

Safety Alert SAL01/24

28 February 2024

Bus and coach rollaways: review your risk controls

The Office of Transport Safety Investigations (OTSI) is currently conducting a systemic safety investigation into bus and coach rollaway incidents in NSW and has identified safety issues requiring immediate attention by operators, in the interests of public transport safety.

Recent incident notifications have highlighted a number of park brake application failures, with drivers not applying the park brake before leaving the driving position. This is due to several factors, including memory lapses, distraction, task focus, and mistaken expectations that the door interlock system would provide adequate braking functionality.

Key points for operators

Bus and coach operators are strongly encouraged to:

- Ensure that you and your drivers understand the functionality of the park brake systems, and interface with door interlock systems, for all vehicles in your operating fleet.
- Ensure drivers are familiar with any alarms or indications identifying the state of the parking brake if the driver is to leave the driving position.
- Ensure that drivers understand the consequences of external door closure switch activations in circumstances where the parking brake is not applied.
- Review your driver operating procedures for rollaways, including responses to abnormal situations, such as door closure issues.
- Review the strength and effectiveness of your risk controls to mitigate vehicle rollaways:
 - have you adequately considered the influence of human factors, such as distraction, task focus, and complacency, in your risk controls?
 - do your risk controls rely on the driver as the final defence against a vehicle rollaway? If so, are there any additional defences, such as engineering controls, that could be considered?
 - have you considered how any variations in rollaway protections across your fleet (for example, some vehicles having an aural park brake alarm when the driver leaves their seat, which may be absent on other vehicles) could potentially affect driver behaviours?

Background

Recent incident notifications to OTSI included two significant events, both involving school services, that highlight the safety issue of driver activations of external door closure switches, with no park brake applied, removing the final defence in preventing an unmanned rollaway.

Casino, 22 November 2023

A Volvo B7R bus, fitted with an NCBC Protégé body, was operating a school service with about 20 students onboard in Casino, NSW.

While students boarded the bus, the driver alighted to talk with a teacher but did not apply the park brake before exiting the bus, which was left in neutral gear. With the bus door open, the door brake system remained active, keeping the bus stationary.

The bus driver activated the external door close switch under the front bumper. The door of the bus closed, with the driver stood outside on the footpath and the students inside the bus.

Within seconds of the door closing, the bus started to roll away towards the mini mart. At that time, there were vehicles parked at the fuel bowser and people standing directly beside one bowser, refuelling their cars.

As the bus crossed the centreline of the road, it was on a trajectory for a direct collision with a vehicle and trailer parked in front of the fuel bowser (Figure 1).

Figure 1: Screenshot from mini mart CCTV of unmanned rollaway



Source: ABC News. Image modified by OTSI.

It was later reported that a student onboard the bus steered the vehicle to the right of the refuelling area and applied the foot brake, bringing the rollaway bus to a stationary position.

No injuries were sustained in the incident and there was no damage to the bus or any infrastructure. The bus was inspected post incident, with no unserviceabilities of the braking or door systems identified.

Gundagai, 1 February 2024

A BCI coach, fitted with a 2010 BCI Classmaster body, was operating a school service with about 25 students onboard in Gundagai, NSW.

The driver, who was unfamiliar with the coach as it was not the usual vehicle they drove, reported experiencing electrical issues, followed by problems closing the front door, with students onboard. The driver contacted their company to report the issues. It was reported that the company instructed the driver to try cycling the front door, using the external door closure switch.

The driver alighted and activated the external door closure switch which closed the passenger door with the driver outside the coach. It is highly likely that the park brake was not engaged.

The coach rolled backwards, mounting the curb and coming to a stop after colliding with the school fence. No injuries were reported but there was minor damage to the coach and fence (Figure 2). The bus was inspected post incident, with no unserviceabilities of the braking or door systems identified.

Figure 2: Post rollaway position of coach



Source: Operator. Image modified by OTSI.

For further information on this Safety Alert, contact engagement@otsi.nsw.gov.au