

ADMINISTRATION OF ROAD SAFETY MEASURES

Executive Summary

1. Road traffic accidents can have a devastating impact on the victims and their families. While Hong Kong's traffic fatality rate has declined in recent years and is one of the lowest in the world, there were 15,894 traffic accidents in 2012, resulting in 120 deaths and 20,090 injuries. In recent years, the Transport and Housing Bureau, with the assistance of the Transport Department (TD) and the Hong Kong Police Force (Police), has introduced a number of new measures to tackle improper driving behaviours and promote safer vehicle operation. The Audit Commission (Audit) has conducted a review of the administration of these road safety measures.

Measures to tackle drink driving

2. *Implementation of random breath tests.* Alcohol affects the central nervous system, blunting perception and coordination and impairing one's ability to detect risk. Studies have shown that drivers who have consumed alcohol have a much higher risk of involvement in accidents than those who have not consumed alcohol. In 2008, the Road Traffic Ordinance was amended to empower the Police to conduct random breath tests on drivers without the need for reasonable suspicion that they have consumed alcohol, with effect from February 2009. Audit examination revealed that from February 2009 to December 2012, 42% of the Police's random breath tests were conducted during the daytime, with an average arrest rate per test of 0.11% which was significantly lower than the 0.75% during the nighttime. In Audit's view, a risk-based tasking of the tests is important to ensure the cost-effective use of the limited enforcement resources. Given that the tests would also cause inconvenience to the motorists, there is a need to administer the tests judiciously (paras. 2.2, 2.4, 2.5, 2.8, 2.9 and 2.11).

3. *Enforcement of the three-tier penalty legislation.* According to medical evidence, the risk of causing an accident increases with the increase of blood alcohol

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level in a driver. In December 2010, the law was amended to provide a three-tier penalty system in proportion to drivers' alcohol concentration levels. A driver will be charged with a drink driving offence if he fails both a screening breath test conducted at roadside and an evidential breath test at a police station. From January to October 2012, 744 drivers were arrested for failing the screening breath tests. However, 182 of them were released and 215 were charged with a lighter offence as their alcohol concentrations had dropped to lower levels by the time the evidential breath tests were taken. Audit sample check revealed that additional travelling time was incurred for conducting the evidential breath tests because some police stations for reporting arrests were not equipped with test devices and there were breakdowns of the test devices in some cases (paras. 2.15, 2.16 and 2.18 to 2.20).

Measures to tackle speeding and red light jumping

4. Speeding and red light jumping are common traffic offences in Hong Kong that could result in grave consequences. In 2012, there were 266,250 and 55,815 prosecutions relating to speeding and red light jumping offences respectively. With their 24-hour surveillance functions, the speed enforcement camera system and red light camera system are the key enforcement tools (paras. 3.2 and 3.8).

5. *Operation of enforcement camera systems.* The deterrent effect of the present speed enforcement camera system is localised as some drivers may increase speed after passing the system. In 2007, the Administration commenced studying the feasibility of using an average speed camera system to influence driver behaviour over a greater distance, like on highways. The system has been used in other countries since 1999. However, as of February 2013, the Administration only planned to launch a trial of the system in 2013-14. As regards the red light camera system, Audit noted that of the 22,871 red light jumping cases detected from October to December 2012, 2,109 (9%) could not be pursued because the images of the offending vehicles were blocked by other vehicles. Moreover, for both enforcement camera systems, the photographs taken only showed the offending vehicles' identity but not that of the offending drivers. There were cases that the registered owners of the vehicles failed to identify the offending drivers. As the effectiveness of both enforcement camera systems as enforcement tools depends on the prosecution evidence they can provide, there is a need to find measures to further improve the systems, drawing on overseas experience where appropriate (paras. 3.9 to 3.14 and 3.17).

Measures to promote safer vehicle operation

6. Public light buses (PLBs), taxis and franchised buses are an integral part of the public transport system. From 2007 to 2011, the accident involvement rates of these vehicles were consistently higher than the average for all motor vehicles (paras. 4.2, 4.37, 4.44 and 4.45).

7. *Measures for PLBs.* The Administration has introduced a package of measures to enhance the safety operation of PLBs including the passenger seat belt legislation in 2004 and measures for regulating the travelling speed of PLBs in 2012. For the passenger seat belt requirements, PLBs in use before the 2004 legislation are exempted. As at 31 December 2012, of the 4,350 PLBs, 1,815 (42%) were not fitted with seat belts and 2,535 (58%) were fitted with seat belts. To protect passenger safety and to enable PLB passengers to form consistent habits of wearing seat belts, the TD needs to work towards applying the seat belt requirement to all PLBs. PLB passengers are required by law to wear a seat belt if available. However, as reflected by the number of summonses issued against PLB passenger seat belt offence, there was little improvement in the seat belt wearing rate from 2007 to 2012. There is a need to step up enforcement and publicity efforts on promoting the wearing of passenger seat belts on PLBs (paras. 4.3, 4.4, 4.7, 4.16, 4.19 and 4.32).

8. *Measures for taxis.* Besides the passenger seat belt legislation in 2001, in April 2003, the Administration informed the Legislative Council Panel on Transport of a proposal to improve the quality of taxi services. The proposal included a mandatory pre-service training programme to improve safe driving knowledge and attitude of prospective taxi drivers. However, the proposal had not been taken forward thereafter. Audit noted from the Police's enforcement statistics that the total number of speeding offences committed by taxi drivers had increased by 23% from 25,338 in 2007 to 31,258 in 2012. In terms of the number of speeding offences per 1,000 vehicles over the period 2007 to 2012, the speeding problem of taxis was more serious than that of PLBs and franchised buses. The situation calls for additional measures to enhance the safety operation of taxis (paras. 4.38 to 4.41).

9. *Measures for franchised buses.* To enhance the safety operation of franchised buses, the maximum speed of a franchised bus is restricted by law to 70 kilometres per hour. On the request of the TD, the franchised bus operators have also enhanced their safety arrangements including requiring their drivers aged

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50 or above to undergo annual health checks. Between June and November 2012, there were three serious franchised bus traffic accidents in which the bus drivers concerned were reported to have lost consciousness at the times of the accidents. In November 2012, the Administration undertook to review the arrangements of health check for franchised bus drivers. Based on Internet research, Audit has found that the Mainland and a number of overseas countries have stipulated in their laws more stringent health check requirements for taxi and bus drivers than the existing legislative requirements in Hong Kong which cover all drivers (paras. 4.45 to 4.48 and 4.50).

Accuracy of traffic accident data

10. *Traffic accident locations.* The Police is responsible for investigating traffic accidents and inputting accident data into its computerised database which is linked with that of the TD. The TD uses computer sorting of traffic accident data to help compile a list of accident black spots. The traffic accident location is identified using a grid reference system. Due to inaccurate input of grid references, the TD has to spend extra time and resources to rectify the problem. There is also a risk that the timeliness of accident black spot data could be compromised. In Audit's view, prompt and effective measures should be taken to ensure that the grid references for traffic accident locations are correctly input in the first place (paras. 5.2 to 5.4 and 5.13).

11. *Traffic accident contributory factors.* The TD relies on the traffic accident contributory factors input by the Police for identifying problems of road environment, road users and driving behaviour, and formulating strategies to tackle specific types of accidents. In a sample check of the accident contributory factors input for 50 traffic accident cases, Audit found that 13% of the input factors were inaccurate and there was no record of supervisory check for the 50 cases. There is a need to tighten management control in this regard (paras. 5.17, 5.20 and 5.21).

Publicity and education programmes

12. The Road Safety Council organises publicity and education programmes to disseminate road safety messages. A variety of publicity and advertising means are employed including the broadcast of announcements in the public interest (APIs) on television. In 2011 and 2012, the broadcast of an API for combating drug

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driving was shelved and another one for promoting safe cycling was temporarily withheld respectively after receiving complaints about their contents. There is a need to draw lessons from these cases to prevent recurrence of similar problems (paras. 6.2, 6.3, 6.5 and 6.6).

Audit recommendations

13. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Commissioner of Police should:**

Measures to tackle drink driving

- (a) **conduct an overall review of the random breath test operations taking into account the observations made in this Audit Report (para. 2.13(b));**
- (b) **streamline the breath test procedures with a view to improving the effectiveness in enforcing the three-tier penalty legislation (para. 2.25);**
- (c) **complete the current testing of the mobile evidential breath test device as soon as possible and make an early decision on the way forward in providing suitable and adequate equipment for implementing the drink driving breath tests (para. 2.25(a));**

Measures to promote safer vehicle operation

- (d) **in conjunction with the Road Safety Council, step up the enforcement and publicity efforts on promoting the wearing of passenger seat belts on PLBs (para. 4.32);**

Accuracy of traffic accident data

- (e) **tighten up procedures and supervisory control to ensure the correct input of grid references for traffic accident locations (para. 5.14(a));**

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- (f) **tighten management control to improve the accuracy of accident contributory factors input (para. 5.22); and**

Publicity and education programmes

- (g) **in conjunction with the Road Safety Council, tighten controls to ensure that road safety API contents are critically checked (para. 6.8).**

14. **Audit has also *recommended* that the Commissioner for Transport should:**

Measures to tackle speeding and red light jumping

- (a) **in conjunction with the Commissioner of Police, expedite action on the trial scheme of the average speed camera system (para. 3.18(a));**
- (b) **in conjunction with the Commissioner of Police, explore measures to improve the effectiveness of the present enforcement camera systems, drawing on overseas experience where appropriate (para. 3.18(b));**

Measures to promote safer vehicle operation

- (c) **in conjunction with the Director of Environmental Protection, make greater efforts to encourage owners of diesel PLBs to participate in the upcoming incentive scheme for the early replacement of their vehicles with cleaner models fitted with passenger seat belts (para. 4.31(a));**
- (d) **explore other measures to encourage owners of the liquefied petroleum gas fuelled PLBs without passenger seat belts to retrofit their vehicles with seat belts (para. 4.31(b));**
- (e) **consider the need for introducing additional measures to enhance the safety operation of taxis (para. 4.42(a)); and**

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- (f) **take into account the health check requirements on taxi and bus drivers adopted by the Mainland and other countries in the ongoing review of measures to ensure the road safety of franchised buses and other major road-based public transport modes (para. 4.52(a)).**

Response from the Administration

- 15. The Administration agrees with the audit recommendations.