefer not to say	.1	0.6	5.903808

The third weight is the ratio of the age proportions

		Panel Percent weighted	NRPS percent	Weight 3
	16-34	23.9	23.5	0.792082
	35-54	39.8	39.1	0.820291
	55+	36.2	35.6	1.706177

The final weight combines each of the three weights.

Appendix G - Disrupted Travellers Survey – Fieldwork

Fieldwork Approach

Typically, weekend shift patterns covered either 10am-4pm, or 7am to 1pm and 1pm to 7pm, but were structured around the timing of the disrupted services. In most situations, shifts were covered by a single interviewer. At some stations with higher passenger numbers, two interviewers were in place.

A combination of approaches was taken optimise the capture of data from disrupted travellers, appropriate to each form of disruption, scheme selected, and operations at each survey location.

Where rail passengers were at stations some time before departing services, they could be interviewed face to face. Where this was not the case, they were asked to complete the survey themselves, either on paper (with a freepost post back facility) or online via a link to the questionnaire hosted on SNAP survey software.

The questionnaires were pre-printed with serial numbers to enable counts to be made of the distribution by location and day. Data from paper questionnaires was subsequently entered into SNAP in our offices by trained data entry clerks.

Each of the selected possessions had its own fieldwork plan, which showed the timings of departures, nature of the disruption and special instructions, for example where interviewers were to report to on site and where replacement buses departed from.

Where practical, questionnaires were offered to any alighting passengers as well as those boarding (either replacement buses or diverted rail services).

A prize draw was offered as an incentive to participate.

Fieldwork Issues

There were a number of issues that affected the fieldwork that may inform any future such surveys with disrupted travellers, including:

- Obtaining permissions to undertake work at stations is time consuming, and occasionally the permission was not granted in time to undertake planned fieldwork. Disruptions to the network are dispersed widely requiring liaison with a large number of TOCs, each with different protocols for authorisation.
- The frequent updates to planned engineering works, line closures and alternative travel arrangements mean that it is necessary to complete repeated checks on supplied information to check for any changes which might impact on planned fieldwork. This includes last minute cancellations of expected works, or incorrect information being provided. There were occasions when station staff were not aware of disruptions, both those planned for the future and those already inforce.
- Response rates were lower than expected compared with our previous experience of rail surveys. An on-train environment is much more conducive to encouraging passengers to complete questionnaires, whereas buses tend to be less comfortable. Passengers may have felt anxious about completing their trip, which may have deterred them completing and returning questionnaires. Travellers may also have felt it necessary to wait until the journey was completed to be able to provide the information requested, and then forgotten to complete and return the questionnaire.

- At some survey locations the high frequency of replacement bus services was such that it made it difficult for interviewers to be effective due to the rapid turnaround of buses and the extremely short waiting times for passengers. At such locations the opportunities for carrying out face to face interviews were limited and it was not always possible to explain the purpose of the survey when handing out paper copies of the questionnaire.
- Despite adding a question to capture passenger satisfaction with regards to journey experience during the planned disruption, anecdotal evidence from returned questionnaires suggested that passengers were keen to have the opportunity to provide more detailed feedback on their journey. Though this was beyond the scope of the survey, it is possible that this adversely affected the response rate; particularly amongst disgruntled passengers who were keen to pass on their views.
- Passenger numbers fluctuated considerably by survey location and it was often difficult to account for this when allocating interviewers and fieldwork materials.
- Despite repeated checks to verify timetables for the replacement bus services, the information provided to interviewers was often inaccurate due to last minute changes, e.g. reduced/ increased frequency of services, cancellation of expected works, etc.
- Feedback from interviewers suggested that at some survey locations the organisation of replacement bus services was disorganised and accurate timetable information for passengers was not always available. This is turn made it difficult for interviewers to encourage passengers to take part in the survey as they were understandably preoccupied with completing their journey.
- At some survey locations, interviewers were required to screen passengers boarding and alighting rail services to identify those affected by particular service changes, e.g. diversions, trains not stopping at particular stations, etc. This was often difficult to achieve, thus limiting the pool of people eligible to take part.

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