

# RAC Road Safety Snapshot

## Cycling

The personal and community benefits of cycling are widely recognised however in 2017 there were 7 cyclist fatalities and in the five years to December 2016, there were nearly 600 cyclists killed or seriously injured in Western Australia (WA)<sup>1</sup>. Understanding the road safety challenges for cyclists is critical to encouraging the uptake of cycling and reducing the number of people killed or seriously injured on our roads.

### Facts about cycling in Western Australia

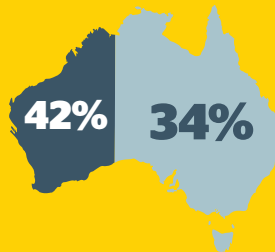
Cycling in WA



1 in 3 WA households own a bicycle<sup>2</sup>.



483,100 people cycle for either recreation or commuting every week<sup>3</sup>.



42% of people cycle in WA, compared to the national average, which is 34%<sup>4</sup>



26% 11%

Males cycle more than females<sup>5</sup>.

Rules for cycling

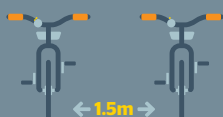
#### Before riding on roads, footpaths and shared paths, bicycles must be fitted with:

- » A bell (or other warning device);
- » An operating rear-wheel brake and a front wheel brake is optional;
- » A red rear reflector and yellow side reflectors on each wheel and pedal; and
- » Front and rear lights which are clearly visible from 200m in the dark or in hazardous weather.



**Electric bike (eBike):** An eBike or power assisted pedal cycle is fitted with a motor that assists the rider to pedal. In WA, eBikes are legally permitted to have a maximum power output of 250 watts and provide power-assistance to a maximum speed of 25km/h.

**Roads:** Cyclists are permitted to ride up to two abreast, but must not ride more than 1.5m apart. Subsequent cyclists are permitted to overtake two cyclists riding abreast.



**Bike lanes:** Unless it is unsafe or not free from debris, on-road cyclists are required to ride in designated bike lanes.

**Paths:** Cyclists are legally permitted to ride on footpaths and shared paths, but must always give way to pedestrians when doing so. Cyclists are required to ride in single-file, unless overtaking another cyclist.

**Helmets:** Helmets must always be worn and comply with the Australian Safety Standard AS/NZS2063:2008. The fine for not wearing a helmet is \$50<sup>6</sup>.

**Minimum passing distance:** Motorists must ensure that there is a minimum distance of 1m between their vehicle and a cyclist on roads with speed limits up to 60 km/h, and 1.5m on roads with speed limits greater than 60km/h<sup>7</sup>.

**Pedestrians:** Pedestrians can use bicycle-only paths, if they are crossing by the shortest safe route, and do not remain on the path for longer than necessary<sup>8</sup>.

**Bus lanes:** When signposted, cyclists are permitted to ride in bus lanes.

### Crash types

Of the crashes involving cyclists, just over half (56%) occur off-road, including on paths, in parks and on driveways. These are not included in Police crash statistics. Only 11% of all crashes involving cyclists are reported to police<sup>9</sup>.

92% of reported cycling crashes resulting in serious injury involved a car. Of these:

**57%**

were right-angle (T-bone) crashes

**15%**

were rear-end crashes

**13%**

occurred during a right turn

**9%**

were due to overtaking or lane changing

**7%**

occurred when the cyclist was moving from the footpath to the road<sup>10</sup>.

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## Crash location

Most cycling crashes occur in the Perth Metropolitan area (88%). Only 12% of reported bicycle crashes occur in regional WA<sup>11</sup>.

Of the regional areas, the South West Region has the highest rate of cycling crashes. Between 2013 and 2017, there were 135 reported cycling crashes for every 100,000 persons living in the region,<sup>12</sup> with 22 crashes per 100,000 people that resulted in fatal or serious injury to the cyclist<sup>13</sup>.

Cyclists involved in crashes on main roads and highways with higher speed limits are more likely to be seriously or fatally injured<sup>14</sup>.

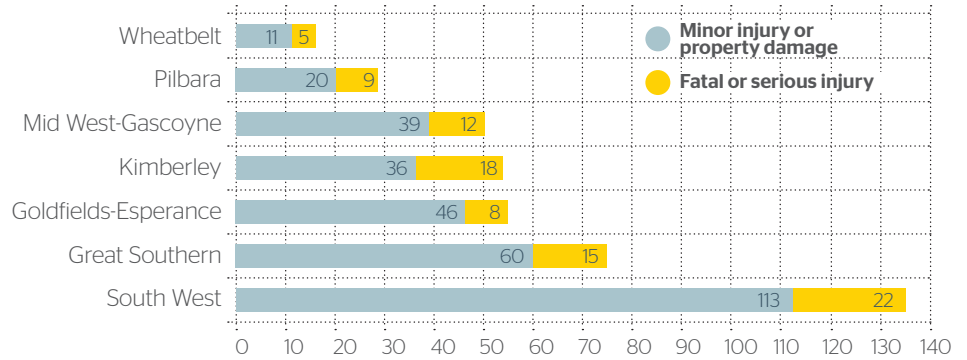


Figure 1: Reported crashes per 100,000 people, 2013 - 2017

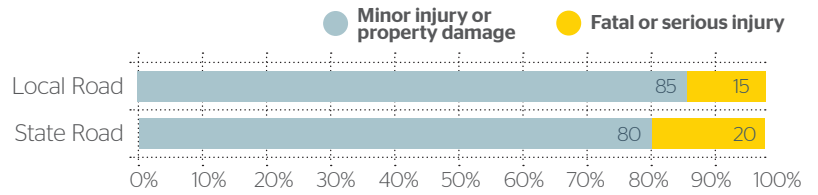


Figure 2: Reported crashes by road type, 2013 - 2017

## Top five roads by the number of crashes:

Marmion Avenue in the City of Joondalup had the highest number of crashes for cyclists in WA with 38 reported crashes between 2013 and 2017<sup>15</sup>.

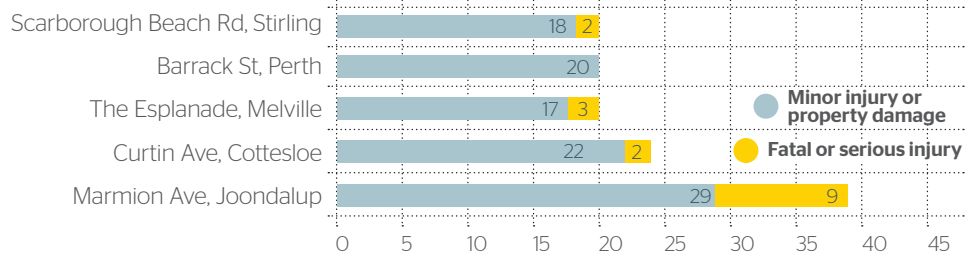


Figure 3: Roads with highest number of reported crashes, 2013 - 2017

## Cycling related injuries

Children aged between 0-16 years account for 59% of all fatal or serious cycling injuries. Of these crashes, 38% occurred off-road.

More males are killed or seriously injured when cycling (80%) than females (20%).

The most common injuries sustained by cyclists were:



Around 760 injured cyclists are admitted to hospital in WA each year<sup>17</sup>.

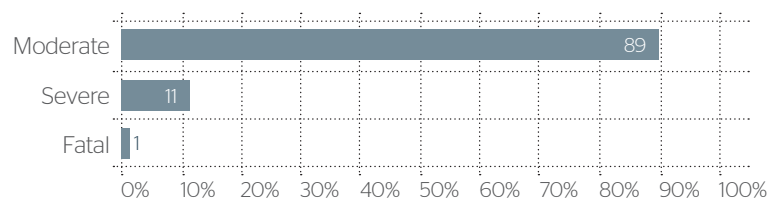


Figure 4: Cyclist injuries by severity<sup>18</sup>

## About RAC

RAC works collaboratively with Government and other organisations to ensure our members and the community can move around our State safely, easily and in a more sustainable way.

### Data sources:

- Main Roads Western Australia, (2018)
- Austrroads, (2017), 'National Cycling Participation Survey Western Australia'. [https://www.bwa.org.au/file/AP-C9147\\_Cycling\\_Participation\\_Survey\\_2017\\_WA.pdf](https://www.bwa.org.au/file/AP-C9147_Cycling_Participation_Survey_2017_WA.pdf)
- Department of Transport, (2016), 'Cycling Rules: Rules affecting cyclists and motorists in WA'. [http://www.transport.wa.gov.au/mediaFiles/active-transport/AT\\_P\\_CyclingRulesWABooklet.pdf](http://www.transport.wa.gov.au/mediaFiles/active-transport/AT_P_CyclingRulesWABooklet.pdf)
- Road Safety Commission, (2017), 'FAQs - keeping a safe distance when cycling'. <https://www.rsc.wa.gov.au/Road-Rules/Browse/Cyclists>
- Road Traffic Code (2000), WA, s 204
- Lee, J.D.Y. (2017), 'The epidemiology of severe and fatal injury among Western Australian cyclists: a linked data analysis'. The University of Western Australia. [http://research-repository.uwa.edu.au/en/publications/the-epidemiology-of-severe-and-fatal-injury-among-western-australian-cyclists\(cd7c512b-9e69-455d-b5f6-a25f427a810\).html](http://research-repository.uwa.edu.au/en/publications/the-epidemiology-of-severe-and-fatal-injury-among-western-australian-cyclists(cd7c512b-9e69-455d-b5f6-a25f427a810).html)
- Main Roads Western Australia, (2018). Calculations are based on data from 2013 - 2017. Figures may not add to 100% due to rounding
- Australian Bureau of Statistics, (2017), 'Population by region, 2011-2016'. CAT No. 14100
- Main Roads Western Australia, (2018)
- Lee, J.D.Y. (2017), 'The epidemiology of severe and fatal injury among Western Australian cyclists: a linked data analysis'. The University of Western Australia. [http://research-repository.uwa.edu.au/en/publications/the-epidemiology-of-severe-and-fatal-injury-among-western-australian-cyclists\(cd7c512b-9e69-455d-b5f6-a25f427a810\).html](http://research-repository.uwa.edu.au/en/publications/the-epidemiology-of-severe-and-fatal-injury-among-western-australian-cyclists(cd7c512b-9e69-455d-b5f6-a25f427a810).html)
- Average number of hospitalised cyclists is calculated using data from years 2012 to 2016. Cyclist hospitalisation data for years 2015 and 2016 has been estimated based on actuals reported by the WA Road Safety Commission for previous years
- Figures may not add to 100% due to rounding