Your Bus Journey: Methodology refinement

Refining our proposed approach to capturing bus passengers' feedback

Summary of what we've learned about the methodology, and our next steps

June 2022

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Outline of this report

CAUTION:
Any data in this report which references passenger satisfaction with bus services are not based on a nationally representative sample of journeys, and responses were given in a trial of data collection approaches

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Executive summary

The Covid-19 pandemic forced the *Bus Passenger Survey* to halt from 2020, and since then the government has brought in changes to the way bus services are managed and evaluated. In light of all this, **Transport Focus has extensively reviewed and piloted possible approaches for re-establishing a robust, nationally-applicable measurement of bus passenger experience, with the intention of launching its new survey, *Your Bus Journey*, from late 2022.**

A large scale pilot conducted in Autumn 2021 resulted in a proposed new approach:

- Passengers recruited face to face at bus stops
- Most take part online, with paper forms available for those needing them
- Survey expected to be continuous throughout the year

As we prepare to tender a supplier contract, **a further, "refinement" pilot has been undertaken, with two main objectives:**

- To further understand some elements of the approach, especially how we sample at bus stops, and the implications of this
- To estimate the likely productivity of fieldwork, to facilitate budgeting and resource planning before setting up the live survey

This pilot study took place…

4 – 27 Mar 2022

Key findings from the refinement pilot:

- **Systematic sampling from a database of bus stops is possible,** and produces a good geographic coverage across a local authority area
- **Conducting fieldwork at individual bus stops did not work.** Instead, **recruiting at clusters of stops showed some merit** and we are now exploring this further
- There is no reliable and consistent source of passenger footfall at stops, meaning that **any sampling of stops or cluster-stops needs to use the frequency of services calling at them as a proxy for passenger footfall.** This proxy works up to a point, but is not perfect.
- We are therefore exploring ways to sample more effectively using the data available, but without further practical pilot work to test the cluster approach more fully, **we are still somewhat unclear on the relative productivity of this "off-bus" recruitment approach versus "on-bus".** Some further practical (fieldwork) trials may be useful before full launch of a live survey, and in the meantime **we will seek quotes for both methods from bidders when we issue the tender.**
- This pilot also generated some further more tactical and detailed learnings about the methodology, covered within this report

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Introduction

Introduction

Background

Transport Focus champions the needs of transport users in Great Britain, with an emphasis on evidence-based campaigning, gathered in part via well-respected primary research. A key example has included the Bus Passenger Survey (BPS), measuring satisfaction with representative samples of over 40,000 bus journeys annually.

While the BPS has been widely used across the bus industry, it had some acknowledged limitations, including: 1) it provided feedback at points in time rather than year-round or more frequently; 2) findings took time to be released (due to the method, and publication process), delaying the industry's response to results. There have been comprehensive reviews of and enhancements to the survey over the years; however – partly for data continuity, and partly because the reviews have not recommended major changes – the fundamentals of the surveys have largely remained.

In 2020, after passenger numbers were severely affected by Covid-19 (and face-to-face fieldwork suspended, then severely restricted), the BPS was cancelled altogether for Autumn 2020 and throughout 2021. During this time there have also been government-led changes to the way that bus services are managed and evaluated, which may have implications for the way that passenger feedback is used in future, and therefore the way it is collected.

While all of this necessitated a break in the continuity of BPS data, in the meantime Transport Focus has used 2020-22 to completely review and potentially update the way we measure passenger experience. We have reviewed possible future approaches to insight collection, including pilots of some options, all leading to the intended launch of a new survey programme, *Your Bus Journey.*

Our piloting work to date

Having trialled some ways of recruiting passengers to a survey which did not involve any face-to-face interaction, and confirming their limitations for our purposes – and as passenger footfall began to resume through 2021 – in Autumn 2021 we conducted a large scale pilot to test:

- The (renewed) potential for intercepting passengers face-to-face and in the moment of making a journey, to invite their feedback
- The potential for encouraging most respondents to take part online, for its time, cost and flexibility (as well as likely environmental) benefits.

This approach was found to be broadly successful, and will meet our objectives for collecting and measuring passenger experience. **Passengers were willing to engage with the fieldworkers, and most were directed to an online survey** which they completed very soon afterwards. A small proportion required a paper questionnaire option, and this is likely to be needed as an alternative to ensure surveys can be inclusive.

A full report on this previous trial is available.

Objectives for this pilot study

Our previous work in Autumn 2021 showed that, in principle, passengers can be recruited face to face at bus stops, from where most can be directed to an online survey which they will complete soon afterwards. This subsequent pilot built on this with three core objectives:

1. **Test a possible approach to sampling these bus stops in a systematic way**

   This put into practice a proposed sampling process which had been arrived at from a separate exercise which investigated possible data sources that could be used to generate a sampling frame, and considered some theoretical points around statistical suitability of sampling options*

2. **Understand the productivity of fieldwork based on this more systematic sample of bus stops**

   To check the viability of the approach (i.e. whether it would yield sufficient number of responses for a robust survey), and begin to facilitate an estimation of budget required to run this at scale and longer term, including with consideration for how productivity varies by time of day, region, type of stop (by relative footfall), etc.

   (For the Autumn 2021 study, a number of towns and cities were chosen, and the recruitment of bus passengers took place at central bus stop areas which were known to be busy. No specific systematic way of determining these locations was used in this earlier study)

3. **Test supplementary recruitment options**

   This was partly to validate the at-stop approach, and partly in anticipation of its likely limitations meaning we wished to explore some alternatives

   - *Recruiting on board buses: (i) as a comparison and validation of the at-stop recruitment, (ii) to cover routes likely to be excluded from the at-stop fieldwork*
   - *Recruiting passengers as they disembarked, to try and include a broader range of stops at which passengers had originally boarded*

We also tested a number of more tactical points of the methodology:

- Offering a take-away postcard showing a QR code, and shortening the URL – both developments on the survey access methods that we had tested previously
- Collecting email addresses within the survey itself from passengers who had not provided this at point of recruitment (to help with issuing reminders and for evaluating response effectiveness)
- Encouraging survey completion after the journey (we suspected that some passengers might do so during their journey, or even pre-boarding in the Autumn 2021 study)
- Understanding whether or not some people took part in the survey even when they may not have been able to make the journey by bus for any reason
- Testing a way of collecting demographic information for the passenger universe, which we anticipate needing in order to inform weighting

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The passenger experience findings are reported on separately; this report focusses on the key learnings about the methodology itself.
**This was work carried out by Dave Chilvers Associates to investigate the potential for sampling at bus stops. A separate report on this analysis is also available.*

Overview of the fieldwork

4 – 27 Mar 2022

Across all days of the week

Passengers recruited between 6am and 7pm

(With additional tests on later evening fieldwork)

Three local authority areas covered, providing a mix of:

- More rural, urban, suburban and metropolitan localities
- Areas which have traditionally been more and less responsive in other passenger surveys like BPS

Your Bus Journey is expected to survey passenger experience at the level of local authority areas (LAAs), as its base unit, hence using LAAs in this pilot as the starting point, rather than operators' business coverage areas, for example.

LAAs included in the survey were also chosen to allow direct comparison of fieldwork productivity with the BPS

Passengers recruited as they waited to board a bus, at bus stops and stations.

(Additional comparative tests conducted with disembarking passengers, and on board)

Eligible passengers invited to take part online, accessed by a choice of:

- Scanning a QR code at point of recruitment
- Providing an email address or mobile number in order to receive a link by email or SMS
- Taking down a short URL
- Taking away a postcard displaying the QR code and URL

Paper self-completion questionnaires offered for those who could not take part online.

267 fieldworker (recruitment) shifts completed

2,965 passengers recruited overall*

1,114 took part in the survey

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** Recruitment figures should be treated with some caution. We suspect that some fieldworkers may not have recorded all recruitment interactions fully (especially where a paper questionnaire was given out and there was less immediate and practical need to record the details of this). Recruitment may therefore have been a little higher than this.*

Overview of types of shift

267 fieldwork shifts were conducted in total during the pilot, split across a number of test approaches

"Core" pilot approach

123

Tiers 1-3

(High, medium and lower footfall, based on number of services calling at stop per week as a proxy for volume of passengers boarding)

Additional test cells

16

Tier 4

(very low service frequency)

18

"Out of hours"

(7-10pm)

14

"Disembarking"

(Passengers recruited as they got off a bus at individual stops, rather than as they waited to board)

76

On board

20

Bus stop clusters

Added later in the fieldwork period

Within this, 55 shifts were conducted on board a general sample of routes. These worked as an equivalent to the core at-stop sample (so included some of the same routes which may have been captured at stops), enabling comparison of productivity between the at-stop and on-board recruitment options

21 shifts were conducted on board routes likely to be excluded from the core sample. These were typically low frequency, often more rural or non-commercially run routes

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Overview of types of shift: by area

	Total	"Core" pilot approach	Additional test cells				
		Tiers 1-3	Tier 4	"Out of hours"	"Disembarking"	On board	Clusters
Greater Manchester	113	55	6	10	7	28	7
Bournemouth, Christchurch & Poole	93	40	6	7	7	26	7
Devon	61	28	4	1	-	22	6

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The sampling approach: at-stop recruitment

The process for sampling bus stops in the core tier 1-3 cells*

1. Establish a list of all bus stops within the local authority area (LAA)
2. Identify the number of individual bus services calling at each stop in a typical week, and stratify the list into tiers based on frequency of service calls. Informed by analysis conducted prior to this pilot, these tiers were defined as:
   - High – collectively, these stops serve 50% of all bus vehicle journeys in the LAA
   - Medium – together with "high" or tier 1, serving 67%
   - Low – 80%
   - Very low – 100%
3. For the core sample, which we determined for this pilot would cover tiers 1-3: remove tier 4
4. Select bus stops from the remaining list, with probability proportional to the number of service calls (PPS). Each selected stop would thus form the location for a fieldworker shift

   In practice, the PPS selection was conducted within each of tiers 1-3 separately, producing a set number of shifts within each tier to enable comparison of response (otherwise in a natural selection there would have been more shifts selected at tier 1 stops, and too few for analysis in the other tiers)
5. Review selected stops for geographical coverage, with some minor manual adjustments made to ensure that key towns or other areas within each LAA were represented
6. Assign a day of the week and time of day to each selected stop, covering all days of the week equally, and an even split of 3-hour segments between 7am and 7pm. Days and times were assigned at random within each tier separately to ensure similar coverage for all tiers
7. Review time and day assignments in light of an analysis of when services called at the stops. This lead to some minor manual adjustments to times or days where it was clear that few or no passengers could be intercepted
8. Assign a fieldwork date to each selected stop.

This process provided a reasonable geographic spread of stops in each area, and steps 6-8 generated a fieldwork plan.

Other at-stop cells used the same overall principles:

- For shifts in tier 4, steps 4-8 were followed using the list of tier 4 stops
- For "disembarking" shifts, steps 4-8 were followed using tiers 1-3 stops
- For "out of hours" shifts, steps 4-8 were followed using tiers 1-3 stops, but with all selections assigned as 7-10pm
- For "out of hours" and "disembarking" shifts, checks were also made that these selections did not duplicate any of the stops selected in the core sample, to give us the broadest coverage across the study as a whole.

Note: the final fieldwork varied a little from this original selection process. This was due to limited fieldworker resource, meaning some planned shifts could not go ahead in practice. This mainly affected shifts in Devon.

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** See notes page for further detail on each of these steps, including how information on stops and number of service calls was sourced for the purposes of this pilot study*

The sampling approach: on-board recruitment

A pragmatic approach was taken to produce the sample and fieldwork plan for the on-board test cells

For the "general" on-board cell:

1. The fieldwork plans used for each LAA in the BPS Autumn 2019 were used as a sample frame, from which a subset of shifts was taken, balancing across times of day and days of the week. This would produce a reasonably comparable sample against 2019 (since, although not a main objective for this survey, we felt it would be valuable to see how productivity of on-board recruitment compared to the BPS).
2. As per the original BPS requirements, the details for each shift in this list included specific fieldworker instructions for which bus to board, where and when, how many return journeys to make, and where to get off bus if it crossed an authority border. These were updated where needed to reflect current timetables for March 2022.
3. Again, the resulting fieldwork plan was reviewed and manually adjusted slightly to ensure a reasonably good geographic coverage

For the "low-patronage" on-board cell:

1. A list was made of all routes in each LAA
2. Of these, low patronage routes were identified as those which do not call at any tier 1 stops, and with a minimum of 50% of their calling points being in tier 4*

   This approach was used for B/C/P and Devon, but did not work well for Manchester, due to the volume of (what appeared to be) school buses within this definition of "low patronage". These routes typically travelled in one direction in the morning, and the other direction in the afternoon, making a return trip impossible within a shift (and we would avoid school buses regardless as our participants need to be 16 or over). After some trial and error, the final approach for the low patronage cell in Manchester was:

   - *To use the common definition of low patronage for the majority of shifts (6)*
   - *For the remainder (3), to use an alternative definition, where no more than 10% of a route's calling points were in tier 1, and at least 50% were in tier 3 or 4*
3. The reduced list containing only low patronage routes was then randomised. Working from the top of this randomised list, published timetables were used to manually identify return trips that could be made within a roughly 3-hour period (the length of a typical fieldworker shift), ensuring that the resulting fieldwork plan covered all days of the week and times of day between approximately 7am-7pm. Some routes in the list were inevitably rejected at this point, where return journeys were not possible within this period.

If on-board recruitment is used in our future survey, a systematic sampling approach will be needed to make this scalable

For a general sample, this could be done similarly to BPS. If on-board recruitment is used to fill gaps (i.e. to cover lower patronage routes in more remote areas which could be overlooked in an at-stop approach), a systematic way of defining these routes will need to be found that is consistent across authority areas.

As part of this, it would be worthwhile to find a way to identify school services in particular, so they can be excluded from the process at the outset.

We do not see a way to reduce the manual element of identifying practical return trips within a shift. This was partly automated in the BPS, but both then and here, manual consultation of timetables was required to work out worthwhile return trips for fieldworkers in practice, on the lower frequency routes. This is time consuming and inevitably introduces some subjectivity, and so will be a key consideration for the viability of including on-board recruitment in the new passenger survey programme.

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** Tier 1 stops were those which collectively serve 50% of all service calls in the LAA. Tier 4 stops were those which collectively serve up to 80%*

The arguments for moving to at-stop rather than on-board recruitment

Moving to at-stop rather than on-board recruitment:
Rationale and implications for sample profile

Recruiting passengers at stops rather than on board should allow us to cover a wider set of routes and individual services

Since most stops serve multiple routes, fieldworkers have the opportunity to speak to users of all of them. Where a route calls several times during a typical 3-hour shift, the fieldworker also has the opportunity to speak to users of each of them. This is in contrast to on-board recruitment as in the BPS where a fieldworker would spend all of their time on one single route, typically covering 2-4 individual timetabled services on that route depending how many return trips they were able to make in the time.

In theory this means that the survey can represent a wider set of routes in a LAA, meaning a wider representation of journey experiences. The sample is also less clustered in terms of any disruption: For example if a bus breaks down, everyone on board – and their survey feedback – is affected. By contrast where congestion affects all buses in an area, everyone using them is affected, but their experience will vary – with different drivers, different atmospheres on board from other passengers, and different environments (crowding, temperature, etc.). So recruiting across this range of buses gives a better representation of real, varied experiences.

In practice, these benefits were not realised in this pilot because too few people were present at the selected stops. However, the principle will work if the approach can be made more productive.

…..but it does mean we cover a narrower set of start (or end) locations

Depending on the version of the survey they completed, passengers were asked about the type of location of their starting stop (city centre, suburb, village, etc.), and about the presence of stop facilities such as lighting, shelter, seating and electronic real time information (RTI). In both of these questions, the nature and features of the origin stop were fairly similar among those recruited in our core set of individual tier 1-3 stops compared to those recruited in the general on board sample. They were quite different in the more extreme versions of this however, i.e. in the "cluster" and very low frequency on-board shifts.

For instance, around half of those in the on-board low frequency cell said their journey started in a village or suburb, whereas over half of those in the cluster cell started their journey at a city or town centre. Similarly, among cluster cell recruits, around three quarters had shelter and seating, and around half saw electronic RTI at the stop and had lighting. Among those recruited on board low patronage routes, only around a quarter benefited from RTI at their origin stop, and fewer than a fifth had lighting.

All of this means that feedback about bus stops will be more limited to busier areas, to stops with additional facilities, and those near to other services like shops, catering, and even staff (for example at bus stations, which are likely to be more frequently selected than quieter stops with fewer service callings)

On balance, the switch from a sample clustered by journey to one clustered by stop and location is preferable

We know from previous work that the on-board experience has the greater influence on overall journey experience.

There is a potential argument that this switch can change the nature of satisfaction ratings and other results; this concern is addressed on page 34.

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Moving to at-stop rather than on-board recruitment:
Rationale and implications for the sampling process

The process of selecting stops is more systematic than the process of selecting on-board journeys as in the Bus Passenger Survey

Setting up fieldwork for on-board recruitment (in the BPS and for on-board tests in this pilot) involved selecting a representative sample of all bus vehicle journeys, and then checking and defining return trips for fieldworkers on each selected service, within a reasonable shift duration. The first part of this can be systematised, and much of the second part can be automated with a programmed script, but some manual work was almost always needed.

Selecting stops, which requires no additional journey working-out, is therefore much less time consuming and inevitably involves less subjectivity

At-stop fieldwork is less affected by service disruption (or even minor timetable deviation) than doing so on board, with advantages for both the sampling process and practical fieldwork:

While there were occasions when fieldworkers could not access the stop selected for their shift due to stop or road closure,or where a bus stop was moved temporarily, they were usually able to walk to an alternative, and this disruption was much less than when a bus selected for on-board recruitment was delayed, cancelled or stuck in traffic for example (with or without the fieldworker on it). This means less un-productive time spent during fieldwork – in addition to removing the un-productive time spent at the turn-around point when on-board fieldworkers made return trips.

This also means the survey can include a broader range of passenger experience, including for those who have to wait a very bng time, or who are unable to board a very crowded bus and must wait for another. This is a contrast to using on-board recruitment, where all passengers have at least managed to begin their bus journey.

The same benefits also come in relation to seasonal timetable changes. We intend for *Your Bus Journey* to run continuously through the year, but it is likely that the sampling work would take place only at intervals (possibly only annually, with checks each month for example for any updates affecting that month). A sample of stops is likely to be more stable than a sample of services with return trip itineraries.

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Moving to at-stop rather than on-board recruitment:
Rationale and implications for fieldwork practicalities

Conducting the recruitment work at stops also carries a lower risk that fieldworkers will be denied access to the location

In the BPS, bus drivers sometimes prevented fieldworkers from boarding buses if they were not aware of the survey. For at-stop fieldwork, formal permission will sometimes be required (for example to be on site at bus stations), but we anticipate this being easier to arrange since there are naturally fewer points of contact than there are when planning fieldwork across multiple operators, with disparate depots and driver staff.

…or that drivers may behave differently when a fieldworker is present

Results from previous bus passenger research shows that drivers' attitude, both towards passengers, and in relation to the driving and other road users, has a big influence on overall journey satisfaction – often making or breaking the experience. It is not necessarily common, but there is potential for drivers to be more friendly while they know they are being evaluated via the survey, which might therefore bring bias to the results.

Fieldworkers may, however, have limited time to engage with potential respondents when intercepting them at stops

Passengers are something of a captive audience when on board a bus (providing a fieldworker can reach them, which is dependent on whether it is practical for the fieldworker to move around either for safety reasons or due to crowding). Feedback from some fieldworkers in this pilot highlighted that some passengers arrive at their stop only momentarily before the bus is due – either because they know the timetable or because the service is frequent. This will mean that the faster options for requirement (especially scanning a QR code or taking away a QR code card to scan) will be important.

There may be both benefits and drawbacks for the safety of fieldworkers

We know that in the BPS it was sometimes difficult for fieldworkers to speak to passengers, because they needed to sit while the bus was moving for safety reasons. We did also hear of isolated accidents where fieldworkers lost their balance. At-stop recruitment overcomes this issue, but brings the potential for fieldworkers to be out in the open air in any weather, and sometimes in remote or less safe areas – which is even more of a concern where shifts happen late in the evening in particular.

These issues will need to be considered by the survey contractor, and we will seek proposals for mitigating risks when planning and budgeting for the live programme.

Being in the open air at stops will also have potential benefits should there be any further changes to societal rules regarding Covid-19 in the future – though any face to face method could also be at risk if severe restrictions were to be introduced again. For the time being we need to assume that this will not happen.

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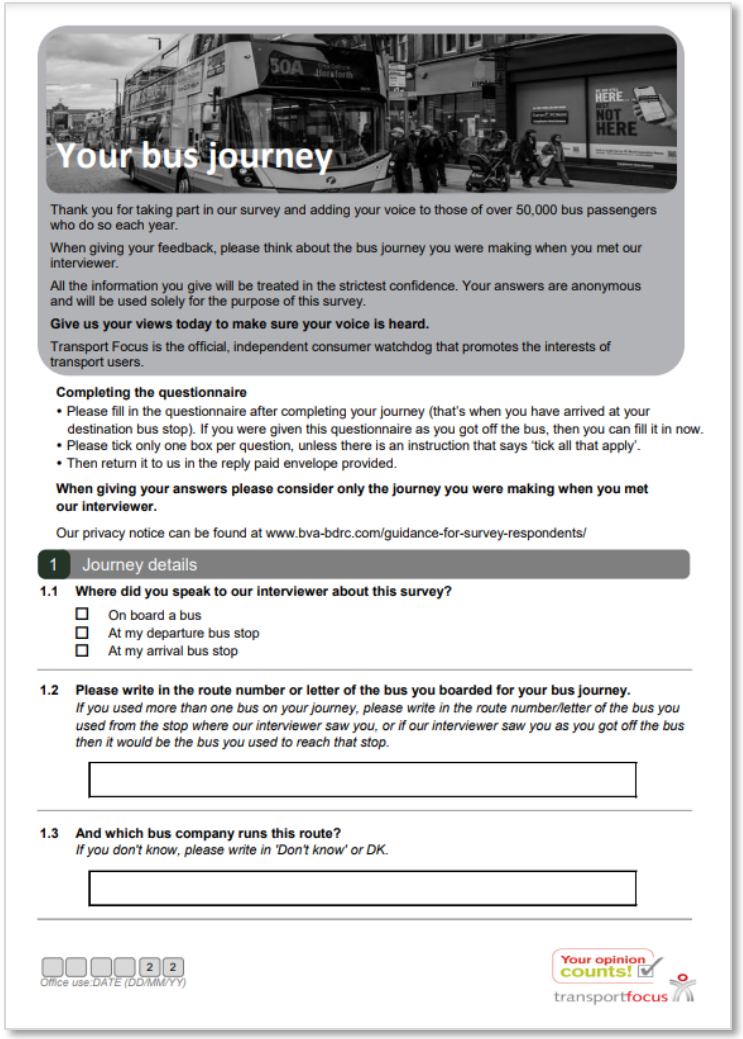
The questionnaire

The core questionnaire *(page 1)*



Your bus journey

Thank you for taking part in our survey and adding your voice to those of over 50,000 bus passengers who do so each year.

When giving your feedback, please think about the bus journey you were making when you met our interviewer.

All the information you give will be treated in the strictest confidence. Your answers are anonymous and will be used solely for the purpose of this survey.

Give us your views today to make sure your voice is heard.

Transport Focus is the official, independent consumer watchdog that promotes the interests of transport users.

Completing the questionnaire

- Please fill in the questionnaire after completing your journey (that's when you have arrived at your destination bus stop). If you were given this questionnaire as you got off the bus, then you can fill it in now.
- Please tick only one box per question, unless there is an instruction that says 'tick all that apply'.
- Then return it to us in the reply paid envelope provided.

When giving your answers please consider only the journey you were making when you met our interviewer.

Our privacy notice can be found at www.bva-bdrc.com/guidance-for-survey-respondents/

1 Journey details

1.1 Where did you speak to our interviewer about this survey?

- ☐ On board a bus
- ☐ At my departure bus stop
- ☐ At my arrival bus stop

1.2 Please write in the route number or letter of the bus you boarded for your bus journey.
If you used more than one bus on your journey, please write in the route number/letter of the bus you used from the stop where our interviewer saw you, or if our interviewer saw you as you got off the bus then it would be the bus you used to reach that stop.

1.3 And which bus company runs this route?
If you don't know, please write in 'Don't know' or DK.

☐☐☐☐22
Office use:DATE (DD/MM/YY)

Your opinion counts!
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The core questionnaire collected key journey details, headline experience questions (overall journey satisfaction and other measures known to be important as part of this), and passenger details such as demographics.

Shown here is the paper version of the questionnaire, which was almost identical in content to the online version.

After completing the core set, respondents were invited to continue with some additional questions. In this pilot, those willing to continue were served a longer questionnaire, which was either a "BPS" equivalent, or an alternative long version which included most of the same questions as the BPS, plus some others.

For online respondents, the core questions took just under 8 minutes on average*. The longer versions took just under 18 minutes on average*.

Full copies of all questionnaire versions, including recruitment screeners, are available.

**excludes outliers where a respondent spent more than two hours on the survey, but does include any respondent who may have dipped in and out of the survey over the course of up to two hours*

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The core questionnaire *(page 2-4)*

1.4 Please confirm the time you boarded the bus

Please use the 24hr clock e.g. 5.25pm is 17:25
Fill in your time of boarding in the boxes as shown

Hours: ☐☐ Minutes: ☐☐

Thanks. Please answer the remaining questions for the bus journey you have just described.

1.5 In which region did you make this journey?

- ☐ North West – Greater Manchester
- ☐ North West – somewhere else
- ☐ South West – Devon
- ☐ South West – Bournemouth, Christchurch & Poole
- ☐ South West – somewhere else
- ☐ Another region

1.6 What was the main purpose of this bus journey?

- ☐ Going to or from work
- ☐ Going to or from education (e.g. college, school)
- ☐ Going to or from a medical or other appointment
- ☐ Travelling for business (excluding commuting)
- ☐ A shopping trip
- ☐ Visiting friends or relatives
- ☐ A leisure trip (e.g a. day out)
- ☐ Something else

1.7 What type of ticket did you use for this bus journey?

- ☐ A free pass or free journey
- ☐ A paid-for ticket
- ☐ Something else
- ☐ Don't know

2 Your journey experience

2.1 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 about this journey.

Please write in:

2.2 How would you rate each of the following at the bus stop where you caught the bus?

	Very good	Fairly good	Neither good nor poor	Fairly poor	Very poor	Don't know/no opinion
The length of time you had to wait for the bus	☐	☐	☐	☐	☐	☐
The punctuality of the bus (arriving on time)	☐	☐	☐	☐	☐	☐

2.3 Thinking about whilst you were on the bus, please indicate how you would rate the following...?

	Very good	Fairly good	Neither good nor poor	Fairly poor	Very poor	Don't know/no opinion
The cleanliness and condition of the inside of the bus	☐	☐	☐	☐	☐	☐
The availability of seating or space to stand	☐	☐	☐	☐	☐	☐
Sufficient ventilation on board the bus	☐	☐	☐	☐	☐	☐

2.4 How satisfied were you with the driver of the bus?

- ☐ Very satisfied
- ☐ Fairly satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Fairly dissatisfied
- ☐ Very dissatisfied
- ☐ Don't know/no opinion

2.5 Overall, taking everything into account from the start to the end, how satisfied were you with your bus journey?

- ☐ Very satisfied
- ☐ Fairly satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Fairly dissatisfied
- ☐ Very dissatisfied
- ☐ Don't know/no opinion

2.6 How satisfied were you with the value for money of your journey?

- ☐ Very satisfied
- ☐ Fairly satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Fairly dissatisfied
- ☐ Very dissatisfied
- ☐ Don't know/ no opinion

3 About you

In this final section we ask for some information about you. Any information you give us here is used for research purposes only and not to identify any particular individual. You are also free to decide whether you want to give us this information or not.
We ask these questions so that we can understand how different passengers' experiences vary, so, for example, what do younger passengers think compared to those who are middle-aged or of retirement age.

3.1 How would you describe yourself?

- ☐ Female
- ☐ Male
- ☐ Prefer to self-describe

Please write in

- ☐ Prefer not to say

3.2 Please tell us your age.

☐☐

- ☐ Prefer not to say

3.3 In terms of having a car to drive, which of the following applies?

- ☐ I have a car available and don't mind driving
- ☐ I have a car available but prefer not to drive
- ☐ I don't have a car available
- ☐ I don't drive

3.4 How often are you able to ask someone else to drive you for local journeys?

- ☐ All or most of the time
- ☐ Some of the time
- ☐ I don't have anybody I can ask
- ☐ Not relevant to me

3.5 We would like to ask if you have any disability. This is to help us better understand the needs you might have. If you do not consent to us collecting this information, please tick the last box below.

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

Please tick all that apply

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

Please write in:

- ☐ Prefer not to say

3.6 We would like to ask your ethnic background. If you do not consent to us collecting this information, please tick the last box below.

- ☐ White
- ☐ Mixed/multiple ethnic groups
- ☐ Asian or Asian British
- ☐ Black, African/Caribbean or Black British
- ☐ Chinese
- ☐ Arab
- ☐ Other ethnic group
- ☐ Prefer not to say

3.7 And finally, to help us get a better picture of bus services at a local level, it would be helpful if you could provide us with your home postcode.

If you provide it, this will be used to help understand bus usage and make improvements locally. Your postcode will not be used to identify you personally and will only be used for research purposes.

Please write your home postcode here:

☐☐☐☐ ☐☐☐

THANK YOU FOR COMPLETING THIS SURVEY AND SHARING YOUR OPINIONS WITH US SO YOUR VOICE IS HEARD

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Key findings on the methodology

What we heard from passengers about their bus journey experiences is reported on separately

Sampling and recruitment at stops in practice

Findings: 1 / 13

Many stops selected for recruitment had very few passengers using them, so fieldwork was unproductive

Key evidence from this pilot:

Many fieldworkers in this pilot reported working at stops where very few – and sometimes no – passengers boarded during the shift.

This varied a little by area and by tier, with higher tier stops yielding more recruits, but these still compared very poorly to BPS in terms of productivity.

Also see notes page for more detail and discussion

Fieldwork productivity: core approach (tier 1-3 stops)

	Avg point-in-time footfall*	Avg no. recruits per shift	Avg no. complete surveys per shift	Conversion rate (completes/recruits)
Manchester	3.8	4.7	1.1	24%
B/C/P	14.6	7.4	2.8	38%
Devon	0.9	4.8	1.5	32%
Total	**8.3**	**5.6**	**1.8**	**32%**
*BPS***	*NA*	*44*	*10.8*	*25%*

Key issues we identified included that:

- Many of the stops selected through our sampling process did indeed serve many bus vehicle journeys, but they may not have been the points at which most *passengers* board – with a majority of passengers all boarding at one or two key calling points towards either end of the route
- While efforts were made to avoid quieter <u>times</u> for each selected stop, because we aimed to achieve this systematically rather than with more manual (and therefore subjective) comparisons to timetables, fieldwork was still inadvertently timed to cover quieter times for some stops.

Recruiting at individual stops, using the sampling approach as in this pilot, is not viable for our future, main bus passenger experience surveys. Conversion from recruitment to actual participation is good, but we need a better way of intercepting passengers in the first place.

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** Fieldworkers paused for five minutes at a pre-determined time during each shift to count the number of people who might potentially be recruited at that point in time. This gives us a snapshot of footfall, building to a pattern of typical footfall across the fieldwork areas as a whole*

*** Averages across G. Manchester, Bournemouth & Poole and Devon surveys in BPS Autumn 2019*

Findings: 2 / 13

Other tests on at-stop fieldwork also confirmed that this way of sampling and recruiting passengers at individual stops was very unproductive

Key evidence from this pilot:

- Given the low yield from tiers 1-3 stops, it was unsurprising that even fewer passengers could be recruited from stops with "very low" service calling frequency – as shown in the table here.

Fieldwork productivity: at-stop recruitment tests

Test cell	Avg point-in-time footfall*	Avg no. recruits per shift	Avg no. complete surveys per shift	Conversion rate (completes/recruits)
"Core" tiers 1-3	8.3	5.6	1.8	32%
Tier 4 (v. low freq.)	2.1	1.4	0.4	32%
Disembarking	3.8	4.2	0.9	22%
Out of hours	4.3	4.6	1.5	33%

- Fieldwork targeting passengers as the were getting off buses was also unproductive. As suspected, very few disembarking passengers were willing to stop and interact with fieldworkers, unlike those waiting for a bus who were a more captive audience. Even when recruited, these passengers were also less likely than boarding passengers to go on and complete the questionnaire. (Note: having confirmed this hypothesis very quickly, some of the "disembarking" test shifts were changed to allow fieldworkers the option to approach both waiting and alighting passengers. This did help productivity slightly.)
- Shifts conducted later in the evening (7-10pm) were a little less productive than the average for the core set in tiers 1-3 (as we would expect), but were much more consistent with the core than the other test cells. Passengers travelling at these times will need to be included in our future surveys, so it is encouraging that this test cell was not so different, implying that if we can find a better way to intercept passengers in general, then similarly "out of hours" journeys should be possible to cover.

Findings: 3 / 13

On-board shifts were more productive than those taking place at bus stops – but were still less productive than in the BPS

Key evidence from this pilot:

As shown in the table here, on board recruitment yielded around five times as many completed questionnaires per shift compared to the at-stop recruitment – a very significant difference.

This was fewer than had previously been achieved in the BPS, however – and this varied by area, with the difference being an average of two fewer than BPS in Manchester, and an average of nearly nine fewer in Devon for example.

Fieldwork productivity: on board and at-stop recruitment comparison

Test cell	Avg point-in-time footfall*	Avg no. recruits per shift	Avg no. complete surveys per shift	Conversion rate (completes/recruits)
"Core" tiers 1-3	8.3	5.6	1.8	32%
On board (main: as comparison to core and BPS)	**11.2**	**22.5**	**9.4**	**42%**
*BPS***	*NA*	*44*	*10.8*	*25%*

Although the overall number of shifts is small at area level here – and indeed there are more variations by shift – the overall trend perhaps reflects the lower patronage on buses nationally since Covid, and may also indicate less willingness to take part in research than we have seen in the past (which we suspect is also an ongoing trend more generally).

With such a difference in productivity of at-stop recruitment, we need to very seriously consider whether or not it is sensible to switch to this from on-board sampling for our future bus passenger surveys, despite the decrease in on-board productivity compared to BPS.

We need to take this information together with other evidence about the value of at-stop recruitment, as well as looking at other potential ways of sampling at stops….

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Findings: 4 / 13

On-board shifts deliberately targeted at lower patronage routes showed some potential to broaden the sample of journeys, but were inevitably less productive, as well as problematic to sample in the first place

21 shifts took place on board buses, on a sample of routes which did not feature at any of the stops in the core at-stop fieldwork. Our hypothesis was that some on-board fieldwork might be needed to supplement the core sample, which might otherwise have a bias towards routes serving busier areas – and meaning it would also bias against some types of passenger journeys, especially those made with publicly or community funded, non-commercial routes.

Key findings from this pilot:

- As outlined earlier, a large proportion of recruits from these shifts began their journey in villages or suburbs rather than urban centres, and benefited from fewer at-stop facilities. This was different from other sample cells, meaning that these shifts helped to represent a broader at-stop experience.
- As expected, these shifts were indeed less productive than other on-board shifts that covered a more general sample of routes – but were still more productive overall than shifts at individual stops
- However, since these routes were by nature infrequent:
  1. some were still impractical to cover in a fieldworker shift
  2. the selection process was manual, thus fairly subjective and time consuming

Fieldwork productivity: on board recruitment tests

Test cell	Avg point-in-time footfall*	Avg no. recruits per shift	Avg no. complete surveys / shift	Conversion (completes / recruits)
"Core" tiers 1-3	8.3	5.6	1.8	32%
On board (main)	11.2	22.5	9.4	42%
On board (low patronage routes)	**7.5**	**15.7**	**6.1**	**39%**
*BPS***	*NA*	*44*	*10.8*	*25%*

The principle of filling the potential gap in the sample for lower patronage routes is the right ambition, and it may be acceptable for fieldwork to yield smaller volumes in these cases. However, we have concerns that on-board recruitment like this does not adequately fulfil this need, and that what it does achieve cannot be sampled systematically enough to be scalable (given the time involved) or sufficiently representative or objective.

This can be explored further as we proceed to a live research programme, but we may also need to consider other options for capturing feedback on these types of passenger journeys, perhaps via separate, ad hoc, targeted research using more appropriate methods for this audience.

Findings: 5 / 13

Recruiting passengers at "clusters" of bus stops proved more effective overall

Based on the early patterns for relatively low recruitment productivity at individual bus stops, we introduced another test option, which involved recruiting passengers at clusters of bus stops. These were primarily places like bus stations/interchanges or major high streets, where fieldworkers were given a small area within which were several stops which they could recruit from. All clusters had at least four bus stops within 200 metres of each other.

During "cluster" shifts, fieldworkers also approached passengers as they waited to board or as they disembarked from buses, to maximise the number of potential participants – though in practice most of the people they recruited were waiting to board.

Key evidence from this pilot:

This approach proved to be much more productive than the individual bus stop one, provided the cluster of bus stops was in a busy area. Productivity at these clusters of stops was closer to that achieved in the "main" on board shifts:

Fieldwork productivity: clusters vs. other shift types

Test cell	Avg point-in-time footfall*	Avg no. recruits per shift	Avg no. complete surveys / shift	Conversion (completes / recruits)
"Core" tiers 1-3	8.3	5.6	1.8	32%
On board (main)	11.2	22.5	9.4	42%
Clusters	**22.4**	**27.3**	**7.0**	**26%**
*BPS***	*NA*	*44*	*10.8*	*25%*

Recruiting at stop clusters yielded passenger feedback from a wider selection of bus routes than on-bus recruitment →

Route mix: clusters vs. other shift types

Test cell	Avg. no. different routes per shift
"Core" tiers 1-3	1
On board (main)	1.3*
Clusters	**3.1**

…albeit from a smaller selection again, of different types of bus stops (i.e. dominated by bus stations and larger town centre hub areas). We saw that cluster shifts yielded more responses from passengers who had benefited from facilities like shelters, lighting and RTI, than those recruited from individual stops which included a broader range of locations.

We will further investigate ways to define and then systematically sample clusters of bus stops in each local area, as well as further explore their potential for productive recruitment fieldwork

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** In a few cases, different respondents named different routes for on-board shifts which in theory should not be possible. However, there were some variations in the way respondents described or named their route, as well as a small number of shifts where fieldworkers did indeed board different services for their outward and return trips. This was more often the case for low-frequency routes where it was necessary to combine them into a shift to be practical, but sometimes also the case where a service uses a slightly different name in each direction (e.g. the number 4A in one direction and the 4B in the reverse).*

Findings: 6 / 13

Despite seeing low footfall overall at individual stops, our stratification of stops using number of services as a proxy for passenger usage did broadly reflect their relative levels of passenger footfall in practice

Key evidence from this pilot:

Stops serving more individual bus services yielded more recruits into the survey on average, and ultimately more survey responses.

In particular, tier 1 stops (those with the highest frequency of services) had higher footfall according to fieldworker spot-counts, and yielded more than double the average number of responses for stops serving fewer bus vehicle journeys

Fieldwork productivity: core approach (tier 1-3 stops)

Tier	Average point-in-time footfall*	Average no. recruits per shift	Average no. completed surveys per shift
1	10.0	8.1	2.3
2	3.7	3.3	1.5
3	4.5	4.0	1.3
4	2.1	1.4	0.4
Clusters	*22.4*	*27.3*	*7.0*

While recruitment at individual bus stops did not work well in this pilot, the principle of using number of services calling at stops as a basis to identify busier sampling points still looks to have some merit (in the absence of actual passenger footfall data which to date we do not have a reliable source for, or cost effective way of collecting). Further work will be conducted to explore the potential of sampling clusters of bus stops, with clusters stratified and selected on the basis of service frequency.

** Fieldworkers paused for five minutes at a pre-determined time during each shift to count the number of people who might potentially be approached for recruitment at that point in time. This gives us a snapshot of footfall, building to a pattern of typical footfall across the fieldwork areas as a whole*

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Who took part in the survey, and how they accessed it

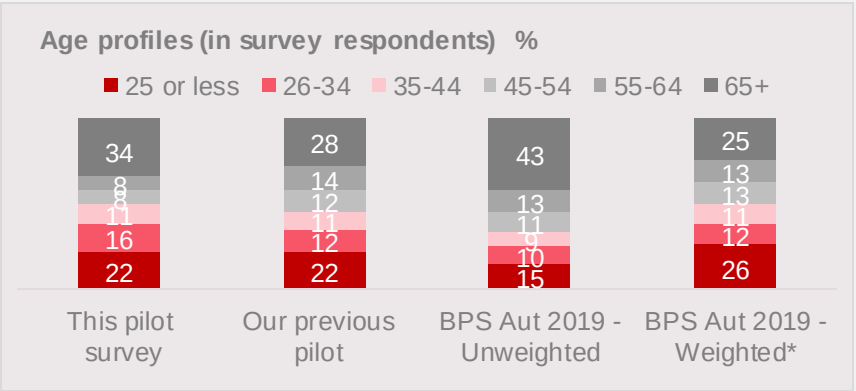
Findings: 7 / 13

Like our previous test on face to face recruitment with a steer to online completion, the approach generated response from a good mix of passengers, including groups that had been harder to engage with the BPS

Key evidence from this pilot:

The overall age profile of bus passenger respondents in this pilot was in between the weighted and unweighted profiles for the BPS, where we had always needed to weight by age (among other variables) to achieve a representative sample. So while the sample generated in this updated approach may still need some weighting by age, this is likely to be significantly less than was required for the BPS.

The age profile is a little older than in our previous pilot at the end of 2021. This varies by area, with older people making up more of the sample in Devon, and younger people in Manchester. The overall older profile is likely linked to the broader range of locations in which we recruited this time, compared to a focus on town and city centres in the previous pilot. Following feedback from fieldworkers, more paper questionnaires were also made available in this latest study. The different time of year may also have been a factor



The journey purpose profile was also fairly similar to our previous pilot, with just under half of all participants taking the bus for a commuting journey. This compares with closer to a quarter in the BPS, which was typically adjusted after weighting by age and the time of day of travel. Other profile markers, such as the proportion of fare payers, also followed this overall more balanced pattern compared to BPS.

There did appear to be a bias towards females rather than males (reflecting our previous surveys, and research generally across most sectors). There was also some indication that, although the number of recruits per shift did not vary greatly by daypart*, response rates were lower in the morning and evening peaks. This echoes BPS and other research where people travelling at this time – and linked to their age and journey context – are harder to engage overall.

Weighting will be needed to correct for sample biases in our future live survey, though perhaps less so than in BPS, making for more robust data overall. Age and gender are likely to be areas where weighting is needed, along with a combination of over-sampling and/or weighting by certain dayparts. As we have seen in the past, these should also correct for any imbalances by journey purpose and other related factors – all of which are known to impact on satisfaction ratings.

Precise weights, and data to inform target universe profiles, will need to be determined with further more in-depth work as we move towards a full live survey. In the short term we tested a possible way of estimating a universe age and gender profile, as outlined on the next page.

** Finding based on cluster shifts only. See a little further information in notes page.*

Findings: 8 / 13

The method tested for collecting demographic information to inform weighting has been successful

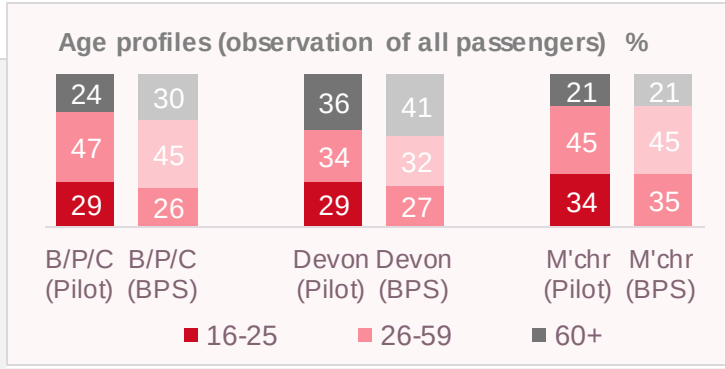
There is no nationally consistent and reliable information source which gives us the demographic profile of bus passengers*,against which to assess how representative our survey is, and therefore how we might weight it if needed. Therefore we need to collect this information ourselves.

For the BPS, fieldworkers were directed to pause at a given interval during each shift, to record the number of people on board at that point in time, and their observable gender and age (in three broad age bands). This generally worked well and so we replicated the approach in this pilot, though with some differences:

- The task in this pilot mainly took place at stops, rather than always on board as in the BPS
- Fieldworkers counted all of the passengers waiting at or near to their stop who might feasibly have been approached (i.e. were standing close enough and clearly waiting for a bus) during an allocated five minute time slot. For BPS, all passengers on board at the time were counted (this could have taken more than five minutes).
- The count was made electronically, with fieldworkers pressing a counter button on their device for each person in their vicinity against each age-gender cell. It was expected that this should improve the quality compared to BPS where counts were made manually in the BPS and recorded on paper.

Key evidence from this pilot:

The demographic profiles collected in this pilot (most of which were at stops) are broadly similar to those collected during the BPS in 2019. Gender patterns were almost identical, with age (as shown here) a little younger overall. This reflects changes in bus travel patterns reported nationally as a result of Covid-19, so it is therefore reassuring that these counts look intuitively sensible.



Anecdotal feedback indicates that demographic observations were conducted at the time directed. This was not always possible for the BPS, since a fieldworker may have been waiting for a bus at the directed time rather than on board. They also needed to move up and down the stairs to count everyone on a double decker, which may not always have been possible at the directed time.

There were also no indications that fieldworkers had any difficulty with conducting the count, and data appeared to be more complete than in the BPS where it was not uncommon for the observation task to be missed (or for the data not to be processed). This is a likely consequence of making the task easier (and less easy to overlook), on the fieldworkers' tablet device rather than as additional paperwork.

We expect to continue to use this approach to estimating passenger demographic profiles in our future live survey

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** Other surveys and data sources collect data about bus passenger demographics, but here we specifically need the profile at the level of passenger journeys. We also need this separately for each local authority area, and most other existing data is national or regional.*

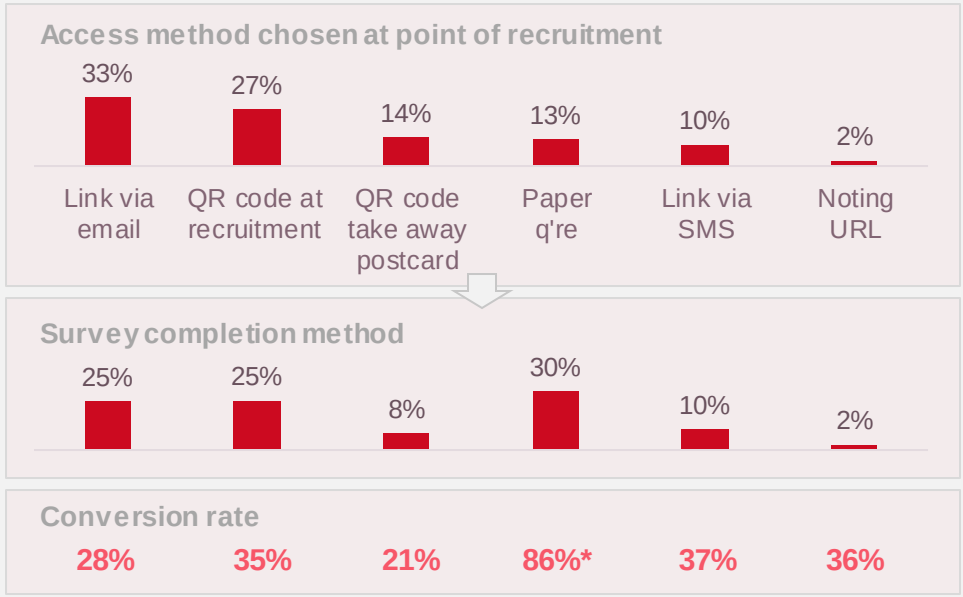
Findings: 9 / 13

Respondents' way of accessing the survey broadly reflected findings from our previous trial

Most survey responses were made online, marking a major shift away from paper questionnaires as in BPS

Key findings from this pilot:

- The most popular access methods at point of recruitment were the emailed survey link and QR code. Both appealed to a range of passengers, but the QR appealed to a slightly younger group overall.
- Paper questionnaires were preferred by a small proportion, who were typically older people – two thirds of all respondents aged over 60 took part on paper, confirming that this option remains important for maintaining inclusiveness of the sample. Paper questionnaires, when given out, were also highly efficient, since these recruits more often than not went on to complete the survey*.
- The URL option added very few recruits, and these were typically in the travel-to-work cohort who were also well (and more so) recruited via other methods.
- The take-away QR code was newly introduced in this pilot, as an option for those who may not have time to stop and scan the code there and then. Likely for this reason, its response efficiency was lower than other options, but was still reasonable overall. This method appealed to a small group and was important, alongside the in-situ QR code, for under 30s and commuters (especially for education).



Note: in the previous trial we were able to confirm that, while respondents completing the survey via different methods – and accessing it in different ways – have different response patterns for satisfaction questions, this is largely driven by demographic differences and can be controlled for with weighting

Our main passenger experience measurement survey should be primarily online, with paper questionnaires used sparingly to enable participation by those not able to do so online. All of the access methods used here should be used, except for the URL which brings little additional value, and we will continue to work with the research supplier(s) to maintain and/or improve on conversion where possible.

** See notes page for further detail on the findings around paper questionnaires*

Findings: 10 / 13

Around half of those entering the survey via "non-contact" methods prefer to be completely anonymous

We were able to collect contact details, enabling more contact with individuals, from most of the remainder

When passengers choose to enter the online survey via an emailed or SMS link, they provide contact details in the process. Entering via the QR code or the URL ("non-contact") methods means they do not need to do this at point of recruitment, and this may be part of these methods' appeal.

Capturing an email address or mobile phone number has some key advantages, however, including the ability to send reminders if a respondent has not completed the survey, and allowing respondents to pick up where they left off if they temporarily drop out. It also enables us to fully track the efficacy of different access methods (e.g. by region, time of day and so on, to assist our ongoing monitoring and continual refinement of the methodology.

Key evidence from this pilot:

- In this pilot we asked half of the non-contact respondents (at random) if they would provide an email address so that we could send them a link to continue, in case they were interrupted. Of 197 people asked, 45% did so. 48% said they would rather not share their email address, and 7% said they did not have one.

  This pattern was very similar by area, though willingness to provide contact details appeared to decrease a little by age.

- We also saw that just over 8% of all entrants to the survey who were asked this question dropped out at this point. This was the very first question – and we know from previous experience that the earliest questions provoke the highest drop-out rates as people enter and change their minds – so this is to be expected to an extent and may not have been entirely caused by the question itself, but this was particularly high (with a maximum of 4% drop out for other questions, including those around the date and time of a journey, which we have previously seen to be drop-out triggers).

Providing non-contact routes to the online survey is important in ensuring we can include people who may be uncomfortable with sharing their details at recruitment – clearly there are many who feel this way – but it is possible to collect this from some people once they enter the survey itself.

We may be able to increase the proportion to agree to this however, and crucially we need to find a way of doing this that provokes as little resistance as possible. We will seek proposals for these points from bidders for any future live survey (some initial ideas are given in the notes page below).

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How respondents engaged with the questions

Findings: 11 / 13

Some people were willing to answer additional questions about their journey, but fewer than expected

Key evidence from this pilot:

40% of online respondents answered beyond the core question set. These people tended to be more often in the travel-to-work cohort* , with some area variations.

Overall this compares to around three quarters in our previous pilot using a similar approach.

Key differences in the two studies' questionnaires which may have influence this included:

- Half of the sample in the previous study were asked an open-ended question, immediately before the invitation to continue, about desired improvements to their bus service. This was not included in the second pilot.
- Two questions before the invitation to continue, respondents in the previous study rated their overall journey experience using both a verbal satisfaction scale and a more light-hearted version – a star rating or an emoji-style rating. Only the verbal scale featured in this pilot.
- Subtle differences in the invitation wording itself, including a longer estimation of likely duration for the remaining questions, and an arguably stronger call to action response for the "no" option versus a more positive spin on the "yes" option in the earlier study

Previous study

Thank you so much for your time and your valuable feedback. We would love to hear more about your experience. Are you happy to continue to answer some additional questions about the same bus journey ***or would you prefer to finish the survey now?*** *The additional questions will take around* ***5 minutes*** *to complete.*

- ***Happy to tell you more*** *about my bus journey*
- *Would like to finish the survey*

This study

Thank you so much for your time and your valuable feedback. We would love to hear more about your experience. Are you happy to continue to answer some additional questions about the same bus journey? The additional questions about your bus journey will take around 5-10 minutes to complete.

- *Yes – I would like to tell you more about my bus journey*
- ***No – I'd rather not*** *tell you more about my bus journey*

We had previously concluded that structuring our survey as a core set plus optional additional questions was a useful way to maximise response among those resistant to a longer questionnaire. It also brings the potential for more flexibility, with the opportunity for using different question modules in different circumstances, for instance. However, more work will be needed to understand how to maximise willingness to continue with further questions, for this to be viable. Some ideas are presented here, but we will seek proposal from bidders for the live survey and will continue to explore this further.

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** For example this group was typically aged 25-59, more likely to travel for commuting, in peak times, and to be fare payers*

Findings: 12 / 13

Recruiting people at stops rather than on board may make for more negative feedback (if they complete the survey while waiting to board), but this in itself should not be a reason to retain the on-bus approach

In another recent trial, we invited bus passengers to give journey feedback by scanning a QR code from a poster placed at stops or on board buses (rather than after meeting a fieldworker). This was a much more immediate style of survey, and many of the responses were received from people as they waited for their bus, i.e. before they had boarded. Most of these people were especially inclined to give their feedback because they were experiencing problems with their service right at that moment: very often these passengers complained that their bus was late – sometimes significantly, that multiple timetabled services were missing, or that buses were too crowded to board when they did turn up. As a result the nature of this feedback was typically quite negative, with poor ratings given for overall journey experience*.

This highlighted a concern that, by moving to at-stop recruitment rather than on-board as in the BPS, we would pick up passengers at an earlier point in their journey, and we could even pick up people who do not ultimately manage to make a journey. Given that the latter group will be more negative, this could affect the levels of passenger satisfaction that we report on behalf of the industry. We did not wish to exclude this group, however, from providng their feedback, so they were routed through to a very short series of relevant questions when they entered the survey.

Key evidence from this pilot:

- Of just over 1,000 people who took part in the survey, only three said that they ultimately could not make the journey after they interacted with our fieldworker. All three happened to have attempted to use the same bus service in the same area, though they were recruited at different times and places. One of them walked instead, one tried a different route, and one simply didn't make the journey.
- At an overall level, people recruited at stops were a little less satisfied with their journeys than those recruited on board, confirming the hypothesis. However, this was not consistent across the areas, and will have been influenced by the specific routes selected in the on-board test cells, which was a very small selection and less representative of each area than the stop selection was.

Given the very small number of passengers who engaged with the survey despite not being able to catch their bus, we do not feel it is necessary to accommodate this scenario in our future survey (there are other channels for complaints if the passenger wishes to make one).

Even without conclusive evidence that satisfaction ratings will be lower when recruiting people at stops rather than on board, we do not feel that this should influence the methodology even if there was such an effect. Instead, any potential for this should be mitigated by encouraging people to take the survey once they have experienced their journey. Additionally, we will not advocate any direct comparisons between our new survey and historic BPS results, given there have been other contextual changes since (many due to Covid), in addition to any methodology changes.

** This "passenger-led" trial was completely separate, and took place in different parts of the country, from the trial on face to face recruitment sampling and productivity covered in this report. A full report on what we learned about the more "passenger-led" approach is available on our website.*

Findings: 13 / 13

What happened when we encouraged people not to fill in the survey until after the journey?

An idiosyncrasy discovered in our previous pilot of the broad approach used here was that some online respondents may have started – and in theory could have completed – the questionnaire before they made their bus journey. This means that they are technically less able to fully evaluate that journey.

This was not evident in the bus survey element of our previous pilot (where we did not ask passengers their time of boarding, and used the shift time as the basis for any day-part analysis), but was clear in the rail study where 12% of all respondents in the rail survey started their survey before the time their train departed. We therefore suspect that similar may have happened among bus passengers. The majority of people in this group in the train survey were more frequent users (mainly commuters), and so we assume that they answered some questions, such as the cleanliness of the inside of the train, based on frequent experience and expectation. The majority of these people accessed the survey via the QR code, which was of course possible to do immediately.

In this "refinement" pilot, we sought to prevent this as far as possible by fieldworkers telling all passengers at the point of recruitment that they should complete the questionnaire after their journey. (It may have been possible to programme a delay or instruction within the online questionnaire, to prevent people from continuing if they entered a departure time in the future. This was decided against because it might put people off or they might forget to return at a later time, and it could be acceptable to people to fill in the survey while on board (indeed we know that this had always happened with paper questionnaires in the NRPS and BPS).

Key evidence from this *pilot (again using data from the train version of this refinement pilot):*

- Of 1,846 online responses in the train survey, 1,340 (73%) were made on the same day as the passenger was recruited. 99 (5%) appear to have been completed before the scheduled departure time of the journey, as reported by the passenger (and some others which were completed soon after the departure time may well have been started before the passenger boarded). This does appear to be an improvement on our previous pilot, where this was 12%.

  As in the previous pilot, almost all of these early completers (95) accessed the survey via the QR code.

- Overall the response rate (conversion from recruitment to survey completion) was stronger overall here. There was no discernible negative impact on response rate, therefore, by instructing respondents to wait a little.

The learnings here are transferable to our future bus passenger surveys. We expect to use this fairly light touch tactic to discourage respondents from completing the survey too early, since it appears to provide a good balance between minimising early completion while not hindering participation. This will need to be monitored however to ensure that fieldworkers are consistent, and to ensure that the proportion of early completers does not creep up.

Summary

Recap on the key principles for our new survey approach

Our piloting and review work up to the end of 2021 allowed us to outline the essentials of our future approach to measuring passenger experience:

Passengers feed back about a **single leg of a journey, made on the day of recruitment**

Online as the main method for survey completion – but paper option has a place

Pro-active recruitment of passengers, at point of usage

Concise questionnaire focusing on essential metrics – with optional, modular question sets

…. meaning **face to face** interception as passengers make journeys; this is verified and inclusive

Structured questions about overall journey experience, with core measures carried over from previous BPS

This pilot work has sought to refine elements of this approach in further detail

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Summary: our findings for the fundamentals of this approach

Recruiting passengers "off-bus" has some advantages over our previous (BPS) approach of selecting bus vehicle journeys which fieldworkers would travel on to intercept passengers. These advantages are around both sample integrity and practicalities. While there is an inevitable trade-off, where a broader representation of on-board experience also brings a narrower representation of at-stop experience; on balance we feel that this is the right trade off.

- **Systematic sampling from a database of bus stops is possible,** and produces a good geographic coverage across a local authority area

- However, **conducting the fieldwork at individual bus stops did not work**

  Since conversion rates from recruitment to survey participation were reasonable, the issue here was at the recruitment stage. The selected bus stops were not busy enough (or fieldworkers did not have sufficient opportunity to engage with passengers there), meaning we did not recruit enough passengers for this version of the approach to be viable in terms of budget, time and fieldworker resource.

- **There were two main factors here:**
  - Limiting the recruitment task to **individual bus stops** (when there may have been passengers at stops serving the opposite direction or elsewhere nearby). **Instead, early tests on recruiting at clusters of stops shows some merit** and we are already exploring this further
  - **Using frequency of services calling at stops – and/or clusters – as a proxy for passenger footfall.** This pilot has demonstrated that there is some relationship between service frequency and passenger footfall at stop, but that it isn't perfect or reliable. We are therefore exploring ways to build in more certainty around which clusters should be selected for our survey fieldwork and where, in order to achieve stability in the sample over time, as well as more guarantees over productivity

- Without further practical pilot work to test the cluster approach more fully, **we are still somewhat unclear on the relative productivity of this "off-bus" recruitment approach versus "on-bus"**

  Some further work may be useful before full launch of a live survey, and in the meantime we will seek quotes for both methods from bidders when we issue the tender.

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Summary: conclusions for more tactical aspects of the method

- The off-bus recruitment approach worked comparably well during later evenings (7-10pm). Providing it can be made more productive overall – and providing that safety of fieldworkers can be managed well – **we intend that fieldwork should take place between 7am (or 6am) and 10pm**, as it did for the BPS.

- Attempting to recruit passengers as they disembarked a bus did not work. Tests where we allowed fieldworkers to approach either boarding or disembarking passengers did show some additional promise, but the proportion of responses from disembarking was relatively small, and so we do not feel it is worthwhile to potentially complicate the fieldworker task. **Our intention is for future survey work to focus any off-bus recruitment on passengers waiting to board only.**

- Supplementing the off-bus fieldwork with additional recruitment on board a sample of services may be one way to mitigate a potential bias towards journeys on more frequent services, and to passengers benefitting from better at-stop information and facilities. In this pilot, on-board work on very low frequency services was not strongly productive, and it may not merit the resource required in setting up or conducting on-board fieldwork on these types of services specifically. Nevertheless **there is likely to be value in including a broader sample of services for on-board work in order to widen the range of experience captured** beyond larger stops or clusters only.
    - *Measurement of passenger experience on the very lowest frequency / remote services may be better treated separately, as complementary but discreet research. Other approaches to capturing feedback may also be appropriate therefore, and this should be tailored to specific needs as they arise.*

- As in our previous surveys for bus passenger experience, the method trialled here does have some response bias, particularly towards females and to some extent older passengers (though much less so than in the BPS), and so some weighting will be needed in a future, full scale survey. **The method tested here for collecting demographic information to inform this weighting has been successful, and so we expect to use this in the future.**

- Building on the findings from our previous pilot, which tested the broad principle of recruiting face to face at stops, with most passengers taking part online, **all of the access methods used in this trial should be used, except for the URL option which brought little additional value.**

  We will continue to work with the research supplier(s) to maintain and/or improve on efficacy of each method where possible. This will include refining the collection of email addresses, where respondents are willing, from those who prefer "non-contact" access methods into the survey in the first place.

- **We will also work with future supplier(s) to maximise the value of the questionnaire itself**, including in maximising the proportion of respondents who complete a larger set of questions beyond the core.

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Next steps (as at June 2022)

- We have already begun to re-explore possible sources for reliable passenger occupancy data at stops, which would reduce our reliance on service frequency as a proxy for this. This may be possible further in the future, but not soon enough for use in our new bus passenger experience survey. We therefore intend to proceed with the use of service frequency to inform sampling at this point.
- We have been working with a consultant to explore methods for defining and selecting clusters of bus stops, and liaising with some local authorities as part of this
- Taking evidence from this pilot, together with progress already made on the potential for sampling clusters of stops, we feel that a realistic assumption for the average number of survey completions per (3-hour) shift using this approach could be approximately 10. We will be posing this as guidance for research agencies to consider in their bids when we issue the tender for *Your Bus Journey*
- *This will vary by area, time of day and other factors, but represents an average across the area types covered here which broadly cover the typical extremes of response that we have seen in previous research. 10 is also close to the average number of responses for these types of areas when they were surveyed in the BPS.*
- Nevertheless, while we are still unclear about the relative productivity of recruiting at (systematically sampled) clusters of stops, we will be requesting quotes from bidders using both on-board and at-stop sampling
- …and once a contractor is in place we may conduct some further fieldwork piloting to test out the real potential of cluster sampling, while we arrange participation from local authorities for the live survey
- We are testing the use of AI to analyse free-text responses given by passengers to open-ended questions in a survey like the one piloted here. This could allow more frequent and more cost-effective reporting on the themes which matter to bus passengers, and the overall sentiment with which passengers evaluate their journeys.
- Our ambition is for the new *Your Bus Journey* survey to begin in late 2022

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Transport Focus is the independent consumer organisation representing the interests of:

- bus, coach and tram users across England outside London
- rail passengers in Great Britain
- all users of England's motorways and major 'A' roads (the Strategic Road Network).

We work to make a difference for all transport users.

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