

Date: 17 November 2016

Item: Bus Safety Programme

This paper will be considered in public

1 Summary

- 1.1 This paper provides an update on progress of the Bus Safety Programme and requests the Panel's views on the proposed way forward.

2 Recommendation

- 2.1 **The Panel is asked to note the paper.**

3 Background

- 3.1 In February 2016, TfL launched the Bus Safety Programme to address the increase in the number of collisions and the number of injuries on the bus network and to continue to drive down the numbers of people killed or seriously injured. Since the launch of the programme two further work streams have been added. The programme deliverables are:

- (a) develop a world leading bus safety standard for London;
- (b) update TfL's bus contracts to include new safety incentives;
- (c) provide a new safety training module to all 25,000 drivers;
- (d) provide a UK first Incident Support Service for those affected by fatal or serious injuries;
- (e) publish additional bus collision data and making it more accessible;
- (f) provide greater transparency on bus collision investigations;
- (g) deliver safety highway engineering improvements at bus collision hotspots; and
- (h) utilise iBus to monitor safety performance and bus speeds.

- 3.2 Further detail of TfL's activities in respect of each of these and the proposed way forward is outlined below.

4 A world leading Bus Safety Standard for London

- 4.1 A range of innovative new technologies are being considered to form part of the Bus Safety Standard, including collision avoidance systems, such as Automatic Emergency Braking (AEB) and Intelligent Speed Assistance (ISA). Other potential

design innovations include improving wing mirror design; windscreen glazing and front of bus re-design to reduce the impact of any collision. Instead of trialling these innovations one at a time, as TfL has done previously with pedestrian and cyclist detection systems and Bus ISA, TfL is looking to trial a number of innovations at the same time to be introduced to new buses as a package, which will be written into the vehicle specification as the Bus Safety Standard.

4.2 To ensure that TfL is trialling those technologies and design innovations that will achieve the greatest casualty reductions, an analysis of police collision investigation files for fatalities involving buses is currently underway. This review has now been extended to include an analysis of Road Accident In-Depth Study (RAIDS) database which will look at serious injuries in addition to fatalities and ensure the Bus Safety Standard addresses casualty reductions across all severities.

4.3 Once a long list of potential technologies and design features has been identified TfL will be holding a workshop at the end of November 2016 with the bus manufacturers and operators to draw up a shortlist to take forward for testing and evaluation. This shortlist will depend on potential casualty savings, cost and timescales for delivery. We would welcome Panel members' participation in this workshop if at all possible.

4.4 It is intended that the evaluation of the shortlist by an independent vehicle safety test house will commence in March 2017.

5 TfL's bus contracts to include new safety incentives

5.1 A bus operator safety scorecard has been developed using safety related metrics to benchmark safety performance at an operator and garage level.

5.2 There are three opportunities for utilising the scorecard for the Panel to consider:

- (a) performance management where scores will form part of the regular meetings TfL has with the operators to discuss actions and initiatives to improve safety;
- (b) the current contract extension of up to two years would be dependent on a defined safety score to be introduced in 2017; and
- (c) tender evaluation where the operator will be given a score that is used as part of the criteria for awarding new contracts.

5.3 It is proposed that all three are taken forward due to the varying timescales associated with these activities. Performance management can begin immediately, whereas contract extensions and tender evaluation will take longer to implement.

6 A new safety training module for all 25,000 bus drivers

6.1 TfL continues to invest in the most stringent bus driver training in the UK. By the end of 2016 bespoke 'In the Zone' training will have been delivered to all bus drivers in the Capital, currently 80 per cent of London bus drivers have completed the training. In the Zone raises drivers' awareness of the risks that we take when we're out on the road, whether as a driver of a vehicle, or as a vulnerable road user such as a pedestrian, cyclist or motorcyclist. It is hoped that over time the training will encourage drivers to make small but significant adjustments in the way they assess risks.

- 6.2 TfL, in partnership with bus operators, has also developed a bespoke two day course titled 'Hello London' for all of London's bus drivers, focussed on improving the customer experience. The training programme started in May 2016 and will take two years to rollout to all 25,000 London bus drivers. The training course is aligned to extensive research on customer gain points to address the areas which will have the greatest impact on improving service. Improved customer focus will result in fewer passenger incidents including slips, trips and falls and reduced conflicts with other road users.
- 6.3 Going forward, TfL proposes trialling the Safe Urban Driving Course with Driver Training Supervisors. Safe Urban Driving was originally developed for HGV drivers and focuses on driving in urban areas and specifically vulnerable road users, such as cyclists and pedestrians, and includes practical on-road cycle training. This course can be modified for driving buses and will reinforce the messages from the In the Zone training as part of driver's ongoing development. We plan to pilot this in 2017.

7 A UK first incident support service for those affected by fatal or serious injuries

- 7.1 The Sarah Hope line was launched in April 2016 to provide support to anyone who has been involved in, or affected by, a life-changing incident on the TfL network. There is a dedicated team who provide both practical support, and work in partnership with organisations that can provide further specialised support.
- 7.2 Since the launch of the 'Sarah Hope Line' in March there have been 9 calls regarding incidents involving buses. The British Transport Police and Metropolitan Police Service provide both victims and witnesses with the phone number at all incidents they attend. The Sarah Hope Line also has the support of the London Air Ambulance Service, who have briefed all first responders on the service's scope. TfL continues to work with bus operators to ensure their employees are aware of the service and can pass on details to anyone involved in a serious incident on the TfL network.
- 7.3 Examples of services that have been offered to date include interim counselling services and transport to and from hospital for family members from outside London. Additionally the team provide signposting to charities who can provide on-going specialist support to callers.

8 Additional and more accessible bus collision data

- 8.1 In August 2016, TfL published long term bus/coach casualty trends using STATS19 data on the TfL website: <http://content.tfl.gov.uk/long-term-bus-casualty-trends-paper.pdf>. Going forward provisional quarterly STATS19 data will be added to the London Collision Map. In addition to the quarterly Incident Reporting and Investigation System (IRIS) data publication, TfL has now published a summary of this data in a user friendly format. This can be found here: <https://tfl.gov.uk/corporate/publications-and-reports/bus-safety-data>. TfL invites the Panel to provide feedback on this new user friendly format and consider whether there is any additional data that would be in the public interest to include.
- 8.2 TfL continues to work on consolidating STATS19 and IRIS data into a single source to provide a more holistic picture of bus safety performance. The Met Police are rolling out COPA (Case Overview and Prosecutions Application, the London version of

CRASH) which will enable real time collision reporting by officers and enable TfL to gain access to the data with a 30 day time lag (previously 5-6 months). Once the roll out is complete TfL will be in a position to publish STATS19 and IRIS data for the same time period as a single data set from May 2017.

9 Greater transparency of bus collision investigations

- 9.1 TfL has recently published the outcome of all fatal bus collision investigations and will continue to publish annually going forward. TfL is also working on enhancing the current NIMI (Notification and Investigation of Major Incidents) and Formal Investigation arrangements that already exist within TfL.
- 9.2 An Incident Review Group is being established to peer review the investigation of bus-related fatalities and other significant incidents. This group is modelled on the arrangements applied within London Underground. It will be chaired by the TfL Director of Health, Safety and Environment, supported by representatives from across the business and technical experts relevant to the nature of the incident. The remit of the group is to ensure that the causes of incidents are understood and the proposed actions are appropriate to prevent recurrence. TfL will continue to oversee the completion of actions arising from investigations through its assurance activity. Additionally, the group will identify any actions that TfL needs to take and ensure that they are allocated and tracked to closure.
- 9.3 There may be instances where it is appropriate for TfL to commission an independent investigation of a major incident. The details of such investigations will be shared with the operator involved, where appropriate. Where TfL believes there is a learning opportunity that would benefit the wider transport industry, those findings will be shared as appropriate.
- 9.4 At the June meeting, the Panel requested further information about the use of CCTV on buses including the retention of CCTV footage and access to recordings of incidents. TfL's vehicle specification for new buses requires the CCTV hard drive to store images for a minimum of 240 hours which, when taking into account the average hours a bus is in service in each 24-hour period, means they do not overwrite for two to three weeks. TfL has a well-established arrangement with bus operators regarding acquiring CCTV footage when an incident has occurred on the bus network. The uniform arrangement is specified in Section B-VI of the framework agreement used by TfL when entering into contract with all bus operators.

10 Safety highway engineering improvements at bus collision hotspots

- 10.1 TfL uses collision data to identify roads and junctions on the Transport for London Road Network that have the highest vulnerable road user collisions. Each year a review of the previous three years of collision data is carried out to identify those locations that are most in need of a road safety intervention. We then sponsor engineering improvements at these sites. This data is shared with the boroughs so that they too can prioritise their road safety engineering programme on the borough road network.
- 10.2 Work has been undertaken to map bus casualty hot spots against the current road safety scheme programme to identify and determine whether bus safety specific measures should be considered at certain sites.

- 10.3 The proposed next steps are to carry out in depth collision studies at those sites not currently included in the road safety engineering programme and any highway improvements the studies identify will be delivered in conjunction the existing Bus Priority Programme.

11 iBus to monitor safety performance and bus speeds

- 11.1 It has been determined that the forthcoming iBus 2 programme could include a speed limiting function and this could directly interact with the GPS data and link to the digital speed limit map of London. Including a speed-limiting function within iBus 2 will deliver a more integrated and robust system interface as it will no longer require separate ISA technology, which TfL has previously trialled as a precursor to the Bus Safety Standard.
- 11.2 Work is underway to explore how iBus 2 can be used to introduce additional safety features as part of the Bus Safety Standard such as a centralised system for monitoring driver behaviour at a network level.

12 Other Developments

- 12.1 To ensure a joined up approach to safety across the business, proposed next steps for the programme include a formal review of TfL's Freight and Fleet programme to ensure that any lessons learned or current initiatives that would be appropriate for buses are utilised. There will also be a formal review of safety processes within our other services (London Underground, rail, overground, and tram) in respect of risks and their contributory factors that are common with buses, to ensure that best practice in the management of these risks is applied consistently across TfL.

13 Target Setting for Bus Safety

- 13.1 TfL has an overall road safety target to reduce the number of people killed and serious injured on London's roads by 50 per cent by 2020 (against a 2005-09 baseline). However customer injuries that occur on buses which are not reported to or by the police are not captured in this data. Therefore the Panel's view is sought on the recommendation to set a bus customer major injury target using data from TfL's Incident Reporting and Information System .
- 13.2 It is suggested that a long term target for reduction in bus customer major injuries is set rather than an annual target, for example a reduction of X per cent over a five year period. This would reflect the time required to be confident of the benefits of new measures and ensure that improvements are sustained over time. The issue with setting an overall target is that this may mask poor performance in respect to specific risks. However, the majority of the deliverables of the Bus Safety Programme tackle multiple risks making an overall target an appropriate measurement.
- 13.3 To monitor progress towards the long term target, interim targets should be set internally based on specific risks for example slips, trips and falls. This will enable the monitoring of risk specific interventions. There are very few risk specific interventions within the current programme, but these will be introduced as the programme evolves.
- 13.4 Following the workshop at the end of November 2016 (see paragraph 4.3) TfL will be clear on which technology and design features to take forward as part of the Bus

Safety Standard and the expected casualty reductions associated with them. The workshop will also touch on the casualty reductions that could be achieved by introducing other elements into the programme mentioned above, such as Safe Urban Driving. Once this information is available the Panel is invited to agree a target to be included in the budget for 2017/18 at the next meeting.

14 Conclusion

- 14.1 The Panel is asked to note the update on progress of the Bus Safety Programme.
- 14.2 The Panel is asked to participate in the workshop to draw up a short list of technologies and design features to be included in the Bus Safety Standard at the end of November 2016.
- 14.3 The Panel is asked to provide feedback on the publication of IRIS data in a new user friendly format and consider whether there is any additional data that would be in the public interest to include.
- 14.4 The Panel is asked to agree a bus customer major injury target to be included in the budget for 2017/18 at the next meeting.

List of appendices to this report:

None

List of Background Papers:

Bus Safety Programme, Safety, Accessibility and Sustainability Panel, 30 June 2016

Bus Safety Programme, Safety, Accessibility and Sustainability Panel, 10 March 2016

London Collision Map <https://tfl.gov.uk/corporate/safety-and-security/road-safety>

Long term bus/coach casualty trends (<http://content.tfl.gov.uk/long-term-bus-casualty-trends-paper.pdf>.)

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