

Road Safety Performance Local Government Roads 2019-2023

Supporting Notes – All Regions (including Metropolitan)

The primary source for data in this report is the Government of Western Australia, Road Safety Commission, December 2024, unless otherwise specified in these notes.

Acronyms

AADT Annual Average Daily Traffic
ABS Australian Bureau of Statistics
KSI Killed and seriously injured

MVKT Million Vehicle Kilometres Travelled
MRWA Main Roads Western Australia
RRG Regional Road Group

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.

State Roads	Local Roads
All roads in the region managed by MRWA on behalf of the State and Commonwealth Governments	All roads in the region managed by Local Governments
Length Percentage of the road network for which MRWA are responsible	Length Percentage of the road network for which Local Governments are responsible
Travel / Use Percentage of million vehicle MVKT on MRWA managed roads	Travel / Use Percentage of MVKT on Local Government managed roads
KSI rate Average annual KSI rate per 100,000 population. The arrows below show the change in KSI rate from the previous reporting period, 2018-2022 ↑ Increased ↓ Decreased → Remains the same	KSI rate Average annual KSI rate per 100,000 population. The arrows below show the change in KSI rate from the previous reporting period, 2018-2022 ↑ Increased ↓ Decreased → Remains the same

Totals are for RRG with the exception of Gascoyne, Mid West, Wheatbelt South and Wheatbelt North. For those RRGs, the road length and travel/use are for the MRWA regions of Mid-West Gascoyne and Wheatbelt.

Road Length and MVKT Used for Report Percentages

Region	State Roads		Local Roads	
	Length (km) ^a	MVKT ^b	Length (km) ^c	MVKT ^d
Gascoyne	- ^e	- ^f	4,270	46
Goldfields-Esperance	2,486	413	17,952	248
Great Southern	1,629	536	12,460	301
Kimberley	2,344	298	4,343	187
Metropolitan	1,145	7,951	14,466	9,773
Mid West	- ^e	- ^f	17,099	257
Mid-West Gascoyne (MRWA region)	3,716	1,070 ^g	21,369	-
Pilbara	3,036	617	5,753	267
South West	1,642	2,422	10,668	1,440
Wheatbelt (MRWA region)	3,492	1,355 ⁷	40,942	-
Wheatbelt North	- ^e	- ^f	23,908	245
Wheatbelt South	- ^e	- ^f	17,034	99

Local Roads – Million Vehicle Kilometres Travelled

Local roads MVKT is calculated by the Road Safety Commission as the difference between the Australian Bureau of Statistics (ABS) whole of state MVKT value and the State roads MVKT value using population percent distribution to estimate travel on Local Roads within each of the regions, assuming that on average each driver representing similar number of persons travels similar distances within each of the regions.

State Roads – Million Vehicle Kilometres Travelled

State roads MVKT is calculated using recorded and estimated annual average daily traffic (AADT) values per kilometre. AADT values prior to 2023 are compounded using growth rates from Main Roads WA Traffic Modelling.

^a State road length is sourced from personal communication with the Main Roads WA regional offices.

^b State roads MVKT is sourced from Main Roads WA by the Road Safety Commission.

^c WALGA's *Road Assets and Expenditure Report*

^d Road Safety Commission source from ABS, 3218.0 Regional Population Growth, Australia, Released at 11.30am (Canberra time) 26 March 2024

^e State roads lengths are obtained from Main Roads WA regional offices, and no breakdown is available for RRGs Mid West, Gascoyne, Wheatbelt North and Wheatbelt South.

^f State roads MVKTs are obtained from Main Roads WA by the Road Safety Commission, and no breakdown is available for RRGs Mid West, Gascoyne, Wheatbelt South and Wheatbelt North.

^g Aggregated MVKTs for the Mid-West Gascoyne and Wheatbelt regions are displayed in the table from Main Roads WA instead of being divided into separate RRGs.

Killed and Seriously Injured

For every death on the region's roads in the period 2019-2023, there were many more people seriously injured. Many of these serious injuries result in permanent disability and changes lives forever, placing a burden on public health resources and the community.

The pie chart on page one shows the number of KSI in the five-year period, 2019-2023, on local and state roads, and the percentage of KSI on local roads.

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

Fatality

A fatality is defined as a person killed immediately, or within 30 days of the crash, as a result of injuries sustained in a crash.

Serious Injury

A serious injury is defined as a person who is admitted to hospital as a result of a reported crash.¹

Average Annual KSI Rate per 100,000 Population by Region

The average annual KSI rate is the average number of people killed and seriously injured per 100,000 population per year. The five-year period, 2019–2023, average annual KSI rate data was calculated using 2023 population data and 2019-2023 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 the 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 safety². 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 all³.

Population data was sourced from the Australian Bureau of Statistics through WALGA's *Report on Local Government Road Assets and Expenditure 2023-24*⁴.

People Killed and Seriously Injured on Local Government Roads

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, 2019-2023. This information can be useful for Local Governments to assess the extent of road trauma, monitor changes over time and to set reduction and ultimately elimination or prevention targets.

Kimberley Region – Christmas Island is not included in the Kimberley Regional Road Group but is included in this table to show continuity in KSI totals throughout the report.

Metropolitan Region – Kings Park and Rottnest Island are not Local Governments but are included in this table to show continuity in KSI totals throughout the report.

Crash Type

This table gives road owners and managers information about the types of crashes occurring on their network. Local Governments can use this information to identify priorities and develop strategies that relate specifically to the unique needs, in each region.

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 crash type. For example, the installation of roadside barriers or sealing shoulders can be used to alleviate run-off-road crashes.

This table shows crash types and associated KSIs on local roads in the region for the five-year period, 2019-2023. The arrows indicate the change in the percentage of KSI crashes from the previous report period, 2018-2022.

↑ Increased ↓ Decreased ➡ Remains the same

In some cases, %KSI column does not add up to 100% due to rounding.

Crash Type	RUM Codes	Notes
Off Carriageway Non-Collision	71, 73, 81, 83	Loss of control off carriageway
Non-Collision	75, 85	Loss of control on carriageway
Non-Collision	76, 77	These RUM Codes 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 website⁵.

Priority Treatment Areas

Highlighting the crash types resulting in the highest percentages of KSI 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

Run-off-road crashes include the crash types, Off Carriageway Hit Object and Off Carriageway Non-collision.

Intersection Crashes

Intersection crashes include the crash types, Right Angle and Right Turn Thru.

Examples of Treatments by Crash Type and RUM Code

Crash Type	Treatment Examples	RUM Codes
RUN-OFF-ROAD	<ul style="list-style-type: none"> • Reduce travel speed • Clear zones • Widen shoulders • Road safety barriers • Audible edge lining • Consistent road design and delineation • Reflective guide posts 	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
NON COLLISION	<ul style="list-style-type: none"> • Reduce travel speed • Widen shoulders • Consistent road design and delineation • Audible edge lining • Reflective guide posts 	75. Lost control on carriageway 85. Out of control on carriageway 76. Left turn (intersection) 77. Right turn (intersection)
INTERSECTION	<ul style="list-style-type: none"> • Reduce travel speed • Roundabouts • Intersection platforms • Grade separation • Ban selected movements 	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
HIT PEDESTRIAN	<ul style="list-style-type: none"> • Reduce travel speed • Grade separation • Footpaths • Raised crossings • Pedestrian refuge islands • Improved lighting 	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

Relevant Austroads Guides

- [Safe System Assessment Framework](#)
- [Guide to Road Safety](#)
- [Safe System Roads for Local Government](#)

References

- ¹ WA Road Safety Commission, Western Australian Road Fatalities and Serious Injuries 2023, <https://www.wa.gov.au/government/publications/western-australian-road-fatalities-and-serious-injuries-2023>, April 2025.
- ² Wegman, F., Oppe, S. (2010), *Benchmarking road safety performances of countries*, Safety Science, Volume 48, Issue 9, pages 1203-1211.
- ³ Chen, F et al. (2016), *Benchmarking road safety performance: Identifying a meaningful reference (best-in-class)*, Accident Analysis & Prevention, Volume 86, pages 76-89.
- ⁴ Western Australian Local Government Association, *Report on Local Government Road Assets and Expenditure 2023-2024*.
- ⁵ Main Roads WA, RUM Codes, <https://www.mainroads.wa.gov.au/globalassets/technical-commercial/road-safety/road-use-movement-rum-codes.pdf>.