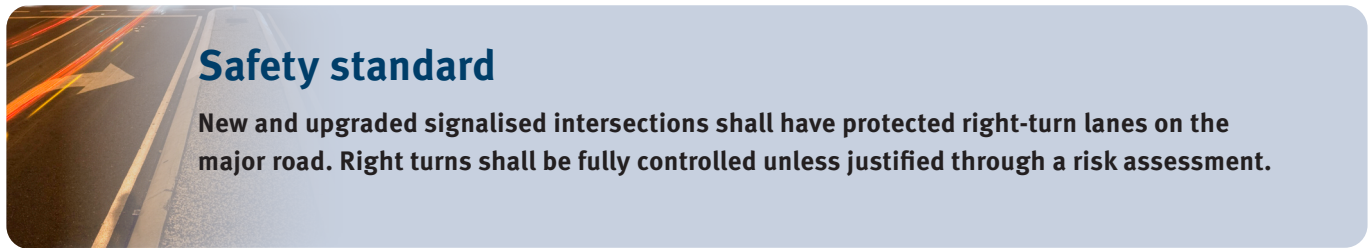


Intersection – Signalised

Filter turns



Fact sheet #5 of 13



Safety standard

New and upgraded signalised intersections shall have protected right-turn lanes on the major road. Right turns shall be fully controlled unless justified through a risk assessment.

Safety countermeasure

A filter turn is a turning movement where a driver must give way to opposing vehicle and/or pedestrian movements before proceeding.

The driver does so, without the aid of specific traffic signals to guide them when it is safe to do so.

A filter right turn is a turn where a turning vehicle has a green circular light but no arrow.

There is an inherent crash risk for motorists attempting a filter turn as the driver must correctly estimate the speeds and paths of all vehicles and pedestrians that their path intersects with, as well as predict the intention of oncoming vehicles.

Typically, right-turn movements are permitted to filter through opposing traffic to improve intersection operation performance. These are only upgraded to controlled right turns if several crashes have occurred or if the intersection has exceeded its capacity.

The main type of crash caused by allowing filter right turns are right-turning vehicles colliding with oncoming vehicles. These types of crashes can be severe, due to side impact. Motorcyclists are particularly vulnerable.

Dedicated right turns

Austrroads' *Towards Safe System Infrastructure: A Compendium of Current Knowledge (2018)* suggests that in a 'Safe System', all signalised intersections would have controlled right turns as the default arrangement on the major road.

Providing a dedicated right-turn movement can be achieved by using leading or lagging right turns, diamond right turns or split phasing, depending on the specific intersection requirements.

For guidance, refer to the [Traffic and Road Use Management \(TRUM\) manual Volume 1 Part 9 Traffic Operations](#).

While the requirement to provide channelised right-turn lanes only applies to major roads, filter turns should be excluded on all approaches unless there is justification.

Safety outcome

A fully controlled right turn at an intersection can reduce crashes by 60%.

39% of fatal and serious injury crashes at signalised intersections involved a right-turning vehicle colliding with a vehicle travelling straight ahead between 2011 to 2020.

This fact sheet is designed to assist the implementation of 13 safety standards for new and upgraded infrastructure on Queensland's state-controlled roads, as per the department's *Road Safety Policy (2018, Appendix A)*. While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.



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