

Exploring a multi-method approach to major quantitative surveys

Methodological report
November 2021

Contents

	Page no.
Background	3
Overall objectives and key findings – summary	4
Overview of what we did	6
Project process	7
Areas to be explored	16
1. Findings from the survey set up	19
2. Findings from the data collected	55

	Page no
3. Findings from the questionnaire	81
Additional learnings outside of the data scope	99
Key differences between bus and train surveys and recommendations for future surveys	101
Questions that remain outstanding	106
Appendix	110





Background

The National Rail Passenger Survey (NRPS) and Bus Passenger Survey (BPS) have measured passengers' experience with rail and bus journeys for many years, supporting transport policy and service planning.

The traditional approach to these surveys (face-to-face recruitment of passengers at the point of/during the taking of, their journey) has provided high quality, robust data. However, it has also constrained the evolution of passenger experience measurement to what can be achieved using this benchmark methodology.

Covid-19 forced, for the first time, the suspension of these ongoing research programmes in 2020 and disrupted the data continuity they provided.

Transport Focus has conducted some large-scale projects in the interim and as travel volumes return they also want to shape plans to resume longer term measurement research.

However, Covid-19 has forced a rethink on how best to develop programmes that serve the transport sector longer term.

This project has taken an opportunity

- to review and help evolve the way in which passenger experience is measured
- to explore and pilot methodologies some new, some less so –
 and the nature of response they generate
- to take advantage of new technologies and the efficiencies they could provide to future passenger experience measurement





Overall KEY objectives and KEY findings

Key findings Objectives Yes, f2f recruitment still works and was successfully used in this project which means it is still a To understand if face to face recruitment is still viable after the pandemic valid way to recruit passengers to complete surveys Same day journey recency does not have a negative impact on recruitment or response rate To understand if passengers can be recruited for journeys made on the day of recruitment and it delivers more detailed insights into passengers journeys. In future set-up we (rather than widening the time period for eligible journeys, to aid response volume) recommend recruiting for journeys made on the day To identify the best ways for passengers to give feedback, once recruited Most recruits are happy to feed back online (expected to be the most cost effective method) 3 which means future survey should have a stronger online focus Yes, most can – this typically results in a younger sample with a larger share of commuters. No specific segment was hard to get; younger are more likely to prefer online options (especially To understand if respondents can be directed towards online completion and what the accessed via QR codes). However, older people often prefer paper, particularly amongst bus consequences are of that on responses and who takes part users, and for some this may be the only way they can take part if they do not have online 4 Online can be the primary way to complete the survey, but it is important to give passengers the choice of how to access the online survey in order to be inclusive and to avoid any bias linked to the method of data collection; it is also important to provide an offline option, even if limited, to enable inclusion of the offline minority. To understand if there is value in offering a short questionnaire first and then asking if Yes, there is value in this as the number of drop outs is much lower this way than when respondents wanted to provide more details about the same journey respondents start with a long questionnaire. Moreover most passengers are happy to continue with the longer version when asked. This should be embedded in future surveys





Other overall objectives and key findings

Obje	ctives		Ke	y findings
6	To identify best locations for recruitment i.e. train stations vs. bus locations vs. town centres	>	(As train stations and bus locations resulted in a higher number of recruits and completes per shift and a better response rate compared to town centres, these should be favoured for future on-site recruitment of passengers.
7	To identify the time difference between recruitment and survey completion (lag time) across different completion methods	>	7	Online data collection generates very quick turnaround between the journey made and when the survey is completed. We can be reassured that people taking the survey online do so when the journey is fresh in their mind. There are however some concerns that some passengers can take the survey before their journey is complete (or in some cases, has started); this point, and potential ways to address it, needs to be investigated further.
8	To define how best to convert recruitment via an online method to a complete	>	8	The invitation and the reminder need to be optimised
9	To understand how the different completion methods impact on response quality	>	9	Overall different completion methods have little impact on response quality; from this perspective there is no issue with mixing them in future surveys
10	To understand if respondents can be 're-used' for a journey on another mode and if it's worth recontacting them for another journey	>	10	There is little value in asking respondents about a journey on two different modes; recontacting can prove useful but they seem to rate more positively, so caution is needed before using them within the same, main dataset
11	To identify how best to ask for additional feedback via open ends	>	11	We tested two open ends which gave somewhat different feedback; it might be worth alternating them in future surveys
12	To understand which satisfaction / rating scale delivers the best responses and how best to ask passengers about the price they paid	>	12	The traditional 5 point scale seems to generate a little more conviction in passengers' responses (i.e. stronger opinions); there is little difference in asking about price paid vs. value for money





Overview of what we did

Three phase project (more details on subsequent pages)

Phase 1 – 2 weeks of fieldwork

How we started



Phase 1a – Pause and reflect Thorough review

Phase 2 – 4 weeks of fieldwork How we continued

Locations

- Mix of towns and cities across England, based on number of train and bus routes and on train and bus user footfall from NRPS and BPS experience
- Within each town and city intercept recruitment at train stations, bus stops and hubs and in town centres

Approach

- Intercept recruitment by interviewers with tablet and short screener
- Respondent asked which option they are happy to complete the survey with:
 - Online (scanning QR code, being sent email or SMS with survey link or taking down short online link)
 - By completing a paper questionnaire
 - By being called back at an agreed time
- If selected online, this was prioritised with options in brackets provided

Eligibility and questionnaire

- Respondent to have made a train or bus journey in last 7 days or was about to make one later the same day
- Respondent randomly selected for short or long questionnaire (paper always short)
- If selected for short questionnaire, then given the option in the survey to continue with long questionnaire
- If made journey by train, respondent was asked if they also made journey by bus (or vice versa) and if they were happy to complete survey for that other mode journey

Full review after two weeks of fieldwork looking at all aspects of the project. A particular focus was given to:

- Feedback from interviewers
- Locations and their footfall, recruitment and completions per shift – train stations vs. bus locations vs. town centres (and sub-location within town centres)
- · Time of day and day of week of recruitment
- Wearing of face coverings
- Impact of short vs. long questionnaire (who drops out, who continues)
- Questions with highest attrition rates
- Completion methods and their response rates
 - · Which method is most successful?
 - Is it worth retaining them all?
 - What are the demographics for each completion method? How do they differ?
 - How can we encourage people to take online options as a default (rather than paper or call back)?
 - Click rate for those that received emails
- Success of reminders (email and SMS)
- Survey completion relative to journey made
- Recency of journey made (relative to when recruited)
- Multi-mode completes
- Questionnaire content incl. scaling

Locations

- Reduced recruitment locations to train stations and bus locations (no more town centres)
- Ensuring more than one fieldworker working across the shifts in each town/city

Approach

- Shortened introduction to engage people more quickly additional focus on how respondents' opinion counts
- Limited number of paper questionnaires per shift to boost online response
- Using paper QR code (printed on a separate sheet) for people in a rush
- Some shifts without paper questionnaire where only call back was an alternative to online (no paper shifts)

Eligibility and questionnaire

- No more 'last 7 days journeys'; all respondents to have made journey earlier the same day or will make one later on the same day
- No more multi-mode completes (either bus or train but not both)
- · Revised text for invitations and reminders
- Some revised wording in the main survey to reduce drop out; one question removed







Project process





How we started – initial set up

Locations

- Birmingham
- Colchester
- Exeter
- Gravesend
- Grimsby
- London Marylebone area
- London Waterloo area

- Manchester
- Middlesbrough
- Norwich
- Preston
- Reading
- Salisbury
- Cl- ff: I
- Sheffield

- Shrewsbury
- Southampton
- StevenageStoke-on-Trent
- Swindon
- Tunbridge Wells
- York
- Mix of towns and cities across England; selected based on:
- Number of train operators serving main station
- Number of bus operators and bus routes serving central area
- Expectation of train and bus user footfall based on experience from NRPS and BPS (avoided smaller towns and rural areas)

Within each town and city intercept recruitment was conducted:



At main train station



At bus stop hubs or terminals



In town centres

- Main shopping area
- Areas with restaurants and other eateries
- Areas with mainly offices

In town centres and at bus stops it was left to the interviewer's discretion to move to busier areas if the initial area was not busy. While the train station shifts were at a named station, the bus locations were chosen partly at local fieldworkers' discretion; there was no systematic sampling from within all possible bus stops and hubs in a town. In future surveys, this would need to be more structured if this approach was to be taken forward.

Approach

Face to face recruitment by interviewers with tablet and short screener

- Anyone was targeted; no pre-selection based on age or gender
- Those who did not want to participate in the survey were counted as "refused" and gender and age were recorded
- Those who were happy to participate in the survey were asked if they would be willing to take part by:
 - Completing an online survey
 - Completing a paper questionnaire
 - Completing over the telephone we will call you
- If yes to online, interviewers were instructed to go with online
- Online respondents were then given the following options:



Scanning a QR code



Being sent a link by email



Taking down a short survey link



Being sent a link by SMS

Note: This did not always work in practice since interviewers rather asked about preference than acceptance which resulted in an inflated number of paper questionnaires

Some methods were ruled out at the outset (from this trial), partly because they had just been tested in previous projects:



Online pane



Social media recruitment



Transport Focus user panel

Eligibility and questionnaire

Eligibility:

- If respondent was going to make a bus or train journey later on the same day OR (if not)
- If respondent made a bus or train journey within the last 7 days (including earlier on the same day)

Priority of journey later on same day or, if none made, most recent including earlier on same day. Mode selection: If modes on par with recency then mode with fewer interviews selected.

Questionnaire length (short or long version):

- Online 50% given long version, 50% given short version (allocation made in main script)
- By phone (when called back) started with short version with option to go for long if respondent up for it (of train or bus only, not both)
- Paper short version (if qualified for both modes, then given 2 short questionnaires); cannot do long

Questionnaire length (based on first two weeks of fieldwork):

- Short
 - Bus 6 mins
 - Train 6 mins
- Long
 - Bus 11 mins
 - Train 9 mins





Review after two weeks of fieldwork

After two weeks we paused fieldwork, to review and confirm the value of continuing the trial in full, and identify ways to optimise its usefulness Our assessment of all aspects of the project included:



Feedback from interviewers:

 Prior to the review we had conducted a mini workshop with some selected fieldworkers to generate tips for best practice including a refinement of the introduction and recruitment wording



Locations and their footfall, recruitment and completions per shift – train stations vs. bus locations vs. town centres (and sub-location within town centres):

 To understand if it was worth conducting more shifts in certain locations and if we wanted to change fieldwork locations



Time of day and day of week of recruitment:

To understand if we needed to prioritise certain shift times



Wearing of face coverings:

- Did these make a difference to recruitment rates?
- What other impact did face coverings have?

This was to some degree answered by the interviewer feedback



Impact of short vs. long questionnaire (who drops out, who continues):

- To understand who goes on to complete long questionnaire, who doesn't? Demographics
- Was wording of invite to continue long questionnaire clear?



Questions with highest attrition rates:

 Also looking specifically at questions where respondents had to enter details rather than select from given options



Completion methods and their response rates:

- Which method is most successful? And specifically which online method?
- Is it worth retaining them all? Where is uptake low and what could be reasons?
- What are the demographics for each completion method? How do they differ?
- How can we encourage people to take online options as a default (rather than paper or call back which are more expensive and have longer turnaround)?
- What are the click through rates for those that received emails and SMS?



Success of reminders (email and SMS):

- Is it worth keeping these?
- How can we make reminder text punchier?



Survey completion relative to journey made:

- What is the lag time between day of the journey made and day survey was completed?
- Is there a difference in data for those that complete later? (This was a greater focus in the final analysis)



Recency of journey made (relative to when recruited):

 What would be the impact on response rate if we changed journey eligibility to earlier or later on the same day? Would we lose many recruits and completes?



Multi-mode completes:

• What uptake do we get here? Is it worth keeping?

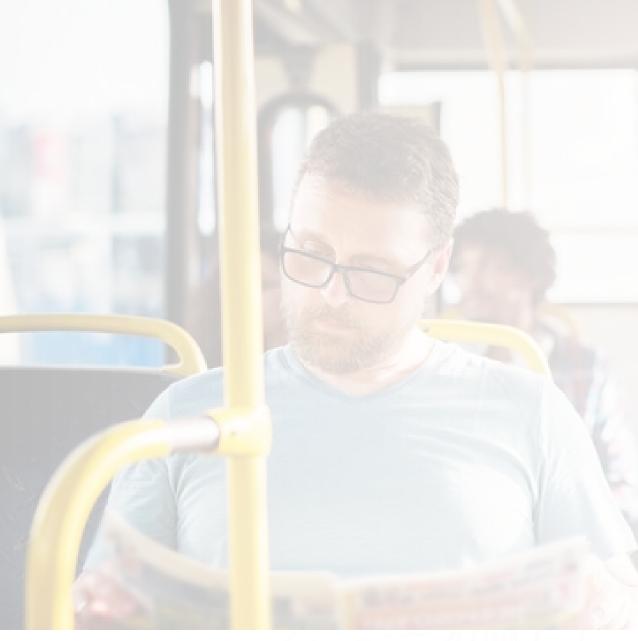


Questionnaire content incl. scaling:

- Do we need to reword some questions?
- Do we need to offer additional answer codes?
- How do answers differ for different scales? (This, too, was a greater focus in the final analysis)







Impact of changes

Following the review we implemented a number of changes for the remaining four weeks of fieldwork. These changes and their results are shown on the following pages. They are divided into themes based on what we wanted to achieve with those changes:

- 1. Improving fieldwork strike and recruitment rate
- 2. Refining recruitment criteria
- 3. Improving completion rate (conversion from recruitment to completion)
- 4. Steering respondents towards online completion where possible

It has to be borne in mind that it cannot be said that a specific change is a contributor to (or even the sole cause for) a result since several changes were made, of which all or some could have impacted on a single result.

Time of fieldwork also needs to be taken into consideration: phase 1 was in August (holiday period) while phase 2 was in September when students returned to education and more adults returned to work.





Top five learnings from phase 1

After two weeks we paused fieldwork, to review and confirm the value of continuing the trial in full, and identify ways to optimise its usefulness

Face to face recruitment is still a viable approach after the pandemic and can be used as a methodology for future surveys. People did not mind being approached to take part in a survey about their train or bus journey experience.

Changes for phase 2: None – we continue the face to face recruitment trial

Not all locations are equally productive in recruiting respondents.

Town centres were notably less productive.

Changes for phase 2: Town centres were removed in phase 2 of the fieldwork.

Most people had made a very recent journey, so shortening the journey recency was not an issue in connection with focusing recruitment on train stations and bus locations (bullet 2).

Changes for phase 2: Moved from 7 days recency to recruiting for journeys on the same day

The sample of respondents completing the survey via online methods was fairly broad, although younger than the paper respondent sample and with a larger proportion of commuters.

Changes for phase 2: Trial promotion of online completion over other methods (mainly paper questionnaires).

Drop outs were fewer when respondents were initially offered a shorter questionnaire and given the option to provide further feedback about their journey, than when they were given a longer questionnaire from the outset.

Changes for phase 2: None – we continue this approach

In the phase 1, if passengers had used both modes in the past 7 days, we asked them about their experience of each journey (bus and rail). Numbers revealed that there were enough respondents for each individual mode of travel removing the need to ask about both

Changes for phase 2: We removed this from the trial to avoid extra level of complication for the analysis and the recruitment





Areas to be explored





Areas to be explored – by order of importance

1 Is face to face recruitment still viable after the pandemic?

To ensure recent journey experience, can passengers be recruited face to face in situ for journeys made on the same day of the recruitment?

Does face to face recruitment work better in some types of locations than others?

• Stations vs. town centres vs. bus locations – analysis

Once recruited face to face, what are the best ways for passengers to give their feedback?

Can interviewers push respondents to complete the survey online and what are the consequences?

Who responds overall to f2f recruitment, and who responds via different survey completion methods?

How does the method of completion impact on the lag time between journey made and survey completion?

How to best convert recruitment via an online method to an actual complete

5

What is the impact of the different survey completion methods on the quality of the response





Areas to be explored – by order of importance (cont'd)



Can participants be "recycled" to complete a second survey, about a bus journey if they first answered about rail, and vice versa?

Is it worth recontacting passengers for another journey?



Is there a value in offering the short questionnaire first and then asking if respondents want to continue?



How to best ask for additional feedback via open ends

Which satisfaction scale delivers the best responses

How to best ask passengers about the price they paid



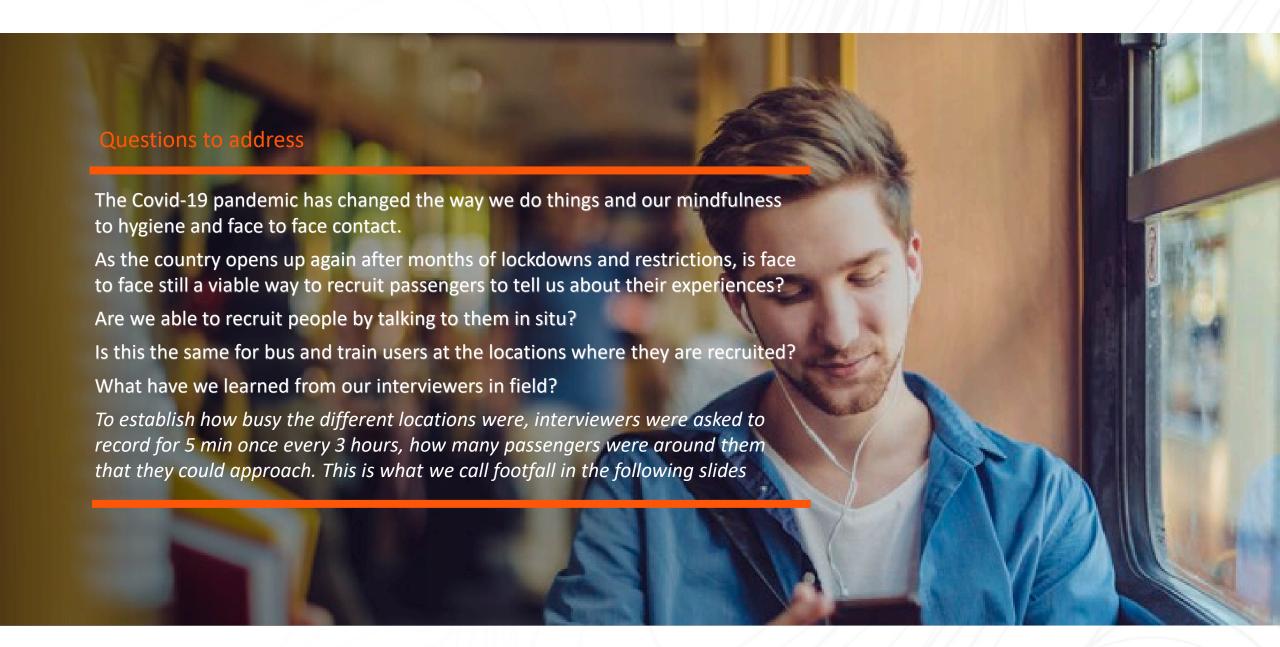




Findings from the survey set up











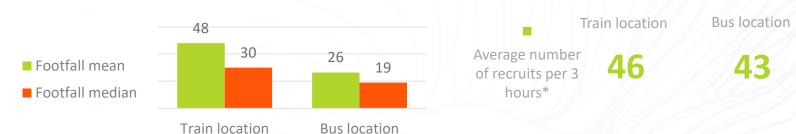
How footfall impacted recruitment

(Based on phase 2 – normal shifts i.e. excludes no paper shifts)

Even though the footfall at train locations was considerably greater than at bus locations the recruitment for each transport mode was fairly balanced. On average train shifts generated 3 more recruits per shift.

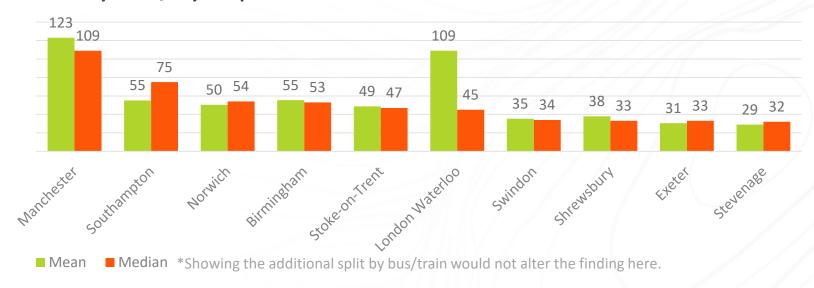
Looking at footfall and recruitment, the locations with the highest footfall do not deliver the highest number of recruits.

Footfall and recruitment share by transport mode



* In this trial, interviewers were not pushed to get as many recruits as possible, but to gauge what was the preferred method of completion. There was also some "unproductive" time as interviewers undertook counting or administration tasks, or moved around. In future set up the average number of recruits could potentially be higher where all of these factors could be reduced.

Footfall by town/city - top 10*



Recruitment by town/city – top 10*

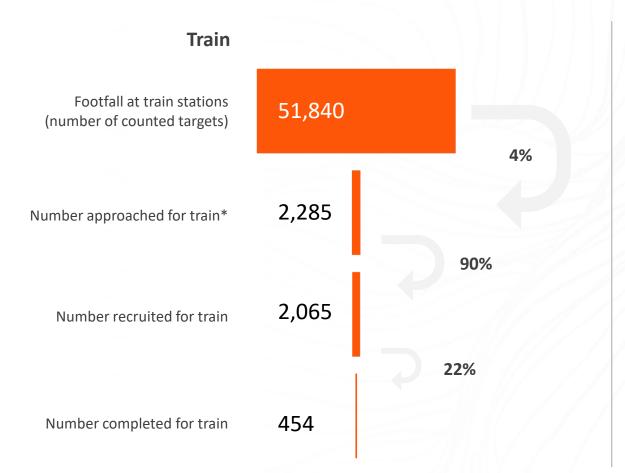
	No. of recruits
Stevenage	588
Exeter	500
Birmingham	461
Colchester	415
Salisbury	406
Swindon	378
Sheffield	375
Preston	354
Shrewsbury	337
Tunbridge Wells	333





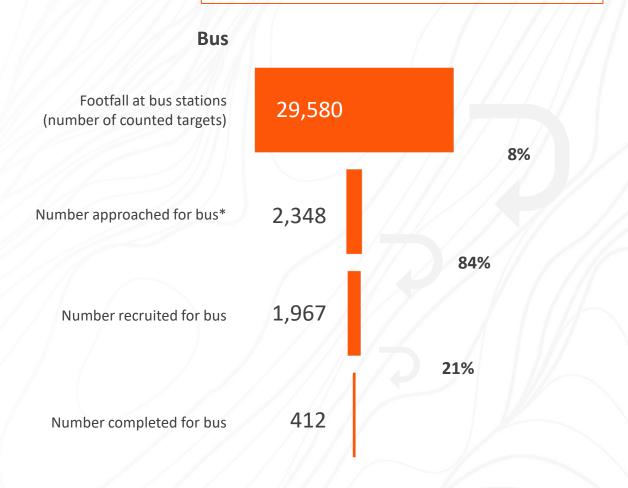
Funnel by transport mode – from footfall to completes

(Based on phase 2 – normal shifts i.e. excludes no paper shifts)



^{*}These figures are dependent on interviewers recording details for all passengers refusing to take part. They are probably smaller than the actual number of approached passengers. 25807/Exploring multi-method approach/Methodological Report/v18112021/Restricted

We did not run out of respondents to approach in any of the locations. But it has to be borne in mind that no rural locations were included and the vast majority of train stations fell into the A/B category (Network Rail station size bands) which make up the largest stations.





Recruits and completes for top performing interviewers per 3 hour shift

(Based on phase 2 – normal shifts i.e. excludes no paper shifts)

The interviewers that recruited the most passengers, achieved the highest number of completes, while the others may have spent more time engaging with (fewer) recruits, which resulted in a higher response rate, but fewer completes.

Overall	Recruits / 3 hours	Completes / 3 hours	Response rate
Average per interviewer	33	7	21%
Top 10 interviewers	61	11	18%
Top 5 interviewers	80	14	18%

Train	Recruits / 3 hours	Completes / 3 hours	Response rate
Average per interviewer	35 (vs. 68 NRPS Spring 20*)	9 (vs. 15 NRPS Spring 20*)	22% (vs. 23% NRPS Spring 20*)
Top 10 interviewers	62	13	21%
Top 5 interviewers	82	14	17%

Bus	Recruits / 3 hours	Completes / 3 hours	Response rate
Average per interviewer	30 (vs. 46 BPS Autumn 19 Eng)	6 (vs. 12 BPS Autumn 19 - Eng)	20% (vs. 26% BPS Autumn 19 Eng)
Top 10 interviewers	56	9	18%
Top 5 interviewers	71	10	14%





^{*}NRPS comparison is based on all stations covered in the survey, whereas this is a selected sample of stations in mainly larger towns and cities 25807/Exploring multi-method approach/Methodological Report/v18112021/Restricted

What we found

Recruiting passengers post pandemic was an overall positive exercise. The footfall counts done at each location revealed that interviewers did not run out of respondents to approach (in the mainly fairly busy locations covered) and respondents did not mind being approached. This was the same for train and bus.

Looking at footfall and recruitment, the locations with the highest footfall do not necessarily deliver the largest number of recruits/completed surveys.

On average interviewers recruited 33 passengers per 3 hour shift leading to 7 completes (21% response rate)

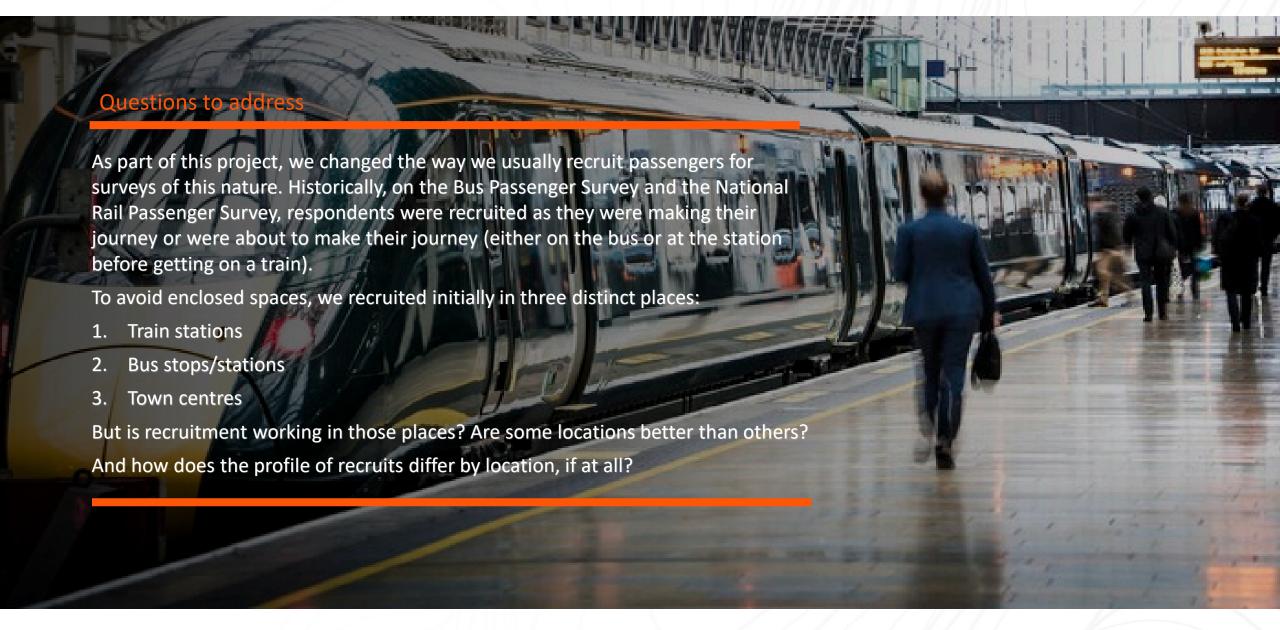
Implication:

Future large scale surveys can be conducted using face to face recruitment; there is no shortage of respondents to approach, the caveat being that this might differ in less populated locations.

On the surface, the productivity (absolute number of responses achieved per shift) is lower than we have seen for historic surveys, but it is likely that this can be improved upon in future surveys through greater engagement with recruits, and when fieldworkers are more fully tasked (and possibly incentivised) with generating higher volumes of actual response.









Footfall, recruits and completes by location

(Based on phase 1*)



Town centre locations recorded the highest footfall based on the average. Despite having twice as many shifts in town centres as bus and train locations, the number of recruits was similar and in terms of recruits per shift those shifts were far less productive.

Combined with a lower response rate, the number of completes per shift in town centres was considerably lower than in bus and train locations.

* The split in phase 1 between the 3 location types was establish manually by analysing the GPS coordinates of the interviewers when the recruits took place. This method was far from ideal and proved to be very difficult in some cases. We have excluded here a large amount of data as it was not possible to identify the exact location.

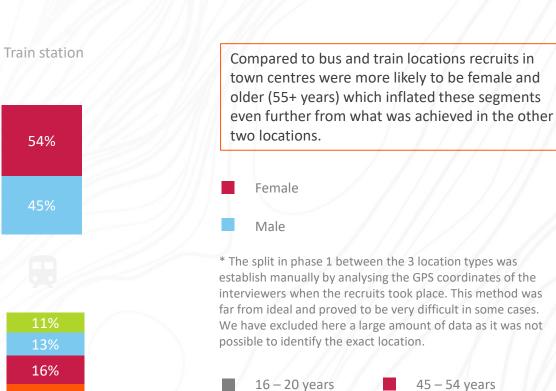




Age and gender recruitment by location

(Based on phase 1*)





21 - 34 years

35 - 44 years

17%

31%

13%



55 – 64 years

65+ years

How different levels of footfall impact on recruits

(Based on phase 2 – normal shifts i.e. excludes no paper shifts)

At train stations, the recruits/targets ratio in the high footfall band is lower than it is for the medium band. This implies that if it gets too busy at train stations, possible recruits are lost.

This is not the case at bus locations. Here the higher the footfall the greater the number of recruits. Yet only a small proportion of bus locations had high footfall, which explains why there were fewer bus recruits per shift than train ones.

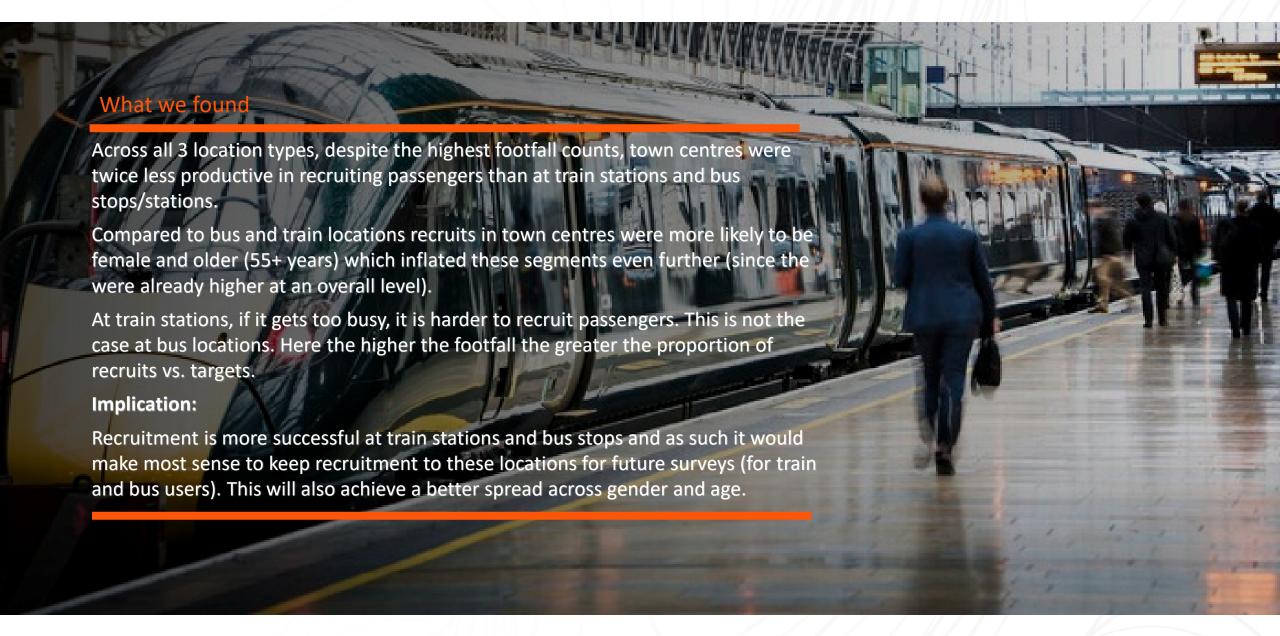
\cap	Bus			
	Low	Medium	High	
Proportion (3 hour shift)	44%	39%	17%	
Approaches (per 3 hours)	34.0	39.2	43.5	
Recruits (per 3 hours)	26.7	29.6	35.3	
Ratio recruits/approaches	79%	75%	81%	

	Train			
9.0	Low	Medium	High	
Proportion (3 hour shift)	29%	35%	36%	
Approaches (per 3 hours)	36.4	40.6	39.7	
Recruits (per 3 hours)	29.4	37.6	32	
Ratio recruits/approaches	81%	93%	81%	

		Proportion of footfall by station size	Low	
d		Station A	11%	
	0-14 targets per 5 min. count	Station B	29%	
	15-49 targets per 5 min. count	Station C	100%	
	50+ targets per 5 min. count	Station D	100%	











The sampling approach in this trial project is different from BPS and NRPS as respondents were not recruited on board buses/trains but at the stations/bus stops. Also, historically respondents to the BPS and NRPS had two ways of answering the survey – either via a paper questionnaire to be posted back or by receiving an online survey link by email.

In this project we added some additional options: call back (CATI), scanning of QR code, recording a short survey link and being sent the survey link by SMS.

So, in this new set up, which of methods of completion produced the highest proportion of completes?

During the project we trialled three different scenarios:

- 1. We asked respondents if they were happy to complete the survey by the various completion methods if they answered online that would be the priority response method
- 2. We actively pushed for online completion methods but still offered the offline methods
- We actively pushed for online completion and only offered call back as an option (i.e. not paper questionnaires)

In each scenario, what are the most productive ways for passengers to give their feedback? Are the findings the same for bus and rail users?





(Based on phase 1 – all methods equally available to respondents)

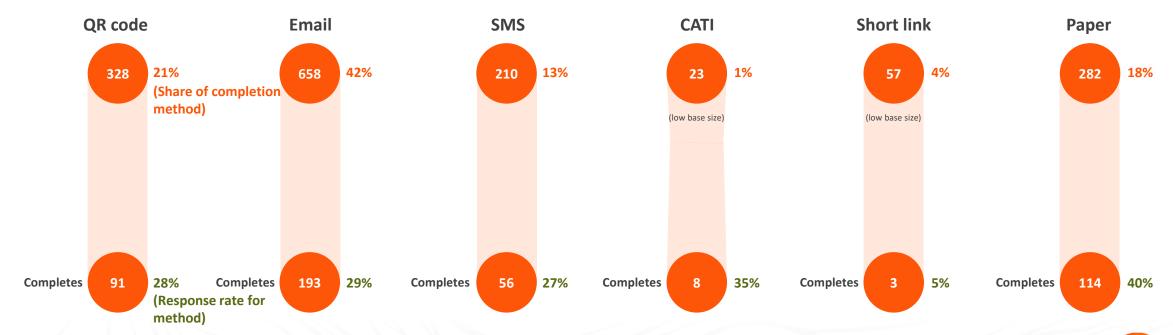


When given full the full range of methods recruits are most likely to pick email, then QR code.

Paper records the highest response rate with 2 in 5 recruits returning a completed questionnaire.

Note – fieldwork observations revealed that some interviewers were leading a little when asking about the method of completion to those they were familiar with.

Recruitment by method





(Based on phase 2 – normal shifts pushing actively for online with all other methods still available)

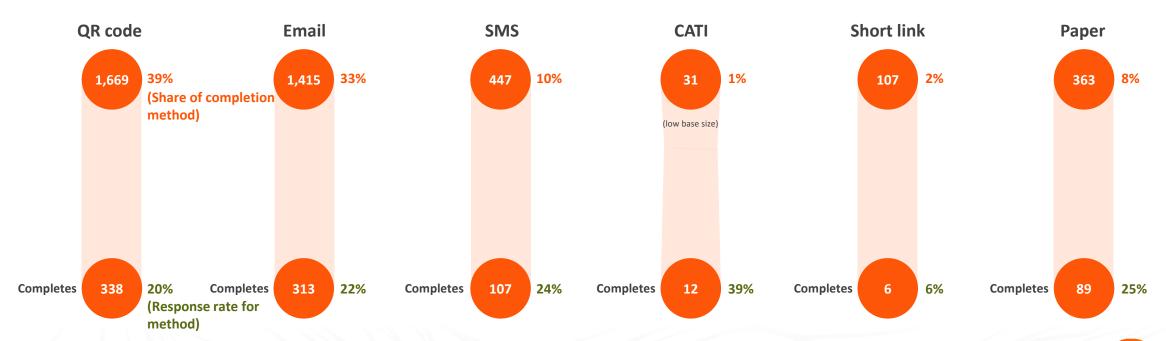


When pushed for online completion QR becomes the preferred response method followed by email.

The share for paper drops considerably and did not lead to significantly more refusals. However, the response rates of other modes drop as a result of the online push.

Paper still records the highest response rate, CATI aside.

Recruitment by method





(Based on phase 2 - CATI shifts, pushing actively for online with no paper questionnaire available, only CATI as an option)

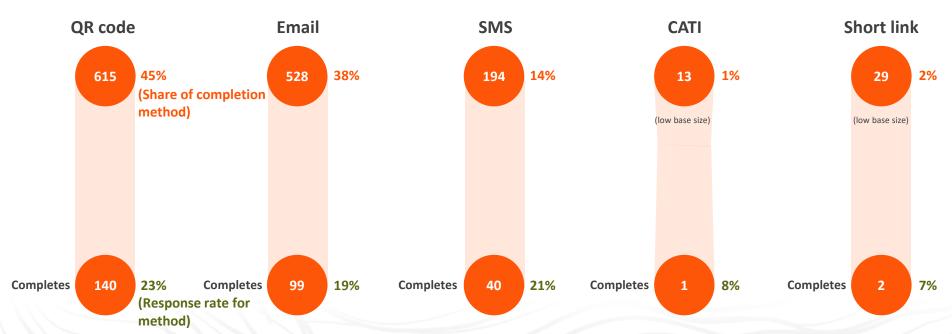


If paper is not an option at all, QR code and email account for 83% of recruits.

In this scenario the response rate for QR code is the highest with the one for email dropping compared to the scenario where paper is also available.

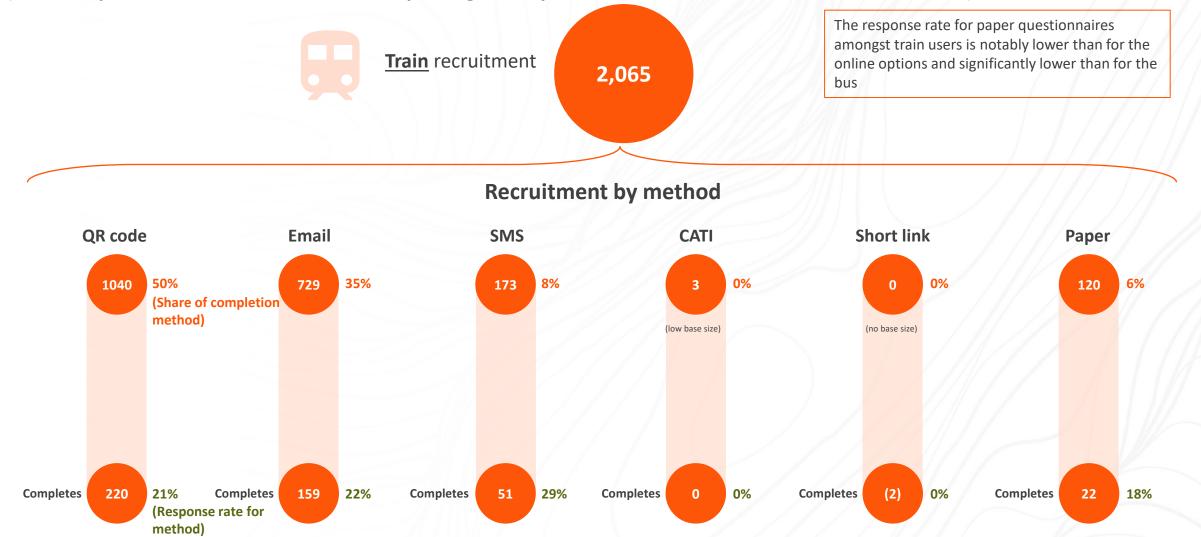
Removing paper doesn't push more people to the telephone survey - instead they go to the online options (or possibly choose not to participate in the survey).

Recruitment by method





(Based on phase 2 train users – normal shifts pushing actively for online with all other methods still available)



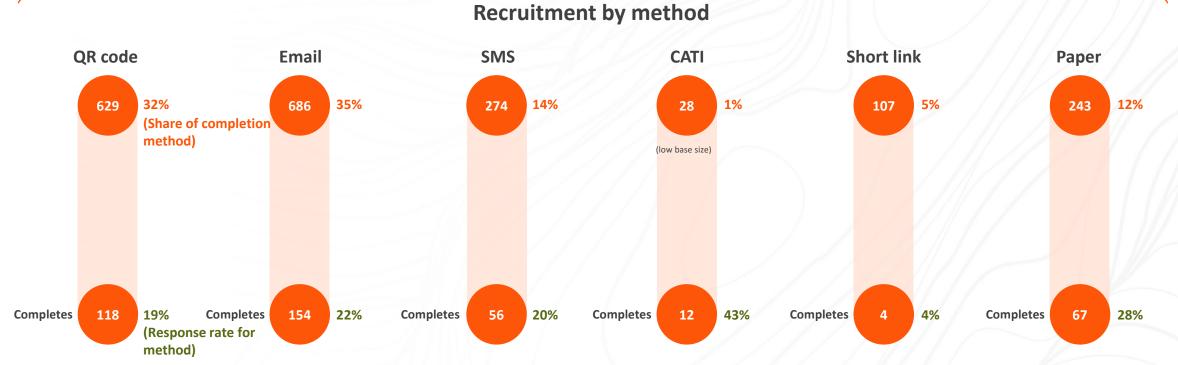


(Based on phase 2 bus users - normal shifts pushing actively for online with all other methods still available)



This is quite different amongst bus users where paper leads the way with regard to response rate, CATI aside.

However, the online options make up almost 90% of recruits in this scenario.







How was response rate impacted by the online push? Comparison to BPS and NRPS*

(Based on phase 2 – normal shifts i.e. excludes no paper shifts)

One has to be mindful when comparing this multi-method project with previous BPS and NRPS surveys. The context in which the survey was run was unprecedented (following COVID restrictions). Interviewers were asked not to aim for numbers but to take their time and understand which completion methods passengers were comfortable with.

Taking this into account, the push to online boosted the online uptake (all online methods included) for both bus and rail surveys. For bus and rail passengers, the response rate on online methods is lower than it was in the NRPS and BPS.

Paper uptake was considerably restricted in the multi-method results. Its completion was higher for bus (+2% pts) but lower for rail (-5% pts).

Rail	NRPS Autumn 2019 (total level)	NRPS Spring 2020 (total level)	Multi-methods phase 2 (normal shifts)	
Paper uptake	66%	62%	4%	
Online uptake	34%	38%	96%	
Overall response rate	23%	23%	22%	
Paper response rate	21%	20%	18%	
Online response rate	25%	27%	22%	

Bus	BPS Autumn 2018 (total level)	BPS Autumn 2019 (total level)	Multi-methods phase 2 (normal shifts)
Paper uptake	92%	89%	10%
Online uptake	8%	11%	89%
Overall response rate	25%	26%	21%
Paper response rate	26%	26%	28%
Online response rate	24%	23%	20%





^{*}This project was run only in a subset of locations (the largest in England) while the NRPS and BPS figures are based on all UK shifts.

Feedback from interviewers on recruitment and data collection methods



Pushing for online options (during phase 2)

- Was seen more of an issue with older and those from lower social grades (and therefore more with bus than train since bus users more likely to be from these segments)
- They either do not have a smartphone or internet access (or do not use the internet) or do not want to give out details (or were more suspicious)
- · Hence older more willing to participate if they could do paper
- There was some feeling that with the option of paper more people would be captured
- Although at train stations older people were more likely to go for internet options than at bus stations



QR code:

- Quickest option
- Popular with the younger population
- Some people still apprehensive with concerns over Covid respondents did not have to touch the tablet/paper questionnaires but could simply scan the code and leave
- Respondents did not have to give out any personal contact details with the QR code



CATI shifts (no paper option)

- Similar feedback as for 'pushing for online options' with regard to older and lower social grade segments
- · Some respondents were lost as a result
- Paper makes it easier to catch those in a hurry

People mainly take a photo of the short link, some typed them into their phones





What we found

When passengers are given the full range of completion methods, they are most likely to pick email (42%), then QR code (21%). In this scenario, paper records the highest response rate with 2 in 5 recruits returning a complete questionnaire.

When pushed for online completion QR becomes, overall, the preferred response method (39%) followed by email (33%). Paper drops from 10% to 8%. It does however still record the highest response rate, CATI aside (small base).

If paper is not an option at all, QR code and email account for 83% of recruits. In this scenario the response rate for QR code is the highest with the one for email dropping.

Of train passengers, in a 'push for online' scenario, 50% select QR code to complete the survey. The response rate for paper questionnaires is notably lower than for the online options (18%).

Amongst bus passengers, in a 'push for online' scenario, QR code only accounts for 32% of the recruits and paper is twice as important than for train passengers. It also leads the way with regard to response rate, CATI aside (small base).

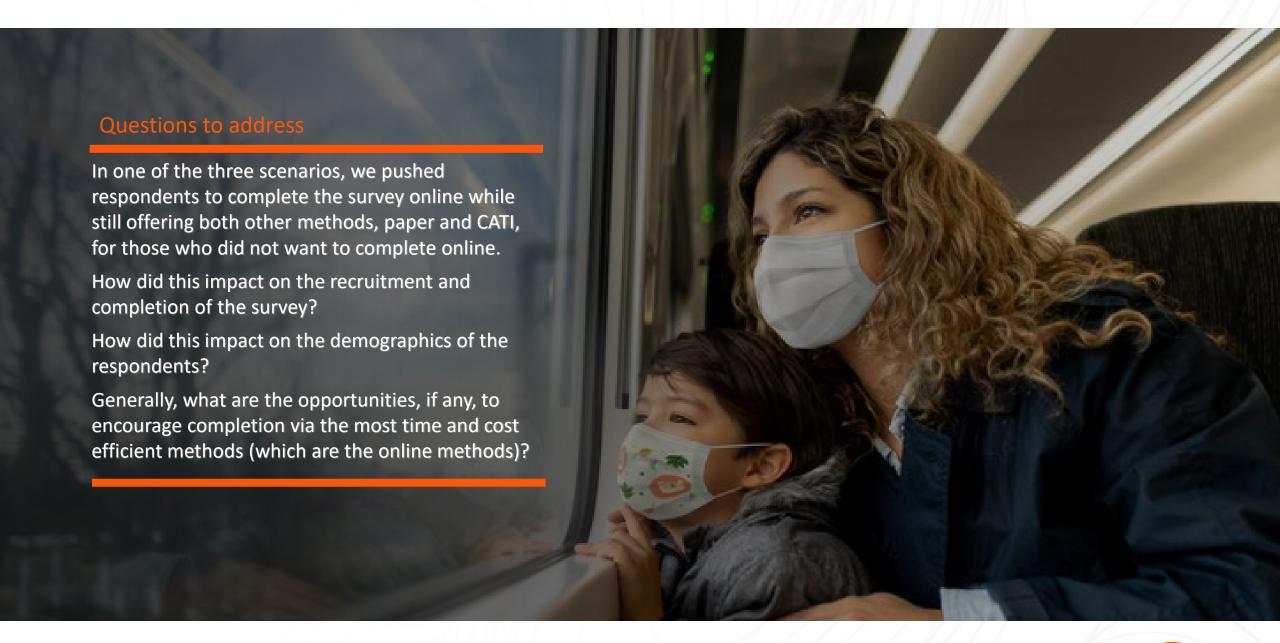
Implication:

With online more productive than paper for rail, future rail surveys could potentially be conducted without a paper option, or only having a very limited number. For bus, however, paper is the most productive and not offering a paper option would reduce productivity and we would recommend providing a paper alternative for those who would otherwise be excluded from the survey if it was online only.

The impact of the different sampling approach, i.e. recruitment not on board buses/trains needs further consideration in the next stage of our research development work.





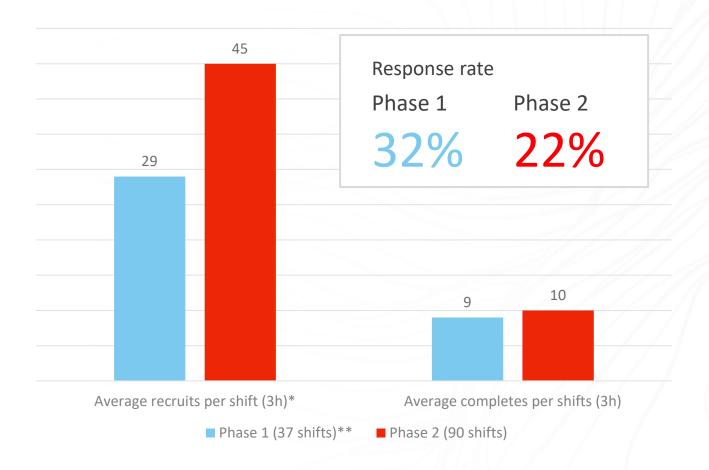






Recruits, completes and response rate phase 1 vs. phase 2

(Phase 2 includes only normal shifts i.e. excludes no paper shifts)



This was driven by the substantially higher number of recruits per shift, making this to some extent a numbers game.

There are a number of factors that could have resulted in the small uplift from 9 to 10 completes (including timing, differences in the mix of locations from phase 1 to 2, differences in the mix of interviewers in phase 1 to 2, etc.), but we are reassured that pushing for online completion does not appear to *damage* overall productivity.

- Fieldworkers were not pushed to get as many recruits as possible, but to gauge
 what was the preferred method of completion. In future set up the average
 number of responses could potentially be higher if fieldworkers are specifically
 tasked (and possibly incentivised) with this.
- Fieldworkers spent some "unproductive" time, recording details about the shift location, recording footfall counts, and in some cases moving between more than one location. In a future project it is likely that such "additional" tasks and less productive time will be streamlined and minimised further, allowing more time for engaging with and recruiting passengers



Even though the response rate during phase 2, when pushing for the online options, was lower than in phase 1, the average of completes per shift is still a little higher.

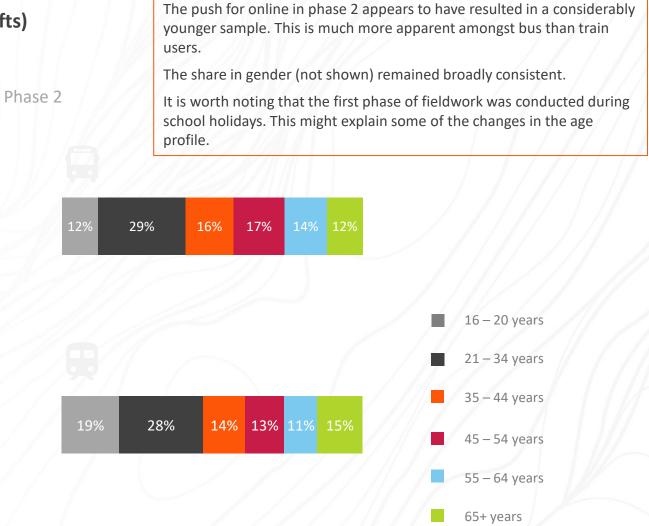
^{*} In this trial, some factors may also have hindered stronger return rates. These include:

^{**}In phase 1 – town centres are excluded

Comparison of age fallout phase 1 vs. phase 2

(Phase 2 includes only normal shifts i.e. excludes no paper shifts)



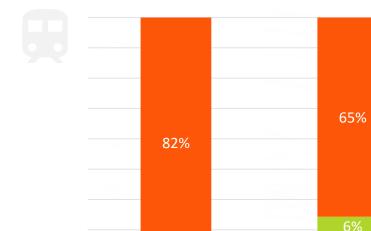


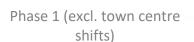




Comparison of journey purpose phase 1 vs. phase 2

(Phase 2 includes only normal shifts i.e. excludes no paper shifts)

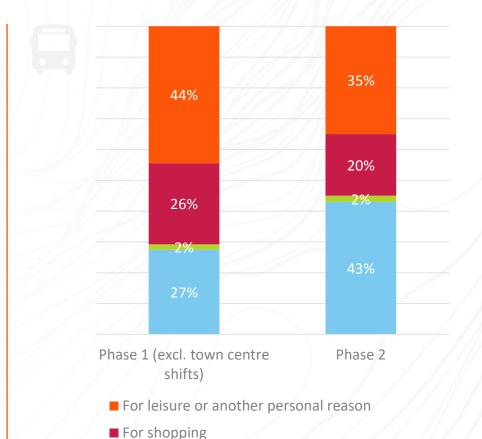




3%

Phase 2

- For leisure or another personal reason
- For business (excluding commuting)
- Commuting to and from work/place of education



For business (excluding commuting)

■ Commuting to and from work/place of education

The push for online in phase 2 also appears to have produced a notable increase in the proportion of commuters at the expense of leisure passengers.

This was evident across both transport modes.

It is worth noting that the first phase of fieldwork was conducted during school holidays. This might also explain some of the changes in journey purpose.





What we found

The push for online completion (vs. offering all methods) led to more respondents dropping out from the survey and a lower response rate.

But a lot more people were recruited in the first place, leading to a higher number of recruits and completes per shift.

The push for online in phase 2 appears to have resulted in a considerably younger sample. This is much more apparent amongst bus than train users.

It also appears to have produced a notable increase in the proportion of commuters at the expense of leisure passengers.

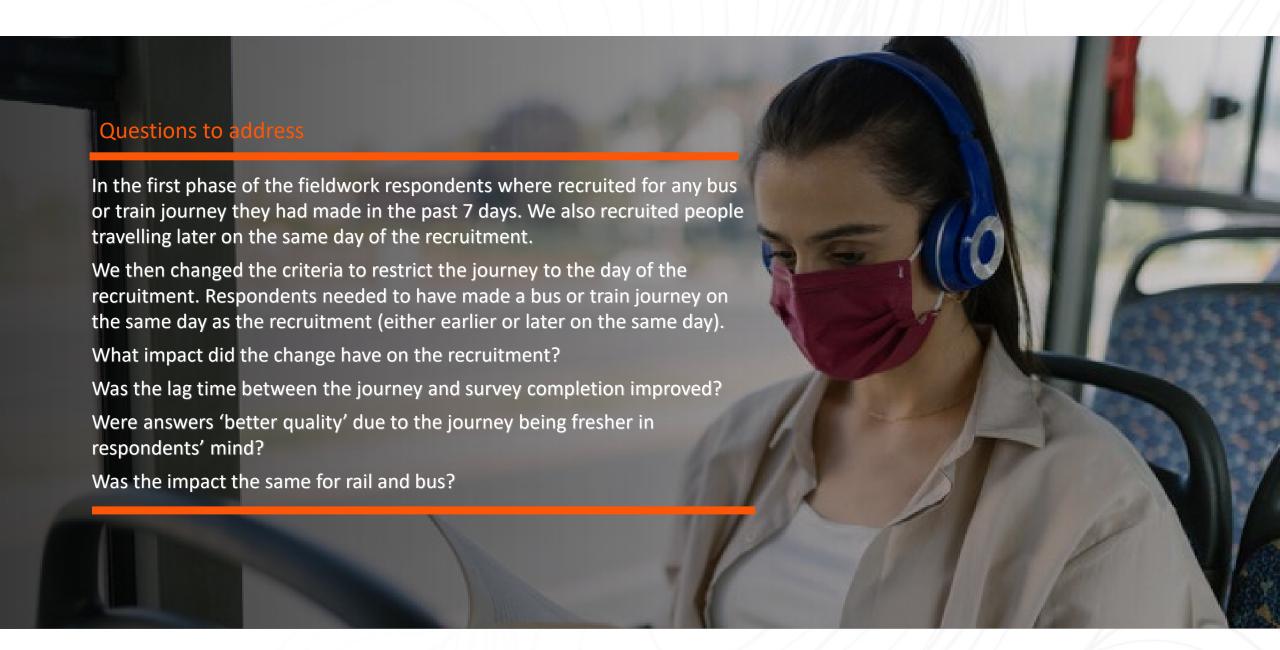
It appears that despite the push for online completion, paper questionnaires are still of value for older respondents especially for the bus survey.

Implication:

Even though the push to online results in a lower response rate, it generates a higher number of completes per shift. It also produces what we believe is a more balanced sample profile, based on age and passenger type which in turn might require less weighting. Therefore, it will be an important option for future surveys.











Lag time* between journey made and survey completed – phase 1 vs. phase 2

(Phase 2 includes all shifts but both phases exclude paper)

Lag time* reduced in phase 2 with the change in journey recency. This implies that the journey would have been fresher in respondents' mind and therefore generated a better quality response.

Positively the change in journey recency to be eligible for the survey does not show any negative impact on the number of recruits per shift (see also interviewer feedback later on).

*The lag time is the average delay between when respondents made their journey and when they completed the survey



4-4		
Bus	1 st phase – 7 days	2 nd phase – same day
Average	2 days	1 day
Median	1 day	0 days
Average number of recruit per shifts (3h)	29	30



Rail	1 st phase – 7 days	2 nd phase – same day
Average	2 days	1 day
Median	1 days	0 days
Average number of recruit per shifts (3h)	27	35

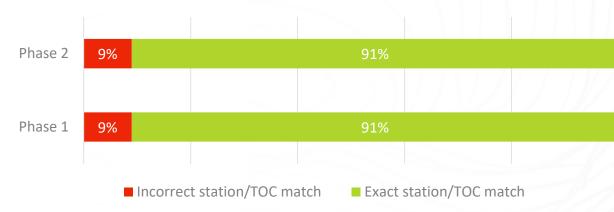




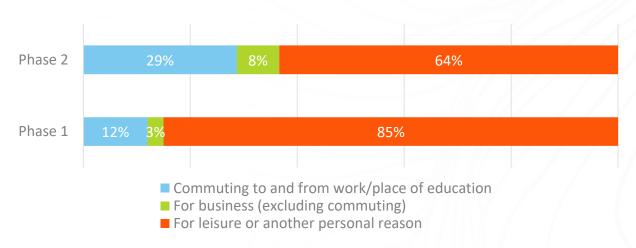
Quality of answers and profile <u>rail</u> users – phase 1 vs. phase 2

(Phase 2 includes all shifts but both phases exclude paper)

TOC and station match



Journey purpose



The change in eligibility for journey recency does not show any visible impact on the quality of answers. For example, the share of those that did not answer the TOC or stations correctly (which was checked against a rail database the covers all stations for each TOC network) remained exactly the same between the two phases.

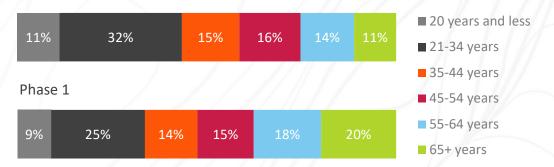
Unsurprisingly the passenger type profile changed considerably following the shorter journey recency, with a much larger proportion of commuters taking part at the expense of leisure travellers. This also resulted in a younger sample profile.

It is worth noting that the first phase of fieldwork was conducted during school holidays and some shifts were conducted in town centres. These factors might also explain some of the shifts in profile.

Potentially the change in eligibility can have a positive impact on weighting, as the sampling becomes more about journeys than passengers. So passengers wouldn't need to be converted into journeys as a start point to weighting (as had been necessary in Transport Focus' "Interim Rail Passenger Survey" for instance).

Age

Phase 2



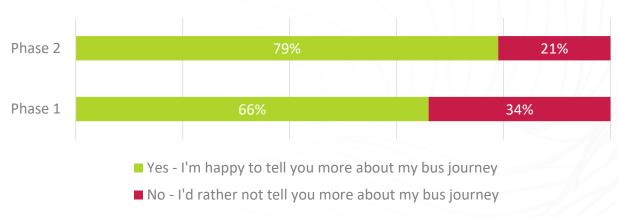




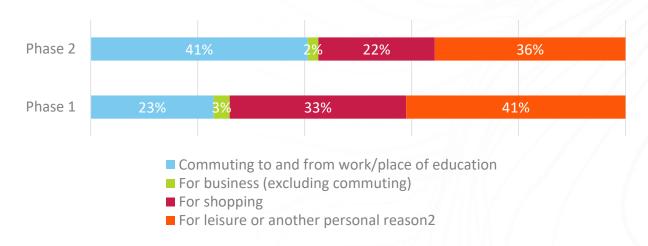
Quality of answers and profile <u>bus</u> users – phase 1 vs. phase 2

(Phase 2 includes all shifts but both phases exclude paper)

Likelihood to continue from short to long questionnaire



Journey purpose



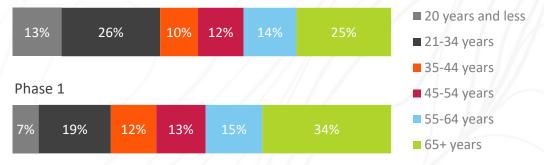
Following the change in eligibility for journey recency a greater share of bus users were happy to continue from the short to the long questionnaire, possibly because the journey was fresher in their mind.

As with rail the passenger type profile changed to a much larger proportion of commuters with fewer leisure travellers taking part, especially shoppers. Here too, this meant that a greater share of younger users completed the survey.

It is worth noting that the first phase of fieldwork was conducted during school holidays and some shifts were conducted in town centres. These factors might also explain some of the shifts in profile.

Age

Phase 2







Qualitative comparison of the open ended questions

(Based on all shifts phase 1 and 2)

Phase 1		,			
7 day recency	Overall	Rail R1_8	Rail R1_15a	Bus B1_10	Bus B1_16a
Average number of characters per question	85	90	82	84	78
				/// /	
Phase 2 Same day recency					
	Overall	Rail R1_8	Rail R1_15a	Bus B1_10	Bus B1_16a
Average number of characters per question	91	104	62	117	75

The change in journey recency seems to have generated more detailed comments overall, except for the rail question asking for improvement (62 vs. 82).

Focussing on a same day journey generates more feedback - passengers have more to say, implying that it's a better question. This further confirms that this is a more valuable approach than asking about a journey within last 7 days.

- **R1_8** Please tell us a bit more about this journey. We're interested in what was good and what was bad. Please also tell us anything else that you think is worth mentioning.
- **R1_15a** If something about your train journey could have been improved, what would it have been?
- **B1_10** Please tell us a bit more about this journey. We're interested in what was good and what was bad. Please also tell us anything else that you think is worth mentioning.
- **B1_16a** If something about your bus journey could have been improved, what would it have been?





Lag time between journey made and survey completed by completion method

(Based on phase 2 normal shifts only i.e. excludes no paper shifts)

We did not analyse by survey start time because for most methods (QR, short link, etc.) the survey start is when respondents opened the link. For example, when people scanned the QR code that would count as the start of the survey.

Instead we focused on the completion date/time and compared it to the date/time of the journey.

QR code generally records the quickest time of completion after the journey (based on average). Paper is the slowest due to having to post the survey.

SMS

C			
	_		
L	<u>"</u>		J
	•	_	

Average

number of days

Bus lag time (journey to completion)

CATI	Email	Paper	QR	Recontact	Short link
1.8	1.3	n/a*	0.9	1.6	0.3



Rail lag time (journey to completion)

•	Email	Paper	QR	Recontact	Short link	SMS
Average r of days	1.6	n/a*	0.8	1.1	1.8	1.1

*For paper there is no actual way of identifying when the physical questionnaire was filled in. They were received back by post already completed.





number

Share that completed on the day by completion method

(Based on phase 2 normal shifts only i.e. excludes no paper shifts)

Over 80% of QR surveys were completed on the day of travel.

*For paper there is no actual way of identifying when the physical questionnaire was filled in. They were received back by post already completed.

		6
	•	

Bus

CATI

Email

Paper

QR code

Recontact

Short link

75%

SMS

Overall

Average

36%

57%

n/a*

83%

47%

76%

59%



Rail

Email

Paper

QR code

Recontact

Short link

SMS

Overall

Average

52%

n/a*

86%

63% 75%

59%

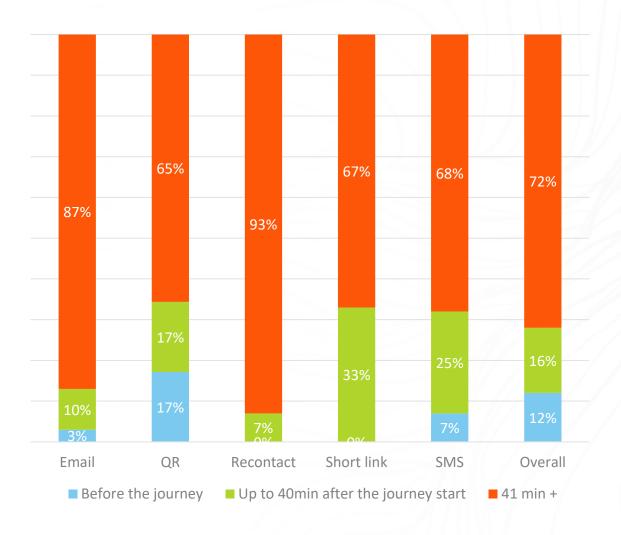
68%





Survey completion time relative to travel time – rail users

(Based on phase 2 normal shifts only i.e. excludes no paper shifts; those that completed on the same day)



12% of those that completed on the day, finished the survey before the train departure time they gave in the survey. This is 10% of all rail user completes in phase 2.

These respondents would have been recruited prior to their journey. Further information about these respondents is given on the next pages.





Survey completion time relative to travel time by journey purpose, travel frequency and satisfaction – rail users

(Based on phase 2 normal shifts only i.e. excludes no paper shifts)

	Satisfaction (NET satisfied)	Commuters	Business	Leisure	Daily	Once a week	Less than a week to once a month	Less often
Before the journey	86.5%	10.3%	6.8%	7.9%	14.5%	5.7%	13.5%	7.2%
40 min after the journey	85.7%	18.8%	9.1%	9.6%	20.0%	20.8%	10.1%	8.5%
41 min +	84.7%	52.1%	72.7%	55.9%	49.1%	53.8%	56.2%	58.5%
Later (not on the day & excl. paper)	84.1%	18.8%	9.1%	26.6%	16.4%	19.8%	20.2%	25.8%

We looked into the responses of those that completed prior to the departure time they gave in the survey and soon after the departure time of their journey. Most of these surveys give the impression that they are based on journeys that were actually made with full open ends – some mentioning their trains were late / wanting trains to run more on time.

Those who were commuting and/or travelling most frequently were more likely to complete the survey quicker (whereas of those completing quickest, the largest share was made up of leisure travellers and those travelling infrequently – because they accounted for the largest share of respondents). But they are also more likely to have taken the QR code option as shown on the previous page which has driven quicker responses. Which might imply that this is more about the completion method than the type of journey.

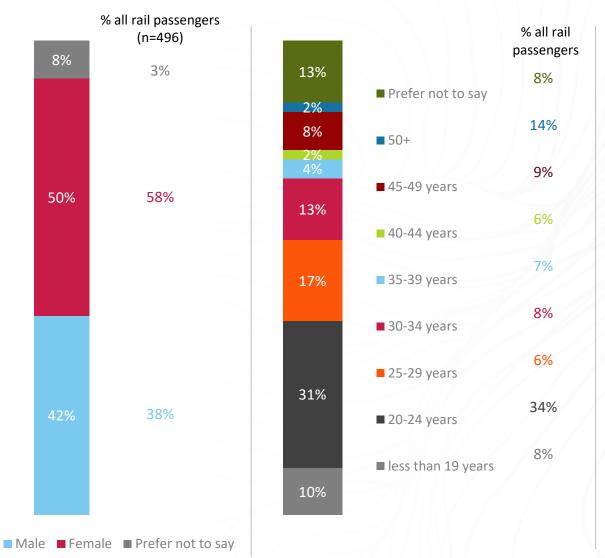
Slightly lower ratings are given as people take longer from the journey start time to complete the survey. It might be that they have had more opportunity to properly experience the journey, during which they could, for example, have been delayed, or had a negative experience with other passengers. The difference in scores between the different completion timings, however, is very low.

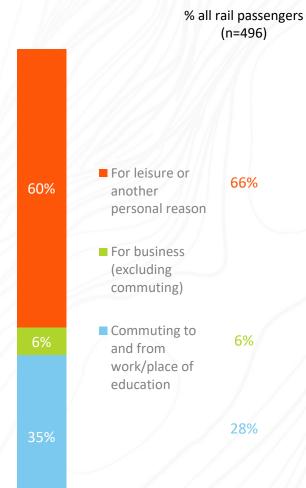




Profile of those completing before the journey starts – rail users

(Based on phase 2 normal shifts only i.e. excludes no paper shifts)





Compared to all rail user completes, those that finished the survey prior to the start of their train journey, are more likely to be male, younger and commuters.

The latter might imply that they refer to a journey they make regularly, however, this could also apply to leisure passengers (as per previous page almost all early completers travel at least once a month, most more often).

How to deal with early completers is addressed in the outstanding question section.

Note: Base size of early completers is very low (n=52).





What we found

When passengers were recruited for journeys made on the same day, there was no impact on the productivity of the shifts compared to when they were recruited for journeys up to 7 days ago.

The lag time between the survey completion and the journey reduced which implies that the journey would have been fresher in respondents' mind, generating better quality and more detailed responses.

A greater share of bus users were happy to continue from the short to the long questionnaire, possibly because the journey was fresher in their mind with the lag time being somewhat shorter.

Though other factors may also have contributed, the passenger type profile changed considerably following the shorter journey recency, with a much larger proportion of commuters taking part at the expense of leisure travellers. This also resulted in a younger sample profile.

By recruiting for a journey that is about to be made on the same day, resulted in 10% of rail passengers finishing the survey before the schedule train departure they gave in the survey.

Implication:

Reducing the journey recency to the day of recruitment had a mainly positive impact and it's recommended to use that in future surveys. Although early completers need to be dealt with.

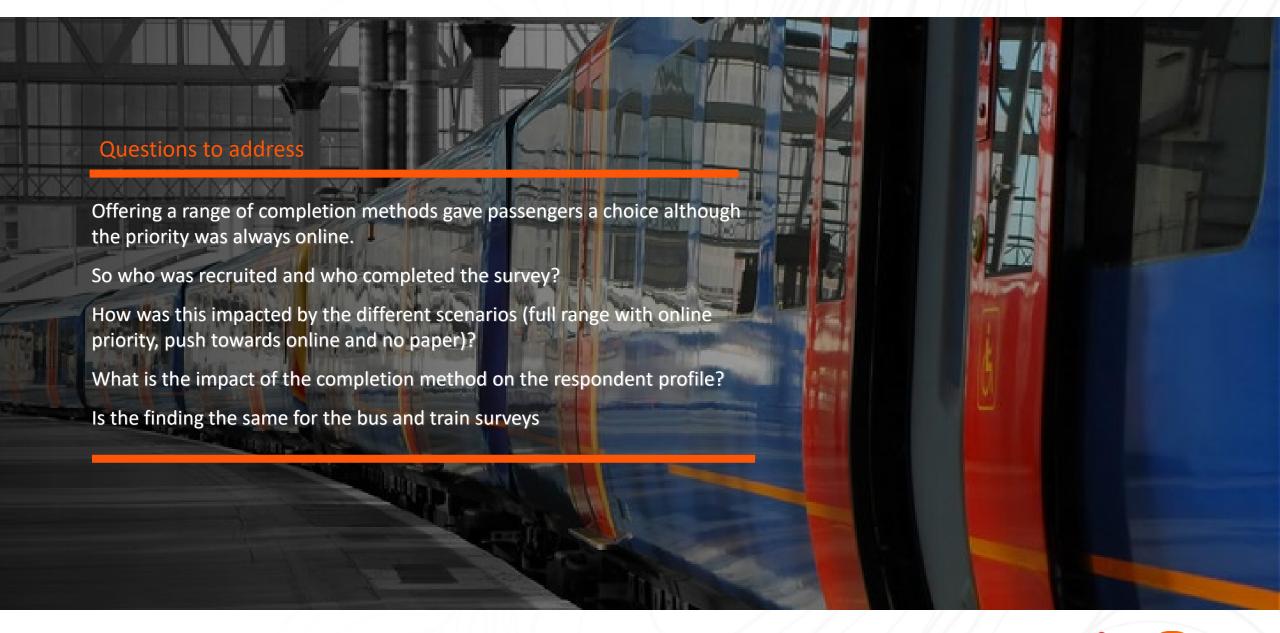




Findings from the data collected









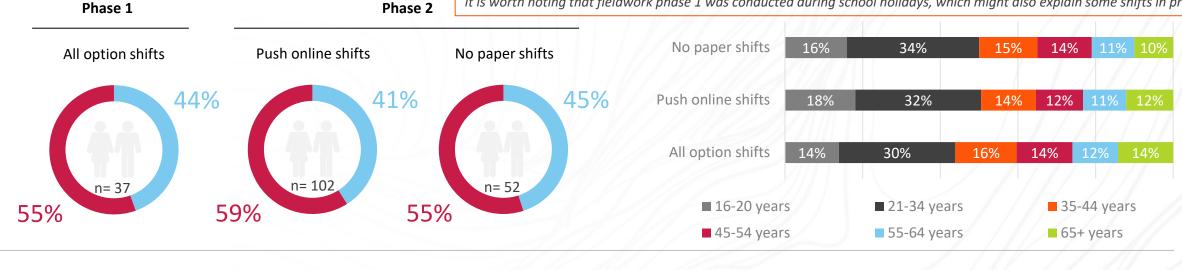


Comparison across demographics by scenario – phase 1 vs. phase 2

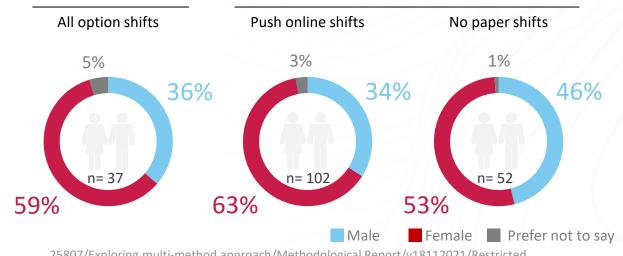


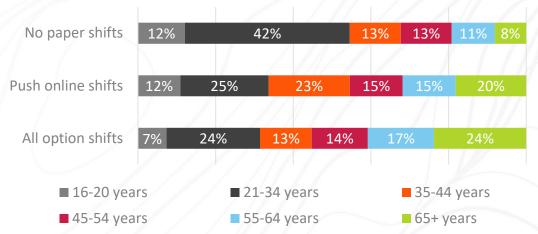
All option shifts resulted particularly in a higher proportion of older completes. By excluding the paper option completely we appear to be losing some (more) female potential respondents, after they are recruited

It is worth noting that fieldwork phase 1 was conducted during school holidays, which might also explain some shifts in profile.



Completes



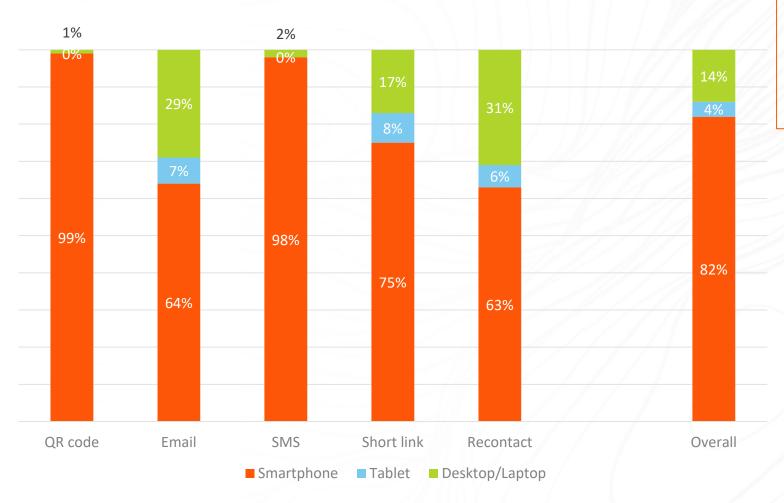






Device used by online method to complete survey

(Based on phase 1 and 2 all – excluding paper and CATI)



The vast majority of online completes is done on a smartphone, highlighting how crucial it is that the survey script is designed for mobile first (and for all iOS, Android and Windows).

Amongst QR code and SMS respondents smartphone usage is almost universal, as one would expect.

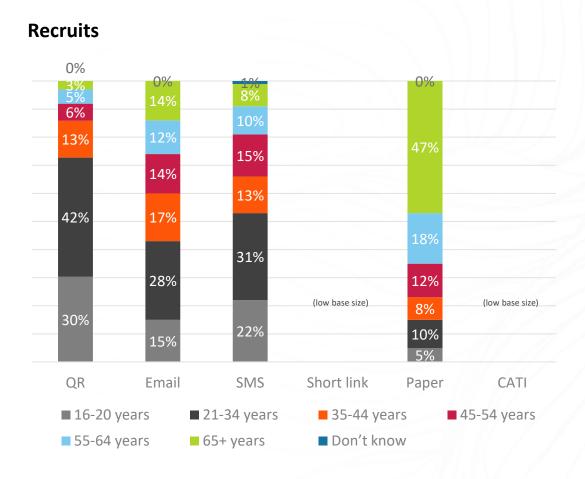


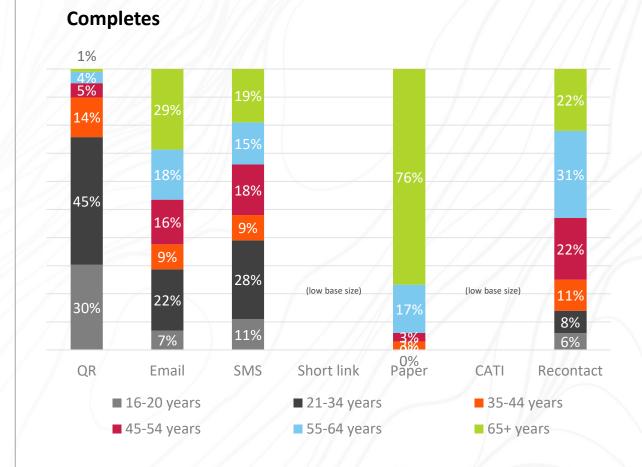


Age spread by completion method when pushing online – bus users

(Based on phase 2 all shifts)

The paper option is much more likely to attract older bus users whereas QR code is popular with younger bus users.





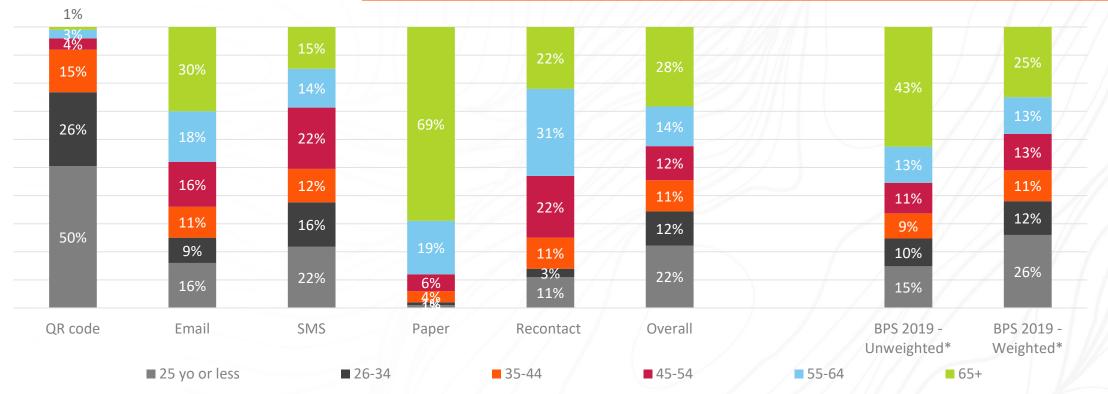


Age profile comparison – multi-method all bus users vs. BPS

(Based on phase 2 all shifts)

Completes

The overall age profile of bus users achieved during phase 2 of the multi-method project sits somewhere between the weighted and unweighted profile from the BPS wave in Autumn 2019 (most recent), but being closer to the weighted profile. Which implies that there needs to be less of an alignment as far as age is concerned with the multi-method approach. It is difficult to say though to what extent the age profile of bus users has actually changed following the pandemic. And it might change back slowly to how it was before the pandemic.



*BPS figures are at total level rather than England only (which is the scope of this multi methods trial)





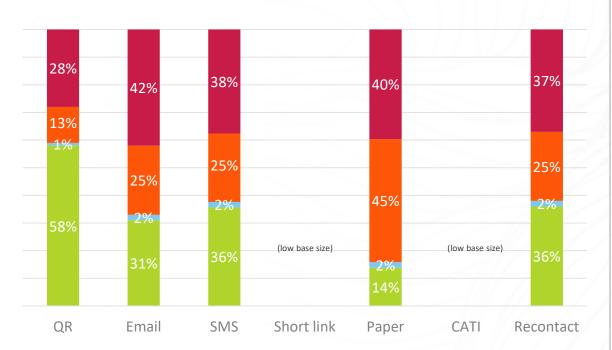
Journey purpose and social grade by completion method when pushing online – bus users

(Based on phase 2 all shifts)

Similarly QR code generates a greater share of commuters whilst these are less likely to complete paper questionnaires.

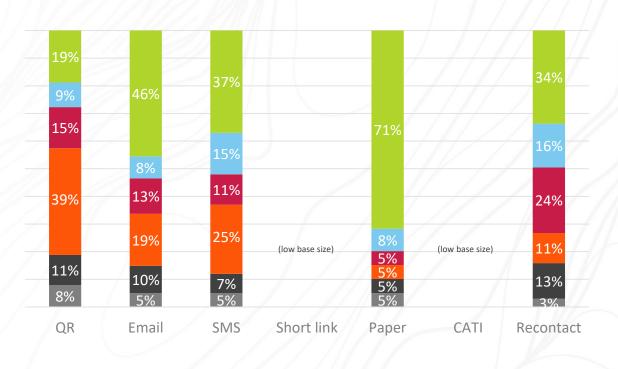
Higher social grades are also more attracted to QR code and, to a lesser extent, to SMS. Social grade E (which includes pensioners) is most prevalent in paper but also comes through via other methods.

Journey purpose – completes



- For other leisure or personal reason
- For shopping
- For business (excluding commuting)
- Commuting to and from work/place of education

Social grade - completes

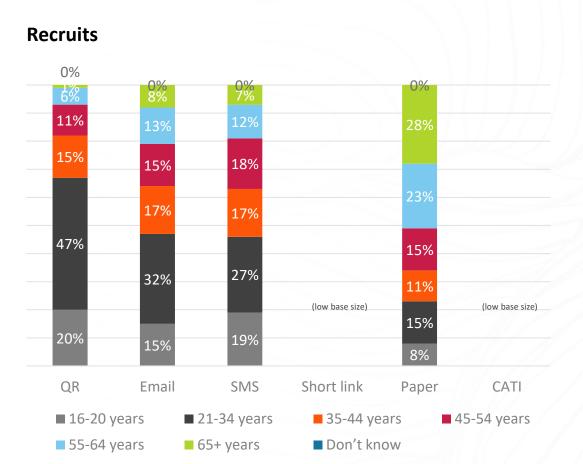






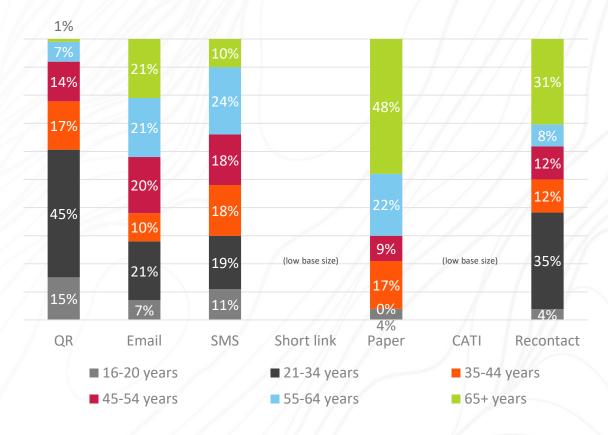
Age spread by completion method when pushing online – rail users

(Based on phase 2 all shifts)



The attraction of older passengers by paper is less pronounced amongst rail users. Other trends are broadly similar to bus though.

Completes







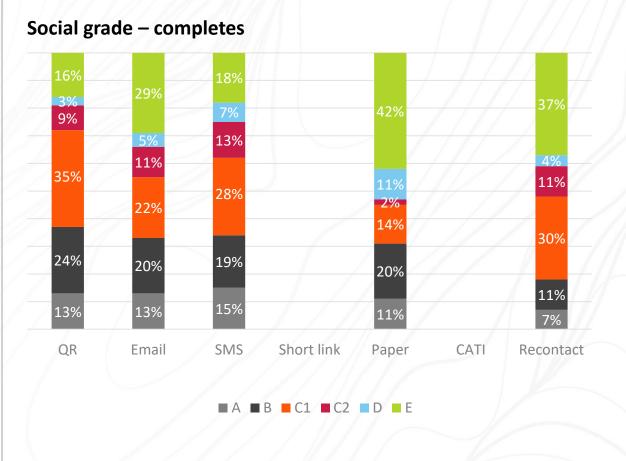
Journey purpose and social grade by completion method when pushing online - rail users

(Based on phase 2 all shifts)

Social grades are more balanced amongst train users than amongst bus users.

This is not dissimilar for journey purpose. Leisure travellers make up the greatest share for all because there are more of them in the sample. They are, however, more drawn to paper which links back to age (as they are also older).

Journey purpose – completes QR Email **SMS** Short link Paper Recontact Overall CATI ■ For leisure or another personal reason For business (excluding commuting) ■ Commuting to and from work/place of education







Age profile comparison – multi-method all train users vs. NRPS

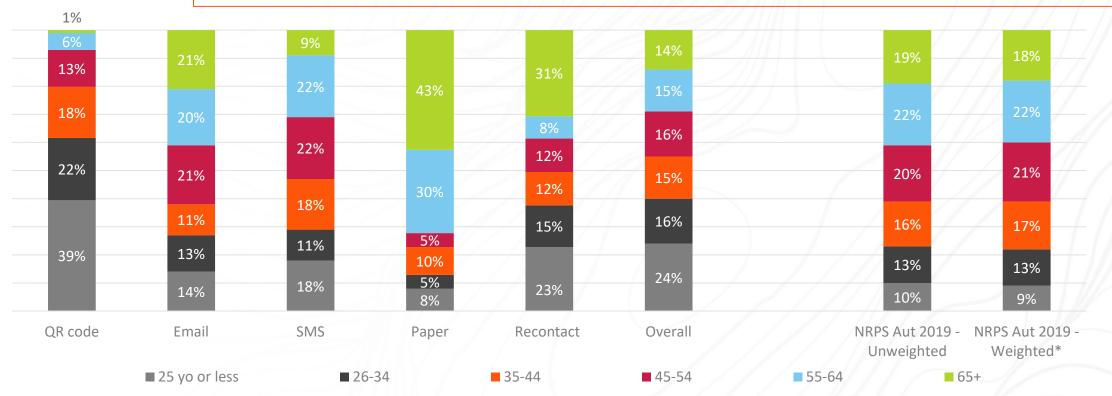
(Based on phase 2 all shifts)

Completes

Compared to the Autumn 2019 NRPS wave (we did not use Spring 2020 because it was cut short), the age profile of train users in this project is quite a bit younger with a notably lower proportion of 55+ years.

As with bus patronage, it's difficult to say to what degree this is the result of changes following the pandemic and how that will evolve going forward.

Note – the age breakdown is similar to Transport Focus's online omnibus survey which took place concurrently. It lends reassurance that this method is broadly sensible and coming up with similar profiles to other research. But as this was online, it underrepresents passengers who are not online.



^{*}NRPS data is not weighted by demographics (unlike BPS) but by journey purpose





What we found

Overall face to face recruitment offering the full range of methods resulted in a particularly higher proportion of older completes.

The paper option is much more likely to attract older bus users whereas QR code is popular amongst younger bus users. This means in the scenario where paper was removed completely the profile of respondents is much younger.

Similarly QR code generates a greater share of commuters whilst these are less likely to complete paper questionnaires.

Higher social grades are also more attracted to QR code and, to a lesser extent, to SMS. Social grade E (which includes pensioners) is most prevalent in paper but also comes through via other methods.

Leisure travellers make up the greatest share for all because there are more of them in the sample. They are, however, more drawn to paper which links back to age.

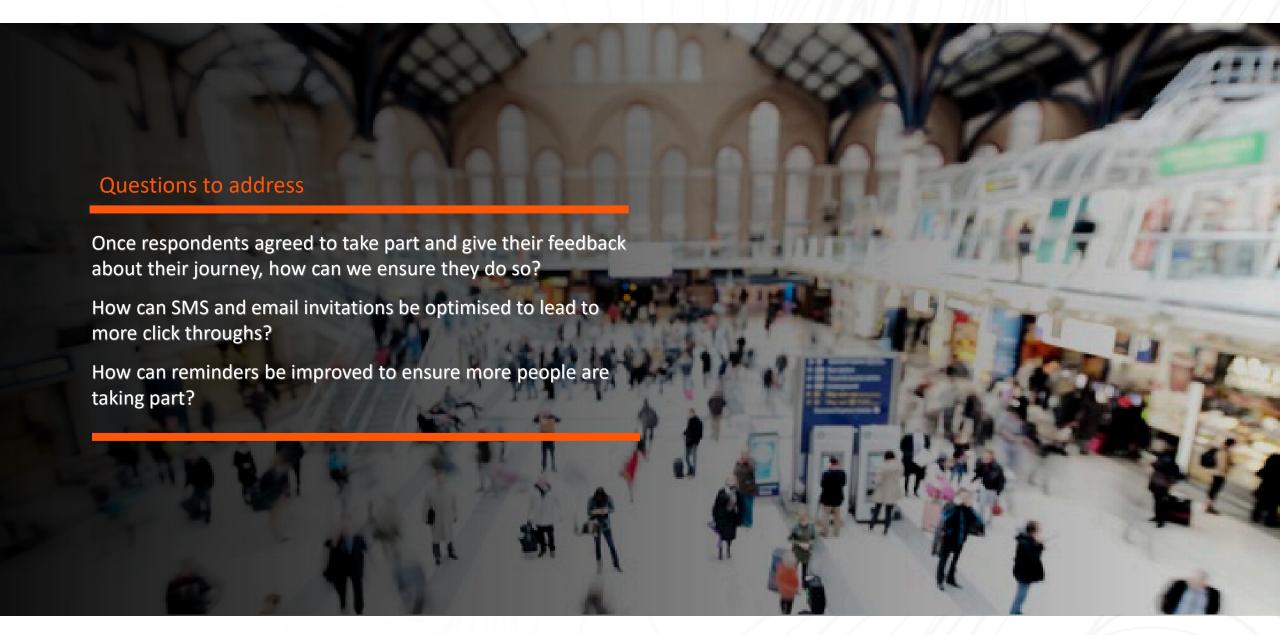
The vast majority of online completes is done on a smartphone, highlighting how crucial it is that the survey script is smartphone compatible (and for all iOS, Android and Windows).

Implication:

Face to face recruitment captures all respondent types; it is the completion method that is more discriminating and shows a greater impact on the sample profile. But offering the choice to passengers in how they complete the survey will capture a broad mix of people and generate the most balanced sample.











Click throughs from the email and SMS invitations

(Based on phases 1 and 2 all shifts)

Phase 1



SMS:

Number recruits: 219

Number of clicks/start: 100 (45%)

Ignore: 119 (54%)

 $\geq <$

Email:

Number recruits: 689

Number of clicks/start: 439 (64%)

Ignore: 250 (36%)



Update of the invitation text to emphasise how important their feedback is and how giving us feedback will benefit them

The change in the invitation text for both email and SMS resulted in a marginally higher click through rate in phase 2.

Phase 2



SMS:

Number recruits: 641

Number of clicks/start: 304 (47% +2pts)

Ignore: 337 (53%)



Number recruits: 1943

Number of clicks/start: 1243 (64% + 1pt)

Ignore: 700 (36%)





Comparison of response to reminders phase 1 vs. phase 2

(Based on phases 1 and 2 all shifts)

Similarly to the invitations we changed the text of the reminders, putting a greater emphasis on the importance of the feedback and how, by completing the survey, respondents as a passenger would benefit.

This seems to have resulted in a small increase in the proportion of additional completes following reminders in phase 2.

Email	Phase 1		Phase 2	
No. of recruits	689		1989	/ //
No. of completes before reminder	93	13%	190	10%
No. of partials without reminder	153	22%	968	49%
No. of reminders*	536	78%	1129	57%
No. of reminders to partials**	n/a		548	28%
No. of additional completes following reminders	22	4%	64	6% (of reminders)
No. of additional completes following reminders - to partials	n/a		0	

^{*60} recruits were not sent a reminder as they were completing the survey





^{**}reminders to partials were worded the same as the regular reminders in phase 1

Similarly to the way interviewers introduce the survey at the recruitment stage, the text in the online invitations needs to put greater emphasis on the importance of the feedback and how, by completing the survey, respondents as a passenger would benefit.

The change made in the second phase of the fieldwork included a re-work on the reminders as well and it resulted in a small increase in the proportion of additional completes following reminders in phase 2.

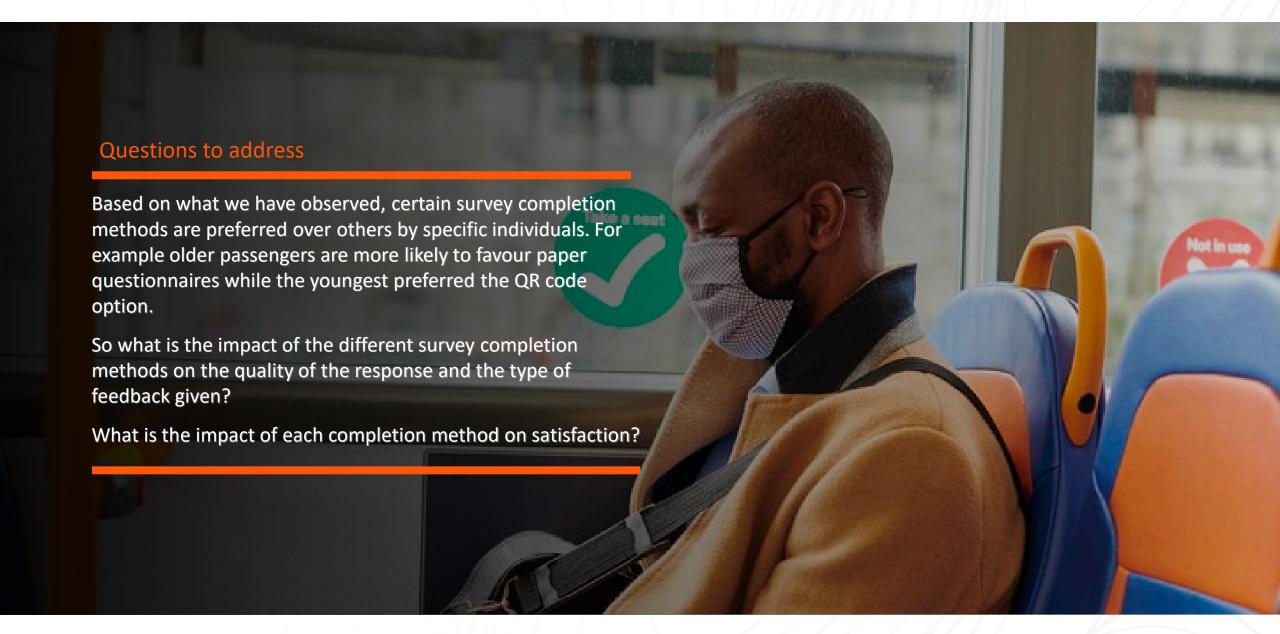
Implication:

The invitation and reminder text need to be optimised focusing on the passenger and their benefits. An initial shorter questionnaire with the option to expand on the same journey is an effective way of obtaining further journey details.











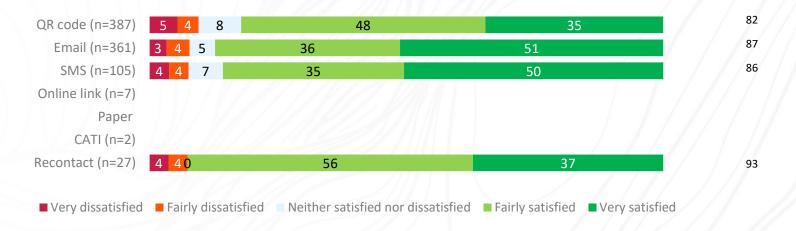


Overall journey satisfaction – rail users

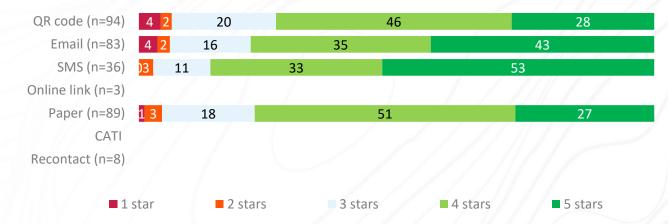
By data collection method

By data collection method there are notable differences in the share of those who rate very satisfied and who rate fairly satisfied. Email and SMS seem to be the most similar.

5-point satisfaction scale



Star rating scale







Net Satisfied

Net 4-5 73

78

86

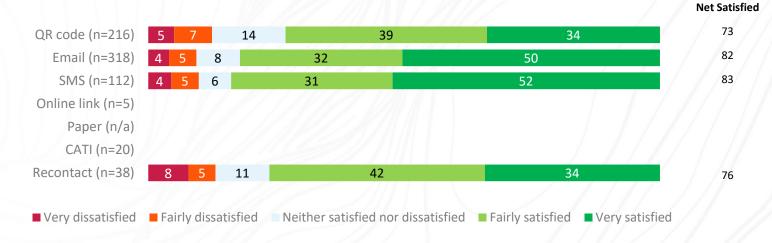
78

Overall journey satisfaction – bus users

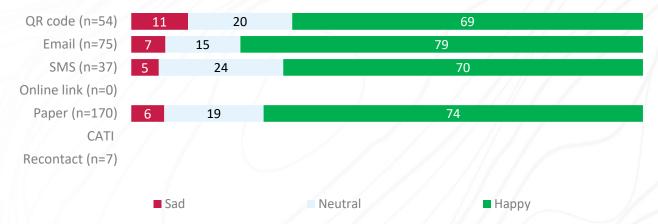
By data collection method

Findings are similar amongst bus users regarding ratings on the 5-point satisfaction scale – differences are considerable, with email and SMS most similar (and QR code and recontacts also fairly similar).

5-point satisfaction scale



Emoji scale







Select satisfaction metrics – rail users

By data collection method

Recontacts (on a rather small base)

usually record the

followed by email

and SMS. QR code

lower ratings. This

could be down to

respondents that

use a specific data collection method

rather than due to

the profile of

this section).

73

highest ratings,

respondents usually provide **Overall journey satisfaction**

% very/fairly satisfied

Paper based Net online 85 on 4/5 stars out of 5 stars Paper QR 81 (n=83) 87 85 81 QR code **SMS Email** Online link n=310 n=361 n=106 n=7

Satisfaction with price paid/value for money for your journey

% very/fairly satisfied

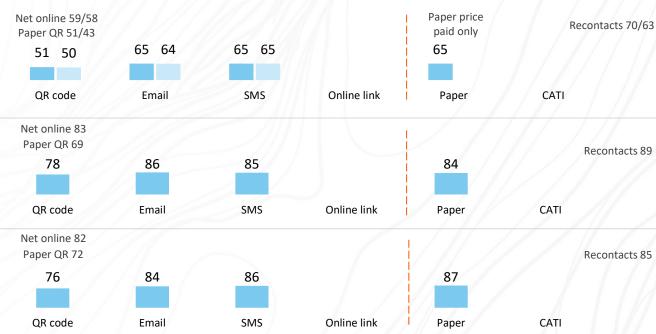
Experience with punctuality/reliability

% very/fairly good

Experience with cleanliness inside

% very/fairly good

Rating of length of time journey was scheduled to take



Online link

n=4

Recontacts 93

(n=27)

Recontacts 87

(n=23)

CATI

CATI

n=2

78

Paper

n=89

Paper not

asked

Paper

transportfocus

the method itself (see also later on in

% very/fairly good



86

SMS

n=79

89

Email

n=285

Net online 86

Paper QR 80 (n=64)

83

QR code

n=209

Select satisfaction metrics – bus users

By data collection method

Overall journey satisfaction

% very/fairly satisfied

Paper based Net online 79 on happy face out of 3 faces Paper QR 83 (n=54) 82 83 70 SMS Online link QR code **Email** n=162 n=318 n=112 n=5

74 95 CATI Paper n=170 n=20

Amongst bus users, email respondents give the highest ratings on most of these metrics. followed by SMS and paper. Amongst bus user, it seems that ratings are less consistent by data collection method than amongst rail users (e.g. paper can provide the highest rating cleanliness - but also one of the lowest punctuality).

Satisfaction with price paid/value for money for your journey % very/fairly satisfied Rating of punctuality % very/fairly good

Rating of cleanliness and condition of the inside % very/fairly good

> Satisfaction with length of time journey took

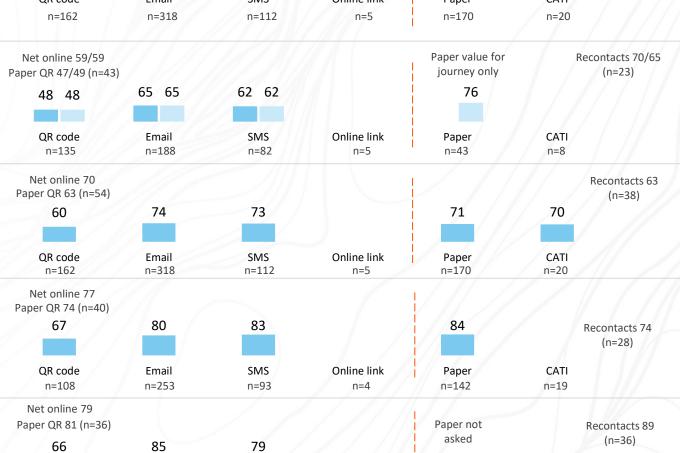
> > % very/fairly good

QR code

n=99

Email

n=257



Online link

n=3

SMS

n=87



Paper

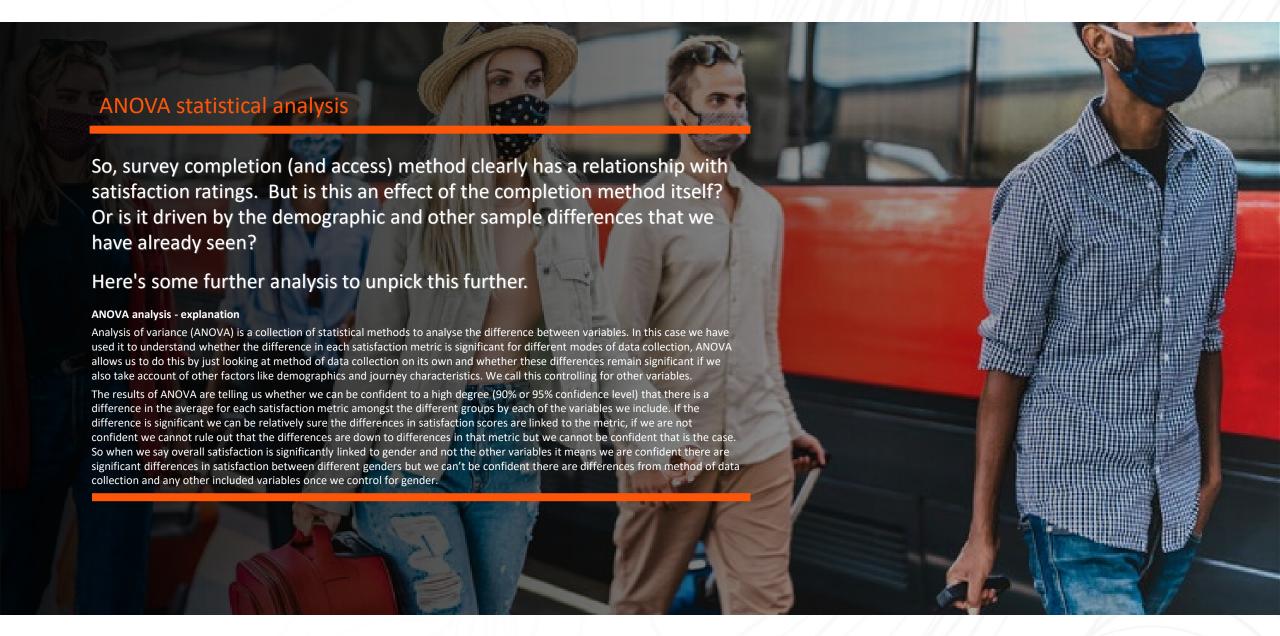


CATI

n=19

Recontacts 76

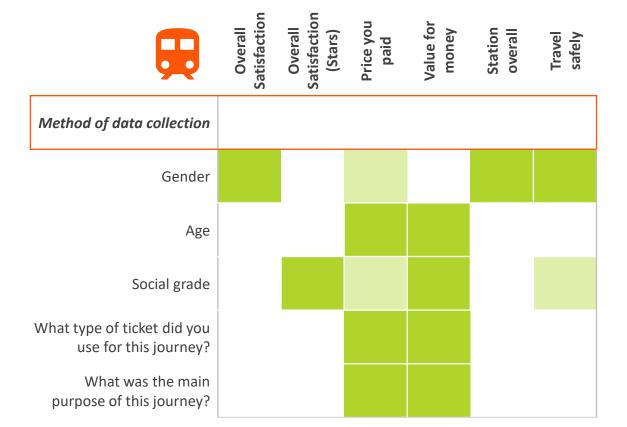
(n=38)





Impact of data collection methods on satisfaction ratings – rail users

1st ANOVA - Based on all shifts from phases 1 and 2



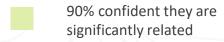
The statistical analysis looked at the scores of the overall metrics and respondents demographics* (age, gender and social grade), journey information (purpose and ticket) as well as the mix of data collection methods used in this trial.

The table to the left shows for each overall metric (the columns) which factors (the rows) were significantly related to the metrics (when controlling from them all). Dark green shading signifies 95% confidence and light green 90% confidence.

Each metric is impacted by different factors. However, the mix of data collection methods used in this project is never significant when other factors are controlled.

Implication: When respondents are offered the choice of method of completion, the differences in satisfaction ratings are down to demographics / respondent profile, rather than the different methods themselves - which implies it could be controlled for with weighting, if indeed it needs controlling for.

*For demographics we also looked at age and gender interlocked which did not change the impact of data collection method.



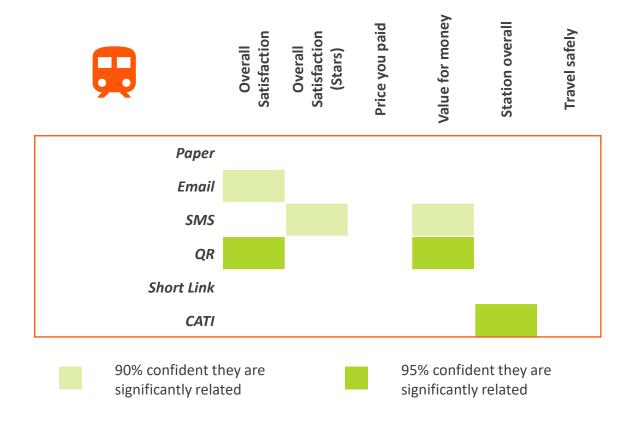


95% confident they are significantly related



Impact of data collection methods on satisfaction ratings – rail users

2nd ANOVA - Based on all shifts from phases 1 and 2



A further set of ANOVA analysis was conducted, this time looking at the relationships between the overall metrics and each method of data collection in isolation while also controlling for other factors.

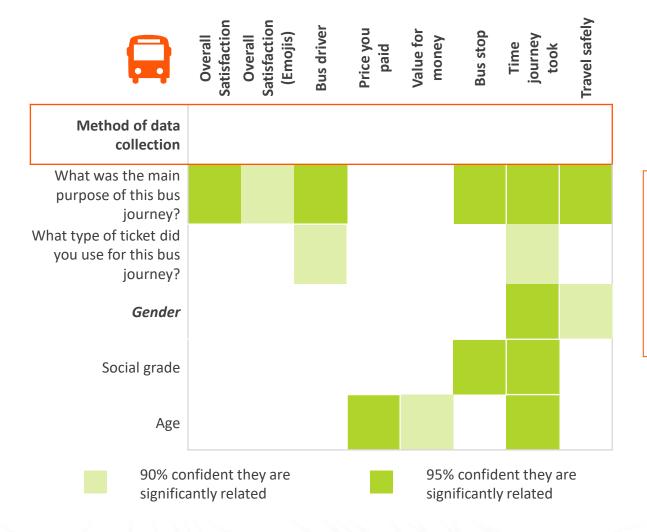
Specifically for each method of data collection, for example QR code, we compare whether there is a difference between the method (QR code) and the other methods (not QR code). This showed at 95% confidence the relationship is significant between QR and overall satisfaction and value for money and CATI and satisfaction with station overall. Also at 90% confidence the relationship is significant between SMS and overall satisfaction using stars and value for money as well as email and overall satisfaction.

Implication: If certain methods of data completion are removed from the mix, they will have an impact on the overall key metrics as it will result in a different sample profile.



Impact of data collection methods on satisfaction ratings – bus users

1st ANOVA - Based on all shifts from phases 1 and 2



The same ANOVA analyses were conducted for bus.

Again when controlling for demographics* and journey factors each overall metric had different significant drivers (for bus this was dominated by journey purpose).

The mix of method of data collection was never significant when other factors are controlled.

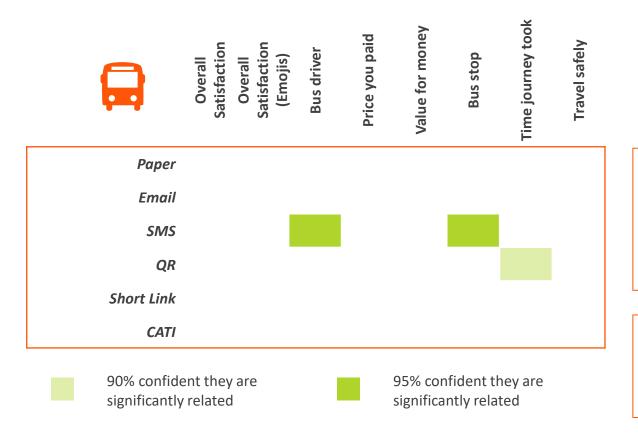
Implication: When respondents are offered the choice of method of completion, the differences in satisfaction ratings are down to demographics / respondent profile, rather than the different methods themselves - which implies it could be controlled for with weighting, if indeed it needs controlling for.



^{*}For demographics we also looked at age and gender interlocked which did not change the impact of data collection method.

Impact of data collection methods on satisfaction ratings – bus users

2nd ANOVA - Based on all shifts from phases 1 and 2



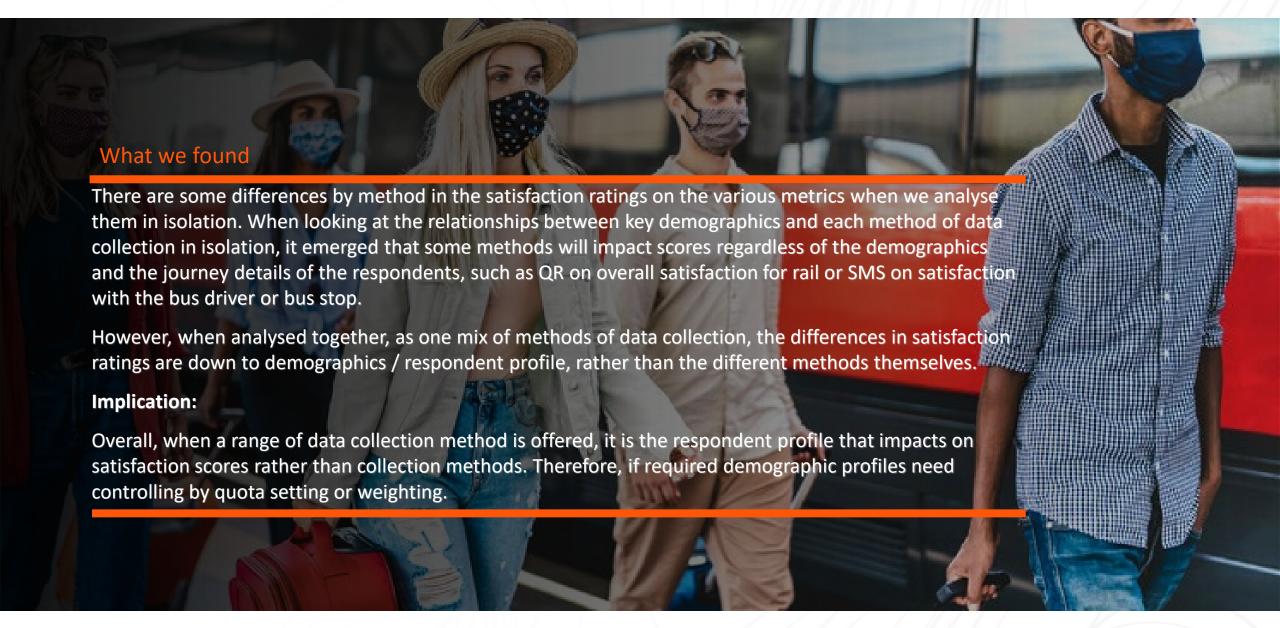
For the final analysis for bus, looking at the methods of data collection individually while still controlling for other factors we are 95% confident there is a relationship for SMS with satisfaction with bus driver and satisfaction with bus stop and 90% confident there is a relationship with QR code and satisfaction with the time the journey took; all the other methods were not significant.

Implication: If certain methods of data completion are removed from the mix, they will have an impact on the overall key metrics as it will result in a different sample profile.

Caveats

It is important to bear in mind the sample sizes are relatively small compared to NRPS or BPS. When testing significance as we are here analysis is sensitive to sample sizes so if the analysis was conducted on a substantially larger survey, we may see more factors coming through as significant.



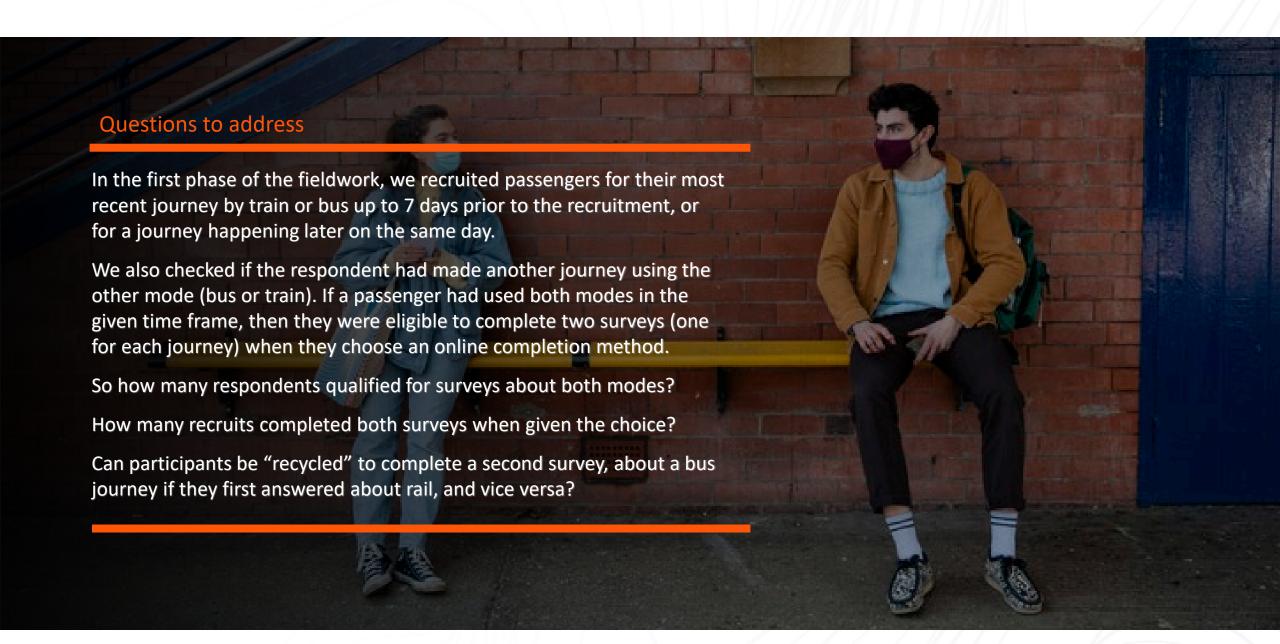




Findings from the questionnaire



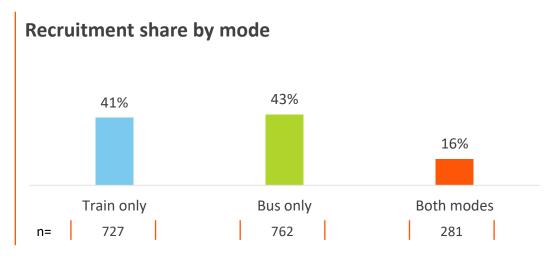






How successful was the multi-mode recruitment

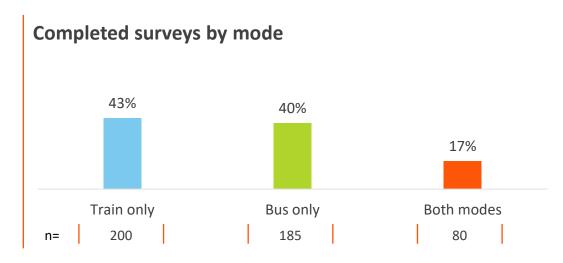
(Based on the first phase of the fieldwork; multi modes was dropped after the first review session)

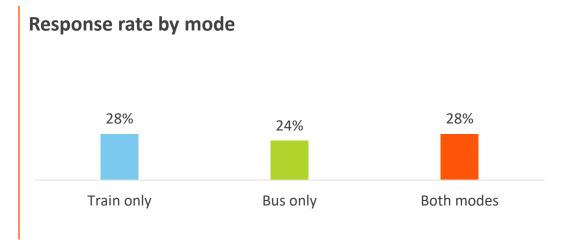


16% qualified for surveys about both modes based on their use of the train and bus in the past 7 days. They represent 17% of all completes from phase 1.

Across city and town locations, there is virtually an equal number of respondents at train and bus stations that qualified for both surveys. Town centres generated fewer respondents qualifying for both modes.

The response rate for those recruited for both modes is high at 28% but it generates the lowest number of completes overall (80 out of 465).







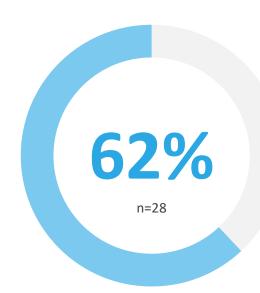
Uptake of a second questionnaire

(Based on the first phase of the fieldwork; multi modes was dropped after the first review session)



Rail

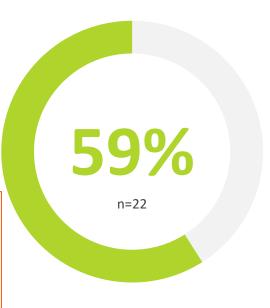
Happy to tell you about my bus journey





Bus

Happy to talk about my train journey



Each respondent who was recruited for both modes was asked at the end of the first questionnaire if they wanted to fill in a short second questionnaire about their journey of the other mode.

Once they completed the first questionnaire, they are generally happy to continue.



What we found

Very few passengers qualified for both modes even when recruitment was for any journey in the past 7 days. The share of this segment was 17%.

Each respondent who was recruited for both modes was asked at the end of the first questionnaire if they were willing to fill in a short second questionnaire about their journey of the other mode. If they filled in the first questionnaire, most are generally happy to give their feedback about their other journey.

Implication:

If journey recency is reduced to the day of recruitment, the segment of dual mode users will be very small, almost non-existent and it might not be worth putting respondents through such a process since it will do very little to boost sample size.





Questions to address

The rail and bus questionnaires where divided into long and short versions. Some passengers were given the long questionnaire to answer, when others where asked after having completed the short version if they wanted to continue or stop the survey.

How did this impact on dropouts?

We also trialled two ways of getting verbatim comments, one asking for general feedback, the other one asking for what operators should improve. What were the results? Is one open end providing more insight into their experience?

We tested two different ways of asking about value for money. What are the results and is it the same for the train and the bus surveys?

We finally trialled asking overall satisfaction using three different scales (5 point satisfaction scale, 5 star rating and three smiley faces – happy, neutral and sad). What are the results telling us? And is it the same for the train and the bus surveys?





Completion time and willingness to answer more questions about the journey

(Data based on the entire fieldwork period)

Rail

Happy to tell you more about my train journey





Most respondents were asked after having completed the short survey if they were willing to continue answering more questions about their journey or if they preferred to finish the survey.

Across both modes about 3 in 4 agreed to continue the survey.



Happy to tell you more about my bus journey



Completion time by survey length (Online)



Short survey



Long survey





If respondents preferred to stop, the short questionnaire was about 5.5 minutes for both modes.

The long survey was about 9 min for the train and 11 min for the bus.



Short survey



Long survey



Completion time by survey length (Online)







How did drop outs change in each phase?

(Data based on the entire fieldwork period)

	1st phase dropouts (indexed)	2nd phase dropouts (indexed)
Overall	78	107

In the second phase of fieldwork we had more drop outs overall. As no major questionnaire changes were made, this is probably the result of the recruitment pushing for online completion over other methods.

Across modes, respondents from the train survey are more likely to drop out than bus respondents.

	Dropouts (indexed)	1st phase dropouts (indexed)	2nd phase dropouts (indexed)
Train only	113	110	113
Bus Only	86	76	88
Both modes	96	124	-
Recontact (Train or Bus)	45	-	42

Those recontacted in the second phase for a new survey are the least likely to drop out from the survey.

When respondents were given the long questionnaires to answer, they were much more likely to drop out than when they were asked after the end of the short questionnaire if they were okay to answer more questions about their journey.

Note – the index is calculated by dividing the share of dropouts of each waves by the overall dropout across the entire fieldwork period.

	Dropouts (indexed)
Short + long version (only in the pre wave)	92
Long version (only in the pre wave)	162



Open ends – how to best ask for additional feedback?

(Based on phase 1 and 2, all shifts)

Respondents where asked one of these two open end questions

Please tell us a bit more about this journey. We're interested in what was good and what was bad. Please also tell us anything else that you think is worth mentioning.

This question generated quite a variety of comments, including some good, neutral and bad ones. It is generally quite focused on the journey made.



Bus clean, on time, well driven. All good.

It was okay today, but last week when I wanted to travel the bus was cancelled.

The wait time was very long - buses did not run on schedule

All trains ran to time. Paid for first class but all you get is extra space and no checks were made on tickets so non-first class passengers were present. Very poor quality for first. Had to get four trains, two of which had no first class.

Plenty of seats available. Clean and comfortable. Departed and arrived on time. Only 50% passengers wearing masks.



If something about your train/bus journey could have been improved, what would it have been?

This question generated more comments on what was wrong during the journey. It also generated some more general comments about ticket prices, punctuality and other related issues.



The prices are unreasonable for younger people. That's why the majority of people who take the bus are much older and therefore qualify for a free/heavily discounted bus price

There was a delay because of a train fault but it was unavoidable so it can't really be improved upon

Northern trains in general could do with an update in terms of modernising

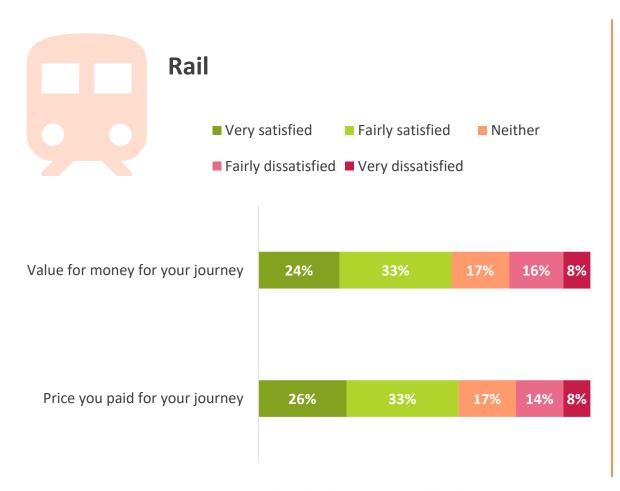
I am a wheelchair user and found that at Swindon bus station the bus was unable to deploy the ramp so the bus driver had to lift me off the bus. This was not due to the ramp itself not working but rather the poor conditions of the bus station and that the bus bays are not fit for purpose for a disabled user - I also use the 49 at that bus station as well and always have to be helped on because the conditions of the bus station and the bus not being able to be level enough for myself to board the bus.

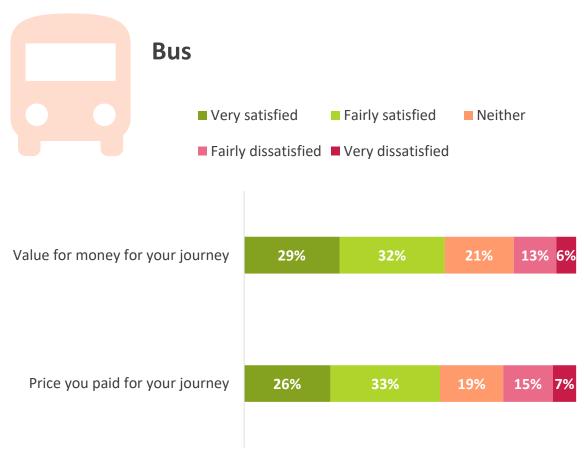


Satisfaction comparison 'value for money' vs. 'price paid'

(Data based on the entire fieldwork period)

The two questions yield the same kind of response across both the train and the bus questionnaires.

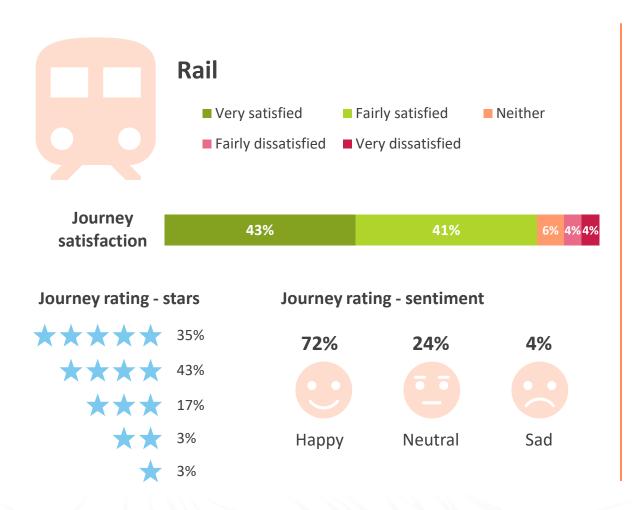




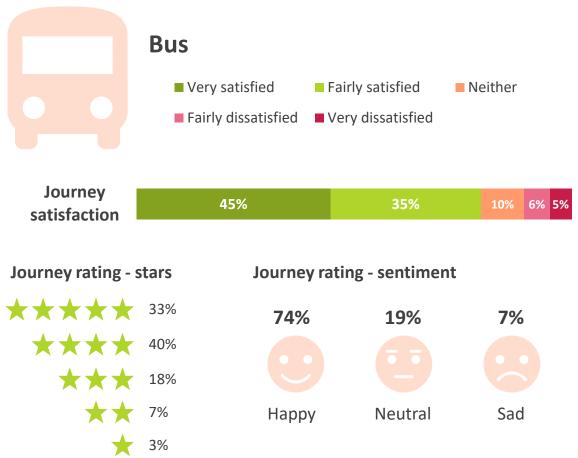


Comparison of satisfaction scales

(Data based on the entire fieldwork period)



The traditional 5 point scale records the highest satisfaction and the lowest neither/nor proportion for both modes. On the other scales, respondents tend to choose more the middle point which leads to lower satisfaction scores overall.





Overall satisfaction rail – cross-tabbing scales

(Data based on the entire fieldwork period)

The finding is that scales are not perceived the same i.e. very satisfied is not the same as 5 stars to everyone. The 3 faces option is less discriminating/detailed. The star rating is relatively similar as verbal satisfaction scale and doesn't add anything.

We therefore recommend using the verbal 5 point satisfaction scale, which is arguably more meaningful, and is more familiar to rail and bus industry stakeholders as a headline metric.



How did passengers rate overall journey satisfaction on a traditional 5 point compared to a 3 face scale and to a 5 star scale?

Showing number of respondents (not %), a g. of 05 who rated fairly satisfied on a 5 point scale 72 rated happy, on the 3 face scale and 22 rated neutrons.

		•		•	
Showing number of respondents (r	not %), e.g	g. of 95 who rated fairly satisf	fied on a 5 point scale	73 rated happy	on the 3 face scale and 22 rated neutral.

(n=220)	Very dissatisfied	Fairly dissatisfied	Neither / nor	Fairly satisfied	Very satisfied
Нарру	0	1	3	73	82
Neutral	2	9	18	22	1
Sad	8	1	0	0	0
Total	10	11	21	95	83

(n=223)	Very dissatisfied	Fairly dissatisfied	Neither / nor	Fairly satisfied	Very satisfied
1 star	6	1	0	0	0
2 stars	1	3	1	0	0
3 stars	2	4	7	23	0
4 stars	0	0	1	60	28
5 stars	0	0	0	8	78
Total	9	8	9	91	106



Overall satisfaction bus – cross-tabbing scales

(Data based on the entire fieldwork period)



How did passengers rate overall journey satisfaction on a traditional 5 point compared to a 3 face scale and to a 5 star scale? Showing number of respondents (not %), e.g. of 58 who rated fairly satisfied on a 5 point scale 43 rated happy on the 3 face scale and 15 rated sad.

(n=172)	Very dissatisfied	Fairly dissatisfied	Neither / nor	Fairly satisfied	Very satisfied
Нарру	0	0	3	43	82
Neutral	1	1	13	15	1
Sad	11	2	0	0	0
Total	12	3	16	58	83

(n=165)	Very dissatisfied	Fairly dissatisfied	Neither / nor	Fairly satisfied	Very satisfied
1 star	4	1	0	0	0
2 stars	3	8	0	1	0
3 stars	1	4	10	16	0
4 stars	0	0	5	45	18
5 stars	0	0	0	6	50
Total	8	13	15	61	68



What we found

When respondents were asked, after an initial shorter questionnaire, if they were willing to continue answering more questions about their journey or if they preferred to finish the survey, about 3 in 4 agreed to continue the survey across both modes.

When respondents were given the long questionnaire, they were much more likely to drop out than when they were asked after the end of the short questionnaire if they wanted to answer more questions about their journey.

Implication: Start with the short questionnaire and then give respondents the option to elaborate on their journey with additional questions.

In the second phase of fieldwork we noticed more drop outs overall. As no questionnaire changes were made, this is probably the result of the recruitment pushing for online completion over other methods resulting in more younger passengers and more commuters, who we know from other research are more likely to drop out.

Implication: Weighing this against all other points, this may be an acceptable side effect.

We asked two different types of open ended question, each of which provided slightly different answers.

Implication: It is worth considering a mix of open ended questions to cover a broader spectrum of answers.

The traditional 5 point scale records the highest satisfaction and the lowest neither/nor scores for both surveys. On the other scales, respondents tend to choose more the middle point which leads to lower satisfaction scores.

Implication: The traditional scale delivers fewer 'indifferent' and more 'stronger' opinions. On this basis, we would recommend using this scale as the alternatives don't have any obvious benefits and stakeholders are more familiar with the verbal 5 point scale.

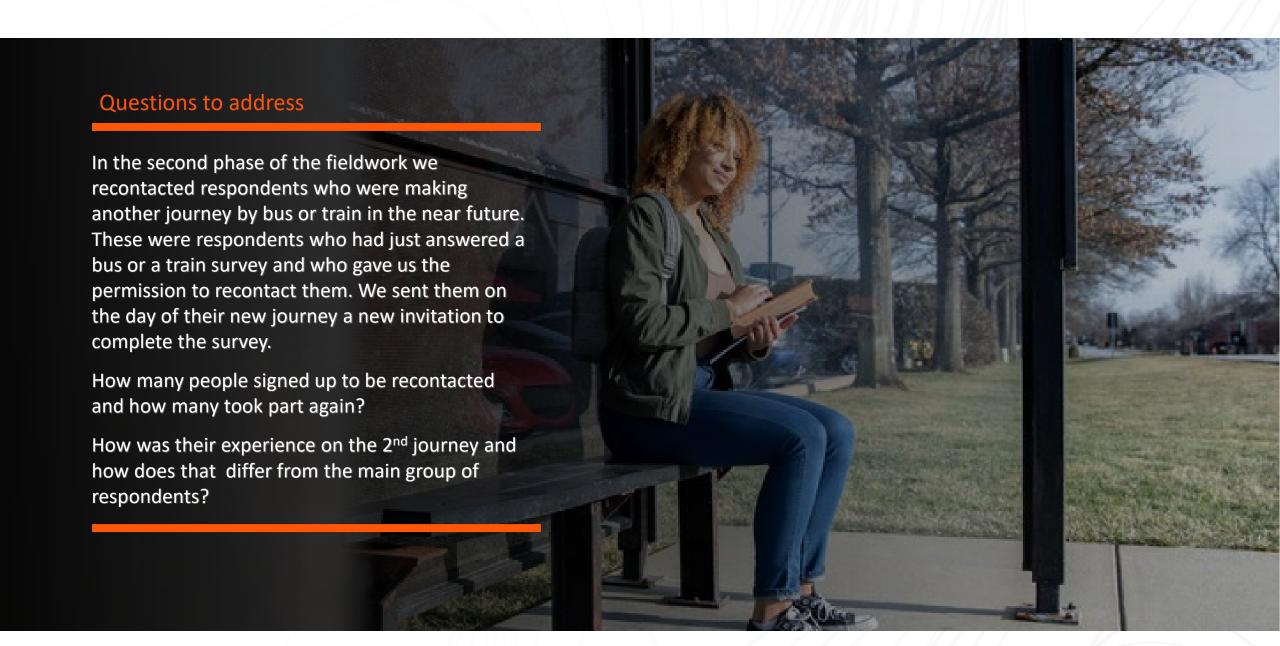
Amongst bus users respondents are slightly more positive about value for money than price paid.

Amongst train users respondents are marginally more negative about value for money than price paid.

Implication: Differences are not statistically significant, so it would be worth retaining value for money as stakeholders are familiar with this.





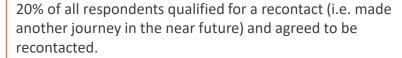






How successful was it recontacting passengers about a 2nd journey?

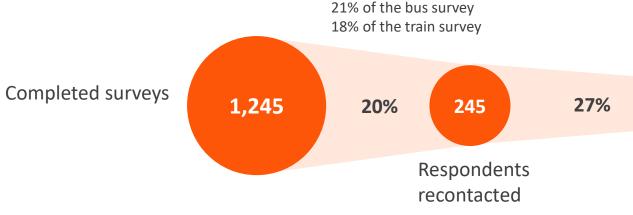
(Based on phase 2 all shifts)



Recontact surveys completed

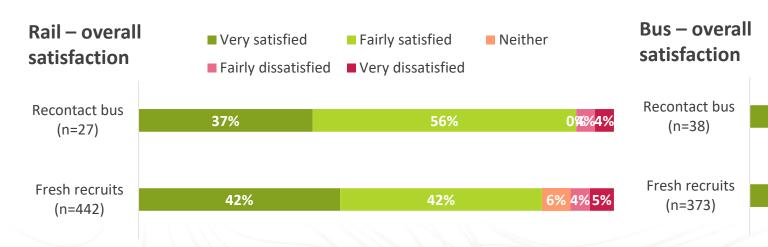
When recontacted, 27% filled in the survey.

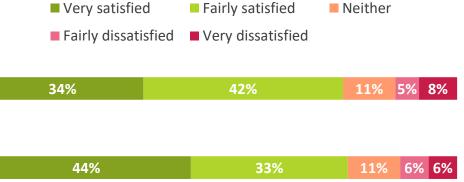
65



145 invitations for upcoming bus journeys 100 invitations for upcoming train journeys

When we compare their satisfaction for the second journey with the overall satisfaction all other completes it appears they are more satisfied overall although less likely to be very satisfied. The data below is just an indication as base sizes are very small.







What we found 20% of all respondents qualified for a recontact (when making another journey in the near future) and agreed to be recontacted. When recontacted, 27% filled in the survey. When comparing their satisfaction for the second journey with the overall satisfaction of all other respondents it appears they are more satisfied overall although less likely to be very satisfied.

Implication:

Although this could possibly be a boost for a large scale survey, with a relatively high response rate, it would be quite complex to set up in order to retain control over the sample. Instead, this experiment has re-confirmed that some passengers are willing to give further feedback, and so we can make use of this outside of the core bus/rail experience tracker, via the Transport User Panel for example.







Additional learnings outside the data scope





Additional learnings for future surveys/ 1

Outside the data presented earlier in this report there were some additional learnings based on processes and interviewer feedback



- **Offline option for interviewers:** The f2f recruitment with a tablet during this project relied on a 4G connection being available where recruitment took place. It will be necessary to have an offline option for when reception is not great and to avoid any issues while recruiting e.g. with the live script or the server.
- **2. GPS tracking:** This was initially included to identify interviewers' exact location to understand where respondents where recruited. While this is useful to have, it takes up a substantial amount of time to convert the GPS coordinates to actual locations. If Transport Focus wants to track detailed recruitment rates, a more sophisticated or paid-for option might be more useful. Or the interviewer needs to enter the exact location (which would impact on productivity).
- 3. Face coverings: Interviewers did not feel that these made a difference. On one hand they showed that interviewers cared about the people they spoke too, on the other hand masks made it harder to understand interviewers (particularly for those hard of hearing) and without masks people could see interviewers' facial expressions more clearly, like smiling, which made it easier to engage and reassure people. As no real impact was observed throughout this fieldwork, there is no need to mandate interviewers to wear face coverings in future surveys.



Interviewer safety: In the dark (early morning or in the evening) interviewers did not feel particularly safe in some bus locations, especially around bus stops. This was mainly in Colchester, Salisbury, Piccadilly Gardens in Manchester. This is an element to keep in mind for future surveys if interviewers are asked to recruit at bus stops/station.



People in a rush: Interviewers felt that these were easier to catch with a paper questionnaire or a QR code on a postcard/leaflet. In future surveys, if paper is restricted or removed completely it is very important to have a postcard/leaflet for interviewers to hand out to passengers in a hurry.







Additional learnings for future surveys/ 2

Outside the data presented earlier in this report there were some additional learnings based on processes and interviewer feedback



- 6. Where to go?: Ideally interviewers would like maps of where specifically they are expected to go (relates more to bus locations)
- . **High viz jackets:** These are seen as helpful since they make recruitment more official and genuine
- 3. Details to be entered for recruitment screener: It Would save time if it can be avoided having to re-enter some of these details for each person approached has it takes time and will impact productivity



- 7. Transport Focus name: People respond to this, so it would be helpful to feature it as prominently as possible
- People made the point that nothing gets done as a result of them completing the survey it might help to include a link to previous reports or to something else that shows action is taken so that interviewers can have this readily available when recruiting e.g. in the invitation
- 11. QR code on paper: The QR code on the tablet can be too big to scan or is not picked up when the sun is too bright which makes it imperative to have a QR code in print





Key differences between bus and train surveys and recommendations for future surveys





What are the key differences observed between the bus and train surveys?

Across the entire fieldwork

	Rail	Bus
Footfall	Generally a little bit higher (but we have targeted mainly A and B stations)	Generally lower than rail, but we did not run out of respondents to approach (this might be different in rural areas)
Recruitment	On average per 3 hour shift: 35 recruits. If the train station is too busy, recruitment will not be as productive	On average per 3 hour shift: 30 recruits. The busier the bus stop/station is, the more passengers are recruited
Completes	26% response rate (when pushed for online completion) – 9 completes per 3 hour shift	20% response rate (when pushed for online completion) – 6 completes per 3 hour shift
Methods	50% are recruited via QR then email at 35%	QR and email record the highest preference but SMS and paper are still important and make up a quarter of all recruits
		The paper option is much more likely to attract older bus users whereas QR code is popular amongst younger bus users
Demographics	The push for online in phase 2 resulted in a considerably younger sample.	Similarly QR code generates a greater share of commuters whilst these are less likely to complete paper questionnaires
		Social grade E (which includes pensioners) is most prevalent in paper but also comes through via other methods.



What are the key differences observed between the bus and train surveys?

Across the entire fieldwork period

	Rail	Bus
Impact of the method of completion on the data	If QR was the <u>only</u> method of completion, it would produce different scores for overall satisfaction and value for money regardless of the demographics of the respondents	If SMS was the only method of completion, it would produce different scores for the satisfaction for bus driver and bus stop regardless of the demographics of the respondents

Rail passengers are more likely to drop out than bus users despite a slightly shorter questionnaire





Key take-outs for future RAIL surveys

Recruitment

- Face to face recruitment does (still) work. Recruitment at stations is successful
 and can be rolled out in future surveys; there is no need to recruit passengers
 elsewhere (i.e. town centres). Stations generate sufficient footfall for
 interviewers to recruit passengers (although one would need to test this in
 smaller stations).
- Recruiting for journeys made on the same day is the best time frame for journey recency, although it needs to be explained carefully to avoid respondent answering the survey before the journey starts. For journeys on the same day after recruitment, it will be helpful to add an interviewer instruction to inform the respondent that the survey should be filled in after the journey.
- Interviewers should be flexible in their approach to passengers, and conversational rather than simply reading out questions and statements, to aid recruitment rate.

Completion methods

- Pushing online is the right thing to do for various reasons including cost and respondent profile but it is important to keep a mix of methods from an inclusivity perspective. This means paper can be restricted in numbers and only made available for those who cannot take part online.
- CATI and the short link can probably be removed from future surveys as they
 generate almost no recruits. However CATI, might be better for those visually
 impaired.
- If the number of paper questionnaires is restricted, then ensure interviewers have printed QR codes that can be handed out to passengers in a hurry (likely to be commuters).

Questionnaire content

- Keep the overall satisfaction as a key metric with the traditional 5 point scale.
- Keep the value for money question as there is little difference to price paid and this is a metric that stakeholders are quite familiar with.
- Offer the short questionnaire, then ask if respondents want to continue with more questions. This will minimise drop outs and provide a larger sample for the long questionnaire.
- Keep both open ends as they generate somewhat different insight.
 Alternate on a least full approach so that respondents only answer one of the two.

Other recommendations

- Ensure the survey is mobile friendly as most online surveys are completed via a smartphone.
- Ensure the survey invitation, the introduction text and the reminders highlight the importance of passengers' feedback and how it will benefit them in the long run.
- Ensure the recruitment survey (for the interviewers) is available offline to avoid any issues when recruiting.





Key take-outs for future BUS surveys (where different to points made for rail)

Points from previous page equally relevant to bus surveys except for differences shown

Recruitment

Recruitment at major bus stops/station works. However, based on this project alone it is unknown how successful bus stop recruitment will be in smaller towns and the current approach might be restricted in delivering a representative view of all passengers (i.e. it might underrepresent users from smaller towns as the recruitment was focused on larger bus hubs areas).



Completion methods

Pushing for online completion is not an issue for most bus passengers – older passengers are however quite keen on answering using paper. Restricting the number of paper questionnaire is a good way to ensure it is only distributed to those that really need them and will help with the weighting efficiency as the age profile is more representative than traditionally.





Questions that remain outstanding





Summary of outstanding questions and how can they be answered? /1

Some questions remain outstanding but could be answered with some additional work



In this trial, productivity is lower than in historic surveys, but we have some evidence that it is possible to improve on it. There are a few things in this set up that could have impacted recruitment rates:

- 1. The location of the shifts. In this project we selected areas where we thought we will get the highest returns. How would a similar approach work in less populated areas?
- 2. Interviewers were asked not to aim for numbers, but rather spend time with the passengers to explain and understand which method of data collection they preferred. How productive would the shifts be, if interviewers were incentivised on the number of recruits and resultant completes?
- 3. The recruitment was done quickly after the restrictions on people movement was lifted and when most commuters were having flexibility to work from home. Is this the new normal, or would new fieldwork in the near future be more productive because there are more passengers to recruit?
- A. This may require a follow up project to assess full productivity in *this* project fieldworkers were not incentivised to get recruits or completes and contact time was considerably longer than during NRPS and BPS previously.





Summary of outstanding questions and how can they be answered? /1

Some questions remain outstanding but could be answered with some additional work

- 2
- Q. How would the approach work in less busy areas / on board buses if needed? What might be the impact of sampling mainly in busier stations / bus hubs? What assumptions, if any, can we make with regards to these?
- A. It might mean less representation of more rural passengers. But here, too, it might be worth testing the approach in less busy locations or on board buses to see how response rates fall out. Although it would seem likely that even in busier locations we will always catch respondents who come from more rural locations (e.g. on a day visit) this was not recorded this time around.
- 3
- Q. How representative is the sample we achieve of the universe? What are the implications for weighting, quotas, volume of paper questionnaires we print? Does it matter as long as the sample is consistent over time?
- A. To understand how representative the sample is of the universe, it requires up to date information on the profiles of passengers on both bus and rail -which could be gathered via an omnibus survey, ideally from a f2f omnibus (as face to face is the most inclusive method of data collection). At the time of reporting no f2f omnibuses are running in GB, with telephone being the most appropriate option. The omnibus data requirement is something to bear in mind for future surveys of this nature. The other questions are difficult to answer at the moment but it needs to be acknowledged that there could be implications for weighting, quotas and volume of questionnaires that need to be printed (as older passenger prefer this method) in future surveys and that consistency over time might make small sample skews acceptable.





Summary of outstanding questions and how can they be answered? /2

Some questions remain outstanding but could be answered with some additional work



- Q. How would uptake of the short link change if we used a more memorable URL?
- A. The short link in the current project was not easy to remember and it begs the question what impact a more memorable short link would have e.g. www. <u>TFpassengersurvey.com</u>. This can only be answered in a separate follow up project.



- Q. How do respondents interpret "journey", especially those that complete the survey before departure? Further clarity is required on that.
- A. The proportion of those completing the survey before the departure time they give in the survey is fairly small i.e. 10% of completes (train users only phase 2). It would be possible to recontact some of these respondents as long as they agreed to be recontacted, and explore the reasons for the earlier completion. We give a profile of the early completers earlier in this report.

We could also test out the different journey time frames, during a future survey, i.e. we allow people to answer about a journey they are making/about to make OR a journey they made earlier that day - and look at 1) the uptake and 2) the impact of this. Furthermore, we could test the wording of the survey ("please fill in this survey when you have finished this journey/ride on this train/bus/any other better term") or encourage people to complete the survey later — maybe by providing an email address or mobile number to send the survey out an hour or so later? This might lead to lower overall response rates but it will be worth finding out.



Appendix





Contacts for questions

Core team:



Alice Wells
Alice.Wells@bva-bdrc.com
0207 490 9130



Henry Clinton
Henry.Clinton@bva-bdrc.com
0207 490 9104



Thomas Folqué
Thomas.Folque@bva-bdrc.com
02974 909 139



Tim Sander
Tim.Sander@bva-bdrc.com
07989 165 658





Quality standards and other details (quant projects)

BVA BDRC is certified to ISO 20252 and 27001, the recognised international quality standards for market research and information security, thus the project has been carried out in accordance with these standards.

- Adherence to the standard is independently audited once per year.
- Where subcontractors are used by BVA BDRC, they are assessed to ensure any outsourced parts of the research are conducted in adherence to ISO 20252 and 27001.

Full methodological details relevant to the project, are available upon request.



