

Local public buses should and can be safe

PUBLIC transport, such as buses, has been found to be a safe form of transportation as compared to other transport modes. In European Union countries, such as the United Kingdom, road crashes involving buses and coaches only accounted for 0.43% of total road fatalities. Similarly, in the United States, buses only contributed to 0.8% of total road fatalities.

However, in Malaysia, the crash rate for buses and the injury rate for bus occupants are relatively high when compared to other transport modes. In 2013, the crash rate for buses was 140 cases for every thousand buses. This was higher than passenger cars and motorcycles crashes, which were 60 cases for every thousand passenger cars and 10 cases for every thousand motorcycles, respectively.

In recent years in Malaysia, there has been a rising number of severe road crashes involving buses. With increased public concern about bus safety, effectively managing travel risk has become critical for both bus operators and road safety policy makers. Bus drivers are generally at a high risk for crashes due to their long hours and exposure to different road environments. Therefore, understanding and quantifying their risks and taking steps to manage them could improve bus safety.



A study conducted by the Road Safety Research Centre (RSRC) revealed that bus drivers' driving behaviour (such as speeding and using mobile phone while driving) and bus safety conditions (such as worn out tyres and the availability of passenger seat belts) significantly contribute to bus safety risks. Hence, specific strategies and policy interventions are required to address bus safety concerns.

Telematics-based auto insurance, also known as usage-based auto insurance, bases its premiums on vehicle type, driven distance, driving time, and driving behaviour (such as hard braking and rapid accelerating). All these measurements are recorded by a small device, which is installed in a concealed location in the vehicle. The prime advantage of this policy is that it enhances the insurance provider's risk assessment strategies and possibly reduces driving risks. Automobile drivers can in turn obtain a discount on their premium as a reward for good driving behaviour.

Recently, the Malaysian Motor Insurance Pool (MMIP) has mandated the installation of telematics devices in public buses. This means that public bus operators are not allowed to renew their insurance unless their buses have a telematics device that was

installed by an appointed vendor. Despite the benefits provided by a telematics-based auto insurance policy, several potential drawbacks and disputes must be resolved before it can become a reliable policy that is beneficial to all stakeholders.

First, further harmonisation and coordination between the MMIP and the Land Public Transport Commission (SPAD) is necessary in terms of how to ensure that the new insurance policy is consistent with SPAD's safety, health and environment code of practice (iCOP-SHE) policy for bus operators. Second, a financial subsidy is recommended to alleviate bus operators' burden on telematics device installation and maintenance fees. Third, research conducted by the RSRC revealed that 40% of intercity bus drivers were using a mobile phone while driving. Therefore, telematics technology must be enhanced to allow for simultaneous detection of mobile phone use violations. Lastly, the telematics device must be able to differentiate between bus drivers so that reckless bus drivers can be identified and recommended for safe driver training.

Scientific research has indicated that poor hazard perception skills are associated with higher crash rates. Hazard perception refers to the ability of automobile drivers to anticipate and avoid potential danger in the road environment. Hazard perception

training has been included in driving tests in several countries such as Australia, Canada, and the United Kingdom. It has been found that driving test candidates who have taken hazard perception training can more quickly and more often detect road hazards than candidates who have not taken such training. However, there has not been a hazard perception training implemented in Malaysia; hence, the ability of drivers to anticipate potentially dangerous situations could not be assessed.

Therefore, it is anticipated that intensive hazard perception training for bus drivers is crucial to enhancing their safe driving skills. The development of a safety performance rating for public buses can not only be used to identify possible risk management strategies to improve public bus safety but also to provide safety information to public bus passengers, making them fully aware of a bus' safety performance and conditions. This, in turn, could place economic pressure on bus operators to improve their vehicles' safety performance. Inevitably, a policy to reduce private vehicle ownership, such as motorcycles and motorcars, and to increase the use of public transport will never be realised if public bus safety is not improved.

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