

National Rail Passenger Survey

Technical guide

Spring 2017

(Wave 36)



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1. Background

Transport Focus (known as Passenger Focus until April 2015, and previously OPRAF and the Strategic Rail Authority) set up the National Rail Passenger Survey in 1999. The aim of the NRPS was to provide customer views on rail company performance on a consistent basis, so that comparisons could be made between the various companies. Over time, data from the NRPS has been built into the franchising contracts with train companies, making the results an important commercial dimension of running a Train Operating Company (TOC). Given this, the sample design, fieldwork standards and accuracy of assigning journeys to specific TOCs are of the greatest importance. In addition, robust enough sample sizes are required for each TOC to ensure that performance changes can be seen in the marketplace.

The first NRPS was run in Autumn 1999 and since then it has run twice a year. The first seven waves were undertaken by The Oxford Research Agency, until the contract was offered at competitive tender in Autumn 2002. In December 2002, Continental Research (later merged to become BDRC Continental) was appointed to run the survey. Between 2002 and 2016 the survey was competitively tendered every four to five years and in 2016 the contract was awarded to Chime Insight & Engagement (CIE).

Following a successful pilot undertaken in Spring 2016 (by BDRC) two key changes were made to the survey methodology for Spring 2017 onwards. The first is the introduction of an online survey option. This now gives passengers a choice between completing a paper version of the questionnaire or being sent a link to an online version of the questionnaire. The second change was a reduction in the length of the questionnaire from 12 A4 pages to eight. This inevitably meant that some questions that have previously been included in the survey have had to be excluded. In some cases changes were also made to the wording of questions, the full details of which can be found later in this report. In order to limit the length of the questionnaire, two separate modules of the questionnaire were rotated across the sample (Fares and Ticketing and Station Access), such that half of the questionnaires distributed included the Fares and Ticketing module and the other half the Station Access module.

Specifically for ScotRail, the decision was taken to run the previous NRPS methodology in parallel to the main Spring 2017 survey. Where possible, the main interviewing shifts were matched in terms of station, day of week and time and run either a week before the corresponding main NRPS interviewing shift, or a week or two after. This has allowed us to gain a robust understanding of the differences between the new and previous methodology, the findings from which are referenced later in this report.

In addition to the changes made to the survey methodology and questionnaire, the decision was taken to conduct a robust assessment of the age and gender profile of passengers at each station. Historically, key demographics have not been controlled for in the survey data, with both age and gender allowed to 'fall out' naturally and no weighting of the data to correct for any imbalance in the profile achieved. The full details can be found in section 3.2 of this report.

This document outlines the methodology and technical details for Spring 2017, Wave 36 in the overall series. The aim of this document is to provide information on all key aspects of methodology, including all area definitions used to generate analyses. All analysis included is based on weighted data.

2. Questionnaire

2.1.1 Questionnaire Changes

A pilot was undertaken during Spring 2016 fieldwork to assess the impact of proposed changes to the questionnaire for future waves. In summary, the changes were:

- Introduction of the option for respondents to complete the survey online should they wish to
- Reduction in the questionnaire length from 12 pages to 8
- Questionnaire printed in colour, with an image on the front page

Following the pilot, the decision was taken to offer an online response option, reduce the length of the questionnaire and print in colour. In terms of the questionnaire coverage, the table below details those changes, their impact and conclusion on whether they are comparable with previous data or not.

Wording change	Impact	Conclusion
'Sufficient room for all passengers to sit/stand' replaced by 'Level of crowding'	Both attributes are rated very similarly by passengers in the Spring '16 pilot and the ScotRail parallel survey. However, there has been a 7% uplift in the results at a national level and changes at TOC level between 10-19%.	Results are not comparable
'Ease of getting on and off' replaced with 'Step or gap between the train the platform'	At a national level, the wording changes have resulted in a -19% difference.	Results are not comparable
'Comfort of the seating area' replaced with 'Comfort of seats'	The change has resulted in a lower score at a national level (-6%). The same pattern was observed in the Spring '16 pilot and the ScotRail parallel.	Results are not comparable
'Provision of shelter facilities' replaced with 'Shelter facilities'	Whilst a small (+4%) increase was observed, we don't believe this is due to such a minor wording change.	Results are comparable
'The facilities and services at the station (e.g. toilets, shops, cafes etc) replaced with 'Toilet facilities at the station'	Given the extent of the differences in meaning between these two statements we don't believe we can compare results.	Results are not comparable

Aside from a few exceptions noted in the above table, changes observed between Spring 2016 and Spring 2017 are real, rather than a result of methodological changes. It is recommended that a comparison is not made between Autumn and Spring as seasonal differences can impact upon the results. Typically, Spring scores are lower, due to poorer weather conditions, shorter days, and the possible impact of recent fare increases.

2.1.2 Online survey option

As an alternative to the paper version of the questionnaire, passengers were offered the opportunity to complete the survey online. Those wishing to take part via this route were asked for their e-mail address and an invite and survey url was sent to them soon after. Depending on connectivity and the availability of Wi-Fi in some cases the invite would have been sent immediately, in other cases a little later, once the interviewer had the opportunity to synchronise his or her tablet.

Of all the completed, returned and validated responses, online responses represented 11% of the total final sample. At an individual TOC level this varied significantly (see the table below), with the highest proportions recorded for ScotRail and Great Western Railway.

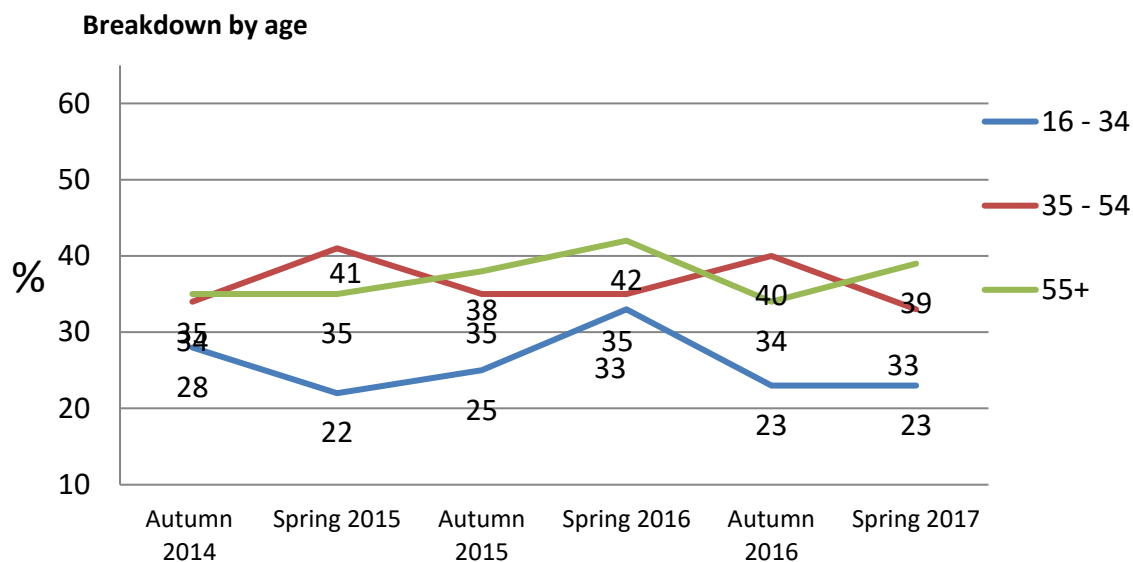
Proportion of online responses for each TOC

	Proportion %
Gatwick Express	3%
Heathrow Connect	3%
Heathrow Express	3%
Hull Trains	3%
Southeastern	5%
Arriva Trains Wales	6%
East Midlands Trains	6%
Grand Central	6%
London Midland	6%
London Overground	6%
Southern	6%
TransPennine Express	7%
c2c	8%
CrossCountry	9%
Northern	9%
Merseyrail	10%
Virgin Trains	11%
Chiltern Railways	12%
South West Trains	12%
Great Northern	14%
Thameslink	14%
Virgin Trains East Coast	14%
Greater Anglia	16%
TfL Rail	16%
Great Western Railway	21%
ScotRail	25%

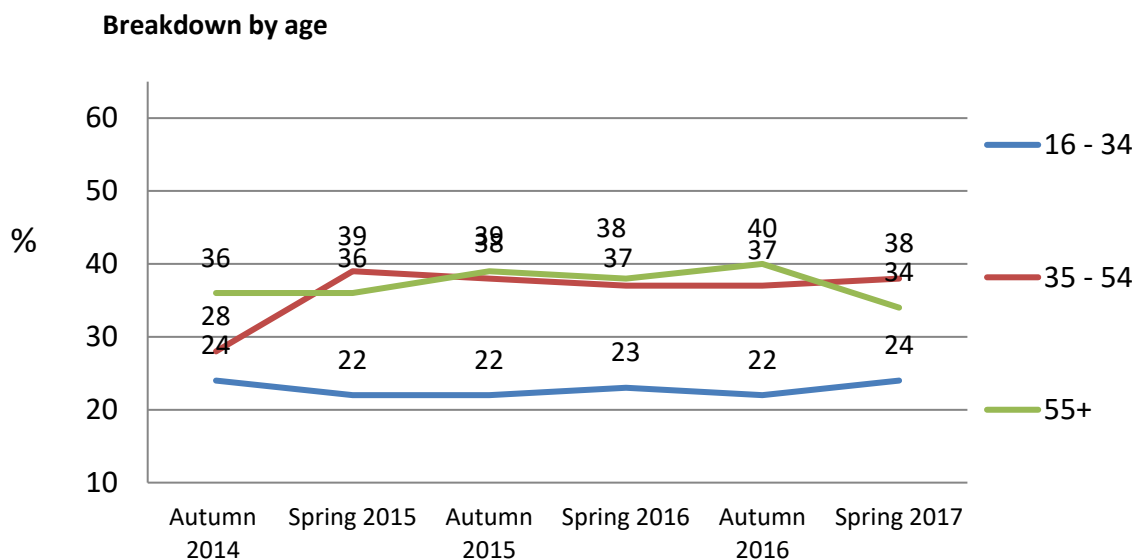
The profile of those responding via online differs from those who elected to complete the paper version of the survey. Online responders are younger (33% aged 16-34 vs 22% for paper) and they are more likely to be commuters (52% vs 45% for paper). In addition, online responders were more likely to have been recruited at category A stations (Network Rail station definitions) 37% vs 24% for paper.

The impact of the online responses on the age and gender profile of the sample has been minimal at both an overall and individual TOC level. Despite the difference in the age profile of online responders, the overall demographic profiles remain very consistent with those of previous waves, both overall and for individual TOCs. The following charts illustrate the consistency of the age profile for the TOCs with the highest proportion of online responses.

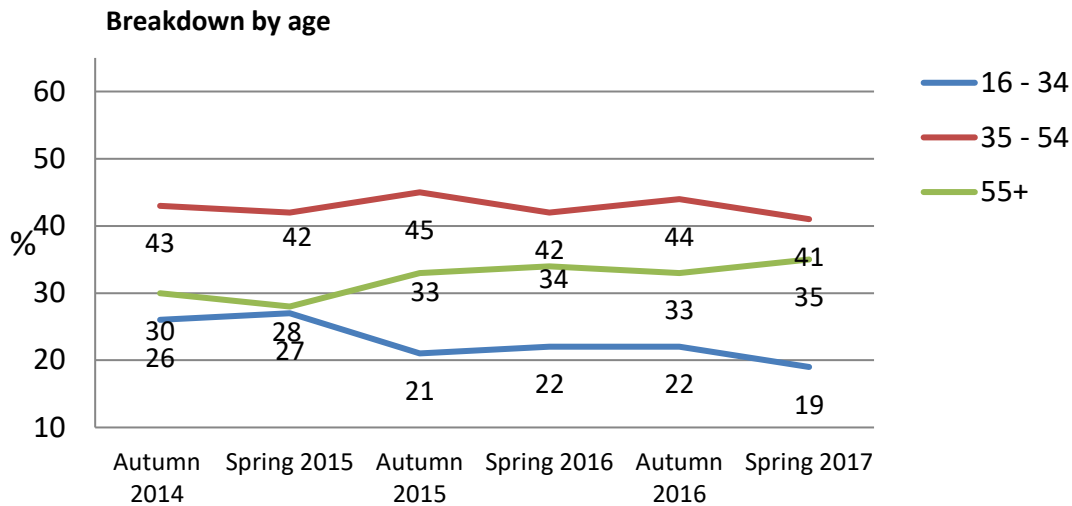
ScotRail – Age profile Autumn 2014 – Spring 2017



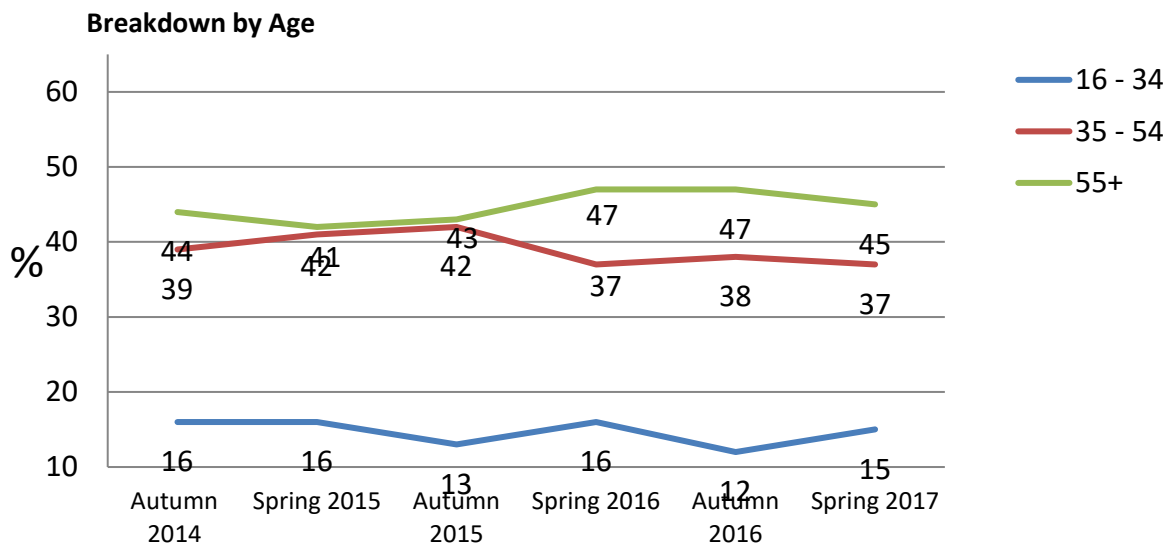
Great Western Railway – Age profile Autumn 2014 – Spring 2017



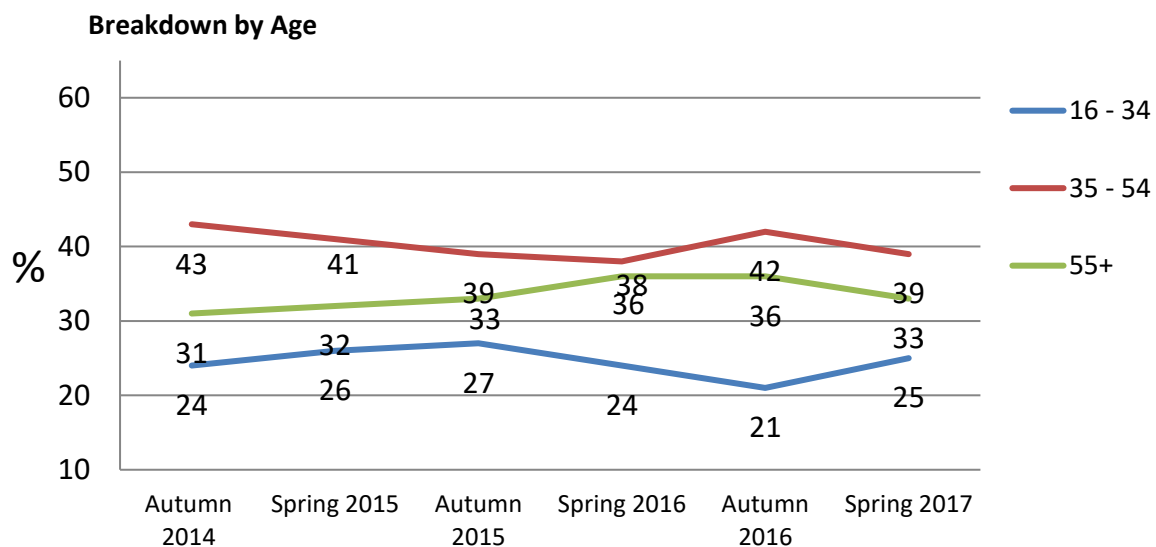
Greater Anglia – Age profile Autumn 2014 – Spring 2017

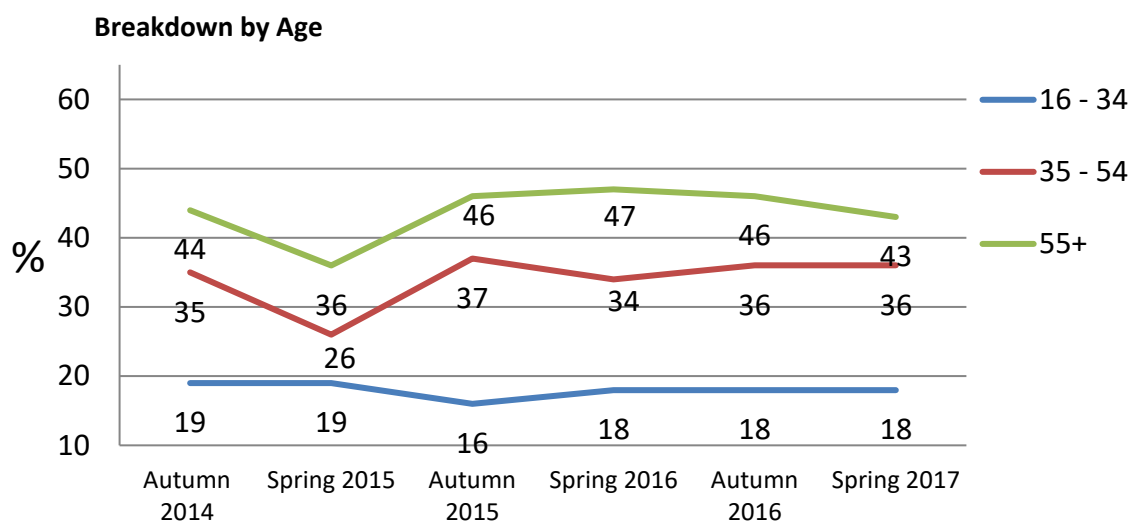


Virgin Trains East Coast – Age profile Autumn 2014 – Spring 2017



South West Trains – Age profile Autumn 2014 – Spring 2017





Differences in response patterns between online and paper were observed across a number of questions, although in respect to overall journey satisfaction no significant difference emerged. Reflecting the higher incidence of commuters in the online sample, ratings for punctuality/reliability and value for money were significantly lower among the online sample. Likewise, differences observed for the station metrics can be explained by a higher proportion of commuters and those recruited at category A stations within the online sample. This also explains some of the differences recorded for the scores for train metrics, where differences between the online and paper samples were more notable, with online responders generally giving less positive ratings.

The overall influence of the online sample has been reduced by the weighting applied to the data, specifically the weighting by journey type (for a number of TOCs the proportion of commuters is down-weighted) and station category (larger stations down-weighted). For both of these weighting factors the online sample had a higher incidence than the paper sample, leading to a decrease in the contribution of online responses to the overall sample.

3. Sample design

3.1.1 Overview

The NRPS uses a two stage cluster sample design for each Train Operating Company (TOC). The first stage sampling unit is a train station, and questionnaires are distributed to passengers departing from that station on a particular day during a specified time period.

Stations are selected for each TOC building block using a PPS (probability proportionate to size) basis, using the estimated number of passengers departing from that station annually as the size measure. As such, larger stations may be selected several times and smaller stations will be selected fewer times. Days of the week and times of day are then assigned to each selected station, based upon agreed profiles for different types of station and upon day of week and journey purpose (commuter, business leisure) profile information provided by the TOCs for journeys taking place on their networks. Sampling points are then assigned to weeks at random during the survey period.

A completely new sampling plan is generated every two years, utilising data on passenger volumes provided by ORR and on journey profiles as supplied by the TOCs. This process was undertaken in advance of the Autumn 2016 wave, using:

- ORR data on station entries and interchanges
- LENNON data on the number of journeys allocated to each TOC
- RailPlanner data on the number of services run by each TOC from each station.

These datasets are amalgamated to generate estimates of the number of passengers each TOC carries from each station it calls at, and this is used as the basis for the sample design. A description of how these three sources of information are used to generate estimates for passenger volumes by TOC at each station is given in Appendix G.

The same sampling plan used in Autumn 2016 was employed for the Spring 2017 wave.

3.1.2 Detailed sampling plan

The key principles of the sample design are as follows:

- The railway network is divided into building blocks for each of the current Train Operating Companies. The original rationale for this approach was to enable existing, planned and also previous franchises to be measured by combining data from relevant building blocks. Increasingly, it also allows TOCs to align NRPS results to business units monitored for other, mainly operational and financial metrics. This allows TOCs to compare, for example, actual punctuality measured by PPM with perceived punctuality measured by passengers, for each of these individual business units
- There are now 74 building blocks which are the principal sampling units for the survey, reflecting the key routes on each of the franchise networks, and for non-franchised TOCs, in Spring 2017.
- Up to and including Spring 2016, some of the building blocks had been station based and some had been route based. This changed in Autumn 2016 onwards, when all building

blocks are now route based. For the previously used station based blocks, the number of passenger journeys for each station originally calculated for the TOC was assigned to that station in its building block. For route based building blocks, some stations may appear in more than one building block. In these situations, passenger volumes are split between building blocks

- Stations are then selected with probability proportional to this derived passenger volume figure for each building block. This means that the larger stations will be selected several times and very small stations will have a lower probability of selection. When the sampling plan is updated, the small stations selected may therefore vary significantly from the previous plan, whereas the sample of larger stations will tend to be quite consistent
- The sampling plan is completely updated every two years, with small modifications made to the existing plan in intervening periods. The Autumn 2016 wave of NRPS was the first in the current cycle, and this is planned to be used up to and including Spring 2018.

3.1.3 Assigning days of week, times of day, and fieldwork dates to selected stations

3.1.4 Days of week and times of day

In the early waves of BDRC's management of the NRPS, days and times were assigned to all shifts as follows:

1. A day of week was assigned at random to each shift, in proportion to day of week profiles as provided by the TOCs

Times of day were assigned based on the following profiles, which are set separately for city centre and other stations, and for weekdays versus weekends (all shifts are three hours in length):

*Time of day profile of passenger journeys
(derived from Wave 9 NRPS data)*

city centres	%	%	%
Time band	Weekday	Weekend	Total
06:00 – 10:00	8.02	0.33	8.35
10:01 – 13:00	19.48	15.88	35.36
13:01 – 16:00	22.01	5.91	27.91
16:01 – 19:00	25.32	0.37	25.69
19:01 – 22:00	2.52	0.16	2.68
Total	77.35	22.65	100.00

Other stations			
Time band	Weekday	Weekend	Total
06:00 – 10:00	48.73	0.51	49.24
10:01 – 13:00	27.93	10.78	38.70
13:01 – 16:00	5.98	0.79	6.77
16:01 – 19:00	4.99	0.04	5.03
19:01 – 22:00	0.26	0.00	0.26
Total	87.88	12.12	100.00

An on-going principle of the NRPS is that systems and processes have continually but gradually evolved over time, in order to improve its representativeness as well as its operational efficiency, without disrupting continuity of survey results.

One example of this followed the Roberts-Miller Review of NRPS undertaken in 2005/6, which recommended that the time of day profiles were amended to equalise the number of outward and return journeys. Ever since NRPS started in 1999, a pattern of over representation of outward trips had been observed and initially the profile was around two thirds of reported journeys being outward journeys.

In Wave 9 (Autumn 2003), a number of shifts starting at 7 pm were introduced, as previously all shifts had been completed by that time. As shown in the table below, this made an impact into rebalancing outward and return journeys, reducing the former by around 4% and boosting return journeys.

	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16
Outward	67	66	68	64	63	63	62	64	64	64	64
Return	28	28	29	33	34	34	34	32	33	33	33
One way trip only	4	5	2	3	3	3	3	3	3	3	3
Don't know	1	1	1	1	1	1	1	1	0	0	1

The consultant's recommendation was to move more shifts from morning to evening peak to improve this rebalancing.

This change was incorporated into the allocation of shifts to time of day for Wave 17 (Autumn 2007), with approximately 100 shifts moved from the original morning peak time generated by the above procedure to an evening peak time. The result has rebalanced outward and return journeys more, as shown by the table below, with outward journeys in Waves 17 onwards now representing 52-56% rather than the 62-64% in earlier waves. In Wave 27 (Autumn 2012) a further re-alignment took place to move the outward/return ratio nearer to 50:50). This was partially successful, but was fine-tuned a little further from wave 29 onwards, resulting in the outward proportion varying between 49% and 52% from wave 29 onwards, as shown in the table below.

	w19	w20	w21	w22	w23	w24	w25	w26	w27	w28	w29	w30	w31	w32	W33	W34	W35	W36
Outward	54	54	54	54	53	56	55	54	45	46	49	48	51	49	50	48	52	55
Return	42	41	42	42	43	41	41	42	51	49	47	47	45	46	45	47	44	39
One way trip only	3	4	3	3	3	3	3	3	3	4	3	3	4	4	4	4	3	4
Don't know/NA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2

Stage 1. Referencing previous shift plans

Although the sample plan is created from scratch every two years, a large number of the same stations will be sampled in every 2-year (4-wave) cycle; this is certainly the case for larger stations. Therefore, a useful first stage of assigning days and times for each shift is to look at the days and times used in the previous wave (which used the previous sampling plan), and as far as possible, to replicate the shift details which were used then. This has two advantages: Firstly, a degree of stability is maintained from wave to wave, despite generating a completely new sample plan every two years. Secondly, it allows us to predict the likely outcome of many of the shifts, because we know how their direct comparison shifts performed in the past (i.e. we will have a very good idea of the likely number of completed surveys that can be generated from each shift, how many will be for weekdays versus weekend days, and how many will be for each TOC where multiple TOCs call at a station); this allows us to check the suitability of the sample plan, before it is implemented. Following the initial focus on the proportion of outward versus return journeys described above, we have also looked at how many questionnaires would likely be returned for outward and return journeys, as part of this process).

The diagram below shows a simplified example of this process:

- All the shifts for wave x (the previous wave) are listed, sorted by station, and within stations are then listed in randomised order
- New shifts for wave y are then listed, sorted by station, and each shift takes the time and day details of equivalent shifts in wave x: so the first shift in the list for a certain station, takes the details of the first-listed shift for that station, from the previous wave
- In the illustration below, 7 shifts took place at Liverpool Street in wave x, and this station has been selected 8 times (i.e. for 8 shifts) in the next wave, wave y. Thus the first 7 shifts in wave y take on the details of the shifts which took place in wave x, and the 8th shift will need completely new times and day details

Shifts conducted in wave x			Shifts to be conducted in wave y	
Station	Start time	Day	Station	Time/day
London Liverpool Street 1	06:00	Tue	London Liverpool Street 1	Use time and day details as in wave x
London Liverpool Street 2	17:00	Mon	London Liverpool Street 2	Use time and day details as in wave x
London Liverpool Street 3	15:00	Fri	London Liverpool Street 3	Use time and day details as in wave x
London Liverpool Street 4	08:00	Sat	London Liverpool Street 4	Use time and day details as in wave x
London Liverpool Street 5	16:00	Wed	London Liverpool Street 5	Use time and day details as in wave x
London Liverpool Street 6	12:00	Sun	London Liverpool Street 6	Use time and day details as in wave x
London Liverpool Street 7	07:00	Thu	London Liverpool Street 7	Use time and day details as in wave x
			London Liverpool Street 8	Requires new time and day details

The next illustration below shows the opposite effect, where a station has been selected fewer times than it was in the previous wave. Because the shifts from wave x have initially been randomised, there is no human bias in the selection of which shifts' details will be replicated.

Shifts conducted in wave x			Shifts to be conducted in wave y	
Station	Start time	Day	Station	Time/day
Nottingham 1	08:00	Wed	Nottingham 1	Use time and day details as in wave x
Nottingham 2	14:00	Sat	Nottingham 2	Use time and day details as in wave x
Nottingham 3	16:00	Thu	Nottingham 3	Use time and day details as in wave x
Nottingham 4	17:00	Fri	Nottingham 4	Use time and day details as in wave x
Nottingham 5	13:00	Wed		
Nottingham 6	09:00	Mon		

Stage 2: Assigning days/times to “new” shifts

At the end of the process described above, we will be left with a set of shifts with no time or day assignment. Some of these will be at larger stations at which we have selected more shifts than in the previous wave, and some will be at (usually smaller) stations which were not covered in the previous wave.

This list of ‘new’ shifts is listed in a randomised order, and days of the week are assigned to this randomised list, according to the average weekday/weekend profiles for all journeys, as supplied by TOCs. For the sample plans used for Spring 2017, these were:

Train Operating Company	Weekday	Weekend
Abellio Greater Anglia	86%	14%
Arriva Trains Wales	81%	19%
c2c	86%	14%
Chiltern Railways	82%	18%
CrossCountry	78%	22%
East Midlands Trains	82%	18%
First Hull Trains	70%	30%
First TransPennine Express	82%	18%
Gatwick Express	78%	22%
Grand Central	71%	29%
Great Northern	89%	11%
Great Western Railway	71%	29%
Heathrow Connect	71%	29%
Heathrow Express	79%	21%
London Midland	85%	15%
London Overground	80%	20%
Merseyrail	80%	20%
Northern	76%	24%
ScotRail	80%	20%
South West Trains	85%	15%
Southeastern	87%	13%
Southern	90%	10%
TfL Rail	82%	18%
Thameslink	83%	17%
Virgin Trains	81%	19%
VTEC	75%	25%
Average	83%	17%

The profiles in this table are also used as part of the final weighting of NRPS results. More information about the weighting is given in section 2.7

So when the new sample plan was generated in Autumn 2016, of the ‘new’ shifts, on average 83% were assigned at random to a weekday, and 17% were assigned at random to a weekend.

Within the weekdays, a fifth of these are assigned (again randomly) to each of Monday, Tuesday, Wednesday, Thursday and Friday. Within the weekend days, approximately half will be Saturdays and half will be Sundays.

Following this, time-bands are assigned, using the approximate proportions as shown in the table on page 4 as a start point. Note that there is also some judgement involved here, where we also take into account:

- the overall number of shifts (for the whole sample plan) in the mornings and afternoons/evenings, in order that we can also consider the implication that this is likely to have on the overall proportion of surveys completed for outward versus return journeys
- information from TOCs about the proportion of journeys made on their networks for commuting, business and leisure reasons (this will also inform the overall shift-patterns across different times of day)
- the level of weighting which was required in previous waves, for journey purpose and day of week (for example if commuters needed to be down-weighted for a TOC, it may be appropriate to reduce the number of peak-time shifts at key stations serving that TOC, in subsequent waves).

3.1.5 Shift dates

Once times and days have been assigned to each of the planned shifts, the full list of all shifts in the sample plan is sorted in a random order, and a week number is assigned. There are usually 10 weeks in a typical wave's fieldwork period, and so a week number between 1 and 10 is given. Weeks 1-3 are over-represented here by approximately +20%, in order that the fieldwork is slightly heavier at the outset; this enables early monitoring of progress and means that, if any additional 'top up' shifts are needed later to address likely sample size shortfalls, these can be arranged with minimised risk of causing a bottle-neck of fieldwork (and thus clustering in the sample) later on.

Some details of sample plans are shared with Network Rail station managers and TOC contacts in advance of fieldwork, and station managers are given the opportunity to alert us to:

- any clashes with other research which may be happening on site at stations
- any significant local events such as major sports events which may impact the safety of fieldworkers
- any outright station closures or outright lack of train services.

Some shift dates may then be changed as a result of these reasons, before fieldwork begins. However, note that fieldwork dates are not changed purely because there is anticipated disruption to rail services (if rail services are still in operation); this is because the NRPS rightly captures the experience of passengers including when they are disrupted. In Spring 2017, 88 shifts were changed due to these reasons.

3.1.6 Sense checks

Finally (before sharing the sample plans with station managers), a number of checks are performed on the sample plan to ensure the sample as a whole is balanced and looks sensible. These include:

- spread of shifts by week, by station – for stations which have several shifts, these are checked to ensure there is a reasonable spread by week, so that larger stations do not see a clustering of fieldwork all in a short space of time
- spread of shifts by time, by station – again, for larger stations, checks are made to ensure there is at least a reasonable spread by time
- spread of shifts by day of week, by time – the similar process again.

Where there is an obvious cluster of shifts around the same few weeks, around similar times, or all on the same day of the week, some manual changes may be made at this point. This is kept to a minimum, however, as it is desirable to keep the sample as natural and un-engineered as possible.

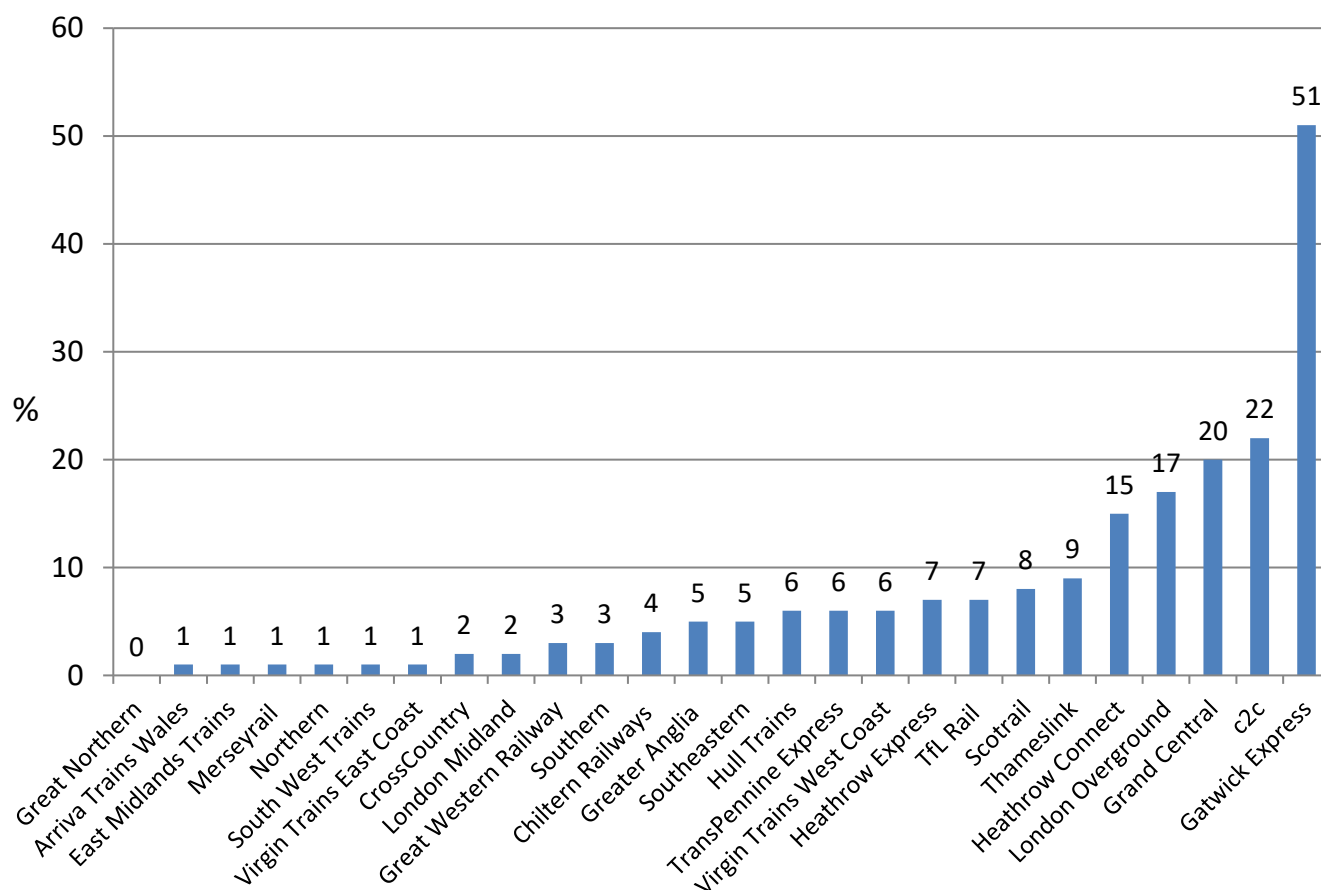
3.1.7 Changes to shift plans during fieldwork period

There are three reasons which mean the sample plan could be altered once fieldwork begins:

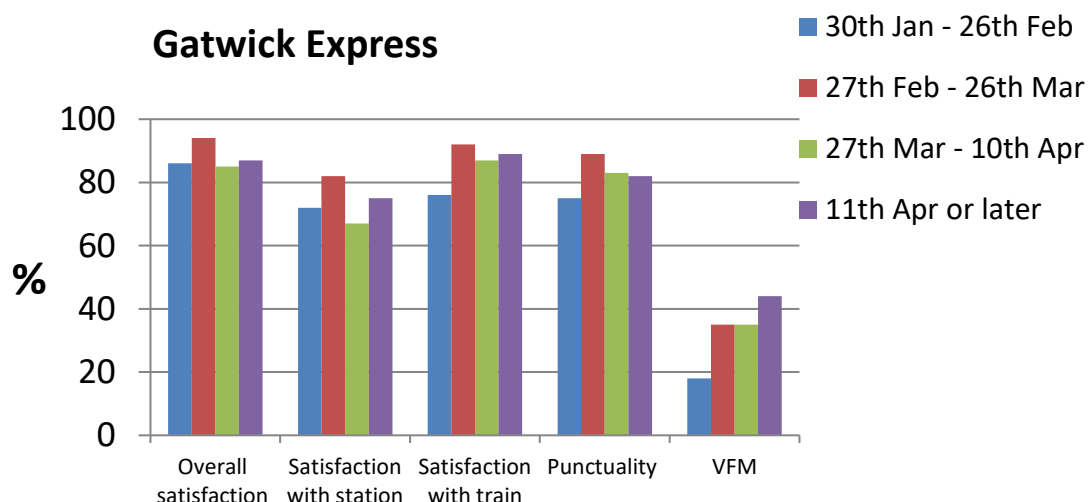
- As a result of the agency handover process, TOCs were not contacted until just prior to fieldwork, therefore a number of shifts had to be moved on receipt of feedback from TOCs highlighting planned engineering works, sporting events, etc. As mentioned above 88 shifts were changed as a result of this.
- Problems with individual shifts meaning they need to be re-arranged for another time. For example, there were 2 periods of industrial action during fieldwork (Monday 13th March and Saturday 8th April), in most cases the effect of these was limited but a small number of shifts had to be re-scheduled. Storm Doris also caused widespread issues for train companies as well as interviewers travelling to shifts. There were also separate issues at Liverpool Lime Street and London Victoria where structural damage affected shifts. Individual interviewer issues are also a factor e.g. held up on the way to a shift, illness or personal issues. In total 210 shifts were moved due these reasons.
- Additional 'top up' shifts which may be needed to address likely shortfalls in sample sizes.

Fieldwork for Spring 2017 started on the 30th January and was scheduled to run until the 9th April, just prior to Easter. As a result of the increased number of additional shifts required this wave, fieldwork extended beyond this period to the 30th April, although no interviewing took place during the Easter period. In total, 6% of questionnaires included in the final numbers were from passengers recruited during shifts that took place after the 9th April. However, not all TOCs were impacted by this to the same extent. The table below shows the proportion of such interviews by TOC.

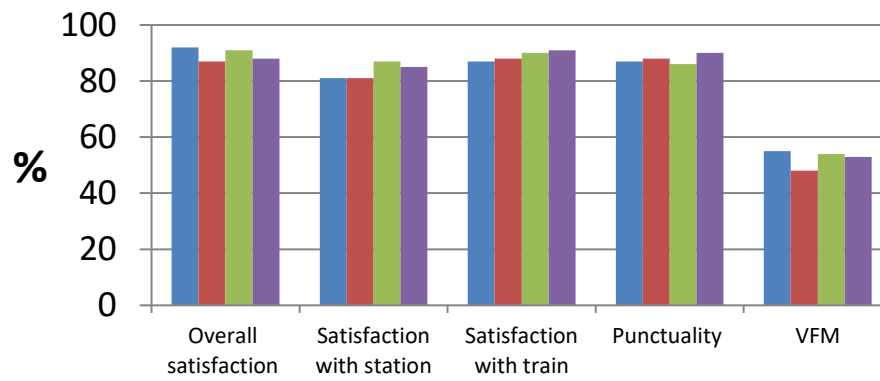
Proportion of responses from post-Easter fieldwork shifts



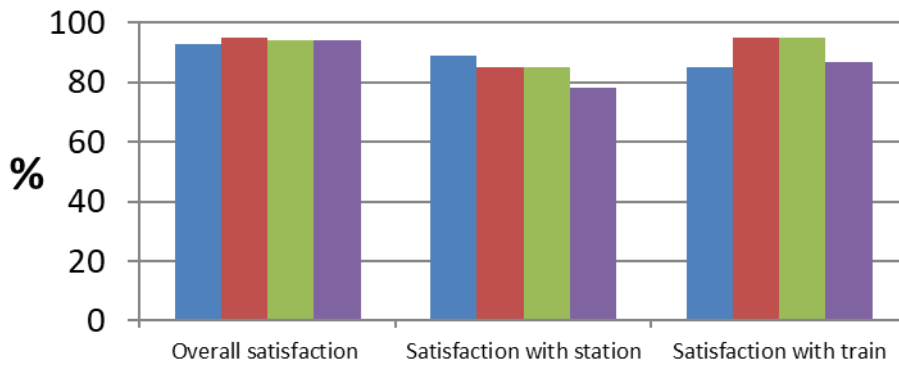
For those TOCs where the proportion of interviews from shifts undertaken after the 10th April was notably higher (>10%), analysis was undertaken to investigate whether the extended fieldwork period impacted on the results. The overall conclusion was that this had very little impact on the overall results, with few observable differences in response patterns between those recruited to take part prior to and after Easter. The following charts illustrate this for Gatwick Express, c2c, Grand Central, London Overground and Heathrow Connect.



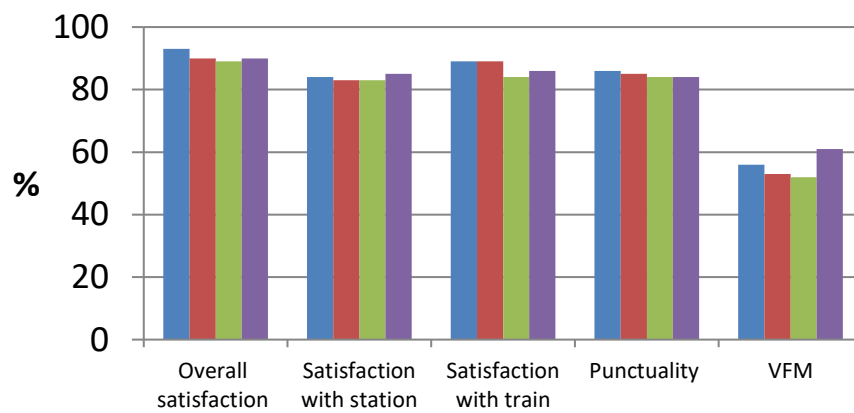
c2c



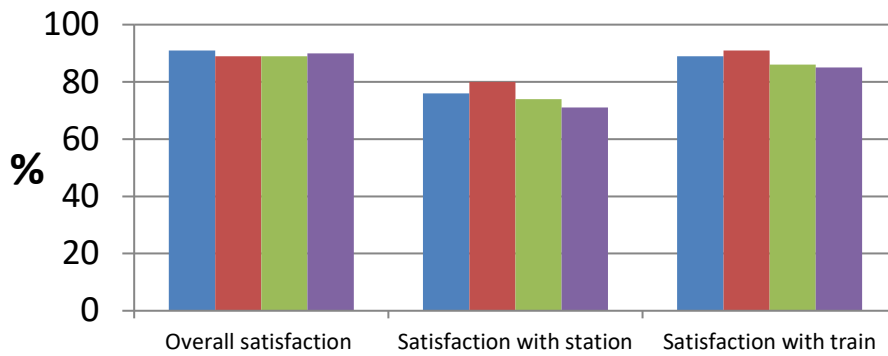
Grand Central



London Overground



Heathrow Connect



During the Spring 2017 wave, 13% of shifts from the original sampling plan (including shifts for the main NRPS and any booster samples) needed to be changed before or during fieldwork due to problems. The majority of these were a result of TOC feedback being received once fieldwork had started, fieldworker issues such as illness, but also included problems at the stations themselves (adverse weather or other disruption to rail services), a small number of industrial strikes and some minor administrative errors. When this happens, wherever possible shifts are rescheduled to the same day, at the same time, and during a week which is as close to the original as possible.

Proportion of shifts moved by reason

TOC/station related issues	4%
Issues outside of our control (adverse weather, rail disruption)	1%
Interviewer issues (illness, travel problems etc)	8%

Throughout the fieldwork period, progress is monitored, and where response is a little lower than anticipated, 'top up' fieldwork shifts may be added to ensure that sample size targets for each TOC and building block are achieved. Top up shifts will be arranged at stations (or on trains for those TOCs and routes which are sampled on board trains) which serve the building blocks requiring extra help, and may be targeted towards the TOC in question, meaning the fieldworker is instructed to prioritise customers of that TOC, if more than one TOC calls at the station. Because the practical purpose of top up shifts is to address potential shortfalls, the stations selected are usually the busiest stations for the TOC or building block in question; however the total mix of stations already in the sample, and the number of shifts scheduled at each, will be taken into account here, to ensure that the busiest stations are not significantly over-sampled. Similarly, the time and day of a top up shift will be chosen to align with the busier periods at the station, but again the overall time of day and day of week pattern which is already in the sample plan for that station and that TOC will be taken into consideration, with a view to keeping an overall balance and minimising the weighting required at analysis stage as far as possible.

For this wave a total of 637 top-up shifts were required. This was higher than normal and primarily a result of the changes to the survey methodology. The inclusion of the age and gender counts reduced the amount of time an interviewer had to recruit passengers, thus impacting on the number of passengers invited to take part in the survey per shift, which in turn led to a lower number of returned questionnaires for each shift. The offering of an online survey option took slightly longer than offering a paper questionnaire as interviewers had to record and check passenger e-mail addresses. Due to the relatively high number of top-up shifts required, the full PPS sample procedures were used to select the stations and times for the majority of additional shifts. This was done to guard against any risk of bias from including just the more 'productive' stations. Of the 637 additional shifts, 445 were selected following PPS procedures. The remainder (192) were targeted towards stations where the recruitment and response rate were likely to be higher.

3.1.8 Sampling for surveys distributed on-train

Whilst the majority of NRPS questionnaires are distributed to passengers at stations before they board their trains, for some TOCs it is more appropriate to distribute the questionnaires on board the trains themselves.

All survey shifts for the non-franchised TOCs (Grand Central, Heathrow Connect, Heathrow Express and Hull Trains) are conducted on trains, as this is the only practical way of ensuring a sufficiently large sample of customers (of all passenger footfall at stations where these TOCs call, the proportion made up by these TOCs' customers is generally small). For the Heathrow TOCs, interviewing on trains between Heathrow and London Paddington also removes the possibility of giving a questionnaire to a passenger making an inter-terminal transit only.

Among the franchised TOCs, questionnaires for the following building blocks and complete TOCs are now distributed on board trains. These are where passenger numbers at individual stations are low, and where on station fieldwork had been shown to yield low numbers of questionnaires distributed and hence returned. For some TOCs (notably Northern and Arriva Trains Wales, on-train distribution also enables a wider range of different small stations to be included in the sample; this means on-train distribution also generates a more representative and inclusive picture of passenger experience).

- Arriva Trains Wales – all five building blocks
- London Overground – all five building blocks
- Northern – all four building blocks
- ScotRail – rural building block
- South West Trains – Island Line building block.

Note that a small proportion of the questionnaires for these 'on-train' TOCs will come from shifts which took place at stations. For example, fieldworkers will be distributing questionnaires at stations like Manchester Piccadilly in order to reach passengers using TransPennine Express, Virgin Trains, East Midlands Trains and CrossCountry; they are likely to also hand questionnaires out to some Northern passengers while doing this. Providing they relate to verified journeys these questionnaires will still be accepted and will contribute to the final results.

The procedure for determining fieldwork shifts to be conducted on train is:

- As described in section 2.1, the overall sampling process begins with identifying annual passenger volumes for each station, and therefore for each TOC and each building block. This information is used to determine the proportion of on-train fieldwork shifts which will be required on each part of a TOC's route network
- Where an individual building block also divides into a number of different routes or branch lines, the published timetables are consulted to establish the number of services which are run by the TOC on each route or line. This informs how the shifts should be divided between the individual routes and lines (lines with more journeys should have a proportionately higher number of shifts). Individual station volumes are also taken into account here, to help determine how busy each route or branch line is, and again this will be used to inform the proportion of all shifts which should be allocated to each part of the network.
- Journeys are then manually defined for each shift in each section of the TOC's network, where fieldworkers can travel backwards and forwards along a route or section of route, for approximately three hours (although because the shifts are based around the timetables, some shifts may be a little longer or a little shorter). As far as possible these journeys will be defined such that as much of the whole network is covered as practically possible.
- Days and approximate times are assigned using the same principles as for at-station shifts, although again the exact times will naturally be determined by the TOC's timetable.

For TOCs which have only one building block or a very simple network (e.g. the non-franchised TOCs), or where on-train shifts are only relevant to one or two building blocks (e.g. Island Line), the procedure is a little different. In these cases, a list of all service departures through the week can be generated, and then individual departures are selected using a systematic approach, to form the start time of the fieldwork shifts.

For NRPS as a whole, results are weighted to help correct for natural differences in response rate at different times of day and days of week, and in different locations (this is described later in section 2.7). For all TOCs and building blocks where fieldwork is conducted on board trains, sampling plans may be amended slightly in subsequent waves (as with the at-station sampling), to improve the weighting efficiency over time.

3.1.9 Sample size

Each TOC has a target sample size. Initially, this was set at 500 for each TOC. However, the sample size for all London and South East TOCs was raised to 1,000, to allow separate analysis of peak and off-peak journeys. The complex route structure for Greater Anglia, Southeastern, Southern and South West Trains led to the sample sizes for each of these franchises being increased to 1,500. All long distance services (East Coast, First Great Western, East Midland Trains, Virgin West Coast, CrossCountry and TransPennine Express) were increased to 1,000 sample size in 2001.

The ScotRail sample size was increased to 1,000 due to its complexity, whilst Island Line was reduced to 250 and then 100 due to its simplicity. The sample sizes for Heathrow Express, Heathrow Connect, Hull Trains and Grand Central are 500 each, reflecting a fairly simple operating structure for these open-access TOCs. Sample sizes for Arriva Trains Wales, TransPennine Express and Northern Rail were set at 750, 1,000 and 1,000 respectively, reflecting the relative complexity of the routes making up these franchises.

Sample sizes for First Great Western, Greater Anglia, First Capital Connect and South West Trains were set at the sum of the sample sizes of their constituent parts (2,750, 2,000, 1,500 and 1,750 respectively) to enable TOC reports for each part of the new franchise to be produced and compared with earlier waves. For example, this was done for original FGW, FGWL, Wessex, Thameslink and WAGN. The sample size for Southern was increased to 2,000 when it absorbed Gatwick Express.

In the Autumn 2011 wave, sample sizes for Arriva Trains Wales and London Overground were increased from 750 to 1,000, to compensate for the increased clustering present with the distribution of questionnaires for these TOCs changing from at-station to on-train (see section 2.4).

In the Autumn 2016 wave, sample sizes were amended following industry consultation, to bring some of the TOCs with larger and smaller sample sizes better into relative proportion with other TOCs in line with actual passenger volumes. The target and achieved sample sizes for the Autumn 2016 wave are shown below in Section 6.

3.1.10 Other sub-samples covered in NRPS reporting

As well as providing data for existing TOCs, the NRPS also provides data for a number of “virtual” TOCs. For the Spring 2017 Wave, these “virtual” TOCs were:

- the three constituent parts of Great Western Railway – Long distance, Thames Valley and West
- Greater Anglia excluding Metro and West Anglia Inner services
- London Overground including Greater Anglia – West Anglia Inners
- Southern including Gatwick Express

Data is also produced for the six PTE areas in England (West Midlands, West Yorkshire, South Yorkshire, TfGM, Merseytravel and Tyne and Wear), for the South East Wales Transport Alliance (SEWTA) area in Wales and for the Strathclyde area in Scotland. Each PTE area except Tyne & Wear has a notional target sample of 500 interviews about journeys starting and ending within the PTE area, although no boosts are undertaken to meet these notional targets. The Tyne & Wear area is much smaller than the others, and so any journey starting in the Tyne & Wear area counts towards the PTE analysis and the notional target sample size is 250. The TfGM area was redefined in Wave 25 to match that currently being used by TfGM. The definition of which stations fall in each PTE area is at Appendix E. For the first time in Wave 26, PTE data was weighted using the day of week and journey purpose profile produced from aggregating waves 16-25 (following analysis which had shown these weighted profiles to be fairly invariant between waves). This procedure has been continued since.

Since wave 29 an additional report, covering the London region, has also been produced. Although not a PTE, this follows similar principles in terms of journeys which are included.

3.1.11 Questionnaire distribution

The key features of the way questionnaires are distributed are:

- Questionnaires are handed out evenly across a 3-hour interviewing shift, to ensure as wide a spread of passenger types and journeys as possible (as described earlier, shifts which

take place on board trains may be longer or shorter than three hours, depending on the service timetable)

- Passengers are given the choice of completing via an online survey or a self-completion paper questionnaire with a reply paid envelope
- The passenger's name and phone number are taken, this was randomly asked of 1 in every 10 passengers, for back checking purposes
- For the Spring 2017 wave, passenger's gender and observable age was noted, irrespective of whether they agreed to take part in the survey or not. The time the survey was handed out was recorded automatically via the tablet software.
- Passengers are also asked the purpose of their journey, using the same codes as in the questionnaire itself
- For some shifts, only passengers for a selected TOC are given questionnaires. Apart from on these shifts, questionnaires are given to any passengers about to board a train
- Questionnaires are station specific, with the station name and the TOCs calling at the station pre-printed on the questionnaire. Questionnaires distributed on trains are also pre-printed with the TOC name
- For Spring 2017 the questionnaire was reduced to a length of 8 pages with 2 versions in use. The survey consists of a core set of questions, asked of every respondent, and a separate module of questions which are designed to be flexible and vary across waves. In Spring 2017 the modules were Station Access (version A) and Fares & Ticketing (version B). Questionnaire handout is rotated between the two versions and this is managed by supplying interviewers with questionnaires in alternating order.
- From the Spring 2003 wave onwards, all questionnaires have an 11 digit serial number pre-printed. The first four digits are a station code, the next four a shift code and the final three a sequence number
- This serial number is also printed on the bottom of the front page as a barcode, which is scanned when questionnaires arrive back in the office. This allows us to quickly identify the returns from each shift on a dynamic basis and enables us to quickly identify shifts with low or no returns
- From the Spring 2004 wave onwards, the station name is personalised throughout the questionnaire and all questionnaires are scanned rather than having data punched manually.

All distribution of questionnaires occurs between 06:00 and 22:00, during a three hour shift. The number of paper questionnaires distributed depends upon the station, day of week and time of day and ranges from 80 at a busy city centre station on a weekday to 2-3 at a small rural station. With the additional of offering online surveys in a few cases across the two methodologies we have been able to distribute 100 questionnaires during a shift.

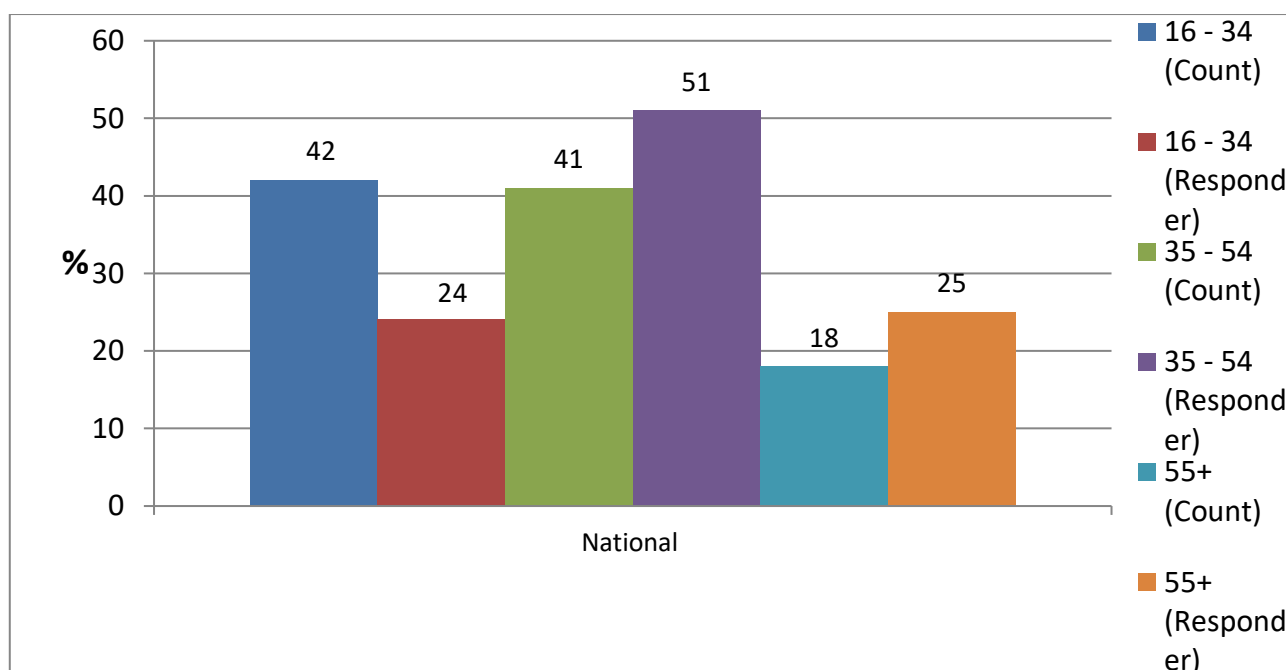
Prior to Wave 17, all interviewing shifts had been at one of the times 06:00-09:00, 07:00-10:00, 10:00-13:00, 13:00-16:00, 16:00-19:00 and 19:00-22:00. In Wave 17, again taking on board one of the recommendations in the NRPS Review, all three hour time periods from 06:00-09:00 to 19:00-22:00 were used. This gives a better spread of journeys across the day and ensures more later evening journeys from 19:00 onwards (as these can now be picked up in shifts commencing 17:00, 18:00 and 19:00 rather than just those commencing at 19:00 as in previous waves). Some shift times at smaller stations are amended to coincide with train departures e.g. if there are only two or three trains per day.

3.2 Age and gender counts

To assess the age and gender profile of passengers, a count exercise was put in place for the Spring 2017 wave. Interviewers were instructed to record the gender and approximate age for every passenger they approached, regardless of whether the passenger agreed to take part in the NRPS survey. In total 119,193 counts were conducted between the 30th January and the 15th March (the counting exercise was stopped at this point to allow more time for interviewers to focus on recruiting passengers).

The inclusion of this exercise has meant we can compare the observed profile of passengers to the profile of those who complete and return the questionnaire. The key difference (see the table below) is the age profile. A clear response bias is evident, with the 16-34 age group under represented in the survey and the 35-54 and 55+ age groups over represented. With the exception of Heathrow Express and Heathrow Connect, the same pattern was observed across all TOCs.

Age profile – comparing the observed age profile with the responders age profile



To assess the impact of this on the survey results, data were weighted to reflect the age profile observed from the count exercise. Data was weighted at TOC level, with the weights applied in addition to the other survey weighting. The impact upon the results was minimal for the key metrics and for station and train metrics. The table below illustrates the impact at a national level. The pattern for individual TOCs is very similar and for individual Train and Station attributes, the differences are in the range of +/- 1 or 2% within each TOC.

Top 2 box % for key metrics – based on data weighted by age

Top 2 Box %	Weighted by age	Unweighted (no age weights)
Overall Satisfaction	83%	83%
Overall satisfaction with train	78%	79%
Overall satisfaction with station	81%	81%
Punctuality	76%	77%
Value for money	44%	47%

3.2.1 Data verification

Many checks are undertaken on NRPS data, before a questionnaire is allowed to pass through for analysis. Most of these revolve around checking that the journey claimed by the respondent is feasible.

The questionnaire asks the respondent to record where they disembarked from the train they boarded when given the questionnaire (Q1b). There is a need to check that the first leg journey as recorded is feasible and also that the destination of this leg is served by the TOC the respondent claimed to use.

We also code the origin and destination of the train the respondent uses, in addition to where they boarded and left that train. This is appended to the questionnaire data when the journey details are validated on Rail Planner.

When questionnaires are received back from respondents, these initial checks are carried out using the electronic railway timetable, from Rail Planner. The checks that are made are:

- Does a train leave the origin station at the time stated by the respondent?
- If so, is it a service of the TOC defined by the respondent?
- If so, does it call at the station written in at Q1b?
- If so, accept the data. If not, set aside for further investigation
- Does the train terminate at a Central London station and if so, is this before 10:00 on a weekday? This question is used to define morning peak journeys in the London and South East sector.

The data entry system does not accept any journey that violates any of these tests. Such questionnaires are set aside and investigated by the research executive team. If a stated time is just a minute or two different from a journey which is valid in all other respects (correct TOC, destination called at by train, no other TOC runs a service near this time), then the journey time may be altered and the questionnaire accepted. In Spring a total of 2,248 questionnaires were rejected.

Once the questionnaire has been scanned and initial checks completed, the returns are reviewed for any potential errors which act as final checks that journeys are valid. These checks include identifying any questionnaires where:

- The origin and destination station are not valid for the TOC used
- The origin and destination station are the same

- The origin and destination of the train service itself are not valid for the TOC used
- The origin and destination of the journey are not valid for at least one TOC building block
- The origin and destination of the train are not valid for at least one building block.

From the Autumn 2004 Wave onwards, a question has been added to the questionnaire, to identify if any part of the first leg of the passenger journey was undertaken by replacement bus service, rather than by train. All such journeys are eliminated from the database, so that all journeys monitored by NRPS now include train-only journeys, with no part by replacement bus service. However, the bus replacement journey basic log data is stored and can be analysed outside of the main NRPS database.

Where building blocks were station based, the journey could be assigned to a TOC building block by reference to the TOC and the station where the passenger boarded. Where building blocks are route based (as is the case for all data from the autumn 2016 wave onwards), the assignment uses rules based upon the station of boarding and alighting and the origin and destination of the train. If all of these stations can only come from one building block, the assignment is made electronically; if the journey could have been assigned to more than one building block, an exception report is prepared as a prelude to manual assignment of the journey to a building block. The assignment of such journeys to building blocks is then made in conjunction with Transport Focus.

3.2.2 Response rates

In the main Spring 2017 survey (Wave 36) a total of 148,005 paper questionnaires were distributed to fieldworkers for the main NRPS survey. The following tables show the breakdown of distribution and returns

	Number of surveys	%
Number of paper & online surveys distributed to passengers	115,704	78.18% (hand out rate)
Number of surveys returned	29,207	25.24% (return rate)
Number of valid surveys	27,359	23.7% (response rate)

Returns by method

	Number of surveys	%
Paper	26,365 surveys	24.9%
Online	2,842 surveys	29.4%

Network Rail Boost

An additional 9,615 questionnaires were printed for sample boosts for Network Rail

	Number of surveys	%
Number distributed	6,769	70%
Number returned	1,862	27.5%

The table below shows a breakdown of the returns that were rejected

Reason	Number of surveys	%
Received after cut-off	236	0.8%
Unresolvable problems (date/time/journey problems)	1,444	4.9%
Blank/incomplete surveys	478	1.6%
Other reasons	90	0.3%

3.2.3 Weighting

Although the sample is designed to generate the right number of responses from each type of station, differential response rates mean this does not exactly happen in practice. Furthermore, although the sample shifts are allocated to days and times to generate the “right” profile of passengers, weighting is employed to ensure sound estimates that do relate to the TOC as a whole. Finally, the gradual increase in building blocks, often with differential sampling rates, means that weighting is required to correct deliberate sampling imbalances.

An extreme case of this is for South West Trains, where 2,000 interviews are conducted on the mainline part of the franchise, with 100 on the Island Line. This 19:1 ratio for sampling is then weighted to reflect a 274:1 ratio when weighting to the respective numbers of journeys, meaning that Island Line questionnaires are substantially down-weighted in the results for the overall TOC. Similar considerations apply for other TOCs where building blocks have been used with the consequence that weighted and un-weighted sample sizes by building block (and subsequently by station) show increasing divergence.

The questionnaires analysed for each TOC building block are weighted by station size stratum. The data for each TOC is then weighted by weekday/weekend and journey purpose (Commuter/Business/Leisure), and grossed up to the estimated number of passenger journeys for that TOC building block. This means that the weighted data for a number of TOCs or building blocks can be simply aggregated (e.g. to generate data for a virtual TOC or a TOC type).

All the data used in this weighting was updated in Summer 2016 in advance of the completely new sample plan generation for the Autumn 2016 wave. Data from the ORR and other sources was used to estimate journeys starting from each station for each TOC, and was sent out by Transport Focus to each TOC for verification, along with the existing weights for journey purpose and day of week. TOCs updated these figures in some cases.

Appendix D gives the resultant data used in the weighting regime for the main survey in Spring 2017.

The impact of any weighting regime is to reduce the final effective base size. In the case of the weighting for the NRPS, the impact on the effective base size for each TOC varies considerably (see Table below) and in some cases the weighting significantly reduces the effective base size. This occurs when the profile of the actual data set varies significantly from the weighting profile.

Unweighted and Effective base sizes by TOC

	Unweighted total	Effective Weighted Sample
Arriva Trains Wales	1244	670
c2c	937	605
Chiltern Railways	1062	729
CrossCountry	1224	1048
East Midlands Trains	1084	700
Gatwick Express	525	425
Grand Central	885	550
Great Northern	583	369
Great Western Railway	1502	720
Greater Anglia	1365	893
Heathrow Connect	445	331
Heathrow Express	504	331
Hull Trains	689	365
London Midland	961	686
London Overground	1472	1120
Merseyrail	719	417
Northern	1391	1180
ScotRail	1243	402
South West Trains (Including Island Line)	2343	1782
Southeastern	1558	1087
Southern	1129	926
TfL Rail	139	101
Thameslink	960	525
TransPennine Express	876	675
Virgin Trains East Coast	1240	753
Virgin Trains	1210	924
Island Line	114	88
Southern / Gatwick Express	1654	1009
Govia Thameslink Railway	3197	1874

Achieved vs weighted profile for journey purpose:

TOC Profile Train Operating Company	JOURNEY PURPOSE					
	Achieved			Weighted		
	COMMUTE	BUSINESS	LEISURE	COMMUTE	BUSINESS	LEISURE
Greater Anglia	43	11	46	47	21	32
Arriva Trains Wales	34	8	59	31	10	59
c2c	62	4	34	67	6	27
Chiltern Railways	46	14	40	38	25	37
CrossCountry	28	21	51	15	28	57
East Midlands Trains	33	18	48	23	28	49
Hull Trains	13	24	63	10	45	45
TransPennine Express	32	16	51	26	13	61
Gatwick Express	20	26	54	15	44	40
Grand Central	15	18	68	5	28	67
Great Northern	49	9	42	47	28	25
Great Western Railway	34	16	50	30	20	50
Heathrow Connect	51	8	41	50	12	38
Heathrow Express	17	42	41	2	55	43
London Midland	41	10	49	40	13	46
London Overground	57	6	37	61	3	37
Merseyrail	41	2	57	38	1	61
Northern	41	7	52	38	9	53
ScotRail	36	13	51	39	13	47
South West Trains	41	10	48	53	15	32
Southeastern	49	8	43	55	17	28
Southern	47	9	44	51	15	34
TfL Rail	67	6	27	62	3	35
Thameslink	50	9	41	43	25	32
Virgin Trains	21	29	50	11	23	66
VTEC*	19	27	54	9	32	59

*VTEC – Virgin Trains East Coast

Achieved vs weighted profile for journey purpose (contd..)

Train Operating Company	DAY OF THE WEEK			
	Achieved		Weighted	
	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
Greater Anglia	86	14	86	14
Arriva Trains Wales	74	26	81	19
c2c	89	11	86	14
Chiltern Railways	89	11	82	18
CrossCountry	80	20	78	22
East Midlands Trains	80	20	82	18
Hull Trains	89	11	70	30
TransPennine Express	92	8	82	18
Gatwick Express	85	15	78	22
Grand Central	79	21	71	29
Great Northern	85	15	89	11
Great Western Railway	88	12	71	29
Heathrow Connect	86	14	71	29
Heathrow Express	85	15	79	21
London Midland	83	17	85	15
London Overground	86	14	80	20
Merseyrail	91	9	80	20
Northern	82	18	76	24
ScotRail	80	20	80	20
South West Trains	83	17	85	15
Southeastern	85	15	87	13
Southern	88	12	90	10
TfL Rail	92	8	82	18
Thameslink	91	9	83	17
Virgin Trains	82	18	81	19
VTEC*	90	10	75	25

*VTEC – Virgin Trains East Coast

Achieved vs weighted profile for station size

Building Block	Achieved				Weighted			
	Station Size				Station Size			
	Small	Medium	Large	Very Large	Small	Medium	Large	Very Large
Arriva Trains Wales								
Cardiff & Valleys	7.07	5.55	3.46	8.44	10.83	11.52	11.27	9.04
Inter Urban	12.06	4.34	8.76	2.49	2.85	2.57	3.46	1.95
Mid Wales & Borders	7.15	9.57	4.98	6.19	3.31	3.28	3.77	1.86
North Wales & Borders	2.09	3.62	1.05	1.69	4.67	4.03	3.69	4.97
South Wales & Borders / West Wales	2.65	4.50	1.61	2.73	4.41	4.68	3.31	4.52
c2c								
Southend Line	18.57	19.53	3.09	23.69	17.61	21.05	9.39	18.47
Tilbury Line	2.67	6.30	12.27	13.87	9.08	10.34	7.89	6.16
Chiltern Railways								
Commuter	5.56	12.62	3.48	6.50	10.13	8.77	3.51	13.84
Metro	11.77	14.03	0.00	5.56	9.32	8.49	0.00	11.71
Oxford	9.04	1.69	0.00	3.67	2.91	2.17	0.00	3.19
West Midlands	5.18	8.19	4.61	8.10	6.50	8.15	4.54	6.74
CrossCountry								
East-West	4.58	8.82	3.27	9.48	6.19	7.46	2.59	8.26
North-South Manchester	7.35	7.11	8.09	4.74	7.37	6.67	8.21	5.65
North-South Scotland & NE	10.13	9.97	8.33	18.14	12.33	11.71	11.69	11.87
Virgin Trains East Coast								
London-Leeds and West Yorkshire	6.94	11.21	0.00	11.05	10.07	15.32	0.00	11.76
London-Newcastle/Sunderland & East Yorkshire	8.39	6.37	0.32	6.37	4.14	3.04	2.21	4.92
London-Scotland	5.56	12.34	16.13	15.32	13.12	11.62	11.95	11.85
East Midlands Trains								
Liverpool - Norwich	2.95	5.44	7.93	5.54	6.40	4.95	7.46	3.30
Local	3.23	1.01	13.28	3.97	6.34	6.18	8.34	3.93
London	10.52	11.53	9.69	24.91	15.00	15.18	7.39	15.54
Great Northern	16.81	30.02	22.98	30.19	26.37	25.25	24.83	23.55
Thameslink								
Kent	7.50	6.04	7.92	8.54	6.83	6.96	7.92	4.35
Loop	7.92	3.02	5.94	3.85	7.92	8.30	10.54	4.35
North / South	4.69	8.85	14.69	21.04	11.54	11.17	10.57	9.55
Great Western Railway								
London Thames Valley	1.73	11.58	6.52	5.99	10.35	12.45	10.29	8.18
Long Distance	7.19	13.72	6.79	23.64	8.88	9.73	7.70	8.18
West	3.00	3.66	6.13	10.05	6.11	6.00	6.50	5.61
Hull Trains	16.40	31.20	0.00	52.39	26.68	26.93	0.00	46.39

Achieved vs weighted profile for station size (contd..)

Building Block	Achieved				Weighted			
	Station Size				Station Size			
	Small	Medium	Large	Very Large	Small	Medium	Large	Very Large
TransPennine Express								
North	13.58	15.87	20.09	20.43	18.35	18.62	16.90	14.91
North west	6.74	4.91	6.05	1.83	6.86	5.47	4.14	5.67
South	1.71	3.65	3.20	1.94	2.60	2.74	1.78	1.97
Grand Central								
London - Bradford	8.81	4.86	0.00	11.86	13.60	16.09	0.00	10.93
London - Sunderland	30.73	13.45	0.00	30.28	19.23	10.07	0.00	30.08
Heathrow Connect	21.12	24.72	7.64	46.52	29.47	21.73	14.11	34.69
Heathrow Express	31.94	50.79	0.00	17.26	30.09	31.78	0.00	38.13
London Midland								
London Commuter	2.29	6.56	5.93	8.22	4.75	6.48	2.67	5.09
West Coast	7.28	11.76	0.00	2.39	6.88	11.25	0.00	9.16
West Midlands	6.56	12.80	14.15	22.06	13.82	13.25	13.65	13.00
London Overground								
Gospel Oak - Barking	0.82	1.36	1.36	2.17	1.36	1.80	0.85	1.15
Highbury & Islington - Croydon	12.16	9.71	7.54	3.94	9.54	8.68	9.63	7.59
Richmond/Clapham Junction - Stratford	13.18	4.69	4.96	6.32	9.45	10.17	9.05	8.66
Watford - Euston	4.21	2.72	3.46	0.82	2.04	2.48	2.18	1.34
West Anglia	5.50	6.93	1.36	6.79	3.56	3.50	3.05	3.92
Merseyrail								
Northern	12.66	19.47	17.94	25.45	14.60	15.41	14.52	12.93
Wirral**	5.15	7.09	12.24	0.00	14.94	14.70	12.90	n/a
Greater Anglia								
Intercity	4.10	3.08	0.00	8.57	3.40	6.37	0.00	3.79
Mainline	4.10	15.38	6.08	8.72	11.56	12.51	4.95	15.08
Rural	1.47	3.66	3.59	2.71	2.50	2.76	1.67	2.42
Stansted Express	2.64	1.25	0.00	3.74	1.27	1.07	0.00	2.50
West Anglia	5.64	8.28	4.03	12.97	7.86	7.33	6.78	6.19
Northern								
Central	7.76	6.18	6.90	5.25	7.20	7.50	8.58	5.32
East	13.44	10.93	12.44	12.15	11.50	11.70	11.88	10.31
North East	1.44	2.08	2.95	3.74	1.26	1.30	1.12	1.18
West	4.60	4.10	1.58	4.46	5.34	5.64	5.31	4.88

** As no achieved sample for the station size. The proportions has been redistributed across the other station sizes.

Achieved vs weighted profile for station size (contd..)

Building Block	Achieved				Weighted			
	Station Size				Station Size			
	Small	Medium	Large	Very Large	Small	Medium	Large	Very Large
ScotRail								
Interurban	8.29	21.40	0.00	10.30	6.45	11.07	0.00	7.61
Rural	1.05	2.33	2.90	0.32	0.54	0.67	0.50	0.41
Strathclyde	3.06	1.37	11.10	13.52	14.82	15.18	14.19	15.07
Urban	2.82	2.57	8.37	10.62	3.48	3.46	3.54	3.01
Southeastern								
High-Speed	4.36	2.63	2.37	5.13	2.02	1.98	1.30	2.21
Mainline	6.93	7.70	9.82	9.37	7.02	7.79	6.08	6.64
Metro	9.31	9.56	21.31	11.49	16.79	15.78	22.73	9.67
Gatwick Express	30.48	0.00	0.00	69.52	30.89	0.00	0.00	69.11
Southern								
Metro	9.21	10.98	14.70	9.30	13.28	13.19	14.53	10.03
Sussex Coast	6.64	16.92	23.74	8.50	12.42	12.96	13.56	10.03
South West Trains								
Island Line	0.64	2.01	0.00	2.22	0.11	0.13	0.00	0.12
Longer Distance	5.76	12.25	0.00	16.77	7.97	10.09	0.00	12.55
Metro	3.63	8.66	12.89	7.38	8.30	8.11	9.66	5.97
Outer Suburban & Local	5.85	6.70	5.63	9.60	9.63	8.97	10.33	8.07
Virgin Trains								
Birmingham - Scotland	6.61	4.55	6.45	4.96	5.41	5.51	5.10	3.13
London - Liverpool	1.82	4.96	0.00	3.72	3.15	3.50	0.00	4.14
London - Manchester	6.94	5.54	0.00	10.66	7.40	11.53	0.00	8.50
London - North Wales	1.16	3.64	0.00	3.22	2.20	2.73	0.00	1.93
London - Scotland	2.23	1.65	2.15	6.45	3.31	3.16	1.70	3.70
London - Wolverhampton	5.62	11.57	0.00	6.03	7.37	9.78	0.00	6.76
TfL Rail	17.27	11.51	34.53	36.69	28.23	23.50	22.17	26.09

4. Derivation of key factors affecting customer satisfaction

4.1.1 Aspects of rail journeys covered by NRPS

Before the first wave of NRPS was undertaken in Autumn 1999, TORA undertook some preliminary research. The aim of this research was to identify all the issues that passengers felt important to them as part of their rail journeys, so that all such issues could be monitored in NRPS.

This initial research comprised:

- a qualitative element (eight focus groups and seven depth interviews among disabled customers), to generate the list of dimensions passengers viewed as important to them
- a quantitative element (conjoint analysis) to rank these dimensions and identify the most important of them

From this initial research, a list of 25 key questions was derived, and these have been used in all waves of NRPS. Two additional measures, relating to personal security at the station and on the train, were added in Autumn 2002, bringing the total number of questions to 27.

One element of the new contract awarded to Continental Research in December 2002 was a requirement to validate the list of dimensions used since Autumn 1999, and see if it was still relevant. There were two aspects to this:

- Are all the questions currently measured important to rail passengers in evaluating their journeys
- Are there any questions missing from the current list.

Two approaches were used to answer this:

- Multivariate analysis was undertaken on all data from Waves 1 to 7, to see how much of the variation in overall journey satisfaction was explained by the 25 questions collected in each of those waves. The notion here was that if most of the variation in overall journey satisfaction was explained by these questions, there were unlikely to be any key missing questions.
- In the event, only around 65% of the total variation in overall journey satisfaction was accounted for, suggesting that other questions might be present
- Further qualitative research was therefore undertaken in May 2003, to try and identify any missing dimensions. Eight focus groups were undertaken, covering leisure, commuter and business travellers and covering urban, suburban and rural locations. The key conclusion was that for frequent passengers, there were no measures on the following:
 - Presence of staff on the station
 - Presence of staff on the train
 - Cleanliness of the outside of the train
 - Cleanliness of the inside of the train
- These questions have been incorporated into the questionnaire – the cleanliness questions from Autumn 2003 and the availability of staff from Spring 2004 (these availability questions were originally only asked of regular travellers on a route but this was changed to all respondents in the Spring 2004 survey).

Overall satisfaction with the station was added as a new measure in Autumn 2010, to provide a direct overall measure of station performance.

Three new questions were added in Autumn 2012:

- Overall satisfaction with the train
- The availability of shelter facilities at the station
- The availability of seating at the station

The first of these was added to try and understand which of the individual train questions is driving satisfaction with the train element of the journey (just as the overall station satisfaction score has been used to identify which of the station questions drives that).

In Spring 2013, 'The choice of shops/eating/drinking facilities available' at the station was also added.

In Autumn 2016, 'Availability of Wi-Fi' at the station was added in Autumn 2016 was added.

In Spring 2017, 'Sufficient room for all the passengers to sit / stand' and 'The ease of being able to get on and off the train' on the train was dropped. Also 'The comfort of the seating area' was renamed to 'Comfort of seats'. The 'Availability of Wi-Fi' on the train was also added

Questions added in chronological order

Year	Autumn 2002	Autumn 2003	Spring 2004	Autumn 2010	Autumn 2012
Questions added	<ul style="list-style-type: none"> • Personal security on the train • Personal security at the station 	<ul style="list-style-type: none"> • Cleanliness of the outside of the train • Cleanliness of the inside of the train 	<ul style="list-style-type: none"> • Presence of staff on train • Presence of staff at station 	<ul style="list-style-type: none"> • Overall satisfaction with the station 	<ul style="list-style-type: none"> • Overall satisfaction with the train • The availability of shelter facilities at the station • The availability of seating at the station
No. of factors	27	29	31	32	35

Questions added in chronological order (continued)

Year	Spring 2013	Autumn 2016	Spring 2017
Questions added	<ul style="list-style-type: none"> The choice of shops/eating/drinking facilities available at the station 	<ul style="list-style-type: none"> Availability of Wi-Fi at the station 	<ul style="list-style-type: none"> Toilet facilities at the station The step or the gap between the train and the platform Level of crowding Availability of power sockets Availability of Wi-Fi on the train <p>Question text changes:</p> <ul style="list-style-type: none"> The 'comfort of the seating area' changed to 'Comfort of seats' The 'provision of shelter facilities' changed to 'shelter facilities' Removed 'the' from all statements for e.g.:- the space for luggage changed to 'space for luggage'. <p>Questions removed:</p> <ul style="list-style-type: none"> Facilities and services at the station The ease of being able to get on and off the train 'Sufficient room for all passengers to sit/stand'
No. of questions	36	37	40

The full list of the 40 questions used in Spring 2017 is as shown overleaf.

Full List of 40 questions measured in NRPS:

18 STATION QUESTIONS:

Ticket buying facilities

Provision of information about train times / platforms

The upkeep/ repair of the station buildings/ platforms

Cleanliness of the station

Toilet facilities at the station (not used in the multivariate analysis)

Attitudes and helpfulness of the staff

Connections with other forms of public transport

Facilities for car parking

Facilities for bicycle parking (not included in the multivariate analysis)

The overall station environment

Your personal security whilst using that station

How request to station staff was handled

Availability of staff at the station

Overall satisfaction with the station (not used in the multivariate analysis)

Shelter facilities

Availability of seating

Choice of shops/eating/drinking facilities available

Availability of Wi-Fi (not used in the multivariate analysis)

22 TRAIN QUESTIONS:

The frequency of the trains on that route
Punctuality / reliability (i.e. the train arriving / departing on time)
Length of time the journey was scheduled to take (speed)
Connections with other train services
Value for money of the price of your ticket
Upkeep and repair of the train
Provision of information during the journey
Helpfulness and attitude of staff on train
Space for luggage
The toilet facilities
Comfort of the seats
Space for bicycles (not included in the multivariate analysis)
Your personal security whilst on board the train
Availability of staff on the train
Cleanliness of the inside of the train
Cleanliness of the outside of the train
How well train company dealt with delays
Overall satisfaction with the train (not used in the multivariate analysis)
Level of crowding (not used in the multivariate analysis)
The step or gap between the train and the platform (not used in the multivariate analysis)
Availability of Wi-Fi (not used in the multivariate analysis)
Availability of power sockets (not used in the multivariate analysis)

All the dimensions are rated by respondents on five point verbal scales, either a satisfaction scale or a good/poor scale. There is a final option for did not use/no opinion.

In addition to these measures, the questionnaire monitors many other aspects of passenger journeys, and is shown at Appendix B. At stations and on board trains in Wales, a Welsh version is offered to respondents. A total of two Welsh questionnaires were returned.

4.1.2 Multivariate analysis to derive which journey aspects are most important

To determine the relative importance of each individual measure in influencing overall satisfaction with journey, multivariate analysis is now undertaken every wave – nationally, by TOC type and by individual TOC and building block.

For the analysis to derive the criteria which are important to overall journey satisfaction, all of the measures in the list on the previous page are included, except for “overall satisfaction with the station”, “overall satisfaction with the train” and “cleanliness of the train” (the latter is excluded because it is superseded by the two separate measures for cleanliness of the inside and outside of trains).

The multivariate analysis did not include the new factors that were added in Spring 2017 (as this analysis is based on the two latest waves).

The full results from this multivariate analysis are shown at Appendix A.

5. Glossary of terms

Certain terms are used throughout the NRPS and these are defined here, for convenience.

Central London stations are any of the following:

Blackfriars	Kings Cross	Paddington
Cannon Street	Liverpool Street	St Pancras
Charing Cross	London Bridge	Victoria
City Thameslink	Marylebone	Waterloo
Euston	Moorgate	Waterloo East
Fenchurch Street		

Journey purpose provides a categorisation of passenger journeys. Journeys are defined as Commuter, Business or Leisure, using the codes at Appendix E.

Peak journeys for journeys in London and the South East are defined as weekday journeys for which the train terminates (or passes through for Govia Thameslink Railway) at a Central London station before 10:00 or departs from a Central London Station between 16:00 and 19:00

Shift is a period during which a fieldworker distributes questionnaires to rail passengers

TOC is a Train Operating Company

TOC type classifies each TOC into one of three types, currently as follows:

London & South East	Long Distance	Regional
c2c	CrossCountry	Arriva Trains Wales
Chiltern Railways	Virgin Trains East Coast	Merseyrail
Gatwick Express	East Midlands Trains	Northern
Great Northern	TransPennine Express	ScotRail
Great Western Railway	Virgin Trains	
Greater Anglia		
London Midland		
London Overground		
South West Trains		
Southeastern		
Southern		
TfL Rail		
Thameslink		

TOC building block is a subset of a TOC for which an independent sample is drawn and for which weighting is applied. Using building blocks allows TOCs to align NRPS data with operational data for sub divisions of their network and also allows new franchise geographies to be assessed before a new franchise commences. All building blocks are now route based although prior to Autumn 2016 (Wave 35) a few TOCs use stations to define their building blocks.

Building blocks are being increasingly used to benchmark performance against the (weighted) average for a building block genre e.g. comparing Stansted Express to the average of the airport services genre. There are seven building block genres to which all building blocks have been assigned:

- Short commute
- Long commute
- High speed
- Long distance
- Inter urban
- Rural
- Airport services

Appendix F provides the definition of the genre allocated to each building block.

6. Deliverables

A wide range of reports is produced from the NRPS data each wave. The key reports are defined below:

Report	Produced for
At a glance report	Short summary reports showing headline results
Full report <i>(formerly known as Summary Report)</i>	A report providing trend data for each TOC by wave which is used to generate the Transport Focus Main NRPS report
Multivariate analysis	Key drivers nationally, for each TOC type and each TOC and for each building block
Rankings report	Results since wave 10, showing satisfaction score for each TOC by factor, significant changes since one year earlier, national rank and rank in TOC type
Stakeholder report <i>(formerly known as Consultees Report)</i>	A report of summary results produced for all TOCs and a range of Stakeholders
Network Rail stations report	Percentage of passengers satisfied by each main factor for last 10 waves for all Network Rail managed stations covered by NRPS during that time period
TOC Reports	Produced for each TOC, virtual TOC and PTE area
Field Report	A document detailing the field operation
Technical Report	This report, outlining the key elements of NRPS
User Guidance Report	A document providing information on sample sizes and statistical reliability

All reports are supplied electronically to Transport Focus at the end of each wave. The TOC Reports and Stakeholder Report are distributed electronically to a distribution list mandated by Transport Focus via a secure FTP site. SPSS files are also available.

In addition, access to the raw data itself and to the verbatim comments written in by respondents in response to open-ended questions are available online. Please see the Transport Focus website or at <http://www.railpassengerdata.org.uk> for further details of this online system. SPSS files are also available. Another online system called 'Data Explorer' gives access to 10 waves of data by TOC and building block for all the main NRPS factors. Access is available via: <http://data.transportfocus.org.uk/train/nps/question/service-overall/>

7. KPIs

The new contract from Autumn 2007 onwards suggested monitoring Key Performance Indicators. We have included here performance against the target sample sizes for each train company for the Spring 2017 wave (showing the number of used questionnaires for each TOC).

Train Operating Company	Target	Sample size achieved
Arriva Trains Wales	1,000	1,244
c2c	1,000	937
Chiltern Railways	1,000	1,062
Crosscountry	1,200	1,224
East Midlands Trains	1,000	1,084
Gatwick Express	500	525
Grand Central*	500	885
Great Northern	500	583
Great Western Railway	1,500	1,502
Greater Anglia	1,300	1,365
Heathrow Connect*	500	445
Heathrow Express*	500	504
Hull Trains*	500	689
London Midland	1,000	961
London Overground	1,600	1,472
Merseyrail	700	719
Northern	1,400	1,391
ScotRail	1,300	1,243
South West Trains	2,000	2,343
Southeastern	1,500	1,558
Southern	1,300	1,129
TfL Rail	200	139
Thameslink	1,000	960
TransPennine Express	1,000	876
Virgin Trains	1,000	1,210
Virgin Trains East Coast	1,000	1,240
Total	26,100	27,290

TOCs marked * are non-franchised operators included in NRPS, but are not part of many of the published results.

8. Appendices

8.1.1 Appendix A:

Results of multivariate analysis – drivers of overall journey satisfaction

Key drivers analysis is undertaken to identify which of the criteria measured best explain overall satisfaction and dissatisfaction with the overall journey experience. The technique used is Pairwise regression, using a Stepwise method. This approach is favoured over others as it is designed to deal with cases where data is missing for respondents. As the NRPS is a self-completion survey, respondents are not required to answer every question and hence for most respondents the data set is incomplete.

The analysis is performed at the end of every wave, but to ensure a robust base of respondents at TOC and Building Block level, two waves of data are amalgamated. Spring 2017 analysis was conducted on the combined Autumn 2016 and Spring 2017 data sets.

The approach itself is designed to measure what explains the variance in the scores given for the dependent variable. In this case the dependent variable is overall satisfaction with journey. Regression analysis produces coefficients and these are then translated into a percentage score for those attributes which help to explain the variance. The inputs (attributes) are the questions relating to the station, train and delay ratings. The analysis is run separately to identify the attributes that explain satisfaction and those that explain dissatisfaction. For the drivers of satisfaction, the dependent variable is defined as those who are either 'very' or 'fairly' satisfied with their journey and the input data is the top-two box scores for the various attributes. Conversely, the dependent variable for the drivers of dissatisfaction is defined as those who are either 'fairly' or 'very' dissatisfied with their journey and the input data is the bottom-two scores for the station, train and delay attributes.

The outputs are reported as percentages and the following tables detail which attributes best explain the variance. Just over a third (36%) of the variation in overall passenger satisfaction is explained by the rating on punctuality/reliability, making this by far the most important driver of overall satisfaction. 52% of the variation in overall dissatisfaction is explained by dissatisfaction with how the train company handled any delays, making this by far the most important driver of trip dissatisfaction.

Train factors remain far more important drivers of passenger satisfaction than station factors.

Where a figure is shown as 0%, this means the factor is a significant driver of overall satisfaction but the percentage variance is below 0.5% (but still above zero).

Where no figure is shown, this means the factor does not contribute to driving overall trip satisfaction.

Drivers of overall journey satisfaction – w35/36 combined

Station questions	
Ticket buying facilities	0%
Provision of information about train times/platforms	3%
The upkeep/repair of the station buildings/platforms	
Cleanliness of the station	0%
The attitudes and helpfulness of the staff	
Connections with other forms of public transport e.g. bus, tube, tram, taxi etc.	
Facilities for car parking	
The availability of staff at the station	
The overall station environment	4%
Your personal security whilst using that station	0%
The provision of shelter facilities	
Availability of seating	0%
The choice of shops/eating/drinking facilities available	
Availability of Wi-Fi	0%
Overall satisfaction with how request was handled	0%
Train questions	
The frequency of the trains on that route	9%
Punctuality/reliability (i.e. the train arriving/departing on time)	36%
The length of time the journey was scheduled to take (speed)	11%
Connections with other train services	0%
The value for money for the price of your ticket	2%
Upkeep and repair of the train	1%
The provision of information during the journey	2%
The helpfulness and attitude of staff on train	
The space for luggage	0%
The toilet facilities	0%
Comfort of seats	9%
Your personal security whilst on board the train	2%
The availability of the staff on the train	
The cleanliness of the inside of the train	18%
The cleanliness of the outside of the train	
How well train company dealt with delays	1%

Drivers of overall journey dissatisfaction – w35/36 combined

Station questions	
Ticket buying facilities	0%
Provision of information about train times/platforms	1%
The upkeep/repair of the station buildings/platforms	
Cleanliness of the station	
The attitudes and helpfulness of the staff	0%
Connections with other forms of public transport.	
Facilities for car parking	
The availability of staff at the station	
The overall station environment	2%
Your personal security whilst using that station	0%
The provision of shelter facilities	
Availability of seating	
The choice of shops/eating/drinking facilities available	
Availability of Wi-Fi	0%
How request to station staff was handled	1%
Train questions	
The frequency of the trains on that route	2%
Punctuality/reliability (i.e. the train arriving/departing on time)	17%
The length of time the journey was scheduled to take (speed)	9%
Connections with other train services	2%
The value for money for the price of your ticket	1%
Upkeep and repair of the train	0%
The provision of information during the journey	2%
The helpfulness and attitude of staff on train	0%
The space for luggage	1%
The toilet facilities	
Comfort of seats	2%
Your personal security whilst on board the train	3%
The availability of the staff on the train	
The cleanliness of the inside of the train	2%
The cleanliness of the outside of the train	0%
How train company dealt with delays	52%

8.1.2 Appendix B

Two versions of the questionnaire were administered, interviewers distributed them alternately throughout their shifts. The core of the questionnaire was identical only a small sub-section varied between the two versions. Below is a full copy of version A plus the sub-section of questions from version B.

Spring 2017

National Rail Passenger Survey

Thank you for agreeing to take part in our survey. Transport Focus is the official, independent consumer watchdog that represents rail, bus, and tram passengers. To help us represent the views of passengers in your area we would appreciate a little of your time to complete this survey. It asks about the rail journey you made when given this questionnaire. The rail industry and governments pay close attention to the survey's results which provide Transport Focus with the evidence to seek improvements on behalf of passengers.

- Please comment on National Rail services only. Do not comment on Underground or tram services.
- To answer the questions please tick the box next to the answer(s) that apply or write your answer in the space provided. Unless the question allows you to tick several answers please just tick one box per question.
- When you have completed your questionnaire please return it to us in the envelope provided.

1

Your journey today

The journey you were making when given this questionnaire

Q1a Please fill in the scheduled departure time of the train you caught after being given this questionnaire.
Please use the 24 hour clock e.g. 17:25

:

Q1b You were given this questionnaire before boarding a train at Alsager. At which station did you get off this train?
Please write in the name of the station

Q1c Did this journey involve you travelling on a rail replacement bus or coach service today?

Yes..... ☐

No..... ☐

Q2 Which train company was operating the train which you boarded at Alsager station.

East Midlands Trains..... ☐ London Midland..... ☐

Other: Please write in Don't know..... ☐

Continued overleaf

Office Use Only

D

D

M

M

1

7

Your opinion

Q3 What was the main purpose of the trip you were making when given this questionnaire?

- | | | | |
|---|--------------------------|------------------------------------|--------------------------|
| Daily commuting to/from work..... | <input type="checkbox"/> | On personal business (job | <input type="checkbox"/> |
| Less regular commuting to/from work..... | <input type="checkbox"/> | interview, dentist etc.)..... | <input type="checkbox"/> |
| Daily commuting for education (to/from | <input type="checkbox"/> | Visiting friends or relatives..... | <input type="checkbox"/> |
| college/school/university)..... | <input type="checkbox"/> | Shopping trip..... | <input type="checkbox"/> |
| Less regular commuting for education (to/from | <input type="checkbox"/> | Travel to/from holiday..... | <input type="checkbox"/> |
| college/school/university)..... | <input type="checkbox"/> | A day out..... | <input type="checkbox"/> |
| On company business (or own if | <input type="checkbox"/> | Sport..... | <input type="checkbox"/> |
| self-employed)..... | <input type="checkbox"/> | Other leisure trip..... | <input type="checkbox"/> |

Q4 What type of ticket did you use for your journey from Alsager?

(Note: type of ticket is often shown at the top left of your ticket)

- | | | | |
|--|--------------------------|---|--------------------------|
| Anytime Single/Return..... | <input type="checkbox"/> | Annual Season Ticket (including Travelcard/ | <input type="checkbox"/> |
| Anytime Day Single/Return..... | <input type="checkbox"/> | Travelcard on Oyster)..... | <input type="checkbox"/> |
| Off-Peak/Super Off-Peak Single/Return..... | <input type="checkbox"/> | Special promotion ticket (e.g. rover ticket)..... | <input type="checkbox"/> |
| Off-Peak Day/Super Off-Peak | <input type="checkbox"/> | Rail Staff Pass/Privilege Ticket/ | <input type="checkbox"/> |
| Day Single/Return..... | <input type="checkbox"/> | Police Concession..... | <input type="checkbox"/> |
| Advance..... | <input type="checkbox"/> | Free travel pass (e.g. Freedom pass)..... | <input type="checkbox"/> |
| Day Travelcard..... | <input type="checkbox"/> | | |
| Weekly or monthly Season Ticket (including | <input type="checkbox"/> | Other: Please write in | |
| Travelcard/Travelcard on Oyster)..... | <input type="checkbox"/> | | |

2 Your opinion of the station where you were given this questionnaire

Q5 How would you rate Alsager station for:

- | | Very good | Fairly good | Neither good nor poor | Fairly poor | Very poor | Did not use/no opinion |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Ticket buying facilities (if you bought at that station)..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Provision of information about train times/platforms..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Upkeep/repair of the station buildings/platforms..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cleanliness of the station..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Toilet facilities at the station..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Availability of staff at the station..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Attitudes and helpfulness of the staff..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Connections with other forms of public transport | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (e.g. bus, tube, tram, taxi, etc.)..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Facilities for car parking..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Facilities for bicycle parking..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Your personal security whilst using that station..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall station environment..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shelter facilities..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Availability of seating..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Choice of shops/eating/drinking facilities available..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Availability of Wi-Fi..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Q6 While at Alsager station, did you ask staff for help or information?

Please tick all that apply

- | | | |
|--|--------------------------|----------|
| Yes - asked for help..... | <input type="checkbox"/> | Go to Q7 |
| Yes - asked for information..... | <input type="checkbox"/> | Go to Q7 |
| No - couldn't find anyone to ask..... | <input type="checkbox"/> | Go to Q8 |
| No - didn't need help/information..... | <input type="checkbox"/> | Go to Q8 |

Q7 Overall, how satisfied were you with the way your request was handled?

- | | | | | | |
|--------------------------|--------------------------|------------------------------------|--------------------------|--------------------------|--------------------------|
| Very satisfied | Fairly satisfied | Neither satisfied nor dissatisfied | Fairly dissatisfied | Very dissatisfied | Don't know/no opinion |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Q8 Overall how satisfied were you with Alsager station?

- | | | | | | |
|--------------------------|--------------------------|------------------------------------|--------------------------|--------------------------|--------------------------|
| Very satisfied | Fairly satisfied | Neither satisfied nor dissatisfied | Fairly dissatisfied | Very dissatisfied | Don't know/no opinion |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Q9 Based on your experience on that journey, how satisfied were you with:

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
Frequency of the trains on that route.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Punctuality/reliability of the train (i.e. the train arriving/departing on time).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of time the journey was scheduled to take.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of crowding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connections with other train services.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Value for money of the price of your ticket.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q10 How would you rate the train you boarded for that journey in terms of:

	Very good	Fairly good	Neither good nor poor	Fairly poor	Very poor	Did not use/no opinion
Cleanliness of the inside of the train.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cleanliness of the outside of the train.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upkeep and repair (condition of seats, walls, tables, etc.).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provision of information during the journey.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of staff on the train.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpfulness and attitude of staff on the train.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Space for luggage.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort of the seats.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Space for bicycles.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The step or gap between the train and the platform.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your personal security whilst on board the train.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toilet facilities on the train.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of Wi-Fi.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of power sockets.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q11 Overall, how satisfied were you with the train you boarded for your journey?

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q12 Did you get a seat on the train?

Yes - for all of the journey.....	<input type="checkbox"/>	No - but I was happy to stand.....	<input type="checkbox"/>
Yes - for part of the journey.....	<input type="checkbox"/>	No - but I would have liked a seat.....	<input type="checkbox"/>

Q13 Did you experience any delay either on this train or because the train you had planned to catch at Alsager was cancelled?

No delay.....	<input type="checkbox"/> Go to Q16	16-20 minutes delay.....	<input type="checkbox"/> Go to Q14
Up to 5 minutes delay.....	<input type="checkbox"/> Go to Q14	21-30 minutes delay.....	<input type="checkbox"/> Go to Q14
6-10 minutes delay.....	<input type="checkbox"/> Go to Q14	31-60 minutes delay.....	<input type="checkbox"/> Go to Q14
11-15 minutes delay.....	<input type="checkbox"/> Go to Q14	Over 60 minutes delay.....	<input type="checkbox"/> Go to Q14

Q14 How well do you think the train company dealt with this delay?

	Very well	Fairly well	Neither well nor poorly	Fairly poorly	Very poorly	Don't know/no opinion
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Q15 How well do you rate the train company for each of the following, in relation to the delay that occurred?

	Very well	Fairly well	Neither well nor poorly	Fairly poorly	Very poorly	Don't know/no opinion
The amount of information provided about the delay.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The accuracy of information given about the delay.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The usefulness of the information.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The speed with which information was provided.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The time taken to resolve the problem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The availability of alternative transport if the train service could not continue.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4 Your overall opinion of your journey today

Q16 Taking into account Alsager station where you boarded the train and the actual train travelled on after being given this questionnaire, how satisfied were you with your journey today?

Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q17 All things considered and on balance, how much do you trust the train company that operated the train you travelled on today?
Please select one number only

TRUST them a GREAT deal

7 6 5 4 3 2 1

☐ ☐ ☐ ☐ ☐ ☐ ☐

Do NOT trust them at all

Q18 Did other passengers' behaviour give you cause to worry or make you feel uncomfortable during your journey? Please tick all that apply

Yes - at the station..... ☐ Go to Q19

Yes - on the train..... ☐ Go to Q19

No..... ☐ Go to Q20

Q19 Which of the following were the reason(s) for this?
Please tick all that apply

	At the station	On the train
Passengers drinking/under the influence of alcohol.....	<input type="checkbox"/>	<input type="checkbox"/>
Passengers taking/under the influence of drugs.....	<input type="checkbox"/>	<input type="checkbox"/>
Abusive or threatening behaviour.....	<input type="checkbox"/>	<input type="checkbox"/>
Rowdy behaviour.....	<input type="checkbox"/>	<input type="checkbox"/>
Feet on seats.....	<input type="checkbox"/>	<input type="checkbox"/>
Music being played loudly.....	<input type="checkbox"/>	<input type="checkbox"/>
Loud use of mobile phones.....	<input type="checkbox"/>	<input type="checkbox"/>
Smoking.....	<input type="checkbox"/>	<input type="checkbox"/>
Graffiti or vandalism.....	<input type="checkbox"/>	<input type="checkbox"/>
Saw an act of vandalism/violence.....	<input type="checkbox"/>	<input type="checkbox"/>
Other	<div>Please write in</div>	<div>Please write in</div>

Q20 Please use the space below for any further comments you would like to make about your trip today or the rail service generally.

Q21 Which methods of transport did you use to get to Alsager station?
Please tick all that apply

- | | | | |
|--|--------------------------|------------------------------------|--------------------------|
| Another train (National Rail service)..... | <input type="checkbox"/> | Tram/Metro..... | <input type="checkbox"/> |
| On foot/walked..... | <input type="checkbox"/> | Underground train..... | <input type="checkbox"/> |
| Bicycle (parked at or near station)..... | <input type="checkbox"/> | Taxi..... | <input type="checkbox"/> |
| Bicycle (taken on to train)..... | <input type="checkbox"/> | Car parked at or near station..... | <input type="checkbox"/> |
| Motorbike..... | <input type="checkbox"/> | Car - dropped off..... | <input type="checkbox"/> |
| Bus/coach..... | <input type="checkbox"/> | Air/sea..... | <input type="checkbox"/> |

Other: Please write in

Q22 Did you continue your journey by train after getting off at this station?
Please remember not to include the Underground/Metro/trams

- | | | |
|----------|--------------------------|-----------|
| Yes..... | <input type="checkbox"/> | Go to Q23 |
| No..... | <input type="checkbox"/> | Go to Q25 |

Q23 Please write in the name of your final destination station.

Q24 Please write in the names of any other stations at which you changed trains before reaching your final destination.

Q25 Which methods of transport did you use to get from the station when you finished your train journey?
Please tick all that apply

- | | | | |
|--|--------------------------|------------------------------------|--------------------------|
| Another train (National Rail service)..... | <input type="checkbox"/> | Tram/Metro..... | <input type="checkbox"/> |
| On foot/walked..... | <input type="checkbox"/> | Underground train..... | <input type="checkbox"/> |
| Bicycle (parked at or near station)..... | <input type="checkbox"/> | Taxi..... | <input type="checkbox"/> |
| Bicycle (taken on to train)..... | <input type="checkbox"/> | Car parked at or near station..... | <input type="checkbox"/> |
| Motorbike..... | <input type="checkbox"/> | Car - dropped off..... | <input type="checkbox"/> |
| Bus/coach..... | <input type="checkbox"/> | Air/sea..... | <input type="checkbox"/> |

Other: Please write in

Q26 Were you on your outward or return journey when you were given a questionnaire?

- | | |
|------------------------|--------------------------|
| Outward..... | <input type="checkbox"/> |
| Return..... | <input type="checkbox"/> |
| One way trip only..... | <input type="checkbox"/> |

Q27 Thinking about the whole journey you were making, of which the train journey was a part, how long did the whole journey take from the time you started out until the time you got to your final destination?

- Less than 30 minutes..... ☐
 - 30 - 59 minutes..... ☐
 - 1 hour - 1 hour 59 minutes..... ☐
 - 2 hours - 2 hours 59 minutes..... ☐
 - 3 hours - 3 hours 59 minutes..... ☐
 - 4 hours or more..... ☐
-

Q28 Did you have an alternative means of making the journey you were on today if you were to choose not to take the train for any reason?

Please tick all that apply

- No alternative means available..... ☐
 - Yes - on foot/walk..... ☐
 - Yes - car..... ☐
 - Yes - bicycle..... ☐
 - Yes - motorbike..... ☐
 - Yes - bus/coach..... ☐
 - Yes - tram/Metro..... ☐
 - Yes - Underground..... ☐
 - Yes - taxi..... ☐
 - Yes - air/sea..... ☐
-

So that we can be sure we've got the views of a representative cross-section of passengers and analyse the findings by different passenger types

Q29 Your age?

- | | | | |
|--------------|--------------------------|--------------|--------------------------|
| 16 - 18..... | <input type="checkbox"/> | 55 - 59..... | <input type="checkbox"/> |
| 19 - 25..... | <input type="checkbox"/> | 60 - 64..... | <input type="checkbox"/> |
| 26 - 34..... | <input type="checkbox"/> | 65 - 69..... | <input type="checkbox"/> |
| 35 - 44..... | <input type="checkbox"/> | 70 - 80..... | <input type="checkbox"/> |
| 45 - 54..... | <input type="checkbox"/> | 81+..... | <input type="checkbox"/> |

Q30 Are you:

- Male..... ☐ Female..... ☐

Q31 To which of these ethnic groups do you consider you belong?

- White..... ☐
 Mixed/multiple ethnic groups..... ☐
 Asian or Asian British..... ☐
 Black, African/Caribbean or Black British..... ☐
 Chinese..... ☐
 Arab..... ☐
 Other ethnic group..... ☐

Q32 Are you affected by any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?

Please tick all that apply

- No: None..... ☐
 Yes: Vision (e.g. blindness or partial sight)..... ☐
 Yes: Hearing (e.g. deafness or partial hearing)..... ☐
 Yes: Mobility (e.g. only able to walk short distances or difficulty climbing stairs)..... ☐
 Yes: Dexterity (e.g. difficulty lifting and carrying objects or using a keyboard)..... ☐
 Yes: Learning or understanding or concentrating..... ☐
 Yes: Memory..... ☐
 Yes: Mental health..... ☐
 Yes: Stamina or breathing or fatigue..... ☐
 Yes: Socially or behaviourally (eg associated with autism, attention deficit disorder or Asperger's syndrome)..... ☐

Other: Please write in

Q33 Were you travelling with:

Please tick all that apply

- Heavy/bulky luggage/other large items..... ☐
 A pushchair..... ☐
 A folding bicycle..... ☐
 A non-folding bicycle..... ☐
 A dog..... ☐
 A helper..... ☐
 A mobility scooter..... ☐
 A wheelchair..... ☐
 None of the above..... ☐

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Q34 And finally, which one of these images best captures how you feel about your journey today?


☐

☐

☐

☐

☐

☐

☐

☐

Images © Transport Focus

THANK YOU! You have made your opinion count ...

If you would be happy to participate in future research projects about the transport industry for Transport Focus please complete the contact details below:

The information that you have provided on this questionnaire is subject to the Data Protection Act 1998 and will not be used to identify you personally. The data will only be used for research purposes. Any organisations receiving the data will also be subject to the same restrictions and obligations under the Data Protection Act 1998.

If you have any queries about this survey or how your data will be used please contact Sarah Champion at Chime Insight and Engagement on 01233 648460.

Name:

Email address:

Please return the questionnaire as soon as possible in the envelope provided or use the following Freepost address:



Freepost Plus RTKL-ZYTR-HTZK
National Rail Passenger Survey
Facts International Ltd
3 Henwood
Henwood Industrial Estate
ASHFORD
TN24 8FL



5

Fares and ticketing

Q21 How did you check the times of the trains for your journey today?

- I did not check as I already knew the times..... ☐ Go to Q23
- I did not check, I just turned up at the station..... ☐ Go to Q23
- I looked at a printed timetable that I already had..... ☐ Go to Q23
- I went to the station/a travel agent in advance..... ☐ Go to Q23
- I phoned for information..... ☐ Go to Q22
- I checked on line on a computer..... ☐ Go to Q22
- I checked on line on my phone..... ☐ Go to Q22
- I used an App..... ☐ Go to Q22

Other: Please write in

Go to Q22

Q22 Which organisation did you use to check the train times?

- National Rail Enquiries (NRE)..... ☐
- The operator of the train I boarded when given this questionnaire..... ☐
- Another train operator..... ☐
- A third party ticket seller (e.g. trainline, Red Spotted Hanky)..... ☐
- A third party travel information provider (e.g. Traveline, local council)..... ☐

Other: Please write in

Q23 When did you buy your ticket for your journey today?

- Today..... ☐ Go to Q24
- In last week..... ☐ Go to Q24
- In last fortnight..... ☐ Go to Q24
- In last month..... ☐ Go to Q24
- In last two months..... ☐ Go to Q24
- Used a season ticket I already had..... ☐ Go to Q25
- Used a free travel pass I already had..... ☐ Go to Q25

Q24 How did you buy your ticket for your journey today?

- From the station ticket window..... ☐
- From a ticket machine at the station/elsewhere..... ☐
- From a member of staff on the train..... ☐
- From a member of staff at a station..... ☐
- Over the phone..... ☐
- From the train company's website..... ☐
- From another company's website..... ☐
- Via the train company's App..... ☐
- Via another company's App..... ☐
- Ticket was organised for me..... ☐
- Used Oyster or other smartcard..... ☐

Other: Please write in

Q25 Was the ticket for your journey:

- A paper ticket - from a ticket office/ticket machine/member of staff..... ☐
- A paper ticket - printed at home, work, or somewhere else..... ☐
- An Oyster or other smartcard..... ☐
- A ticket on a mobile phone (e.g. an m-ticket or e-ticket)..... ☐
- I did not have a ticket - I used a contactless payment method (e.g. card or phone)..... ☐

Other: Please write in

Q26 Was your fare reduced because you have any of the following railcards:

- No - do not have a railcard..... ☐
- Network Railcard..... ☐
- 16-25 Railcard..... ☐
- Senior Railcard..... ☐
- HM Forces Railcard..... ☐
- Two Together Railcard..... ☐
- Family & Friends Railcard..... ☐
- Disabled Persons Railcard..... ☐
- Gold Card (annual season ticket)..... ☐

Other: Please write in

Q27 Thinking about where you bought your ticket, how would you rate the following:

	Very good	Fairly good	Neither good nor poor	Fairly poor	Very poor	Did not use/no opinion
The information provided there about the tickets available.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The range of tickets available there.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of ticket purchase there.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q28 Is your ticket for your journey today?

- Standard Class..... ☐
- First Class..... ☐
- First Class upgrade (special offer)..... ☐

Q29 Did you have a reserved seat for your journey today?

- Yes..... ☐
- Yes - although I had to get someone to move..... ☐
- Yes - but the seat was taken and I had to sit elsewhere..... ☐
- Yes - but the reservation was not shown at the seat..... ☐
- Yes - but I chose to sit elsewhere without checking my reserved seat..... ☐
- No - I did not have a reserved seat..... ☐

8.1.3 Appendix C

Definition of PTE areas

Stations in area: TfGM

ALTRINCHAM	GATLEY	MIDDLEWOOD
APPLEY BRIDGE	GLOSSOP	MILLS HILL
ARDWICK	GLAZEBROOK	MOORSIDE
ASHBURYS	GODLEY	MOSES GATE
ASHTON-UNDER-LYNE	GORTON	MOSSLEY (GREATER MANCHESTER)
ATHERTON	GREENFIELD	MOSTON
BELLE VUE	GUIDE BRIDGE	NAVIGATION ROAD
BLACKROD	HADFIELD	NEWTON FOR HYDE
BOLTON	HAG FOLD	ORRELL
BRAMHALL	HALE	PATRICROFT
BREDBURY	HALL I' TH' WOOD	PEMBERTON
BRINNINGTON	HATTERSLEY	REDDISH NORTH
BROADBOTTOM	HAZEL GROVE	REDDISH SOUTH
BROMLEY CROSS	HEALD GREEN	ROCHDALE
BRYN	HEATON CHAPEL	ROMILEY
BURNAGE	HINDLEY	ROSE HILL MARPLE
CASTLETON	HORWICH PARKWAY	RYDER BROW
CHASSEN ROAD	HUMPHREY PARK	SALFORD CENTRAL
CHEADLE HULME	HYDE CENTRAL	SALFORD CRESCENT
CLIFTON	HYDE NORTH	SMITHY BRIDGE
DAISY HILL	INCE (MANCHESTER)	STALYBRIDGE
DAVENPORT	IRLAM	STOCKPORT
DEANSGATE	KEARSLEY	STRINES
DENTON	LEVENSHULME	SWINTON (LANCASHIRE)
DINTING	LITTLEBOROUGH	TRAFFORD PARK
EAST DIDSBURY	LOSTOCK	URMSTON
ECCLES	MANCHESTER AIRPORT	WALKDEN
FAIRFIELD	MANCHESTER OXFORD ROAD	WESTHOUGHTON
FARNWORTH	MANCHESTER PICCADILLY	WIGAN NORTH WESTERN
FLIXTON	MANCHESTER VICTORIA	WIGAN WALLGATE
FLOWERY FIELD	MARPLE	WOODLEY
GATHURST	MAULDETH ROAD	WOODSMOOR

Stations in area: Merseytravel

AIGBURTH	GREEN LANE	OLD ROAN
AINSDALE	HALEWOOD	ORRELL PARK
AINTREE	HALL ROAD	PORT SUNLIGHT
BANK HALL	HESWALL	PRESCOT
BEBINGTON	HIGHTOWN	RAINFORD
BIDSTON	HILLSIDE	RAINHILL
BIRKDALE	HOOTON	RICE LANE
BIRKENHEAD CENTRAL	HOUGH GREEN	ROBY
BIRKENHEAD HAMILTON SQUARE	HOYLAKE	ROCK FERRY
BIRKENHEAD NORTH	HUNTS CROSS	SANDHILLS
BIRKENHEAD PARK	HUYTON	SEAFORTH AND LITHERLAND
BLUNDELLSANDS AND CROSBY	KIRKBY	SOUTHPORT
BOOTLE NEW STRAND	KIRKDALE	SPITAL
BOOTLE ORIEL ROAD	LEA GREEN	ST HELENS CENTRAL
BROAD GREEN	LEASOWE	ST HELENS JUNCTION
BROMBOROUGH	LIVERPOOL CENTRAL	ST MICHAELS
BROMBOROUGH RAKE	LIVERPOOL JAMES STREET	THATTO HEATH
BRUNSWICK	LIVERPOOL LIME STREET	UPTON
CONWAY PARK	LIVERPOOL SOUTH PARKWAY	WALLASEY GROVE ROAD
CRESSINGTON	MAGHULL	WALLASEY VILLAGE
EARLESTOWN	MANOR ROAD	WALTON (MERSEYSIDE)
EASTHAM RAKE	MEOLS	WATERLOO (MERSEYSIDE)
ECCLESTON PARK	MEOLS COP	WAVERTREE TECHNOLOGY PARK
EDGE HILL	MOORFIELDS	WEST ALLERTON
FAZAKERLEY	MORETON (MERSEYSIDE)	WEST KIRBY
FORMBY	MOSSLEY HILL	WHISTON
FRESHFIELD	NEW BRIGHTON	
GARSWOOD	NEWTON-LE-WILLOWS	

Stations in area: Nexus PTE

METROCENTRE
HEWORTH
NEWCASTLE
SEABURN
SUNDERLAND

Stations in area: SEWTA

ABER	FERNHILL	PONTYPRIDD
ABERCYNON	GARTH (MID GLAMORGAN)	PORTH
ABERDARE	GILFACH FARGOED	PYLE
ABERGAVENNY	GRANGETOWN (GLAMORGAN)	QUAKERS YARD
BARGOED	HEATH HIGH LEVEL	RADYR
BARRY	HEATH LOW LEVEL	RHIWBINA
BARRY DOCKS	HENGOED	RHOOSE (CARDIFF INTERNATIONAL AIRPORT)
BARRY ISLAND	LISVANE AND THORNHILL	RHYMNEY
BIRCHGROVE	LLANBRADACH	RISCA AND PONTYMISTER
BRIDGEND	LLANDAF	ROGERSTONE
BRITHDIR	LLANHARRAN	SARN
CADOXTON	LLANHILLETH	SEVERN TUNNEL JUNCTION
CAERPHILLY	LLANISHEN	TAFFS WELL
CALDICOT	LLANTWIT MAJOR	TIR-PHIL
CARDIFF BAY	LLWYNPIA	TON PENTRE
CARDIFF CENTRAL	MAESTEG	TONDU
CARDIFF QUEEN STREET	MAESTEG EWENNY ROAD	TONYPANDY
CATHAYS	MERTHYR TYDFIL	TREFFOREST
CHEPSTOW	MERTHYR VALE	TREFFOREST ESTATE
COGAN	MOUNTAIN ASH	TREHAFOD
CORYTON	NEWBRIDGE	TREHERBERT
CROSSKEYS	NEWPORT (SOUTH WALES)	TREORCHY
CWMBACH	NINIAN PARK	TROED-Y-RHIW
CWMBRAN	PENARTH	TY GLAS
DANESCOURT	PENCOED	WAUN-GRON PARK
DINAS POWYS	PENGAM	WHITCHURCH
DINAS RHONDDA	PENRHIWCEIBER	WILDMILL
DINGLE ROAD	PENTRE-BACH	YNYSWEN
EASTBROOK	PONTLOTTYN	YSTRAD MYNACH
EBBW VALE PARKWAY	PONTYCLUN	YSTRAD RHONDDA
FAIRWATER	PONTYPOOL AND NEW INN	

Stations in area: Strathclyde PTE

AIRBLES	CHATELHERAULT	HAIRMYRES	NEW CUMNOCK
AIRDRIE	CLARKSTON	HAMILTON CENTRAL	NEWTON (LANARKSHIRE)
ALEXANDRA PARADE	CLELAND	HAMILTON WEST	NEWTON-ON-AYR
ALEXANDRIA	CLYDEBANK	HARTWOOD	NITSHILL
ANDERSTON	COATBRIDGE CENTRAL	HAWKHEAD	PAISLEY CANAL
ANNIESLAND	COATBRIDGE SUNNYSIDE	HELENSBURGH CENTRAL	PAISLEY GILMOUR St
ARDLUI	COATDYKE	HELENSBURGH UPPER	PAISLEY ST JAMES
ARDROSSAN HARBOUR	CORKERHILL	HIGH STREET GLASGOW	PARTICK
ARDROSSAN SOUTH BEACH	CRAIGENDORAN	HILLFOOT	PATTERTON
ARDROSSAN TOWN	CROFTFOOT	HILLINGTON EAST	POLLOKSHAWES EAST
ARGYLE STREET	CROOKSTON	HILLINGTON WEST	POLLOKSHAWES WEST
ARROCHAR AND TARBET	CROSSHILL	HOLYTOWN	POLLOKSHIELDS EAST
ASHFIELD	CROSSMYLOOF	HOWWOOD	POLLOKSHIELDS WEST
AUCHINLECK	CROY	HYNDLAND	PORT GLASGOW
AYR	CUMBERNAULD	IBM	POSSILPARK & PARKHOUSE
BAILLIESTON	DALMARNOCK	INVERKIP	PRESTWICK INTERNATIONAL AIRPORT
BALLOCH	DALMUIR	IRVINE	PRESTWICK TOWN
BARASSIE	DALREOCH	JOHNSTONE	PRIESTHILL AND DARNLEY
BARGEDDIE	DALRY	JORDANHILL	QUEENS PARK (GLASGOW)
BARNHILL	DRUMCHAPEL	KELVINDALE	RENTON
BARRHEAD	DRUMFROCHAR	KENNISHEAD	RUTHERGLEN
BARRHILL	DRUMGELLOCH	KILMARNOCK	SALTCOATS
BEARSDEN	DRUMRY	KILMAURS	SCOTSTOUNHILL
BELDGROVE	DUKE STREET	KILPATRICK	SHAWLANDS
BELLSHILL	DUMBARTON CENTRAL	KILWINNING	SHETTLESTON
BISHOPBRIGGS	DUMBARTON EAST	KINGS PARK	SHIELDMUIR
BISHOPTON	DUMBRECK	KIRKHILL	SHOTTS
BLAIRHILL	DUNLOP	KIRKWOOD	SINGER
BLANTYRE	EAST KILBRIDE	LANARK	SPRINGBURN
BOGSTON	EASTERHOUSE	LANGBANK	STEPPS
BOWLING	EXHIBITION CENTRE GLASGOW	LANGSIDE	STEVENSTON
BRANCHTON	FAIRLIE	LARGS	STEWARTON
BRIDGETON	FORT MATILDA	LARKHALL	SUMMERSTON
BURNSIDE	GARELOCHHEAD	LENZIE	THORNLIEBANK
BUSBY	GARROWHILL	LOCHWINNOCH	THORNTONHALL
CALDERCRUIX	GARSCADDEN	MARYHILL	TROON
CAMBUSLANG	GARTCOSH	MAXWELL PARK	UDDINGSTON

CARDONALD	GIFFNOCK	MAYBOLE	WEMYSS BAY
CARDROSS	GILSHOCHILL	MERRYTON	WEST KILBRIDE
CARFIN	GIRVAN	MILLIKEN PARK	WESTERTON
CARLUKE	GLASGOW CENTRAL	MILNGAVIE	WHIFFLET
CARMYLE	GLASGOW QUEEN STREET	MOSSPARK	WHINHILL
CARNTYNE	GLENGARNOCK	MOTHERWELL	WHITECRAIGS
CARSTAIRS	GOUROCK	MOUNT FLORIDA	WILLIAMWOOD
CARTSDYKE	GREENFAULDS	MOUNT VERNON	WISHAW
CATHCART	GREENOCK CENTRAL	MUIREND	WOODHALL
CHARING CROSS (GLASGOW)	GREENOCK WEST	NEILSTON	YOKER

Stations in area: South Yorkshire PTE

ADWICK
ALTHORPE
BARNSLEY
BENTLEY (YORKSHIRE)
BOLTON-ON-DEARNE
CHAPELTOWN
CONISBROUGH
CROWLE
DARNALL
DARTON
DODWORTH
DONCASTER
DORE
ELSECAR
HATFIELD AND STAINFORTH
KIRK SANDALL
KIVETON BRIDGE
KIVETON PARK
MEADOWHALL
MEXBOROUGH
PENISTONE
ROTHERHAM CENTRAL
SHEFFIELD
SILKSTONE COMMON
SWINTON (YORKSHIRE)
THORNE NORTH
THORNE SOUTH
THURNSCOE
WOMBWELL
WOODHOUSE

Stations in area: West Yorkshire PTE

APPERLEY BRIDGE	KNOTTINGLEY
BAILDON	LEEDS
BATLEY	LOW MOOR (LMR)
BEN RHYDDING	LOCKWOOD
BERRY BROW	MARSDEN
BINGLEY	MENSTON
BRADFORD FORSTER SQUARE	MICKLEFIELD
BRADFORD INTERCHANGE	MIRFIELD
BRAMLEY (YORKSHIRE)	MOORTHORPE
BRIGHOUSE	MORLEY
BROCKHOLES	MYTHOLMROYD
BURLEY PARK	NEW PUDSEY
BURLEY-IN-WHARFEDALE	NORMANTON
CASTLEFORD	OUTWOOD
COTTINGLEY	PONTEFRACT BAGHILL
CROSS GATES	PONTEFRACT MONKHILL
CROSSFLATTS	PONTEFRACT TANSHELF
DARTON	RAVENSTHORPE
DEIGHTON	SALTAIRE
DENBY DALE	SANDAL AND AGBRIGG
DEWSBURY	SHEPLEY
EAST GARFORTH	SHIPLEY
FEATHERSTONE	SLAITHWAITE
FITZWILLIAM	SOUTH ELMSALL
FRIZINGHALL	SOWERBY BRIDGE
GARFORTH	STEETON AND SILSDEN
GLASSHOUGHTON	STOCKSMOOR
GUISELEY	STREETHOUSE
HALIFAX	TODMORDEN
HEADINGLEY	WAKEFIELD KIRKGATE
HEBDEN BRIDGE	WAKEFIELD WESTGATE
HONLEY	WALSDEN
HORSFORTH	WOODLESFORD
HUDDERSFIELD	
ILKLEY	
KEIGHLEY	
KIRKSTALL FORGE (KLF)	
BAILDON	
BATLEY	

Stations in area: West Midlands PTE

ACOCKS GREEN	JEWELLERY QUARTER	WALSALL
ADDERLEY PARK	KINGS NORTON	WHITLOCKS END
ASTON	LANDYWOOD	WIDNEY MANOR
BERKSWELL	LANGLEY GREEN	WITTON
BESCOT STADIUM	LEA HALL	WOLVERHAMPTON
BIRMINGHAM INTERNATIONAL	LONGBRIDGE	WYLDE GREEN
BIRMINGHAM MOOR STREET	LYE	WYTHALL
BIRMINGHAM NEW STREET	MARSTON GREEN	YARDLEY WOOD
BIRMINGHAM SNOW HILL	NORTHFIELD	
BLAKE STREET	OLD HILL	
BLOXWICH	OLTON	
BLOXWICH NORTH	PERRY BARR	
BORDESLEY	ROWLEY REGIS	
BOURNVILLE	SANDWELL AND DUDLEY	
BUTLERS LANE	SELLY OAK	
CANLEY	SHIRLEY	
CANNOCK	SMALL HEATH	
CHESTER ROAD	SMETHWICK GALTON BRIDGE	
COSELEY	SMETHWICK ROLFE STREET	
COVENTRY	SOLIHULL	
CRADLEY HEATH	SPRING ROAD	
DORRIDGE	STECHFORD	
DUDDESTON	STOURBRIDGE JUNCTION	
DUDLEY PORT	STOURBRIDGE TOWN	
EARLSWOOD (WEST MIDLANDS)	SUTTON COLDFIELD	
ERDINGTON	TAME BRIDGE PARKWAY	
FIVE WAYS	THE HAWTHORNS	
FOUR OAKS	TILE HILL	
GRAVELLY HILL	TIPTON	
HALL GREEN	TYSELEY	
HAMPTON-IN-ARDEN	UNIVERSITY (BIRMINGHAM)	
HAMSTEAD (BIRMINGHAM)		
HEDNESFORD		

8.1.4 Appendix D

Weighting regime: main survey – Wave 36

TOC	total journeys	COMMUTE	BUSINESS	LEISURE	WEEKDAY	WEEKEND
Arriva Trains Wales	31,474,507	30.8	10.2	59	81	19
c2c	43,331,010	67	6	27	86	14
Chiltern Railways	24,449,723	38	25	37	82	18
CrossCountry	37,215,597	15	28	57	78	22
East Midlands Trains	25,839,804	23	28	49	82	18
Gatwick Express	8,576,051	15	44	40	79	22
Grand Central	1,504,000	5	28	67	71	29
Great Northern	53,000,135	47	28	25	89	11
Great Western Railway	103,951,691	30	20	50	71	29
Greater Anglia	89,194,744	47	21	32	86	14
Heathrow Connect	3,145,141	50	12	38	71	29
Heathrow Express	5,870,000	2	55	43	79	21
Hull Trains	946,081	10	45	45	70	30
London Midland	69,604,641	40	13	46	85	15
London Overground	188,790,252	61	3	37	80	20
Merseyrail	44,283,684	38	1	61	80	20
Northern	98,556,736	38	9	53	76	24
ScotRail	94,239,437	39	13	47	80	20
South West Trains	236,850,737	53	15	32	85	15
Southeastern	177,792,936	55	17	28	87	13
Southern	186,640,111	51	15	34	90	10
TfL Rail	39,265,125	62	3	35	82	18
Thameslink	82,326,477	43	25	32	83	17
TransPennine Express	25,979,613	26	13	61	82	18
Virgin Trains	35,698,000	11	23	66	81	19
VTEC	21,085,651	9	32	59	75	25

8.1.5 Appendix E

Journey Purpose Definition

Detailed description	Journey Purpose
Daily commuting to/from work/college/school	Commuter
Less regular commuting to/from work/college/school	
On company business (or own if self employed).....	Business
On personal business (job interview, dentist etc)	Leisure
Visiting friends or relatives.....	
Shopping trip.....	
Travel to/from holiday	
A day out.....	
Sport	
Other leisure	

8.1.6 Appendix F : Building block genre definitions

HIGH SPEED	SHORT COMMUTE
Great Western Railway - Long Distance	Arriva Trains Wales - Cardiff & Valleys
Southeastern - High-Speed	Arriva Trains Wales - South Wales & Borders / West Wales
Virgin Trains - London - Liverpool	c2c - Southend Line
Virgin Trains - London - Manchester	c2c - Tilbury Line
Virgin Trains - London - North Wales	Chiltern Railways - Metro
Virgin Trains - London - Scotland	East Midlands Trains - Local
Virgin Trains - London - Wolverhampton	London Midland - West Midlands
VTEC - London-Leeds and West Yorkshire	London Overground - Highbury & Islington - Croydon
VTEC - London-Newcastle/Sunderland and East Yorkshire	London Overground - Richmond/Clapham Junction - Stratford
	London Overground - Watford - Euston
LONG DISTANCE	London Overground - West Anglia
CrossCountry - North-South Manchester	Merseyrail - Northern
CrossCountry - North-South Scotland & NE	Merseyrail - Wirral
East Midlands Trains - Liverpool - Norwich	Northern - Central
Grand Central - London - Bradford	Northern - North East
Grand Central - London - Sunderland	Northern - West
Hull Trains	ScotRail - Strathclyde
TransPennine Express - North	South West Trains - Metro
Virgin Trains - Birmingham - Scotland	Southeastern - Metro
VTEC - London-Scotland	Southern - Metro
	TfL Rail
	Thameslink - Kent
	Thameslink - Loop

INTERURBAN	LONG COMMUTE
Arriva Trains Wales - Inter Urban	Chiltern Railways - Commuter
CrossCountry - East-West	Chiltern Railways - Oxford
Greater Anglia - Intercity	Chiltern Railways - West Midlands
London Midland - West Coast	East Midlands Trains - London
Northern – East	Great Northern
ScotRail – Interurban	Great Western Railway - London Thames Valley
South West Trains - Longer Distance	Greater Anglia - Mainline
TransPennine Express - North west	London Midland - London Commuter
TransPennine Express - South	ScotRail - Urban
	South West Trains - Outer Suburban & Local
	Southeastern - Mainline
	Southern - Sussex Coast
	Thameslink - North / South

RURAL	AIRPORT
Greater Anglia – Rural	Greater Anglia - Stansted Express
Arriva Trains Wales - Mid Wales & Borders	Gatwick Express
Arriva Trains Wales - North Wales & Borders	Heathrow Connect
Great Western Railway – West	Heathrow Express
ScotRail – Rural	
South West Trains - Island Line	

8.1.7 Appendix G:

Methodology for calculating passenger volumes by TOC and station

The following is a description of how ORR data is used to calculate passenger volumes for each TOC at each station in the national rail network.

Step 1

Passenger journey data for each station is taken from the ORR database. This database uses ticket sales data from LENNON supplemented with journey data from a number of other sources that LENNON does not include, principally:

- Journey data from TfL for London Underground stations that offer national rail services
- PTE journeys from sales that are made from sources other than national rail stations.

The data used is number of entries plus number of interchanges. For example, the total annual passenger journeys estimated from London Victoria in 2010 was 39,626,050 (35,127,971 entries and 4,498,079 interchanges).

Step 2

This data is then aggregated for all stations across the rail network and compared to the total obtained by aggregating data for all TOCs as supplied by DfT. In 2010, the station aggregation total was 1,227,778,667, whereas the DfT TOC total was 1,240,218,685. An adjustment factor is calculated for each station so that the station totals add to the TOC totals – this initial adjustment factor is 1.010132134 and the adjusted total for London Victoria is (48,699,957).

Step 3

Data from the electronic timetable is used to count how many services each TOC runs from a station in the four weeks in February each year. This is then profiled, so that we estimate what percentage of the services run from a station are by each TOC. At London Victoria, the % breakdown of services run from the station in 2010 was as follows:

Southeastern	23.12 %
Gatwick Express	11.88%
Southern	76.88 %

Step 4

These profiles are then applied to the total passenger count for the station derived in step 1. Implicitly, the assumption is that the proportion of journeys by TOC from the station is the same as the proportion of number of services by TOC from the station. For London Victoria, this results in estimated passenger volumes as follows:

Southeastern	11,258,622
Gatwick Express	4,756,615
Southern	37,441,336

Step 5

The total estimated passenger journeys for each TOC is computed by adding up the estimate for each station at which the TOC calls. For Southeastern, this gives a total of 162,471,848 compared to the TOC total of 154,073,470. This produces a TOC scaling factor for Southeastern of 0.94830872. A similar process for Gatwick Express and Southern produces factors of 0.72579627 and 1.08620260 respectively.

Step 6

These factors are then applied, TOC by TOC, to the estimated passenger journeys for each station at which the TOC calls. This gives an updated estimated passenger journeys for the TOC for each station. So at London Victoria, the updated figures are as follows:

Southeastern	10,654,391 (11,235,150 times 0.94830872)
Gatwick Express	3,452,333 (4,756,615 times 0.72579627)
Southern	25,942,024 (24,035,782 times 1.08620260)

A revised estimate for London Victoria is then calculated by adding up these totals - 40,048,747 compared to the original station total of 40,027,546. A station scaling factor for London Victoria is now produced - 0.9994706.

Steps 5 and 6 are then repeated until the process converges in that station factors remain as they were from the previous iteration (TOC totals are preserved in the final run as these are regarded as sacrosanct).

At the end of this process we have a set of estimated passenger journeys for each TOC at each station that adds to the TOC totals and adds as closely as possible to the station totals.