# Safe System for Universities 

## Case study: Princes Highway intersection crash

| Revision | Date | By | Revisions |
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| 1.0 | 8 Dec 2019 | C Stokes | First release |
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## Introduction:

On 1 December 2014, a fatal crash occurred along the Princes Highway near the South Australian town of Hatherleigh. The crash occurred when the driver of a Nissan utility vehicle entered the intersection from a side road and collided with a Hino truck, which was travelling along the main road. A trailer attached to the Hino then struck a Ford utility vehicle which was also travelling along the main road, but in the opposite direction. Four occupants of the Ford utility where killed in the crash.

## Timeline:

The following timeline describes the critical events that led to the crash and associated information important for understanding the reasons for the crash.

- A Ford utility vehicle travelling south along Princes Highway near Hatherleigh in a $110 \mathrm{~km} / \mathrm{h}$ zone. The Ford was a current model with a then 5 -star Australian New Car Assessment Program (ANCAP) safety rating.
- A Hino rigid heavy vehicle towing a trailer travelling north along Princes Highway, in the opposing direction to the Ford.
- A mid-1990s Nissan utility vehicle travelling east along Main Road 300, approaching the intersection with Princes Highway. The intersection with Princes Highway is a four-way crossroad intersection.
- As the Nissan approached the intersection, the driver was reportedly distracted as he operated a GPS device within the vehicle. The Main Road 300 approach to the intersection was controlled by a give way sign and give way line marking. The Nissan driver failed to give way and entered the intersection at speed.
- Advanced warning sign, designed to warn drivers of the upcoming intersection, are provided on approach to the intersection on Main Road 300 (see below, left). At the intersection, there is one give way sign and give way line marking for drivers entering from Main Road 300 (see below, right). There are no substantial visual obstructions preventing drivers on Main Road 300 from seeing traffic travelling along Princes Highway.

- As the Nissan entered the intersection, the Hino traversed through the intersection at or near the speed limit. The Princes Highway approaches to the intersection were uncontrolled. There are no design elements to slow traffic as it approaches and enters the intersection from any of the approach roads.
- The Nissan collided with side of the Hino, which forced the Hino's trailer to swing into the oncoming lane, where the Ford, which was travelling through the intersection in the opposing direction to the Hino, collided with the trailer.
- At the time of the crash, the Ford was travelling at or near the speed limit. The force of the collision with the trailer resulting in severe damage to the Ford's occupant compartment. Four of five people in the Ford were killed. Both drivers of the Nissan and Hino sustained minor injuries.
- The intersection where the crash occurred was a low volume intersection. Approximately 800 vehicles traverse the intersection per day along the Princes Highway. Traffic volumes for Main Road 300 are unknown but likely to be much lower. The intersection did not have a history of similar or severe crashes.


