



RoadWise®



WALGA

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Road Safety Performance Local Government Roads 2015-2019

Supporting Notes

July 2022

All Regions (including Metropolitan)

The primary source for data in this report is the Government of Western Australia, Road Safety Commission, December 2021, unless otherwise specified in these notes.

Road Network

This section classifies the region's road network according to whether Main Roads WA (state roads) or Local Government (local roads) is responsible for managing the road infrastructure. Included in this graphic is:

- total length of roads in kilometres and percentage of road length, in the region, managed by Local Government and Main Roads WA,
- an estimate of travel in the region, based on Million Vehicle Kilometres Travelled (MVKT). This includes trucks and light vehicles,
- percentage of MVKT in the region on Local Government and Main Roads WA managed roads, and
- average annual KSI rate per 100,000 population. The arrows below show the change in the Killed and Seriously Injured (KSI) rate from the previous five year reporting period, 2014-2018.



Increased



Decreased



Remains the same

Local road network - All roads in the region managed by Local Governments. Information is sourced from WALGA's *Report on Local Government Road Assets and Expenditure 2019/20*¹.

State road network - All roads in the region managed by Main Roads WA on behalf of the State and Commonwealth Governments. Information is sourced from the *Main Roads WA Annual Report 2020*², except for the following regions;

- **Gascoyne** - State road length data is for the Gascoyne region and is sourced from personal communication 10/02/2022 with Main Roads Mid West Gascoyne.
- **Mid West** - State road length data is for the Mid West region and is sourced from personal communication 10/02/2022 with Main Roads Mid-West Gascoyne.
- **Wheatbelt North** - State road length data is for the Wheatbelt North region and is sourced from the *Main Roads WA Annual Report 2014*³.
- **Wheatbelt South** - State road length data is for the Wheatbelt South region and is sourced from the *Main Roads WA Annual Report 2014*³.

¹ Western Australian Local Government Association, [Report on Local Government Road Assets and Expenditure 2019-2020](#).

² Main Roads Western Australia, [Main Roads Western Australia 2020 Annual Report](#).

³ Main Roads Western Australia, [Main Roads Western Australia 2014 Annual Report](#).

Average Annual KSI Rate per 100,000 Population by Region

The Average Annual Killed and Seriously Injured (KSI) rate is the average number of people killed and seriously injured per 100,000 population per year. The five-year, 2015–2019, Average Annual KSI rate data was calculated using 2019 population data and 2015-2019 crash data.

The bar chart included in the report allows for a comparison of road safety performance across the different regions in WA, as well as all of WA, as measured by Average Annual KSI Rate. This adjusts for the size of the population in each region, so they can be compared on a common basis.

Benchmarking and comparing road safety performance are increasingly being used as an approach to encourage improvements in road safety⁴. Result comparisons help to promote best practice, encourage the adoption of ambitious road safety performance targets and boost political leadership to create a safer road transport system for all⁵.

Population data was sourced from the Australian Bureau of Statistics through the *Report on Local Government Road Assets and Expenditure 2019/20*¹.

Killed and Seriously Injured

For every death on the region's roads in the period 2015-2019, there were many more people seriously injured. Many of these serious injuries result in permanent disability and change lives forever, placing a huge burden on public health resources and the community.

Definitions

- Road crash fatality in WA – a person who was killed immediately or died within 30 days of the date of a road crash, as a result of the crash.
- Road crash serious injury in WA – a person admitted to hospital as an inpatient for treatment of injuries sustained in a crash but did not die within 30 days of the crash.

The pie chart shows the number of people in the region killed and seriously injured in the five year period, 2015-2019, on local and state roads, and the percentage of KSI on local roads.

The infographic shows the breakdown on local roads in the region of the number of people killed and the number of people seriously injured.

Killed and Seriously Injured by Local Government

The first table on page two provides a breakdown of the number of people killed and seriously injured on local roads in the region, by Local Government area, for the five year period 2015-2019.

This information can be useful to Local Governments to assess the extent of road trauma, monitor changes over time and to set reduction targets.

Wheatbelt North – The Shire of Nungarin was inadvertently omitted from the list of Local Governments in this report. There were no KSIs for the Shire for the five year period 2015-2019.

⁴ Wegman, F., Oppe, S. (2010), *Benchmarking road safety performances of countries*. Safety Science, Volume 48, Issue 9, Pages 1203-1211.

⁵ Chen, F et al. (2016), *Benchmarking road safety performance: Identifying a meaningful reference (best-in-class)*, Accident Analysis & Prevention, Volume 86, Pages 76-89.

Crash Type

Information on crash types gives road managers the opportunity to pin-point the types of crashes occurring on their network, and helps to identify priorities and develop strategies that relate specifically to the unique needs of the region (unless stated otherwise).

This data can provide a rationale that may be used to support the allocation of funds in road program budgets for the installation of safe system treatments that will counteract the road crash types that result in the greatest number of people killed and seriously injured. For example, the installation of roadside barriers or sealing shoulders can be used to alleviate run-off-road crashes.

The second table on page two of the report shows:

- KSI crash types in descending order,
- the number and percentage of KSIs, in the region, and
- the change in percentage of KSI crashes from the previous reporting period, 2014-2018.

↑ Increased ↓ Decreased ➡ Remains the same

Crash types with no KSI crashes for the five-year period have not been included in the table.

This information may assist Local Governments to identify and prioritise their works program to treat the crash types leading to the most harm when maintaining, upgrading or renewing their roads, as well as preventing crash types when expanding the road network.

Definitions:

- **Off Carriageway Non-Collision** - RUM Codes 71, 73, 81, 83, which are loss of control off carriageway.
- **Non-Collision** - defined by the RUM Codes 75, 85 which are also loss of control on carriageway.
- The RUM Code 76 and 77 may refer to the crash type *Non-Collision* which are also loss of control but at an intersection, depending whether an object was hit or not.

RUM code details are available on the Main Roads WA website.

Priority Treatment Areas

The most common crash types provide information that can assist Local Governments to prioritise their time, resources, and effort towards implementing road safety interventions, specifically those that target the crashes that are causing the most harm to people in their area.

Run-off-road crashes include: Off Carriageway, Hit Object crashes and Off Carriageway, Non-collision crashes.

Intersection crashes include: Right angle and right turn thru crashes.

Examples of Treatments by Crash Type and RUM Code

Crash Type	Treatments	RUM Codes
Run-off-Road	<p>Examples Reduce travel speed, clear zones, widen shoulders, wire rope barriers, audible edge lining, consistent road design and delineation, reflective guide posts.</p> <p>Relevant Austroads Guides: Safe System Assessment Framework (AP-R509-16) Guide to Road Safety Part 2: Safe Roads (AGRS02-21) Safe System Roads for Local Government (AP-518-16)</p>	<p>71. Left off carriageway 72. Left off carriageway into object/vehicle 73. Right off carriageway 74. Right off carriageway into object/vehicle 81. Off carriageway right bend 82. Off carriageway right bend into object 83. Off carriageway left bend 84. Off carriageway left bend into object</p> <p>RUM Codes</p>
Non-Collision	<p>Examples Reduce travel speed, widen shoulders, consistent road design and delineation, audible edge lining, reflective guide posts.</p> <p>Relevant Austroads Guides Safe System Assessment Framework (AP-R509-16) Guide to Road Safety Part 2: Safe Roads (AGRS02-21) Safe System Roads for Local Government (AP-518-16)</p>	<p>75. Lost control on carriageway 85. Out of control on carriageway 76. Left turn (intersection) 77. Right turn (intersection)</p> <p>RUM Codes</p>
Intersection	<p>Examples Reduce travel speed, roundabouts, intersection platforms, grade separation, ban selected movements.</p> <p>Relevant Austroads Guides Safe System Assessment Framework (AP-R509-16) Guide to Road Safety Part 2: Safe Roads (AGRS02-21) Safe System Roads for Local Government (AP-518-16)</p>	<p>11. Thru - thru 12. Right - thru 13. Left - thru 14. Thru - right 15. Right - right 16. Left - right 17. Thru - left 18. Right - left 19. Left - left</p> <p>RUM Codes</p>
Hit Pedestrian	<p>Examples Reduce travel speed, grade separation, footpaths, raised crossings, pedestrian refuge islands, improved lighting.</p> <p>Relevant Austroads Guides Safe System Assessment Framework (AP-R509-16) Guide to Road Safety Part 2: Safe Roads (AGRS02-21) Safe System Roads for Local Government (AP-518-16)</p>	<p>1. Near side 2. Emerging 3. Far side 4. Play/work/stand on carriageway 5. Walking with traffic 6. Walking against traffic 7. Driveway 8. On footway 9. Struck while boarding or alighting</p> <p>RUM Codes</p>