

Safety Advisory SA02/23

Bus rollaways and incident data collection

The incident

In January 2021, the Office of Transport Safety Investigations (OTSI) started an investigation into a serious bus rollaway accident at Cordeaux Heights in NSW. The bus rolled out of control after the driver suffered a medical episode and became incapacitated.

OTSI reviewed evidence from the Cordeaux Heights accident, and several other investigations on bus rollaway events, including a fatality at Hurstville in 2016. As a result of that review, OTSI determined there were safety benefits to be gained from a sector-wide examination of systems issues and organisational influences on safety in relation to bus rollaways.

As a result, OTSI discontinued the Cordeaux Heights investigation and in January 2022¹ began a systemic investigation into bus rollaway events in NSW.

OTSI observations

To date, a key focus of the systemic investigation has been on identifying the extent of and trends associated with bus rollaway incidents, to enable the identification and prevention of primary and contributory causes.

OTSI analysed available datasets including reports received directly from operators and those submitted under contractual obligations, such as in the Bus Incident Management Database (BIMD). After assessing the dataset, OTSI found that the recording of the circumstances of rollaway events could be improved. In 36% of reports the cause of the incident was not identified. Additionally, operator reports often included details that were not relevant in determining the circumstances of the event. For example, reports included operational impacts of the event and details of the recovery, such as time delays, reallocation of drivers, and detailed summary of substituted services.

While operational impacts have an immediate effect on services that an operator may need to manage. It is important to identify the safety issues which can lead to recurring operational impacts and/or societal harm, including individual injury, fatalities, loss of morale, reputational harm and significant business costs if not identified and managed.

As such, identifying the underlying cause/s of a safety event such as a rollaway ensures effective action can be taken for immediate improvement, and to prevent similar or more serious future occurrences.

¹ See OTSI investigation [I02012: Bus rollaways in NSW](#)

Key points for operators

All **bus and coach operators** should:

- Conduct internal investigations after a safety incident, with the aim of identifying the circumstances of the event and underlying cause/s. Using a simple investigative model such as **People, Environment, Equipment, Procedures and Organisation (PEEPO)** and collecting data on conditions, actions and/or deficiencies in each of its five categories can help to identify contributing factors to an incident. The 72 Hour Bus Incident Investigation form is currently being updated to include the PEEPO model.
- For rollaways, the following information should be recorded as a minimum at the time of the event:
 - Engine status (on/off)
 - Door status (open/closed)
 - Park brake status (applied/released)
 - Driver location (in seat/vestibule/absent)
 - Risk controls fitted/present and functionality
 - Summary of event and contributory factors.

Safety message

Bus rollaway events present a substantial risk of both serious injury and loss of life. Bus and coach operators need to fully understand the circumstances of the event and likely cause/s, to ensure appropriate and timely safety actions are taken. Using a simple investigative model such as PEEPO will assist operators to capture better data and identify contributory or underlying cause/s.

OTSI will continue its systemic investigation into bus rollaway events to help industry recognise the risks and potential preventative controls that may be implemented but will require more support from industry to provide further data on rollaway events. OTSI will be approaching metropolitan contract holders in the coming months as part of this ongoing investigative activity.

For more information contact: engagement@otsi.nsw.gov.au

