A dual measurement approach to the National Rail Passenger Survey in Scotland in the Spring and Autumn 2018 wave

Methodology

Some methodological changes were made to the National Rail Passenger Survey (NRPS) from Spring 2017. This included a shorter NRPS questionnaire, some changes to question wording, and offering passengers the choice of completing the survey on paper or online. In light of these changes there was concern that the time series of NRPS results could be affected.

A robust pilot of the new approach that Transport Focus and our agency conducted in Spring 2016 suggested that the methodological changes had resulted in only minor/insignificant changes to the results nationally, although it was not possible to look at results by train operating company (due to the sample size at train operating company level).

ScotRail and Transport Scotland were concerned that the results could be affected so it was agreed that a dual methodology would be implemented from spring 2017 (and autumn 2017) on ScotRail, and this continued during 2018 for both the Spring and Autumn waves. This means that results for the NRPS using the new methodology could be compared to results to the old methodology that was used up to Autumn 2016.

The dual methodology involves carrying out 'duplicate' or parallel shifts of the main NRPS shifts on ScotRail. For each main NRPS shift during the Spring and Autumn 2018 waves a separate shift was arranged on a different day on the same day of the week at the same time as the main shift and if possible, using the same fieldworker. The parallel run shift was at most two weeks later or the week before the main NRPS shift.

Results

A summary comparing the main (official) NRPS and the parallel run in spring and autumn 2018 is given below:

NRPS factor	Difference between the current NRPS methodology and the parallel run (current – parallel)	
	Spring 2018	Autumn 2018
Overall journey satisfaction*	-1% (84% - 85%)	-1% (79% - 80%)
Overall station satisfaction	-1%	-2%
Overall train satisfaction	-2%	-4%
Punctuality/reliability*	-1%	1%
Value for money for the price of your ticket	-2%	-3%
Cleanliness of the Inside of the train	1%	-3%
How well train company deals with delays*	-5%	9%
Sufficient room for all passengers to sit/stand (old methodology) vs Level of Crowding (new methodology)**	1%	3%

Notes:

*: Key factors used in performance targets

**: The NRPS factors related to crowding changed between Autumn 2016 and Spring 2017.

Full results for all station and train factors are available on request.

Comparing results between the two methodologies

Comparing the main NRPS and parallel run results for Spring 2018 and Autumn 2018, most scores are within plus or minus 6 per cent (at most) suggesting that the main station and train scores (and overall satisfaction) are little or no different under the two different methodologies.

A few factors had a slightly bigger difference in the percentage of passengers satisfied. This included ‘How request to station staff was handled’, ‘Facilities for car parking’, and ‘Bicycle parking’. All these factors had a smaller sample size because the questions were not relevant to all passengers. The smaller sample size is the main reason that the results for those factors were more likely to have (and had) bigger percentage differences in satisfaction (even though the results may not statistically be significantly different).

‘How well the train company dealt with delays’ was also another factor with a greater percentage difference. There was a nine per cent difference in the results between the parallel run and main survey in Autumn 2018 (and an 11 per cent difference for ‘usefulness of information during delays’). In the official Autumn 2018 results for how well the train company dealt with delays 39 per cent of passengers said ScotRail dealt with delays very or fairly well, compared to 30 per cent in the ScotRail parallel run project. The most likely main reason for the difference is the different timing between the main and parallel run shifts, because results for this factor will vary quite a lot depending on the extent of delays experienced.