

# Tram Passenger Survey (TPS)

Autumn 2013

Technical report



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# Contents

## Page No.

1. Background .....	2
2. Summary of approach .....	4
3. Sample .....	5
3.1 Route coverage.....	5
3.2 Sample sizes .....	5
3.3 Sampling process .....	6
3.4 Weighting.....	9
3.4.1 Passenger Counts.....	9
3.4.2 Estimating passenger volumes.....	10
3.4.3 Creating rim weights .....	12
3.5 Response rates.....	14
3.6 Weighting efficiency .....	17
4. Data differences by mode of completion .....	19
5. Key driver analysis .....	23

Appendix – Typical questionnaire

# 1. Background

Passenger Focus is the official, independent consumer organisation representing the interests of train, bus, coach and tram users across England outside London. A key part of the Passenger Focus mandate is to provide evidence based research to support its stance on the views and priorities of passengers. To this end, Passenger Focus (and its predecessors) established:

- The National Rail Passenger Survey (NRPS) in 1999 - this twice yearly survey (Spring and Autumn) provides data for each Train Operating Company on its passengers' perceptions in regard to key measures of station and train performance
- The Bus Passenger Survey (BPS) in 2009 - this annual Autumn survey (with a smaller project in the late Spring) provides data for a number of PTE, unitary and county council areas on passengers' perceptions in regard to key bus stop, bus vehicle and bus driver measures
- A pilot Tram Passenger Survey (TPS) in Spring 2013 in the Centro area, covering the Midlands Metrolink tram service.

A number of different methodologies were tested in the TPS pilot, including:

1. The traditional paper self completion only approach used on NRPS and BPS
2. The option of providing an email address if the passenger refused to take a questionnaire
3. Offering the choice of a paper self completion questionnaire or providing an email address
4. Just collecting email addresses.

Those providing email addresses were sent an invitation to participate in an online version of the survey 1-2 days following contact. Whilst there is a need for TPS to be consistent with NRPS and BPS, there was also a desire to assess the opportunity for using new technology in the survey and to see if any of the new approaches reduced the age bias present in BPS and to a lesser extent in NRPS.

The TPS pilot demonstrated that option 3 above generated a similar final sample size to the traditional paper self completion approach at similar cost, but in addition did

reduce the age bias present in undertaking just a paper self completion approach and furthermore did not significantly affect the results (full details of this are provided in the Technical Overview of the TPS pilot). As a result, the rollout of TPS to five tram networks in Autumn 2013 used this combined approach, where passengers were asked which completion method they preferred and either given a paper self completion questionnaire or asked for their email address to enable them to complete the survey online.

## 2. Summary of approach

Our approach uses the TPS pilot as a suitable template for this roll out of TPS; in particular the following are salient features of what we have used in the TPS roll out:

- The sampling unit is an individual tram service (e.g. the 06:15 from Birmingham New Street on a specific Tuesday), in the same way that BPS sampling is based on bus services. (In NRPS, in contrast, most sampling is based on stations.)
  - This is a more cost effective sampling unit than a tram stop, as passenger numbers are greater for a service over a given time period than for most stops over the same period
- The sampling frame thus needed is the list of all tram services that run each week (which has been downloaded from the published timetables)
- Many of the questions have been directly taken from the pilot TPS, to enable a standard questionnaire to be used across all networks. As TfGM already had their own passenger satisfaction survey the questionnaire used for the Metrolink network was slightly longer as it included questions specific to the previous TfGM survey. (TfGM funded their additional questions.)

The standard questionnaire used is attached as an Appendix.

A similar version of the questionnaire was used for the online sample. To ensure online respondents answered specifically about the journey they were taking when recruited by the interviewer, the date and time they were approached was inserted into the wording of the online questionnaire they completed.

As indicated above, all passengers were approached and asked if they would provide feedback about today's journey. If willing, they were offered the choice between a paper self completion questionnaire and providing their email address so that they could be sent a link to an online version of the questionnaire.

## 3. Sample

### 3.1 Route coverage

The Autumn roll out of TPS covered five different operators. Three of these have just one route, but Sheffield has three and Manchester has six. For cost and logistical reasons, the blue and purple routes in Sheffield were merged and so this wave covered eleven routes as follows:

- Blackpool
- Centro (Birmingham/Wolverhampton)
- Manchester - Altrincham
- Manchester - Ashton
- Manchester - Bury
- Manchester - Didsbury
- Manchester - Eccles/Media City
- Manchester - Rochdale
- Nottingham
- Sheffield - Blue/Purple routes
- Sheffield - Yellow route.

The sampling process described was applied in turn to each of these eleven routes and a separate sample selected for each. The routes were then weighted according to their relative volume, so that in the overall tables the routes with the largest numbers of passengers have the greatest weight.

### 3.2 Sample sizes

The sample sizes specified for each network are shown in the table overleaf. These were used to determine the number of shifts required for each network and the shift numbers used to determine which tram services should be sampled. The sampling process is discussed in detail in Section 3.3.

Network/route	Sample size required	Sample achieved
Blackpool	500	725
Centro	500	556
Manchester – Altrincham	500	579
Manchester – Ashton	400	439
Manchester – Bury	500	548
Manchester – Didsbury	400	443
Manchester – Eccles/Media City	400	471
Manchester – Rochdale	400	424
Nottingham	250	333
Sheffield – Blue/Purple routes	250	366
Sheffield – Yellow route	250	366

### 3.3 Sampling process

As highlighted above, we have followed the sampling processes employed in the pilot TPS (and in BPS), as follows:

- We downloaded the tram timetable for each route from the network’s website
- We generated lists of the tram services which run each day of the week including start point, start time, end point and end time
- We sorted these lists by direction, the seven days of the week and start time of the service - this generated a list of the tram services in a week. As with NRPS and BPS, fieldworker shifts only operate between 6 a.m. and 10 p.m. There are very few public transport services prior to 6 a.m. and the additional costs - hourly rates and transport to the start point - are not justified given the very small number of passengers. Although there are more journeys after 10 p.m., safety concerns rule out fieldworkers operating at these times - the only feasible option would be to ensure fieldworkers operate in pairs and again the cost of this and providing transport at the end of the shift is not justified given the relatively low number of passengers
- Excluding those services starting before 6 a.m. or after 10 p.m. reduced the number of services to those shown in the table below, distributed by peak (07:00 to 09:30 a.m. and 4:00 to 6:30 p.m. weekdays), off peak weekday and weekend:

Network/route	Number of peak services	Number of off peak weekday services	Number of weekend services
Blackpool	250	560	306
Centro	420	695	325
Manchester – Altrincham	492	1060	522
Manchester – Ashton	248	524	298
Manchester – Bury	485	1067	520
Manchester – Didsbury	246	526	297
Manchester – Eccles/Media City	454	942	384
Manchester – Rochdale	234	538	297
Nottingham	590	965	497
Sheffield – Blue/Purple routes	450	825	411
Sheffield – Yellow route	345	655	301

- We selected sufficient interviewing shifts to generate the required sample, denoted as 1 in n. We took a random start between 1 and n from the list sorted by direction, day of week and start time and picked this service and then every n<sup>th</sup> service following this start point
- This systematic sample ensures that the services sampled reasonably match all tram services by direction, day of week and time of day. The number of selected services is shown below:

Network/route	Number of peak shifts	Number of off peak weekday shifts	Number of weekend shifts
Blackpool	12	15	11
Centro	9	13	8
Manchester – Altrincham	10	13	7
Manchester – Ashton	9	8	7
Manchester – Bury	10	12	8
Manchester – Didsbury	8	9	7
Manchester – Eccles/Media City	9	9	6
Manchester – Rochdale	10	7	7
Nottingham	5	6	4
Sheffield – Blue/Purple routes	4	7	4
Sheffield – Yellow route	3	8	4

- We scheduled fieldworker shifts around the selected services: the time and day of the week that was selected dictated the beginning of the shift, and return journeys were made thereafter on the same vehicle for the duration of that shift. The three hour shift length allows for two return journeys in most shifts, adjusting as necessary to ensure this. A three hour shift length provides time for fieldworkers to encounter plenty of passengers for distributing questionnaires. A longer period than this can introduce more clustering - e.g. if a particular day is affected by service disruption
- Some selected vehicle journeys fell towards the end of the day meaning that a full three-hour shift would have run beyond 10pm, which is the usual latest reasonable time for our fieldworkers to finish work. We therefore:
  - moved half of those shifts selected to begin after 7pm so that they began at around 7pm and therefore covered the period up to 10pm
  - moved the other half so that they covered the same or a similar tram journey, starting at 6am.
- A small number of top up shifts was generated towards the end of fieldwork to ensure that targets had a good chance of being met
- Once travelling on the selected tram services, fieldworkers approached all passengers (except those clearly under 16) as soon as possible after they boarded, to offer them a paper questionnaire or the opportunity to provide an

email address to which a link to an online version could be sent; thus all passengers over 16 had the opportunity to be included in the sample (interviewing under 16s requires consent from a responsible adult)

- Passenger counts were undertaken twice during the shift to record passenger characteristics (gender and observable age). For Blackpool, Centro, Nottingham and Sheffield the fieldworker was given times at which to start these counts:
  - After 20 minutes
  - After two hours 40 minutes.
- In most cases this ensured one count on an outward journey and one count on an inward journey. For Manchester, due to the high proportion of shifts, interviewers were given times that ensured one outward and one inward count.
- If necessary, these times were varied to ensure the time coincided with the fieldworker being on board the tram
- If the fieldworker took a count in one carriage of a two carriage tram, the count was doubled
- The data produced by the counts can be used to weight responses to a more acceptable gender and age profile. Only counts carried out on board a tram were used to compile the weighting matrix used at the data analysis stage (although estimates of passenger numbers were made at peak times where the tram was too busy to undertake a count - see Section 3.4.1 below for more details on this).

### 3.4 Weighting

As already mentioned in this report, data has been weighted to correct for imbalance in response rate by age (and gender where necessary), using information from fieldworkers' observation of all passengers on board at a given point in time. This weighting has been applied for the three time periods (peak, off peak and weekend) for each of the eleven routes surveyed.

#### 3.4.1 Passenger Counts

Passenger counts were undertaken on 245 of the 269 shifts. There were 51 planned counts which were not taken

- 28 of these were at off peak times and it was assumed the counts on these shifts would have been the same as the average for that route and daypart

- 23 of these were in peak hours when the tram was full and this prevented the fieldworker moving around the tram to effect the count; in these cases we could not assume that the count was the same as the average for the route and so we investigated using three different assumptions for the number of passengers:
  - The maximum number that had been recorded in peak time for that route
  - The capacity of the tram, as defined by the network
  - The crush capacity of the tram, as defined by the network.

### 3.4.2 Estimating passenger volumes

We used these three different assumptions to estimate the number of passengers on peak, off peak and weekend services, by multiplying the number of services in the daypart by the average number of passengers. If a tram had two carriages, and the count was only taken in one, this was doubled; similarly where the count was not undertaken at peak hours for a two carriage tram, the estimated passenger numbers (either using maximum count, capacity or crush) was doubled. For Centro, which had been covered in the TPS pilot, we had data from the network showing this profile and this is how it compared with that from the above process:

	Peak passengers	Offpeak weekday passengers	Weekend passengers
Centro	44%	40%	16%
Crush	44%	41%	16%
Capacity	40%	43%	17%
Maximum count	37%	46%	18%

Using the crush capacity to estimate the number of passengers when the tram is full provides an almost exact correspondence to Centro's own figures; using lower estimates of passenger numbers understates the peak percentage.

This comparison led us to use the crush capacity to estimate passenger numbers at peak time. Applying this to each route and comparing passenger numbers to those produced by the Department for Transport (DfT) gives the following comparison:

Estimated numbers of passengers per annum

<b>Network/route</b>	<b>DfT report<sup>1</sup></b>	<b>Crush</b>	<b>Capacity</b>	<b>Max count</b>
Blackpool	1,100,000	1,432,659	1,432,659	1,432,659
Centro	4,900,000	2,360,889	2,219,768	2,095,448
Manchester – Altrincham	22,300,000	6,564,734	6,036,070	5,163,518
Manchester – Ashton		1,974,659	1,768,453	1,428,114
Manchester – Bury		4,948,982	4,610,240	4,051,150
Manchester – Didsbury		3,208,391	2,745,810	1,982,327
Manchester – Eccles/Media City		2,951,283	2,829,325	2,628,035
Manchester – Rochdale		1,651,886	1,577,598	1,454,986
Nottingham		9,000,000	3,712,921	3,712,921
Sheffield – Blue/Purple routes	15,000,000	2,376,660	2,376,660	2,376,660
Sheffield – Yellow route		3,458,943	3,294,827	3,032,612
Manchester total	22,300,000	21,299,935	19,567,496	16,708,130
Sheffield total	15,000,000	5,835,603	5,671,487	5,409,272

Note 1: All data in this column comes from the 2012 DfT report on passenger numbers using tram systems. The DfT does not provide data at line level. The report can be found at <https://www.gov.uk/government/statistical-data-sets/lrt01-ocupancy-journeys-and-passenger-miles>.

At the time the weighting was run, the 2012 data was the most up to date, although the report now shows 2013 data, with small changes from 2012. For Manchester, passenger figures by line were derived from ticket machine data provided by TfGM for the six months to November 2013 (given the expansion of the Metrolink network over the past year). The numbers for each route were doubled and the City Zone passenger numbers allocated equally to the six routes (all six routes cover the City Zone) to give an estimated annual figure.

Using the crush capacity provides estimates that are close to the DfT data for each Manchester route and for Blackpool. The DfT estimates are higher than those derived here for the other three routes, even when the crush figures are used (the

understatement for Centro, Nottingham and Sheffield is probably due to not many shifts failing to provide a passenger count, and so the crush capacity was not used very often). Once again, this comparison indicates that using the crush figures to estimate passenger numbers when a tram is too crowded to count gives the best comparison with external sources. We have therefore used the crush capacity figure to estimate passenger volumes in peak time, in situations where the fieldworker was unable to undertake the count.

### **3.4.3 Creating rim weights**

Where the crush capacity figure was used to estimate total passengers, the split between the three age groups and between males and female was based on the profile for other peak shifts on that route. In this way, an overall age and gender profile was derived for each route for each of the three time segments: weekday peak, weekday offpeak and weekend. These profiles were aggregated, using the DfT passenger counts for each route, as defined above. This gives an overall total passenger number, split by age group and gender for each of the time segments for each route. Dividing this by the total passenger estimates across all five areas gives the following rim weights:

Table of rim weights used

<b>Network/route</b>	<b>Time of day</b>	<b>16-25</b>	<b>26-59</b>	<b>60+</b>	<b>Male</b>	<b>Female</b>
Blackpool	Peak	0.11%	0.21%	0.12%	0.23%	0.21%
Blackpool	Off peak weekday	0.15%	0.27%	0.51%	0.47%	0.46%
Blackpool	Weekend	0.16%	0.27%	0.29%	0.33%	0.39%
Centro	Peak	1.60%	2.06%	0.41%	1.99%	2.08%
Centro	Off peak weekday	1.24%	1.79%	0.76%	2.06%	1.74%
Centro	Weekend	0.33%	0.73%	0.39%	0.69%	0.76%
Manchester – Altrincham	Peak	2.05%	2.99%	0.68%	3.24%	2.48%
Manchester – Altrincham	Off peak weekday	1.23%	2.01%	1.02%	2.37%	1.90%
Manchester – Altrincham	Weekend	0.79%	0.94%	0.34%	1.07%	1.00%
Manchester – Ashton	Peak	0.36%	0.62%	0.20%	0.66%	0.52%
Manchester – Ashton	Off peak weekday	0.17%	0.27%	0.23%	0.30%	0.37%
Manchester – Ashton	Weekend	0.12%	0.18%	0.09%	0.20%	0.19%
Manchester – Bury	Peak	1.87%	2.53%	0.40%	2.74%	2.06%
Manchester – Bury	Off peak weekday	1.36%	2.31%	1.22%	2.60%	2.30%
Manchester – Bury	Weekend	0.85%	1.34%	0.37%	1.57%	0.99%
Manchester – Didsbury	Peak	1.06%	1.61%	0.53%	1.64%	1.56%
Manchester – Didsbury	Off peak weekday	0.37%	0.67%	0.32%	0.70%	0.65%
Manchester – Didsbury	Weekend	0.34%	0.27%	0.08%	0.36%	0.34%
Manchester – Eccles /Media City	Peak	0.80%	1.07%	0.31%	1.22%	0.96%
Manchester – Eccles /Media City	Off peak weekday	0.62%	1.23%	0.51%	1.20%	1.16%
Manchester – Eccles /Media City	Weekend	0.58%	0.69%	0.25%	0.76%	0.76%
Manchester – Rochdale	Peak	0.73%	0.97%	0.11%	1.11%	0.70%
Manchester – Rochdale	Off peak weekday	0.59%	1.21%	0.49%	1.28%	1.00%
Manchester – Rochdale	Weekend	0.32%	0.49%	0.25%	0.57%	0.49%
Nottingham	Peak	3.23%	2.72%	0.76%	3.76%	2.95%
Nottingham	Off peak weekday	1.62%	3.59%	1.43%	3.34%	3.30%
Nottingham	Weekend	1.28%	1.55%	0.92%	2.02%	1.73%
Sheffield – Blue/Purple routes	Peak	1.51%	1.57%	0.40%	1.51%	1.97%
Sheffield – Blue/Purple routes	Off peak weekday	1.56%	2.63%	1.84%	2.79%	3.24%
Sheffield – Blue/Purple routes	Weekend	0.65%	0.73%	0.70%	0.94%	1.15%
Sheffield – Yellow route	Peak	3.22%	2.80%	0.67%	3.33%	3.35%
Sheffield – Yellow route	Off peak weekday	2.78%	2.99%	2.03%	3.25%	4.55%
Sheffield – Yellow route	Weekend	1.36%	0.73%	0.32%	0.99%	1.41%

### 3.5 Response rates

Both NRPS and BPS have a bias in response, with younger passengers less likely to respond. This is more of an issue with BPS than NRPS and the observational counts were instituted to correct the response bias. In the pilot TPS, this bias persisted for those given paper questionnaires, but was in the opposite direction for those who provided email addresses. The combined approach enabled the age bias in the self completion approach to be reduced (and was the reason for using this approach in this TPS wave).

To examine the extent to which demographic bias exists in response for this wave of TPS, we have compared the age and gender profile from:

- The responses from all methods of completion
- The weighted data, using the observational counts to generate this
- The ratio between the two.

The tables below show this data across all individual sampled routes

#### Unweighted sample

Network/route	Total	Male	Female	16-25	26-59	60+
Blackpool	725	343	382	106	273	346
Centro	556	246	310	114	340	102
Manchester – Altrincham	579	247	332	73	349	157
Manchester – Ashton	439	178	261	41	231	167
Manchester – Bury	548	219	329	74	304	170
Manchester – East Didsbury	443	178	265	48	269	126
Manchester – Eccles/Media City	471	218	253	86	253	132
Manchester – Rochdale	424	192	232	46	252	126
Nottingham	333	117	216	49	208	76
Sheffield – Blue/Purple routes	366	134	232	59	187	120
Sheffield – Yellow route	366	128	238	77	179	110
Total	5250	2200	3050	773	2845	1632

### Weighted to original sample size

Network/route	Total	Male	Female	16-25	26-59	60+
Blackpool	725	356	369	145	264	316
Centro	556	283	273	190	273	93
Manchester – Altrincham	579	321	258	196	286	98
Manchester – Ashton	439	227	212	126	212	104
Manchester – Bury	548	309	239	182	276	89
Manchester – East Didsbury	443	228	215	149	215	79
Manchester – Eccles/Media City	471	248	223	155	232	83
Manchester – Rochdale	424	244	180	135	219	70
Nottingham	333	178	155	119	153	60
Sheffield – Blue/Purple routes	366	165	201	118	156	93
Sheffield – Yellow route	366	164	202	159	141	65
Total	5250	2723	2527	1675	2427	1152

### Weighting factors

Network/route	Total	Male	Female	16-25	26-59	60+
Blackpool	100%	104%	97%	137%	97%	91%
Centro	100%	115%	88%	167%	80%	91%
Manchester – Altrincham	100%	130%	78%	269%	82%	62%
Manchester – Ashton	100%	127%	81%	309%	92%	62%
Manchester – Bury	100%	141%	73%	246%	91%	53%
Manchester – East Didsbury	100%	128%	81%	311%	80%	62%
Manchester – Eccles/Media City	100%	114%	88%	180%	92%	63%
Manchester – Rochdale	100%	127%	78%	293%	87%	56%
Nottingham	100%	152%	72%	244%	74%	80%
Sheffield – Blue/Purple routes	100%	123%	87%	200%	83%	78%
Sheffield – Yellow route	100%	128%	85%	207%	79%	59%
Total	100%	124%	83%	217%	85%	71%

As can be seen, the unweighted data under represents males and those aged 16-25 (as these have weighting factors above 100% in every area) and over represents females and those aged 60+, even when adding in the data from online interviews to those completing paper questionnaires. These results mirror those found in the TPS pilot, although the age bias is more pronounced in this Autumn 2013 wave. The profile of respondents by age and gender for each mode of interviewing is as expected, with more males and more younger people completing online relative to paper.

		Online	Paper	Total
Gender	Male	54.9%	49.6%	51.3%
	Female	45.1%	50.4%	48.7%
Total		100.0%	100.0%	100.0%

		Online	Paper	Total
Age group	16-18	12.5%	8.0%	9.5%
	19-25	35.6%	20.7%	25.5%
	26-34	14.5%	12.1%	12.9%
	35-44	12.0%	13.8%	13.2%
	45-54	13.1%	13.5%	13.4%
	55-59	4.2%	7.7%	6.6%
	60-64	4.2%	7.8%	6.6%
	65-69	2.6%	8.0%	6.2%
	70-79	1.3%	6.6%	4.9%
	80+	0.1%	1.8%	1.2%
Total		100.0%	100.0%	100.0%

The following table shows the numbers handed out and responding for each mode of data collection, and confirms that the online response rate is at least as good as the self completion response rate, for each route in each area.

Network/ route	Handed out			Responded			Response rates		
	Online	Paper	Total	Online	Paper	Total	Online	Paper	Total
Blackpool	720	1854	2574	202	523	725	28%	28%	28%
Centro	625	1656	2281	171	385	556	27%	23%	24%
Manchester – Altrincham	567	1751	2318	172	407	579	30%	23%	25%
Manchester – Ashton	345	1819	2164	90	349	439	26%	19%	20%
Manchester – Bury	433	1982	2415	113	435	548	26%	22%	23%
Manchester – East Didsbury	488	1392	1880	148	295	443	30%	21%	24%
Manchester – Eccles/Media City	456	1758	2214	124	347	471	27%	20%	21%
Manchester – Rochdale	377	1402	1779	104	320	424	28%	23%	24%
Nottingham	260	907	1167	83	250	333	32%	28%	29%
Sheffield – Blue/Purple routes	287	842	1129	95	271	366	33%	32%	32%
Sheffield – Yellow route	420	870	1290	118	248	366	28%	29%	28%
Total	5006	16308	21314	1420	3830	5250	28%	23%	25%

It is therefore clear, as it was from the TPS pilot, that offering an online option increases the participation of men and younger people, but that this has not happened to the same extent as in the pilot (where the online response almost eradicated the age group bias). Part of the reason for this is that only 23% of respondents selected the online option – 5006 out of 21314 (although all were offered the choice between paper and online).

In the TPS pilot, around 40% of those given the option of completing questionnaires or providing email addresses took the email option, considerably higher than the 23% seen here (or even the 27% for Centro specifically); this lower proportion of online responses is a key factor in the age bias being less well controlled in this Autumn 2013 survey.

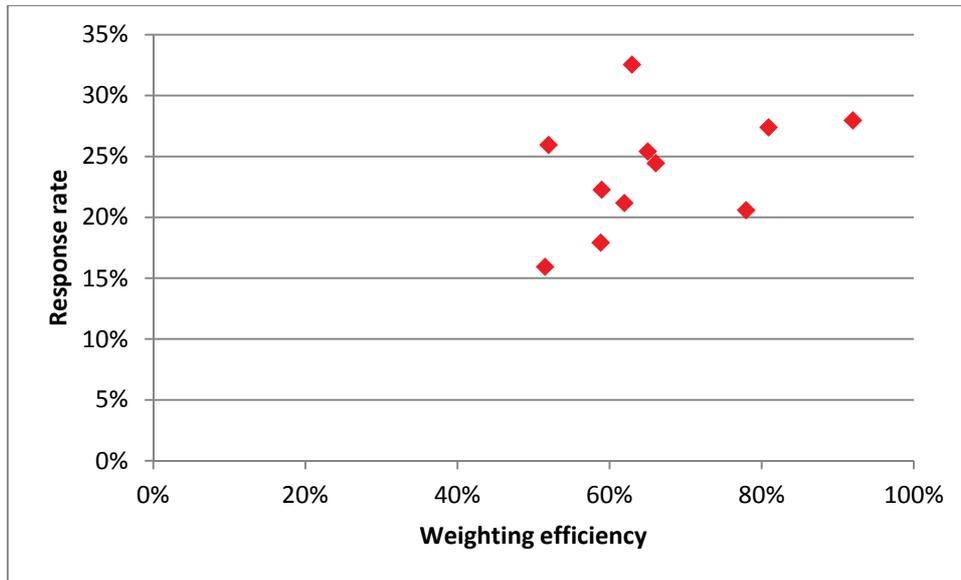
### 3.6 Weighting efficiency

The table below shows the weighting efficiency and response rates for each route:

Network/route	Sample	Weighting Efficiency	Response rate
Blackpool	725	92%	28%
Centro	556	81%	24%
Manchester – Altrincham	579	66%	24%
Manchester – Ashton	439	53%	21%
Manchester – Bury	548	59%	22%
Manchester – East Didsbury	443	51%	27%
Manchester – Eccles/Media City	471	80%	22%
Manchester – Rochdale	424	59%	22%
Nottingham	333	59%	29%
Sheffield – Blue/Purple routes	366	65%	33%
Sheffield – Yellow route	366	63%	28%
Total	5250	41%	25%

Overall, the weighting efficiency is only 41%, but a substantial part of this is due to weighting each area-route to its annual passenger numbers. Taking this out, the overall weighting efficiency due to demographic and time of day weighting rises to 68% overall and to between 51% and 92% for individual networks/routes.

There is a strong correlation between the weighting efficiency and the response rate (R=0.42):



An overall weighting efficiency of 68% is acceptable, but if there are future waves of TPS, it would be worth trying to increase the proportion of online responses, by collecting more email addresses at the expense of handing out fewer paper questionnaires. The impact of this would be likely to:

- Increase response from younger people and as a result reduce the range of weights
- Improve the weighting efficiency
- Improve the response rate overall (as online generates a higher response rate than paper).

## 4. Data differences by mode of completion

Those responding online have a younger age profile than those completing paper self completion questionnaires, as demonstrated in Section Three above. This is intentional, to rebalance the age profile of those participating in TPS. Data collected by different methods can, however, generate different responses, and it is important to see if there is any mode effect in TPS.

From analysing the unweighted data tables, comparing online responses with those from the paper self completion questionnaire, there are very few questions which show significant differences. However, the overall journey satisfaction does show some differences which appear to be significant (i.e. outside the range one would expect from an overall sample size of 5250):

	Online	Paper	Total
% satisfied	88%	91%	90%
% very satisfied	48%	59%	56%

However, younger people tend to be less satisfied with their overall journey experience, as shown by the unweighted data below:

Age Group	% satisfied	% very satisfied
16-25	87%	42%
26-59	87%	47%
60+	96%	77%
Total	90%	56%

Given that satisfaction varies by age, and that the online sample has a different age profile from the paper self completion sample, the question arises of whether there is a real mode effect, or whether the apparently lower satisfaction seen in the online sample comes entirely from the younger age profile.

To test this, we have undertaken a key driver analysis, using gender, age and mode of interviewing as the potential key drivers of satisfaction. For overall satisfaction, only

age is a key driver and gender and mode of interviewing do not have any impact on the result. This is confirmed when looking at satisfaction levels by age for each mode of data collection:

Age Group	Mode	% satisfied	% very satisfied
16-25	Online	88%	37%
	Paper	87%	46%
	Total	87%	42%
26-59	Online	86%	44%
	Paper	87%	48%
	Total	87%	47%
60+	Online	97%	75%
	Paper	96%	78%
	Total	96%	77%
Total	Online	88%	48%
	Paper	91%	59%
	Total	90%	56%

Within each age group, there is no significant variation by mode of interviewing, but for each mode the satisfaction scores for those aged 60+ are much higher. The higher overall satisfaction for paper self completion respondents is driven by a much higher percentage of those aged 60+ completing using this mode.

For those who were very satisfied, there is a small difference by mode of interviewing for the 16-25 age group, but not for the other two age groups. Here most of the variation in the percentage very satisfied is being driven by the age groups, rather than the mode of interviewing. A formal key driver analysis shows age, route and mode as significant drivers of the percentage very satisfied, but the significance of age is much greater than that of mode of interviewing. Gender is just significant at the 5% level but not at the 1% level.

Source	F	Sig.
Age Group	200.90	0
Route	41.98	0
Mode of interviewing	12.91	0
Gender	4.15	0.042

We have also looked at how satisfaction with value for money is affected by mode of interviewing and age and gender. For both overall satisfaction with value for money and those very satisfied, there is no obvious mode effect on results, but there are significant differences by age as follows (this is unweighted data across all operators/networks):

Age Group	Mode	% satisfied	% very satisfied
16-25	Online	52%	21%
	Paper	57%	23%
	Total	55%	22%
26-59	Online	61%	22%
	Paper	64%	26%
	Total	63%	25%
60+	Online	82%	53%
	Paper	83%	53%
	Total	83%	53%
Total	Online	60%	23%
	Paper	64%	28%
	Total	63%	27%

Within each age group, there is very little difference in the value for money results. However, the overall results weight younger passengers more in the online option, and it is this factor, rather than any mode effect, which creates the apparent difference. A formal key driver analysis confirms the importance of age and also route and gender in affecting value for money ratings, but also confirms the lack of significance of mode of data collection for satisfaction with value for money and at the margin for those very satisfied.

Source	% satisfied		% very satisfied	
	F	Sig.	F	Sig.
Age Group	36.948	0	49.443	0
Route	31.199	0	43.127	0
Mode of interviewing	2.493	.114	4.839	.028
Gender	9.448	.002	8.380	.004

From this analysis we can conclude that:

- Mode of interviewing does not affect the percentage satisfied with their journey
- Mode of interviewing has a small effect on the percentage very satisfied with their journey, but this is much less than the impact of age or route
- Mode of interviewing does not affect overall satisfaction with value for money
- Mode of interviewing has a small effect on the percentage very satisfied with value for money, but this is much less than the impact of age or route.

(Interestingly, when the mixed (online/paper) mode approach was piloted for TPS in Spring 2013, there was found to be a significant difference in satisfaction with value for money, between those completing the survey online versus paper. Due to smaller sample sizes in the pilot, it was not possible to draw concrete conclusions that this was related to the age profile of respondents in each of the modes; however now that a full wave, with larger sample sizes (and multiple tram networks) has been conducted, we can confidently state the findings above about the impact of the mixed mode.)

## 5. Key driver analysis

The 'Key Driver Analysis' looks at the relationship between overall journey satisfaction, and the other 'ratings' measures which are covered in the survey. This gives a useful indication of which service aspects would be most influential in driving satisfaction up further in the future.

For TPS the analysis uses Multiple Linear Regression and is performed in two stages. First, the drivers of satisfaction are identified. Satisfied passengers are defined as those who are either very or fairly satisfied with their journey. The regression takes into account all five points of the satisfaction scale, and is run using scalar driver variables (sometimes called independent variables) – this means that moving any one point up the 5 point scale is assumed to have the same impact.

Once the drivers of satisfaction have been determined, the non-satisfied (very dissatisfied, fairly dissatisfied and neither/nor respondents) are removed, and a new regression analysis is run to determine which factors drive people to be very satisfied (rather than fairly or very satisfied), again using scalar driver variables.

The two parts of the analysis therefore indicate, firstly, which service aspects should be improved in order to provide an adequate overall journey experience (i.e. one which is at least satisfactory) and secondly, which service aspects should be improved in order to provide a genuinely good experience.

## Appendix - Typical Questionnaire



### Tram Passenger Survey (Centro)

<b>Shift</b>			

<b>Date</b>		

Passenger Focus is the official, independent consumer organisation that represents Train, Bus and Tram passengers across England (except London).

To help us represent the views of passengers in your area we would appreciate a little of your time to complete this questionnaire about your journey on Midland Metro today as part of our national Tram Passenger Survey. Tram companies, local authorities and Government pay close attention to the survey's results and the survey provides the evidence for us to seek improvements on your behalf.

To find out more about our work please visit [www.passengerfocus.org.uk](http://www.passengerfocus.org.uk). You can also follow us on Twitter @passengerfocus

Please fill in the questionnaire after you have completed your Midland Metro journey.

Please tick only one box per question, unless that question requests otherwise.

After completing the questionnaire, please return it using the postage paid envelope provided.

**1. About your journey**

**Q1a. At which stop did you board this Midland Metro tram?**

**Q1b. At which stop did you leave this Midland Metro tram?**

**Q2. Please fill in the time that you boarded the tram today:**

		Hour			Mins	<i>(Please use 24 hour clock e.g. 5.25pm should be written as 17:25)</i>
--	--	------	--	--	------	--

**Q3a. What type of ticket or pass did you use for this Midland Metro journey? (Please tick one box only)**

**Season Ticket/Midland Metro Card/Student**

- 1 day .....
- 3 day/weekend .....
- 5 days/1 week .....
- 10 days/2 weeks .....
- 4 weeks/1 month .....
- Quarterly/3 months .....
- 1 year .....

Other time period (specify) .....   
 \_\_\_\_\_ .....

**Single/return ticket**

- Single ticket .....
- Return ticket .....

**A free pass or free journey**

- Elderly person's pass .....
- Disabled person's pass .....
- Complimentary/free ticket .....

**Other ticket**

- Park and Ride .....
- Family/Group ticket .....
- Other .....

**Q3b. What modes of transport does your ticket allow you to travel on?**

- |  |   |
|--|---|
| Metro only ..... <input type="checkbox"/>      | Bus and Metro ..... <input type="checkbox"/>        |
| Train and Metro ..... <input type="checkbox"/> | Train, Bus and Metro ..... <input type="checkbox"/> |

**Q4. In what format was your ticket?**

- A standard paper ticket/pass .....       A ticket sent to your mobile phone .....   
A photo card ticket/pass .....       Other format .....   
A plastic card you touched  
on to the fare machine .....

**Q5. How did you buy that ticket or pass?**

- From Conductor .....       From a local shop or post office .....   
Direct from Network West Midlands  
(website/phone) .....       You had a free pass .....   
Travel shop .....       Direct debit through work/college .....   
Rail/bus company .....       Other .....

**Q6. What is the main purpose of your Midland Metro journey today?**

- Travelling to/from work .....       Health visit (Doctor/hospital/dentist) ..   
Travelling to/from education  
(e.g. college, school) .....       Shopping trip .....   
On company business  
(or own if self-employed) .....       Visiting friends or relatives .....   
On personal business  
(job interview, bank, post office) .....       Leisure trip (e.g. day out) .....   
Other .....

**Q7. Were you on your outward or return journey when you were given a questionnaire?**

- Outward .....       One way trip only .....   
Return .....

**Q8. Were you travelling with...? (Please tick all that apply)**

- Children in a buggy or pushchair .....       Lots of bags or luggage .....   
Children (under 12) who were walking .....       None of these .....   
A wheelchair .....   
A carer .....

**Q9. How did you get to the Midland Metro stop where you boarded this tram today?**

- On foot/walked .....       Bus .....   
Cycled .....       Train .....   
Motorbike .....       Tram .....   
Car - dropped off .....       Other .....   
Car - and used Park and Ride .....   
Car - parked elsewhere .....   
Taxi .....

**Q10. Which means of transport did you use when you got off this tram today?**

- On foot/walked .....       Bus .....   
Cycled .....       Train .....   
Motorbike .....       Tram .....   
Car - picked up .....       Other .....   
Car - and used Park and Ride .....   
Car - parked elsewhere .....   
Taxi .....

**Q11. What was the main reason you chose to take Midland Metro for this journey?  
(Please tick one box only)**

- Cheaper than the car .....       Quicker than other transport .....   
Cheaper than other transport .....       Best way to get where I am going .....   
More convenient than the car  
(e.g. parking) .....       Tram more comfortable than  
other transport .....   
Didn't have the option of travelling  
by another means .....       Prefer tram to walking/cycling .....

**Q12. What was the weather like when you made your journey, was it?**

- |                  |                          |            |                          |
|------------------|--------------------------|------------|--------------------------|
| Dry.....         | <input type="checkbox"/> | Foggy..... | <input type="checkbox"/> |
| Light rain ..... | <input type="checkbox"/> | Snow ..... | <input type="checkbox"/> |
| Heavy rain ..... | <input type="checkbox"/> | Icy.....   | <input type="checkbox"/> |

**2. About the tram stop where you boarded this tram**

**Q13. Thinking about the Midland Metro stop itself, how satisfied were you with the following?**

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
Its distance from your journey start e.g. home, shops.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The convenience/accessibility of its location .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Its general condition/standard of maintenance .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Its freedom from graffiti/vandalism .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Its freedom from litter .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behaviour of fellow passengers waiting at the stop..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The information provided at the tram stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your personal safety whilst at the tram stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q14. Overall, how satisfied were you with the tram stop?**

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

**3. Waiting for the tram**

**Q15. Approximately, how long did you wait for your tram?**

(Please write in the time in minutes)

**Q16a. Did you check any of the following to find out when the tram was meant to arrive?**

*(Please tick all that apply)*

**Before leaving for the tram stop**

- Leaflet/paper timetable.....
- Online tram times .....
- Live tram locator/timings  
(e.g. via mobile app/web).....
- Disruption updates  
(e.g. on Twitter/Facebook).....
- Other.....

**At the tram stop**

- Electronic display at the stop .....
- Information posters at the stop .....
- Online tram times.....
- Live tram locator/timings  
(e.g. via mobile app/web) .....
- Disruption updates  
(e.g. on Twitter/Facebook).....
- Other.....

**Q16b. If you did not check to find out when the tram was meant to arrive, why was this?**

*(Please tick all that apply)*

- |   |                          |  |                          |
|---|--------------------------|--|--------------------------|
| Knew the trams ran frequently on this route ..... | <input type="checkbox"/> | Didn't have time .....                               | <input type="checkbox"/> |
| Already knew arrival times .....                  | <input type="checkbox"/> | Did not know when the tram was meant to arrive ..... | <input type="checkbox"/> |
| Knew through other means .....                    | <input type="checkbox"/> | Other.....   | <input type="checkbox"/> |
| Could not find the information .....              | <input type="checkbox"/> |  |                          |

**Q17. Approximately how long did you expect to wait for the tram?**

(Please write in the time in minutes)

**Q18a. Thinking about the time you waited for the tram today, was it...**

Much longer than expected.....       A little less time than you expected .....   
 A little longer than you expected.....       Much less time than you expected.....   
 About the length of time you expected.....

**Q18b. Were you able to board the first tram you wanted to travel on?**

Yes .....       No .....

**Q19. How satisfied were you with each of the following?**

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
The length of time you had to wait for the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The punctuality of the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**4. On the tram**

**Q20. Thinking about when the tram arrived, please indicate how satisfied you were with the following:**

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
Route/destination information on the outside of the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The cleanliness and condition of the outside of the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The ease of getting on to and off of the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The length of time it took to board the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q21. Thinking about whilst you were on the tram, please indicate how satisfied you were with the following:**

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
The cleanliness and condition of the inside of the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The information provided inside the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient room for all the passengers to sit/stand ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The comfort of the seats.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The amount of personal space you had around you .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provision of grab rails to hold on to when standing/moving about the tram.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The temperature inside the tram .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your personal security whilst on the tram.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The amount of time the journey took .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoothness/freedom from jolting during the journey .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q22. Did you get a seat on the tram?**

- Yes – for all of the journey .....       No – but you were happy to stand .....   
Yes – for part of the journey .....       No – but you would have liked a seat .....

**Q23a. Did other passengers' behaviour give you cause to worry or make you feel uncomfortable during your journey?**

- Yes .....       No .....

**Q23b. If yes: Which of the following were the reason(s) for this? (Please tick all that apply)**

- |  |  |
|--|--|
| Passengers drinking/under the influence of alcohol..... <input type="checkbox"/> | Feet on seats..... <input type="checkbox"/>              |
| Passengers taking/under the influence of drugs..... <input type="checkbox"/>     | Music being played loudly ..... <input type="checkbox"/> |
| Abusive or threatening behaviour ..... <input type="checkbox"/>                  | Smoking ..... <input type="checkbox"/>                   |
| Rowdy behaviour ..... <input type="checkbox"/>                                   | Graffiti or vandalism ..... <input type="checkbox"/>     |
| Passengers not paying their fares ..... <input type="checkbox"/>                 | Loud use of mobile phones..... <input type="checkbox"/>  |
|  | Other (please specify)..... <input type="checkbox"/>     |
|  | _____..... <input type="checkbox"/>                      |

**Q23c. If yes: What local area was the tram travelling through or at which stop was it when you were worried or concerned?**

**Q24a. Was your Midland Metro journey today delayed at all?**

- Yes .....       No .....

**Q24b. If yes: Why was this? (Please tick all that apply)**

- |  |   |
|--|---|
| Due to a signal/points failure..... <input type="checkbox"/>       | Time it took passengers to board/ pay for tickets..... <input type="checkbox"/> |
| Road congestion/traffic jam ..... <input type="checkbox"/>         | Had to use bus replacement service ..... <input type="checkbox"/>               |
| Due to a tram failure..... <input type="checkbox"/>                | Other (please specify) ..... <input type="checkbox"/>                           |
| Planned engineering works..... <input type="checkbox"/>            | _____..... <input type="checkbox"/>   |
| Poor weather conditions..... <input type="checkbox"/>              | Don't know ..... <input type="checkbox"/>                                       |
| The tram waiting too long at stops..... <input type="checkbox"/>   |   |
| The tram waiting too long at signals..... <input type="checkbox"/> |   |

**Q25. If yes: By approximately how long was your journey today delayed?**

(Please write in the time in minutes)

**Q26. Were any of these items of information present on the tram?**

- |  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| A map of the tram route/journey times .....                | <input type="checkbox"/> | <input type="checkbox"/> |
| Audio announcements e.g. saying the next tram stop.....    | <input type="checkbox"/> | <input type="checkbox"/> |
| An electronic display e.g. showing the next tram stop..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Information about tickets/fares.....                       | <input type="checkbox"/> | <input type="checkbox"/> |
| A timetable.....   | <input type="checkbox"/> | <input type="checkbox"/> |
| Details of how to make a complaint, if you had one .....   | <input type="checkbox"/> | <input type="checkbox"/> |

**Q27. Thinking about any Midland Metro staff you encountered on your journey, please indicate how satisfied you were with each of the following:**

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
The appearance of any staff.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any greeting/welcome you got from the staff.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The helpfulness and attitude of the staff.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The safety of the driving (i.e. appropriateness of speed, driver concentrating) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5. Your overall opinion of the Midland Metro journey you made when given this questionnaire**

**Q28. Overall, taking everything into account from start to end of this journey, how satisfied were you with your Midland Metro journey today?**

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

**Q29. If something could have been improved on your Midland Metro journey today, what would it have been?**

**Q30. How satisfied were you with the value for money of your Midland Metro journey?**

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

**Q31. What had the biggest influence on the 'value for money' rating you gave in the previous question?**

The cost for the distance travelled.....	<input type="checkbox"/>	Comfort/journey quality for the fare paid .....	<input type="checkbox"/>
The cost of the tram versus other modes of transport .....	<input type="checkbox"/>	A reason not mentioned above .....	<input type="checkbox"/>
The fare in comparison to the cost of everyday items.....	<input type="checkbox"/>		

**6. Your opinion of trams generally**

**Q32a. How would you rate Midland Metro services for the following:**

	Very good	Good	Neither good nor poor	Poor	Very poor	Don't know/no opinion
Ease of getting to local amenities (e.g. shops, hospitals, leisure facilities) .....	<input type="checkbox"/>					
Connection with other forms of public transport (e.g. trains/buses) .....	<input type="checkbox"/>					

**Q32b. And how satisfied are you overall with Midland Metro services for the following:**

	Very satisfied	Fairly satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know/no opinion
Ease of buying your ticket.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Punctuality (running on time).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frequency (how often the trams run) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q33. If you needed information about your local tram services, e.g. times, fares, where would you obtain that information? (Please tick all that apply)**

Phone: Centro .....	<input type="checkbox"/>	Ask friend/relative .....	<input type="checkbox"/>
Phone: Traveline .....	<input type="checkbox"/>	Ask tram staff.....	<input type="checkbox"/>
Phone: Other number.....	<input type="checkbox"/>	Text/SMS for information.....	<input type="checkbox"/>
Internet: Centro website.....	<input type="checkbox"/>	Smartphone app .....	<input type="checkbox"/>
Internet: Network West Midlands website	<input type="checkbox"/>	Other.....	<input type="checkbox"/>
Internet: Other travel website .....	<input type="checkbox"/>	Not sure .....	<input type="checkbox"/>
Travel shop.....	<input type="checkbox"/>		

**Q34. How often do you typically travel by Midland Metro?**

*(Please tick the closest to your frequency of tram use)*

5 or more days a week.....	<input type="checkbox"/>	Once a month .....	<input type="checkbox"/>
3 or 4 days a week.....	<input type="checkbox"/>	Less frequently.....	<input type="checkbox"/>
Once or twice a week.....	<input type="checkbox"/>	This is the first time I have	
Once a fortnight.....	<input type="checkbox"/>	used Midland Metro .....	<input type="checkbox"/>

**Q35. If you have used Midland Metro before, how typical would you say today's experience was? Was it...**

Much better than usual .....	<input type="checkbox"/>	A little worse than usual.....	<input type="checkbox"/>
A little better than usual.....	<input type="checkbox"/>	Much worse than usual .....	<input type="checkbox"/>
About the same as usual.....	<input type="checkbox"/>		

**Q36. Have any of the following frequently stopped you making journeys by tram? (Please tick all that apply)**

The places you can reach by Midland Metro.....	<input type="checkbox"/>	How long journeys take when going by Midland Metro.....	<input type="checkbox"/>
The frequency of trams in the area .....	<input type="checkbox"/>	The comfort of the trams.....	<input type="checkbox"/>
The reliability of the trams.....	<input type="checkbox"/>	The level of crowding on the trams .....	<input type="checkbox"/>
The cost of using Midland Metro.....	<input type="checkbox"/>	A concern for your personal safety on Midland Metro .....	<input type="checkbox"/>
Understanding the fares .....	<input type="checkbox"/>		
Understanding the ticket machines.....	<input type="checkbox"/>		

**7. About you**

**QA. Are you...?**

Male .....	<input type="checkbox"/>	Female .....	<input type="checkbox"/>
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**QB. In which age group are you?**

16-18 .....	<input type="checkbox"/>	55-59.....	<input type="checkbox"/>
19-25 .....	<input type="checkbox"/>	60-64.....	<input type="checkbox"/>
26-34 .....	<input type="checkbox"/>	65-69.....	<input type="checkbox"/>
35-44 .....	<input type="checkbox"/>	70-79.....	<input type="checkbox"/>
45-54 .....	<input type="checkbox"/>	80+ .....	<input type="checkbox"/>

