Board meeting 26.11.13

Secretariat memorandum

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Agenda item: 11
LTW456
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London TravelWatch research into passenger priorities on the Underground

1 Purpose of report

1.1. To inform members of the findings of London TravelWatch's research into passenger priorities on London Underground.

2 Recommendation

2.1. That members note the findings and conclusions of the research.

3 Information

3.1. London TravelWatch has analysed the data compiled by London Underground to gain a fuller understanding of what passengers view as priorities on the network. The findings of that analysis are set out below.

3.2. Members reviewed the draft report at the Board meeting on 15 October 2013. The report has been revised in line with discussions.

4 London TravelWatch priority

4.1. The items and issues raised in this report fall within the remit of London TravelWatch and they meet the criteria for relevance and impact on transport users in the London TravelWatch area. In particular, large numbers of passengers use London Underground from a wide geographical area and ascertaining passenger priorities for the Underground will have a positive impact on future transport users.

5 Equalities and inclusion implications

5.1. Assessing the priories of passengers for London Underground will assist with making the network more inclusive for all users.

6 Financial implications

6.1. None – report is for information only.

7 Legal powers

7.1. Section 248 of the Greater London Authority Act 1999 places upon London TravelWatch (as the London Transport Users Committee) a duty to consider - and where it appears to the Committee to be desirable, to make recommendations with respect to - any matter affecting the functions of the Greater London Authority or Transport for London which relate to transport (other than of freight).

London Underground Passenger Priorities research document

Foreword

The London Underground network is one of the largest metro systems in the world, and with over one billion passengers per year it is critical to the economic fortunes of the country as a whole. As an emblem of London, the tube is used by commuters, leisure users and tourists to keep London moving, and with 249 miles of tracks, it covers a large, but not universal, proportion of London.

Investment in the Underground system has seen several line upgrades either completed or in progress, with more upgrade works to follow. This has largely been required to keep up with existing demand, with passenger numbers at an all time high. Accessibility to the Underground network is far from universal, with many stations historically inaccessible to those with mobility issues, with a large amount of work either started or planned to improve this in the future.

London TravelWatch has always worked tirelessly to improve the London Underground system for passengers, pressing for accessibility improvements as well as capacity upgrades, new trains, and improvements to ticketing arrangements. We are pleased to see the improvements that have taken place on the Underground network, and will continue to work to secure further benefits for passengers.

With the current economic climate, and the announcement of cuts to Transport for London's budgets going forward, we felt it was important to research what passengers feel matters most, and to follow on from our previous research in to bus passengers' priorities in gaining the evidence base to support our work on behalf of passengers. We commissioned extra analysis on survey data already conducted by Transport for London (TfL) in order to examine in more detail what passengers consider to be the most important factors in their experience of using the Underground system, along with some work to highlight any key differences amongst certain groups of society who may value certain aspects of their journey higher than the average.

It is important to note that the data is collected by TfL for use internally, and was not originally intended to be used for this purpose. The extra analysis we have commissioned has therefore taken a "long-list" of differing aspects of the tube journey, which were ranked comparative to each other in value rather than importance, and split a selection of this list in to demographic splits. The TfL data has been collected over previous tranches, and we have only been able to do the extra analysis on the latest tranche. For this reason, many worthy areas for examination have not been looked at further at this time, with only the latest tranche receiving our scrutiny.

We have taken this opportunity to add value to existing research, at an affordable cost, rather than undertaking new primary research. This has led to some restrictions both with what has been analysed, and with the sample sizes we have used. We have discounted all sample sizes under 120, with the exception of those over-55 (85 sample size), as we could not ensure statistical accuracy.

Throughout all our research, it is clear the Londoners value the tube network immensely, and are very proud that London has such an asset. It is recognised that

considerable investment has been carried out on the network, but that more improvement and investment is essential, along with more smaller scale interventions that could have a beneficial effect on passengers' feelings of value.

Somewhat inevitably, the most important factors of a journey to the vast majority of passengers are reliability, punctuality and safety. The key areas regarding the performance of the system was researched and covered by the London Assembly's scrutiny[1]. We have not examined these factors further as we feel the London Assembly have covered them already. The performance of the network is important for all passengers, so we have examined in greater detail some of the other elements of the journey that can considerably affect passengers' perceptions of value for money on the tube.

London TravelWatch has recently published research that should be read in conjunction with this report. These are: 'Passengers' ticket purchasing and journey experiences' which was published in July 2013[2], and follows on from our 2011 research on Oyster incomplete journeys. This research gives key insights in to how passengers value different options for purchasing tickets, along with the challenges they face in understanding the system including Oyster and paper tickets, along with more modern technology.
In August 2013, we published our 'Value for money on London's transport services: what consumers think' research[3]. This timely piece of research details passenger perceptions of value for money, examining in detail many of the factors that were statistically analysed in this research.
Additionally, in 2011 we undertook a research project to identify best practice at interchanges in the London area[4]. We found that there were serious shortcomings in wayfinding, signage and information provision, including imperfect information showing access to bus and London Underground interchanges.

[1] State of the Underground report, September 2011 - http://www.london.gov.uk/mayor-assembly/london-assembly/publications/state-of-the-underground-report
[2] http://www.londontravelwatch.org.uk/document/14360/get
[3] http://www.londontravelwatch.org.uk/document/14387/get
[4] http://www.londontravelwatch.org.uk/document/14197/get

Executive Summary

This research has expanded on Transport for London's own research, examining whether there are significant differences in the value placed on discrete aspects of the London Underground journey experience, for different demographic groups.

In all demographic groups, the major themes of safety, reliability and punctuality are by far the most important factors in their journey experience. In most of the other factors we analysed, there were no significant differences between different demographic groups, the clear majority being identical value, with a few cases of minor discrepancies or very small sample sizes preventing worthwhile examination.

The exceptions that did show a statistically relevant difference between demographic groups were in ride quality, which was considered to be twice as important to those over-55, and was the single most important factor analysed for over-55s, as opposed to temperature on train, which was the most important factor analysed across all users. Under-55s valued services such as cash points, Wi-Fi, and retail facilities at stations significantly higher than older passengers, who placed next to no value on these factors. Station retail facilities also scored as more important for those starting their journey in outer London.

In terms of gender difference, women value announcements from the train operator higher than men, whereas men value station service during special line closure higher than women. For all other factors, men and women surveyed the same.

The one area that data was not available for analysis was to examine the difference of opinion on a line-by-line basis. This could prove very useful in determining, amongst other things, the impact of the upgrades to the tube with before and after surveys.

This research did not seek to replicate the work done by the London Assembly with their scrutiny of London Underground's performance, or safety issues. This research is intended to compliment our parallel research, and highlight areas in which passengers feel that their journey can be made more pleasant, or better value, with more marginal interventions.

Introduction

London TravelWatch is the official body set up by Parliament to provide a voice for London's travelling public.

Our role is to:

- Speak up for transport users in discussions with policy-makers and the media;
- Liaise with the transport industry, regulators and funders on matters affecting users and respond to their consultations;
- Investigate complaints users have been unable to resolve with service providers, and;
- Monitor trends in service quality.

Our aim is to press in all that we do for a better travel experience for all those living, working or visiting London and the surrounding area.

We represent passengers on the entire London Underground network, including lines and stations that are outside the Greater London boundary.

We commissioned MVA consultancy to expand on research they had already carried out for Transport for London. More details on the methodology of the research are provided in the next section of this document, but the main objective was to examine in more detail, the impact of various factors of an underground journey on different demographic groupings, to try and identify any areas where a small enhancement could provide a considerable benefit for some demographic groups.

Methodology and results

London Underground carries out significant research on all factors of passengers' experience of travelling on the tube, with a rolling series of surveys. The surveys are conducted in the form of a "willingness to pay" exercise, whereby passengers state how much they would be willing to pay for a large number of comparable options, such as, how much would you be willing to pay to have better lighting on platforms. This evidence then allows London Underground to produce an accurate Business Case model, which they can use to target investment where it is most valuable.

In each case, this data is used to rank possible enhancements against each other, with a score based on the financial benefit in terms of the value for money the enhancement offers. This is aggregated in to a single figure, across the whole network and not broken down in any way, to give TfL's business case model a simple scoring methodology. As beneficial as this is for TfL, we wanted to examine the detail behind the scoring, to see if there were any key messages or factors that were significantly more important for certain demographic groups than the average.

The following categories were selected for further analysis, based on having been surveyed more recently:

- Temperature on the train
- Ride quality of the train
- Emergency help at stations
- Station service during special line closures
- Platform air-cooling
- Tube operator announcements
- Emergency help on trains
- Cash points at stations
- Wi-Fi availability
- Multi-purpose areas
- Retail facilities in ticket halls
- Information button on help points
- Retail facilities on platforms
- Gangways
- Wide-aisle ticket gates
- Information over the public address system on train when delays occur
- Repeated information over the public address system when delays occur
- Comfort of seating on trains

MVA then analysed whether there were key differences in the value of these factors by different demographic groups. They compared the ranking of the value placed on these factors amongst the following groups:

- Age (over or under 55)
- Ethnicity (white or non-white)
- Employment status (in or out of work)
- Net household income (over or under £20,000 per annum)
- Gender (male or female)
- Physical or mental impairment (Impairment or no impairment)
- Wheelchair use (Wheelchair user or not)
- Mobile device use (Mobile device available or unavailable)
- Internet availability (Internet available to passenger or not)
- Starting borough of journey (Inner or Outer (including outside) London)
- End borough of journey (Inner or Outer (including outside) London)
- Number of underground trains used for journey (1 or more than 1)
- Time that journey started (Peak or Off-peak)
- Whether the journey surveyed was disrupted (Yes or no)
- Time that journey finished (Peak or Off-peak)
- Frequency the journey was taken (At least weekly or less than weekly)
- Payment means (Free travel or paid travel)
- Discounted travel (Discounted travel or fully paid travel)

All the results were then ranked amongst the 18 variables, with a score of 1.00 being given to the highest priority (Temperature on-train) and then the other variables scored relative to that. This was used to ascertain a ranking of these variables, including the scale of value, and also to highlight where any significant difference of opinion was observed from the different demographic groups.

The full data is not compatible with presentation in this report due to the size and complexity of the data. This, along with the “long-list” of factors analysed in the earlier tranche of surveys, are available as appendices on request.

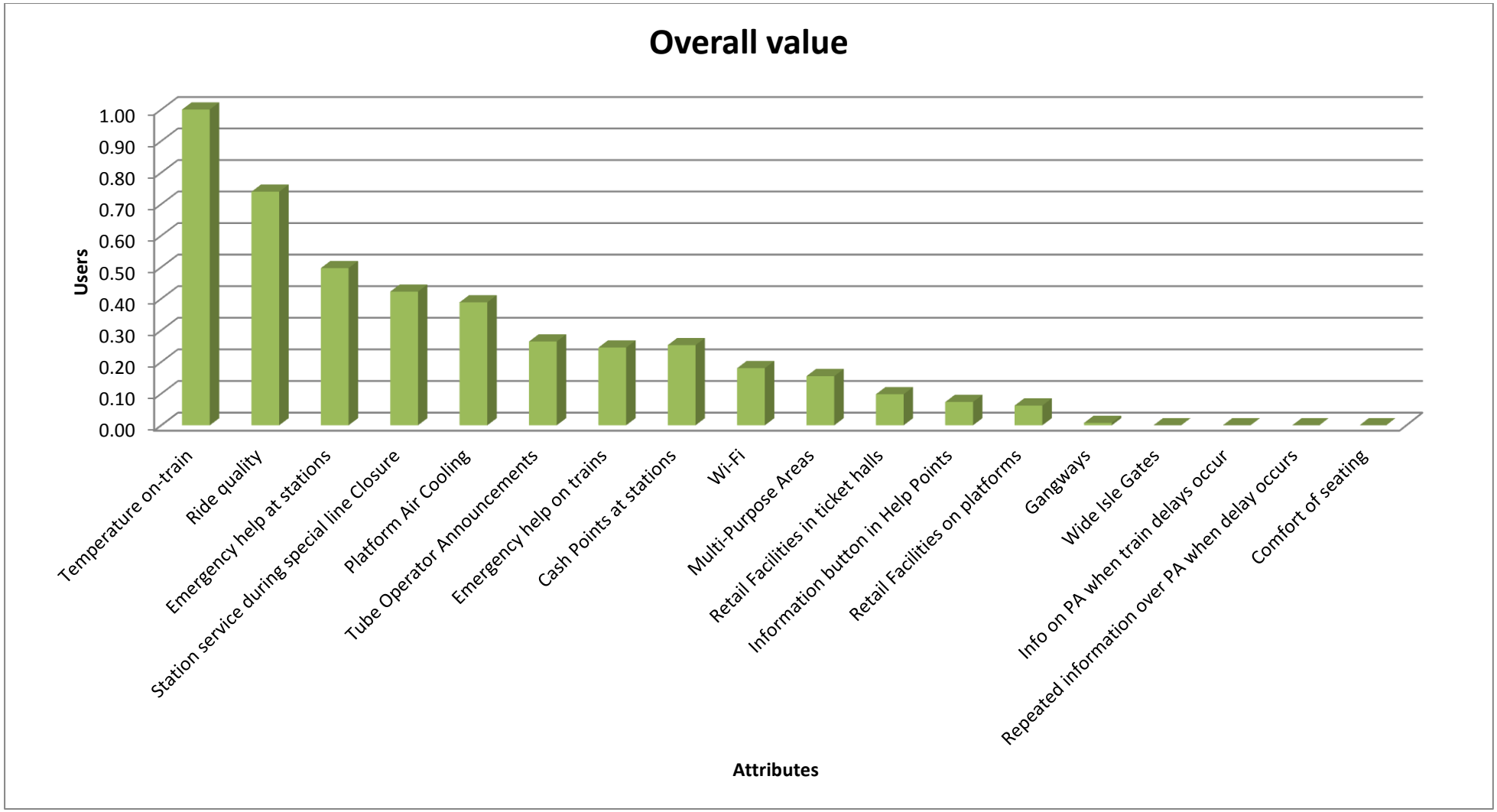

Figure 1 – Overall ranking of attributes by all users

Attribute	All users	Age		Gender		Ethnicity		Employment Status		Start Borough		End Borough		Income*	
		< 55	>= 55	Female	Male	Non-white	White	Working	Not Working	Outer LB	Inner LB	Outer LB	Inner LB	>=20k	<20k
Sample	*543*	*458*	*85*	*271*	*272*	*355*	*188*	*423*	*120*	*248*	*295*	*122*	*421*	*261*	*108*
Temperature on-train	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.29	1.00	1.00	0.76	1.10	1.00	1.00
Ride quality	0.74	0.69	1.19	0.74	0.74	0.31	0.97	0.82	0.47	0.74	0.74	0.74	0.74	0.83	0.45
Emergency help at stations	0.50	0.50	0.50	0.50	0.50	0.30	0.68	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.33
Station service during special line Closure	0.42	0.42	0.42	0.37	0.54	0.42	0.42	0.42	0.42	0.42	0.42	0.56	0.39	0.42	0.42
Platform Air Cooling	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Tube Operator Announcements	0.26	0.26	0.26	0.34	0.22	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Emergency help on trains	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Cash Points at stations	0.25	0.30	0.04	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.37	0.22	0.22	0.41
Wi-Fi	0.18	0.22	0.01	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Multi-Purpose Areas	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Retail Facilities in ticket halls	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Information button in Help Points	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Retail Facilities on platforms	0.06	0.10	0.00	0.06	0.06	0.15	0.00	0.06	0.06	0.18	0.00	0.06	0.06	0.06	0.06
Gangways	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wide Isle Gates	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Info on PA when train delays occur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repeated information over PA when delay occurs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comfort of seating	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.38	0.00	0.00	0.00	0.05	0.00	0.00
* 174 did not state Income															

Figure 2 – Detailed breakdown of the relative value of attributes by demographic splits (only splits with both categories having a sample size of 50 or more shown)

Related London TravelWatch research conclusions

As previously mentioned, London TravelWatch has recently published research on various aspects of the passenger journey experience, including on passenger perceptions of value for money.

Passenger satisfaction with London Underground services is much higher than for National Rail or buses in London but slightly lower than for trams.

Figure 3: London Underground satisfaction scores

	2011/12 Q4	2012/13 Q1	2012/13 Q2	2012/13 Q3
Overall satisfaction	80	82	82	84

TfL customer satisfaction survey research (London Underground) 2012/13

Service reliability, considerable recent investment, both on major upgrades and smaller schemes such as Wi-Fi provision, and platform edge doors on the Jubilee line were all mentioned as positive factors in the London Underground journey experience. By contrast, overcrowding, a lack of facilities with retail outlets missing, and no night service were all mentioned as negative factors.

We will shortly be publishing research into passenger perceptions of the travelling environment, which will add to the debate regarding what passengers wish to see or avoid as part of their journey experience.

Conclusions

Generally, passengers are concerned with reliability, punctuality and safety above all other elements of their journey and these factors are universal amongst all demographic splits. We have not analysed these further as they were covered thoroughly by the London Assembly scrutiny.

When further analysis is done on the marginal elements of the journey experience, and broken down by demographic sectors, it is clear that the majority of aspects are considered much the same across all groups, with only minor differences. At the very small sample size end of the scale there are some other extreme differences, but as these can be put down to the survey response from one or two individuals, they can be discounted as not statistically relevant.

The only demographic splits that can be shown to be statistically relevant are:

- The over-55s value ride quality nearly twice as much as the under-55s;
- Younger people value Wi-Fi, retail facilities and cash points more than over-55s;
- Women value tube operator announcements more than men; and
- Those starting journeys in outer London value station retail facilities higher than those from inner London.

From our analysis, we can see that there is some significant findings that are otherwise hidden if the data is only considered in its' aggregated form. Ride quality is the clear most valued factor for the over-55s, a growing sector of the travelling public. It is also very likely that this is of more value to those with mobility impairments, a group that we did not have a large enough sample size to analyse further. Tube Operator Announcements are valued by all passengers, but especially to female passengers. Clear announcements can serve to reassure passengers and to explain delays when they occur.

The wider use of stations outside central London, either for retail or community use, can be seen to be considered of value to those passengers surveyed. This area was of greater importance to several distinct demographic groups and could form an increasing function in the future.

It is our opinion that, subject to suitable sample sizes, it may be worth including a question in future surveys asking which line was predominantly used. This could either allow a line-by-line split, a split of deep-tube or sub-surface, or possibly a "pre-upgrade" and "post-upgrade" split. We understand that this information is not currently required by TfL for use in their analysis, but hope that this information could be collected at minimal or no cost in future.

We would like to thank Transport for London for allowing use to use their data to add value to their research. We would welcome any opportunity to discuss their next tranche of surveys to see if there are opportunities to ask further questions that would provide extra useful data for minimal extra cost and work with them to achieve this.