

Safe vehicles



Existing and emerging vehicle safety innovative technologies, such as collision warnings and avoidance, fatigue assistance, braking stability and speed alerts will greatly improve road safety in Queensland.

Over time, the introduction of safer vehicles and new technology has greatly reduced the number of road fatalities in Queensland. As represented below and outlined in the *Queensland Road Safety Strategy 2022–31*, the introduction of seat belts in 1969, for example, saw the beginning of a steep decline in road fatalities. It is anticipated that new technologies designed to improve driver and passenger safety will have similar positive results.

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‘...as a daily user, safety on the highway is paramount for me.’ Private citizen



Bruce Highway southbound morning peak at Anzac Avenue, North Lakes (March 2022).

Key actions to deliver Safer vehicles on the Bruce Highway and broader road network:

1. Encourage the uptake of safer and smarter new vehicles and develop approaches to reduce the age of the Queensland vehicle fleet.
2. Work with industry and the community to improve the safety of interactions with heavy vehicles and vulnerable road users.

Road fatalities per 100,000 population in Queensland: 1969 - 2023

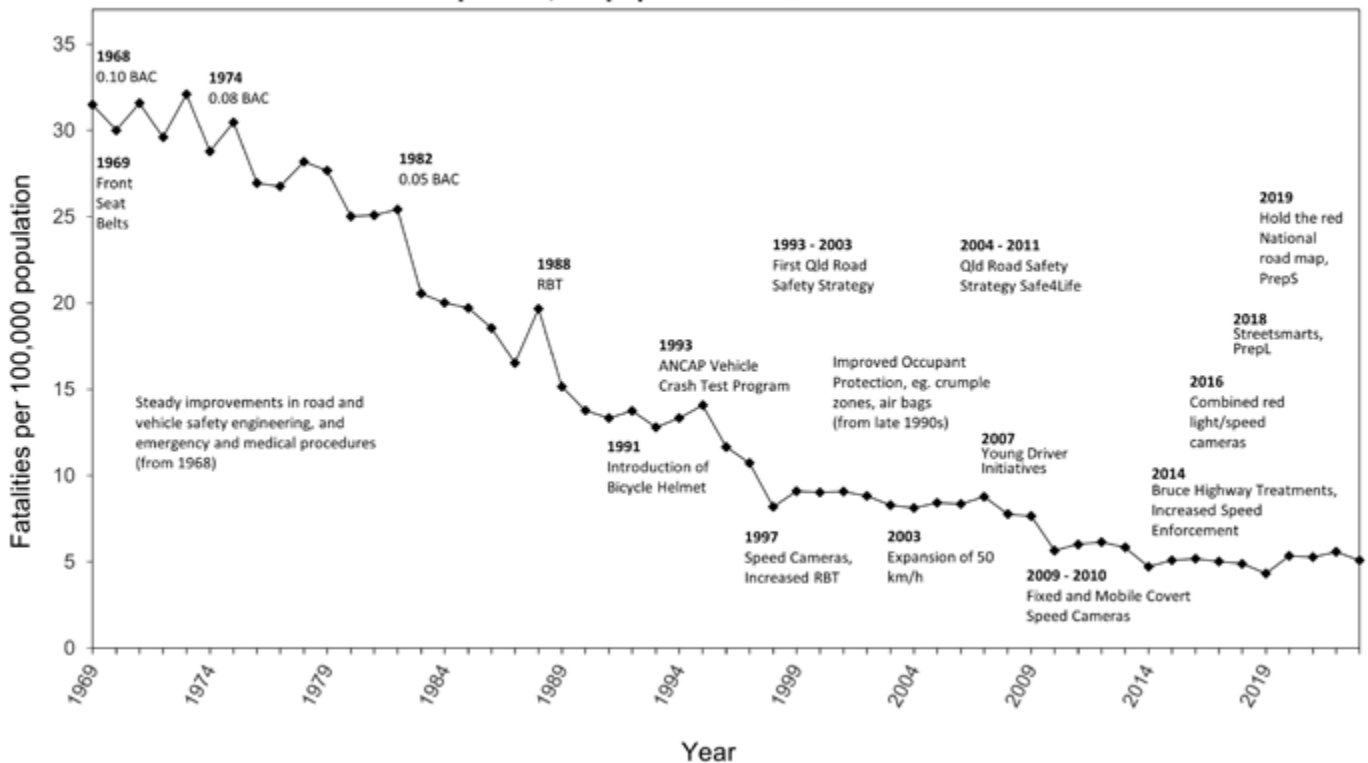


Figure 5: Road fatalities per 100,000 population in Queensland between 1969–2023.

Case study

Cooperative and Automated Vehicle Initiative

TMR's Cooperative and Automated Vehicle Initiative (CAVI) supports Queensland's vision of zero deaths and serious injuries on the state's road network. CAVI delivered Australia's largest Cooperative Intelligent Transport Systems (C-ITS) pilot—the Ipswich Connected Vehicle Pilot which ran from September 2020–2021. The European compliant technology enables vehicles to communicate to other connected vehicles, roadside infrastructure and centralised traffic management systems to share awareness messages. This equipment generated real-time driver warnings to conditions, such as upcoming red lights, road works, road hazards, congestion and presence of pedestrians at intersections, allowing the project team to test how these warnings affect driver behaviour and offer safety benefits.

The technology has now been installed at 66 intersections across Queensland, including 37 intersections along the Bruce Highway, between the Sunshine Coast and Cairns. This will give road users the chance to experience the service in Queensland before it appears in commercially available vehicles. The C-ITS upgrades to the Bruce Highway intersections are jointly-funded by the Queensland and Australian governments.



Cooperative Intelligent Transport Systems (C-ITS).



Testing C-ITS along the Bruce Highway in Mackay at the intersection with Gordon Street.