TRAFFIC SIGNALS

Pedestrian crashes at traffic signals (intersections and mid-block) account for 21% of all pedestrian crashes for people aged 65 and over.

What do CrashStats tell us?

- 21% of all pedestrian crashes involving 65+ year olds occur at signalised intersections.
- This compares with 19% of all pedestrian crashes involving 65+ year olds that occur at unsignalised intersections.
- 96% of older pedestrian crashes involving a right turning vehicle at a signalised intersection occur on the departure side of the intersection, where motorists have an obligation to give way to pedestrians.
- Only 2% of all older pedestrian crashes occur at signalised mid-block locations, which are significantly less complex than other types of intersections.

Issues

- Most traffic signals are typically designed to facilitate vehicle traffic and provide a lower level of service to pedestrians (requiring them to push a button in advance to trigger pedestrian signals).
- The duration of the 'flashing red' man is not always sufficient to allow pedestrians, especially older people, to clear the intersection and safely reach the other footpath.
- On some arterials the time allocated to cross is based on a walking speed of up to 1.5 metres per second (50% to 67% faster than the 0.9 to 1.0 metre per second that older people are typically capable of walking).
- When turning at an intersection vehicles must always give way to pedestrians who are crossing the road vehicles are turning into. This rule applies irrespective of the phase for the pedestrian lights (green, flashing red or red man).

Contributing factors

- Insufficient signal time for pedestrians to safely complete crossing.
- Background vehicle speeds and intersection design that allows turning at high speed.
- Lack of motorists' compliance with pedestrian priority rules.
- Intersection designs that increase pedestrian exposure and complexity of crossings, such as slip lanes.

Potential solutions

- The time provided for pedestrians to cross for every metre of exposure must be at least 1 second of time during the 'flashing red' man period. Ideally, the same time should be provided for pedestrians to cross during both the 'green man' and flashing red periods.
- Continue the program to retrofit audio tactile devices at all traffic signals, to assist visually impaired pedestrians.
- Reduce intersection signal cycle times to provide more frequent crossing opportunities.
- Apply exclusive right-turn phases to separate right-turning traffic from pedestrians.
- Install pedestrian early-start signal phases and PUFFIN pedestrian detection signals.
- Install automatically operated pedestrian signals ('pushing the button' not required to get a 'green man'), late introduction pedestrian signals or countdown timers at pedestrian signals.

This factsheet is a summary of relevant findings from the 2016 report *Safer Road Design for Older Pedestrians* by movendo and Victoria Walks.