

TRANSPORT FOR LONDON

BOARD

SUBJECT: A102/A12 BLACKWALL TUNNELS INCIDENT REDUCTION AND CAPACITY IMPROVEMENT MEASURES

DATE: 30 MARCH 2011

1 PURPOSE AND DECISION REQUIRED

- 1.1 The purpose of this paper is to update the Board on the actions being taken and considered to reduce the number of unplanned incidents that cause significant delays to traffic using the A102/A12 Blackwall Tunnels corridor.
- 1.2 The Board is asked to note the potential benefits of the measures being progressed to improve the effective operation and safety for users of this corridor.

2 BACKGROUND

- 2.1 The Blackwall Tunnels provide a strategic north/south, cross river route in east London for 100,000 vehicles per day, providing an alternative route for commercial traffic avoiding the Dartford Crossing tolls. Congested for much of the working day, with northbound queues frequently extending south as far as the A2 Sun in the Sands Junction during the morning rush hour, the route suffers from a significant level of unplanned disruption.
- 2.2 Traffic disruption due to unplanned events and incidents on the road network such as emergencies, road traffic collisions, breakdowns, highway defects and burst/leaking utility mains is, to some extent, inevitable on any busy road network.
- 2.3 TfL has focussed its efforts on minimising stoppages caused by incidents and events occurring in and around the tunnel that reduce capacity and cause disruption. This has included removing the ad hoc implementation of the tidal flow arrangement in the morning peak, making journey times through the tunnel much more predictable; improving the tunnel height restriction signage to reduce over-height vehicle stoppages from around 3,000 a year to around 1,700 last year; and taking over control of the London Streets Tunnels Operations Centre from the Metropolitan Police in April 2009, improving TfL's response to, and management of, incidents that do occur to minimise their duration.
- 2.4 Following the cessation of tidal flow and introduction of the measures outlined above, TfL recorded a 20 per cent improvement in overall traffic throughput at Blackwall Tunnel in the morning peak (a 40 per cent improvement in the southbound direction and seven per cent in the northbound direction).

- 2.5 However, in 2009/10, TfL still recorded 324 hours of serious and severe traffic disruption due to unplanned incidents on the Blackwall Tunnels corridor. This represents 14 per cent of the hours of serious and severe disruption caused by unplanned events occurring across the TfL network as a whole. The principal causes were vehicle breakdowns and HGVs exceeding the Northbound Tunnel height restrictions (4m nearside lane and 2.8m offside lane).
- 2.6 In 2009/10, TfL recorded 335 vehicle breakdowns in the tunnels or on their approaches, which caused over 130 hours of serious and severe traffic disruption. In addition, despite the numerous height restriction warning signs on the routes approaching the tunnels, 1,759 over-height HGVs (about 30 per cent of overseas origin) were prevented from entering the northbound tunnel by the over-height detection equipment in place on the tunnel approach. Although individually these over-height vehicles (OHVs) take only a few minutes to remove from the traffic flow, cumulatively they led to around four days' worth of unplanned tunnel closures. For every minute it is closed, around 60 vehicles are prevented from getting through the tunnels. The unplanned closures caused by these OHVs could, on average, prevent up to 750 vehicles a day from travelling through the tunnels.
- 2.7 TfL has undertaken a number of actions to reduce the number of tunnel closures caused by OHVs (set out in further detail below) and these are starting to have an effect. During the 10 periods of 2010/11, TfL has recorded 1,152 over-height vehicles at Blackwall Tunnel. If these levels continue for the remainder of the financial year, TfL expects to see around a 14 per cent drop in the number of OHV incidents compared with last year.
- 2.8 In the same period, TfL has recorded 466 vehicle breakdowns, which, if this trend continues for the remainder of the year, would see an 80 per cent increase compared to last year. However, this is likely to be as a result of more robust reporting of such incidents.
- 2.9 Overall, due to more efficient management, the hours of serious and severe disruption caused by unplanned incidents is expected to drop by 12 per cent, when compared to last year. While this is a positive improvement, tunnel closures due to OHVs and vehicle breakdowns remain a significant issue and, so far this year, have caused almost 100 hours of unplanned tunnel closures.

3 REDUCING UNPLANNED TUNNEL CLOSURES

- 3.1 Introducing measures to reduce unplanned tunnel closures is a TfL priority. A number of measures to reduce the number and impact of these unplanned incidents and events are being progressed. These include:
- (a) Improving over-height vehicle detection**
- 3.2 In spite of numerous signs and warnings, many drivers ignore the automatic detection system linked to diversion signs and proceed to the mouth of the tunnel requiring the tunnel to be closed.
- 3.3 Two additional over-height detectors, linked to automatic number plate recognition (ANPR) devices and variable message signs (VMS) have been installed. These will display over-height vehicle registration marks and a message to divert away from the entrance ramp. Investigations are underway to

establish whether ANPR equipment could pick up the nationality of foreign vehicles and display on VMS in appropriate languages.

(b) Altering the Blackwall Tunnel Southern approach to segregate high sided vehicles into a separate lane so that OHVs do not interrupt the flow of other traffic

- 3.4 A potential opportunity has been identified to introduce a dedicated lane with a height gauge for all high vehicles. The approach to the tunnel on the A102 could be altered to retain two lanes of general traffic, but using the existing nearside lane for use by high vehicles only (see outline design in Appendix 1).
- 3.5 Vehicles passing the gauge would be allowed to proceed through the tunnel if lower than the permitted height. Over-height vehicles would be diverted away from the tunnel, along Tunnel Avenue, to continue their journey via other Thames crossing points (for example Woolwich Ferry, Dartford Crossing or central London bridges). Such use of this lane would significantly reduce the delays to general traffic caused by OHV incidents by allowing the other two lanes to continue through the tunnel unhindered. Feasibility and design are currently underway with a view to construction coinciding with completion of the Blackwall Tunnel Northbound Refurbishment Project.
- 3.6 As this proposal involves highway controlled by both TfL and the London Borough of Greenwich, TfL will need to explore this option further with the London Borough.

(c) Improving driver awareness of the incidents causing closures, both through the media and new roadside signage, to encourage drivers to check the condition of their vehicles before they travel

- 3.7 A publicity campaign about the delays experienced at Blackwall Tunnel, covering the nature and frequency of incidents, the disruption caused for many road users, and what drivers can do to avoid such incidents, commenced at the end of January 2011.
- 3.8 TfL has this year started recording, wherever possible, the cause of vehicle breakdowns occurring in the tunnels or on the approaches. Of those logged, a third of breakdowns were the result of vehicles simply running out of fuel.
- 3.9 TfL has erected new signs advising drivers that there are no fuel stations on the A2, A102 and A12, which are intended to improve driver awareness.
- 3.10 A new electronic sign has been installed adjacent to the entrance of the northbound Blackwall Tunnel to highlight to tunnel users the frequency of over height and broken down vehicles stopping traffic. The sign is updated remotely each month to reflect the number of incidents taking place.
- 3.11 Since March 2010, TfL has been recording vehicle registration and business names (where visible on CCTV) of vehicles breaking down, running out of fuel, or being stopped by the over-height vehicle detection system. Letters are being sent to those businesses whose addresses are known in order to discourage this behaviour. Offenders include major UK supermarkets and foreign haulage vehicles.
- 3.12 TfL is proposing to send similar letters to all OHV offenders or drivers of vehicles breaking down/running out of fuel to highlight the impact of their

actions and discourage future occurrences.

(d) Working with the Vehicle Operator and Services Agency (VOSA) and the Metropolitan Police Service (MPS) to enhance enforcement measures for all infringements

- 3.13 The MPS and VOSA have powers of enforcement that, if used robustly, could bring about a change in driver behaviour, reducing the number of over-height incidents and, potentially, breakdowns caused by unroadworthy vehicles. Both organisations have in the past carried out ad hoc stop and check inspections and enforcement activity in the vicinity of the tunnels. VOSA and the MPS are able to process vehicles for a range of offences (for example, lack of insurance, MOT or Vehicle Excise Duty, vehicle road worthiness defects, overweight vehicles and drivers exceeding permitted driving hours). A Fixed Penalty Notice of £60 and a three-point licence endorsement may be issued by the MPS for OHV offences.
- 3.14 In addition, since August 2010, the TfL-funded MPS Road Response Team (RRTs) has covered Blackwall Tunnel as part of its default network patrol plan and provides a reactive response to unplanned events on the network. These ad hoc arrangements resulted in 228 vehicle inspections and 80 prohibitions.
- 3.15 On 1 February 2011, TfL and MPS began a three month trial of a dedicated police team for the Blackwall Tunnels to test whether dedicated policing at the tunnels can improve journey time reliability by reducing the duration and frequency of unplanned incidents that cause delays.
- 3.16 The trial consists of two RRTs (one sergeant and four constables) during the Monday to Friday peaks. At least once a week the officers will be joined by staff from VOSA and MPS Traffic officers and the Commissioner is meeting VOSA imminently to pursue greater VOSA enforcement.

(e) Other enforcement measures

- 3.17 Another means of encouraging drivers to check the roadworthiness of their vehicle before travelling and reduce disruption from broken down vehicles may be to charge drivers for recovering their vehicle from within the tunnel. TfL funds vehicle recovery, covering the Limehouse, Rotherhithe and Blackwall Tunnels, through its Highway Maintenance and Works Contractor. It is not currently able to charge drivers for this.
- 3.18 However, the MPS has tow away powers which allow for the immediate removal of broken down vehicles and for the recovery of costs (£150). The MPS can also issue Fixed Penalty Notices (£60) to drivers who breach the Red Route Clearway Order by stopping in the tunnels. As part of TfL's robust approach to traffic management and to minimise congestion, TfL intends to work with the MPS to maximise the effective use of these powers.
- 3.19 In the longer term, subject to consultation, TfL intends to consolidate and review comprehensively the existing traffic regulation orders affecting the tunnels and tunnel approaches and make new orders that would address various traffic management issues. It is proposed that the new orders should empower TfL to tow away vehicles that have broken down and recover the expense of doing so from drivers.

3.20 Consideration is also being given to the possibility of TfL seeking increased powers so that it can carry out enforcement action currently reserved to the MPS (such as the power to issue Fixed Penalty Notices).

3.21 These actions will also address the inconvenience caused to other road users by the breakdown of vehicles that run out of fuel.

4 CRIME AND DISORDER/RISK MANAGEMENT/SUSTAINABILITY/ EQUALITY AND INCLUSION IMPLICATIONS

4.1 The purpose of this initiative is to encourage better compliance with existing restrictions at the tunnels, vehicle roadworthiness regulations and driver documentation requirements. Working more closely with enforcement agencies is clearly the 'stick' used against those who flout the restrictions. Enhancing public awareness of the inconvenience caused to other road users by inconsiderate behaviour is a complementary initiative.

5 RECOMMENDATION

5.1 The Board is asked to NOTE the actions being taken and considered by TfL, in partnership with other agencies, to reduce the number of traffic delaying incidents on the A102/A12 corridor.

6 CONTACT

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