

Who Rules the Road? Pedestrian Road Rules Assessment in Victoria

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Abstract

The 942 “older” pedestrian crashes that occurred in Victoria from 1 July 2009 to 30 June 2014, indicate that there is an issue that needs to be addressed.

Would a consistent requirement for vehicles to give way to pedestrians at non-signalised intersections increase road safety and eliminate current road user confusion about when drivers are or are not required to give way to pedestrians?

A risk assessment of such a requirement indicates that in Victoria a number of road rules would need amendments, yet it is not clear that changes to these road rules would not introduce new risks.

Background

Nieuwesteeg & McIntyre (2010) surveyed pedestrians in Victoria injured in 40, 50 and 60 km/h speed zones. They explored the crash circumstances and pre-crash behaviour from the perspective of pedestrians. Key insights include:

- * Injured pedestrians are usually not at fault when crossing at intersections, but mostly at fault when crossing the road mid-block.
- * They are usually injured in familiar locations while on routine journeys.
- * A particularly problematic interaction is that of a vehicle turning right at an intersection, failing to give way to a crossing pedestrian.

Legislative provisions about giving way to pedestrians are inconsistent – for example, a vehicle turning from a continuing road into a terminating side street is required to give way to pedestrians crossing the terminating road; however, if the driver is turning from the terminating road into the continuing road, the driver is not required to give way to pedestrians crossing the terminating road. This could result in a pedestrian being able to cross one half of a side street, yet needing to stop halfway and give way to a vehicle on the other half of the side street.

Accordingly it has been suggested that a consistent requirement for vehicles to give way to pedestrians at non-signalised intersections could increase road safety and eliminate current road user confusion about when drivers are or are not required to give way to pedestrians

This assumption was examined by undertaking a scenario-based risk assessment.

Risk Assessment

To study the possible impacts of requiring all vehicles to give way to pedestrians at non-signalised intersections, the risks were estimated for ten scenarios:

1. Four way intersections
2. T intersections
3. Left-turn slip lane

4. Multiple lane side road approach – a T intersection with separate right and left turning lanes for traffic from terminating road into the continuing road
5. Channelised right turn lane on a continuing road
6. Seagull intersection – a T intersection with channelised lanes on the continuing road for traffic turning right, both into and out of the continuing road.
7. Shared off-road pathway
8. Off-road bicycle pathway
9. Bus bays
10. Left in – Left out intersections – a T intersection with the exit of the terminating road angled so as to facilitate left turns and to prohibit right turns.

The risks were estimated using the risk matrix method of the 2006 Austroads Guide to Road Safety (Turner et al., 2006) which is based on the Australian risk management standard AS/NZS 4360 that subsequently became the international risk management standard ISO 31000. The results of the risk assessment indicate that some of the risks to either driver, vehicle or pedestrian may not be negligible.

Conclusions

Other Australian States also have problems with pedestrians and motor vehicles (King et al., 2009). All Australian States and Territories operate with the same road rules as Victoria in relation to pedestrian priority in relation to: turning at intersections; U-turning; Giving way to a pedestrian at or near a Stop Sign or Stop Line; Giving way to a pedestrian at or near a Give-Way Sign or Give-Way Line; Slip lanes.

There should be a full study of the risk treatments needed to ensure that the risk of the relevant scenarios are at a level of medium or lower. If such risk reduction is not possible then solutions other than legislation – such as infrastructure, enforcement or education – should be sought.

References

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- King, M. J., Soole, D. W., Ghafourian, A. 2009 Illegal pedestrian crossing at signalised intersections : Incidence and relative risk, *Accident Analysis and Prevention*, 41(3). pp. 485-490.
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