Transport for NSW | Centre for Road Safety

## Safety Assessment Gocup Road, Tumut

Executive Summary September 2020





## **Executive Summary Safety Assessment Gocup Road, Tumut**

A fatal crash occurred on 16 May 2020 at the intersection of Gocup Road and Snowy Mountains Highway. The driver of a vehicle travelling south on Gocup Road failed to give way entering the intersection, colliding with a semi-trailer travelling west on the Snowy Mountains Highway. As a result, a 10-year-old girl and a pregnant 29-year-old female were killed. The community has called for the intersection to be upgraded due to safety concerns.

The intersection is located at the northern end of Tumut and is the junction point for the two most important roads in the area - Snowy Mountains Highway and Gocup Road. The intersection is currently uncontrolled, with vehicles travelling south from Gocup Road and north from Capper Street requiring to give way to traffic on the Snowy Mountains Highway.

The posted speed limit on the Snowy Mountains Highway through this intersection is 60 km/h, while the posted speed limit on Gocup Road is 100 km/h. The speed limit on Capper Street is 60 km/h, with a school zone located about 300 metres south of the intersection.

Using the Safer Roads Risk Assessment Platform and Safe Systems approach, the intersection has been identified as being in the top 2.1 per cent of intersections in NSW for risk.

Evaluating design elements such as lane and shoulder width, road curve and safety barriers, Snowy Mountains Highway from the east has been rated a three out of five-star road. Snowy Mountains Highway from the west and Gocup Road are four-star roads.

The objective of this NSW Centre for Road Safety report is to:

- Review the current safety risk at the Gocup Road, Capper Street and Snowy Mountains Highway intersection.
- Evaluate the interim infrastructure measures currently in place.
- Recommend a longer term safety solution for the intersection.

A review of the NSW Safer Roads Program interim improvements being carried out at the site determined safety could be further improved by banning movements and reducing the speed limit at the intersection.

This review also assessed other long-term infrastructure improvements including:

- Traffic lights to simplify road user decisions. Traffic lights would not minimise conflict points, impact speeds or impact angles. This option would address the existing crash history. Construction would take an estimated 18 to 30 months to complete from approval.
- Roundabout to reduce conflict points, simplify road user decisions and minimise impact speeds and impact angles. Installing a roundabout would address the site's crash history, with a non-mountable annulus considered most effective. Construction completion would be an estimated 18 to 30 months following project approval.
- Close Capper Street to reduce conflict points and simplify road user decisions. This would not
  minimise impact speeds or impact angles, nor address the crash history associated with turning
  movements from Gocup Road. Construction would take an estimated 12 months to complete from
  approval.
- Raised intersection to slow the approach speeds to the intersection. This would not simplify
  road user decisions or minimise conflict points or impact angles. This option would address some
  of the location's crash history by reducing severity of crashes due to the slower approach speeds
  to the intersection. Construction completion would be an estimated 12 to 24 months following
  project approval.
- Close Gocup Road and move the intersection to remove the safety risks at the existing intersection. This option would reduce the conflict point and remove road user decisions associated with Gocup Road, but would not minimise impact speeds or impact angles. Crash mitigation would have to be considered at the new intersection at Boundary Street, where an upgrade would be expected with a single lane roundabout based on traffic volumes. This options would require significant development work, including utilities and property boundaries assessments. Construction would be an estimated 36 to 60 months from approval.

• **Do nothing further** except ban movements and reduce the speed limit at the intersection. This option does not improve safety at the intersection and would require a safety performance review every 12 months if adopted.

## Conclusion

Based on the safety analysis and infrastructure options assessment, it is recommended a roundabout be investigated and constructed at the Gocup Road and Snowy Mountains Highway.

As an infrastructure solution, a roundabout has the highest safety performance of all the options considered.

Roundabouts help make intersections safer by reducing vehicle speeds, making it easier to choose a safe gap in traffic. Roundabouts minimise the impact angles of approach, leading to lower severity crashes, have fewer conflict points and direct motorists in one direction. Roundabouts reduce the risk of being severely injured by up to 85 per cent.

Roundabouts are also more suitable for heavy vehicle traffic compared to other options. For example, the stop/start required at traffic lights would impact the efficient flow of heavy vehicles through the intersection.

In addition, a roundabout could be designed so that it is clearly visible to the road user and acts as a gateway treatment to Tumut.

Due to site constraints, it would take between 18 and 30 months to construct a roundabout at the location once the project is approved.

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