



Mann Region

Rate Your Road

March 2021



Director's address

In January 2019, the NRMA launched a report revealing a \$2.2 billion council funding backlog to maintain local roads across NSW. Alongside the report, 'Rate Your Road' was born – a survey that called on NRMA Members and the community to rate the condition and safety of their local roads.

Within weeks, Rate Your Road attracted more than 23,000 responses. Promising news shortly followed, with the NRMA's policies to address the local roads funding backlog adopted by both sides of politics prior to the 2019 NSW State Election. The NRMA's policies were designed to elevate the condition of local roads to at least a satisfactory level to improve safety and assist in stimulating local economies.

In March 2019, the NSW Government committed \$1 billion to help clear the council funding backlog, replace NSW's worst timber bridges, and transfer up to 15,000 kilometres of council-owned regional roads to the state to lessen the financial burden on councils. In May 2020, the Federal Government announced a \$1.8 billion commitment to provide a much needed boost to road infrastructure focusing on regional roads as part of their COVID recovery package, proving our advocacy has a real impact on Government decision making.

This report presents the results of the Rate Your Road survey for the Mann Region, which incorporates 38 Local Government Areas across the ACT and southern regional and rural NSW. Aside from gaining some intriguing insights, the full and public release of the NRMA's survey results will assist in guiding government investment.

If you were one of the tens of thousands who participated in Rate Your Road, thank you for contributing to this outcome.

The Hon. Kate Lundy
Director – Mann Region

Table of contents

II

Director's address

III

Contents

I

Introduction

2

About the NRMA

3

Background

4

The Bureau of Infrastructure,
Transport and Regional Economics

5

NRMA regions

6 Mann Region

7

Mann overview

8

Centre for Road Safety

10

Rate your Road data collection

12

Jurisdiction / LGA assessment

14

Road specific

15

Other assessments

16

Local streets

18

Cost of road trauma

Introduction

The NRMA is a national leader in advocating for safer roads and better transport outcomes for NSW and the ACT. Prior to the 2019 NSW State Election, the NRMA undertook a comprehensive survey with the public, asking them to rate roads in their local area against a number of characteristics including safety, congestion, condition and public transport.

The rate your road survey was developed by the NRMA as a platform for the public to identify key roads for improvement. The basis of the survey was that 'no one knows the roads you use like you do' and the analysis may be considered to support all levels of government in guiding funding commitments.

We want to thank NRMA Members and the public for taking the time to respond to the survey. The responses we received were extensive and from right across the state, from Parramatta Road in Sydney, to Billybingbone Road in Gongolgon, The Snowy River Way in Dalgety, and Dolgelly Road in Garah.

About the NRMA

Better transport infrastructure has been a core focus of the NRMA since 1920 when our founders lobbied for improvements to the condition of Parramatta Road in Sydney. Independent advocacy was the foundation activity of the organisation and remains critical to who we are 100 years later.

The NRMA has grown to one of the largest tourism and transport companies in Australia, representing over 2.6 million Australians principally from NSW and the ACT. We provide motoring, transport and tourism services to our Members and the community.

Today, we work with policy makers and industry leaders to advocate for transport solutions that help solve key pain points such as congestion, access and affordability and connect people and communities. We're passionate about facilitating travel across Australia, recognising the vital role tourism plays in supporting regional communities.

By working together with all levels of government to deliver integrated transport and tourism options we can provide for the future growth of our communities and continue to keep people moving for generations to come.

Background

Regional and Local roads are the backbone of our transport system, making up approximately 80% of the national road network.

In 2019, the NRMA released its Funding Local Roads report which sought to address and quantify the infrastructure backlog on regional and local roads in NSW. Under the national funding system, local government is largely responsible for funding, upgrading and maintaining thousands of kilometres of roadways. The local government tends to fund road infrastructure through payable rates, and though there are grants from the state and federal government, a significant shortfall remains.

Passenger, and in particular freight traffic, has sharply increased in recent times, and the damage to the road tends to be exponentially correlated with the volume and weight of vehicles. The poor condition of roads increases wear and tear to vehicles, increasing servicing costs to the public, and further, poor roads can lead

to relatively hazardous driving conditions, potentially leading to higher crash rates, leading to property damage, injury and deaths.

In recent years, interstate and intrastate rail freight services have considerably declined due to competitiveness pressures, and with the ongoing drought, water and fodder are increasingly being moved on regional roads to support regional areas.

The NRMA's Funding Local Roads report outlined that in recent years, the funding backlog increased by almost 30% from \$1.73 billion in 2014-15, to \$2.2 billion in 2016-17, with regional Councils responsible for approximately 75% of the backlog.

Whilst this is part of a broader discussion, subsequent reviews into road use have highlighted that the current road funding environment is unsustainable. Most recently, Infrastructure Australia has stated that 'road use, funding and expenditure is not adequately linked', highlighting that the current status is 'inequitable', 'inefficient', 'unsustainable' and 'not transparent'.

The NRMA is committed to advocating on behalf of Members for a fairer funding and financing system for all road and transport users which is sustainable over the long term.

Bureau of Infrastructure, Transport and Regional Economics (BITRE)

The Bureau of Infrastructure, Transport and Regional Economics (BITRE) provides economic analysis, research and statistics on infrastructure, transport and regional development issues to inform government policy development.

In the 2018 yearbook produced by BITRE, the following is a summary of the road network, and the demands we place upon it.

In 2017-18, it is estimated that NSW drivers drove a collective 80 billion kilometres, up from approximately 30 billion kilometres in the early 1970s. ACT drivers drove a collective 4.2 billion kilometres in 2017-18, up from 900 million kilometres in the early 1970s.

The freight task of the roads has grown significantly faster. In the early-to-mid 1970s, the freight task was approximately 10 billion tonne kilometres in NSW and

0.2 billion tonne kilometres in the ACT. By 2015-16, BITRE estimated NSW had a road freight task of 62.8 billion tonne kilometres, and the ACT, 0.6 billion tonne kilometres in the ACT.

In 2015, it was estimated that NSW had a collective 207,187km of public road, of which 201,397km was paved. Similarly, in 2015, the ACT had 3,448km of roads, of which 3,348km are paved.

BITRE estimates that road funding in NSW increased from an average of approximately \$6 billion annually during the 2010s, to an average of approximately \$8 billion in recent years. The ACT had road funding of approximately \$200 to \$250 million annually across the last 15 years.

The headline and per capita fatality rate on the roads has steeply declined since the 1970s. In 1971, NSW recorded 1,249 road fatalities, decreasing to 392 in 2017. On a per capita basis, the fatality rate dropped from 26.4 fatalities/100,000 population to five fatalities/100,000 population. Similarly, in the ACT, in 1971, the fatality rate was approximately 15 fatalities/100,000 population, decreasing to 2.5 fatalities/100,000 population during the 2010s.

NRMA regions

NRMA has divided NSW and the ACT into six regions, with each region represented by an NRMA Director.

Region	Area	Area (km ²)	Population
Cox	Western Sydney and the Blue Mountains	2,718	1,801,605
Harbour	Sydney's metropolitan north, the Eastern Suburbs and the Inner West	599	1,522,003
Hoddle	Sydney's metropolitan south, the Illawarra and the South Coast	18,894	1,221,800
Howe	Sydney's northern suburbs, the Central Coast and the Hunter	30,104	1,385,792
Mann	ACT and southern regional and rural NSW	244,497	1,056,053
Townsend	Northern regional and rural NSW, including Northern Tablelands, North Coast and Far North West NSW	498,144	858,429



Mann

Mann overview

ACT	Cowra	Junee	Snowy Monaro Regional
Albury	Edward River	Leeton	Snowy Valleys
Balranald	Federation	Lithgow	Temora
Bathurst Regional	Forbes	Lockhart	Upper Lachlan Shire
Berrigan	Goulburn Mulwaree	Murray River	Wagga Wagga
Bland	Greater Hume Shire	Murrumbidgee	Weddin
Blayney	Griffith	Narrandera	Wentworth
Cabonne	Gundagai	Oberon	Wingecarribee
Carathool	Hay	Orange	Yass Valley
Coolamon	Hilltops	Queanbeyan-Palerang Regional	

Cumulatively, these jurisdictions cover an area of 245,000 square kilometres and are home to more than 1,000,000 residents as of the 2016 census. For the purposes of this report, a 'pin' is a point that a survey respondent identified for the purposes of completing the survey. More than 2,100 pins were dropped in the Mann region.

NSW Centre for Road Safety

Based on the NSW Centre for Road Safety, the following table identifies the number and types of crashes for LGAs between the beginning of 2014 and the end of 2018 within the Mann region (ACT data obtained from the ACT Justice and Community Safety Directorate):

Jurisdiction / LGA	2014-2018 Crash History			
	Fatal Crashes	Injury Crashes	Non-injury Crashes	Total Crashes
ACT*	49	3,091	35,709	38,849
Albury	4	423	357	1,207
Balranald	2	30	13	75
Bathurst Regional	20	503	258	1,284
Berrigan	3	56	26	141
Bland	10	68	37	183
Blayney	4	101	36	242
Cabonne	9	250	114	623
Carrathool	7	61	30	159
Coolamon	4	39	24	106
Cowra	9	130	87	356
Edward River	3	65	23	156
Federation	8	88	45	229
Forbes	7	103	37	250
Goulburn Mulwaree	18	491	215	1,215
Greater Hume Shire	10	185	119	499
Griffith	9	260	131	660
Gundagai	13	194	100	501
Hay	3	47	17	114
Hilltops	14	283	136	716

* ACT crash history reporting guidelines and definitions may not be consistent with NSW. Reported statistics should not be used as a direct comparison.

Jurisdiction / LGA	Fatal Crashes	Injury Crashes	Non-injury Crashes	Total Crashes
Junee	6	69	27	171
Leeton	5	93	39	230
Lithgow	6	369	205	949
Lockhart	1	20	10	51
Murray River	5	113	55	286
Murrumbidgee	5	43	39	130
Narrandera	5	70	41	186
Oberon	5	106	53	270
Orange	8	341	209	899
Queanbeyan-Palerang Regional	8	575	361	1,519
Snowy Monaro Regional	16	372	236	996
Snowy Valleys	16	226	140	608
Temora	2	52	40	146
Upper Lachlan Shire	8	188	91	475
Wagga Wagga	10	569	338	1,486
Weddin	1	52	17	122
Wentworth	6	83	45	217
Wingecarribee	25	603	309	1,540
Yass Valley	16	303	208	830
Mann Region	360	10,715	39,977	58,676

The above table is a staggering reminder of the societal cost of road trauma. In the Mann region, 360 people crashes resulted in someone losing their life, and there were more than 10,700 crashes resulting in injury. The economic cost of these accidents is also significant, in 2019, TfNSW estimated that the economic cost of a

fatal crash in NSW was \$8.586 million, a serious injury resulting in hospitalisation cost approximately \$500,000, a moderate/minor injury crash cost approximately \$90,000 and a property damage only crash cost \$10,000. Based on this, in the Mann region, the cost of road trauma aggregated to more than \$4.5 billion (excluding the ACT).

Rate Your Road data collection

Data collection ran for approximately one month between January 2019 and February 2019 with members and the broader public encouraged to participate through NRMA media and communication channels. The survey was run through a dedicated website www.rateyourroad.com.au, with more than 23,000 surveys fully completed.

The survey asked respondents for their residential postcode, the road they wanted to rate, the condition, congestion, safety and public transport on the basis of

very poor, poor, average, good or excellent. The survey also allowed people the opportunity to input a free text comment. Finally, the survey asked respondents to identify their age bracket.

Survey Participation

In terms of summarising participation in the survey on an area and per capita basis, the following table shows a summary.

Jurisdiction / LGA	Area km ²	Population (2016 census)	Density (ppl/km ²)	Road length (sealed & unsealed)	Pins	Pins/100 km ²	Pins / 1,000 population	Pins/popn/area X 1,000,000	Pins/100 km of road
ACT	2,358	397,397	168.53	1,570.4	290	12.30	0.73	0.31	18.5
Albury	307	51,076	166.37	714.3	65	21.17	1.27	4.15	9.1
Balranald	21,693	2,287	0.11	2,070.9	2	0.01	0.87	0.04	0.1
Bathurst Regional	3,820	41,300	10.81	1,732.1	102	2.67	2.47	0.65	5.9
Berrigan	2,066	8,462	4.10	1,307.1	11	0.53	1.30	0.63	0.8
Bland	8,560	5,995	0.70	3,413.7	6	0.07	1.00	0.12	0.2
Blayney	1,525	7,257	4.76	849.2	6	0.39	0.83	0.54	0.7
Cabonne	6,026	13,386	2.22	2,414.9	25	0.41	1.87	0.31	1.0
Carrathool	18,933	2,719	0.14	3,371.6	10	0.05	3.68	0.19	0.3
Coolamon	2,433	4,315	1.77	1,446.0	5	0.21	1.16	0.48	0.3
Cowra	2,810	12,460	4.43	1,472.8	22	0.78	1.77	0.63	1.5
Edward River	8,881	8,851	1.00	1,885.9	6	0.07	0.68	0.08	0.3
Federation	5,685	12,777	2.25	2,773.6	17	0.30	1.33	0.23	0.6
Forbes	4,720	9,587	2.03	1,952.8	12	0.25	1.25	0.27	0.6
Goulburn Mulwaree	3,220	29,609	9.20	1,617.1	149	4.63	5.03	1.56	9.2
Greater Hume Shire	5,746	10,351	1.80	2,443.7	38	0.66	3.67	0.64	1.6
Griffith	1,640	25,641	15.63	1,371.1	35	2.13	1.37	0.83	2.6
Gundagai	3,981	11,141	2.80	1,639.3	31	0.78	2.78	0.70	1.9

Jurisdiction / LGA	Area km ²	Population (2016 census)	Density (ppl/km ²)	Road length (sealed & unsealed)	Pins	Pins/100 km ²	Pins / 1,000 population	Pins/popn/area X 1,000,000	Pins/100 km of road
Hay	11,326	2,946	0.26	1,351.1	12	0.11	4.07	0.36	0.9
Hilltops	7,139	18,498	2.59	2,975.7	64	0.90	3.46	0.48	2.2
Junee	2,030	6,295	3.10	995.4	12	0.59	1.91	0.94	1.2
Leeton	1,167	11,168	9.57	933.7	16	1.37	1.43	1.23	1.7
Lithgow	4,551	51,090	11.23	1,306.8	102	2.24	2.00	0.44	7.8
Lockhart	2,895	3,119	1.08	1,464.1	9	0.31	2.89	1.00	0.6
Murray River	11,865	11,680	0.98	3,233.3	18	0.15	1.54	0.13	0.6
Murrumbidgee	6,880	3,836	0.56	2,071.2	21	0.31	5.47	0.80	1.0
Narrandera	4,117	5,853	1.42	1,672.5	6	0.15	1.03	0.25	0.4
Oberon	3,659	5,301	1.45	1,566.7	20	0.55	3.77	1.03	1.3
Orange	285	40,344	141.56	582.1	154	54.04	3.82	13.39	26.5
Queanbeyan-Palerang Regional	8,960	56,027	6.25	2,168.2	181	2.02	3.23	0.36	8.3
Snowy Monaro Regional	15,162	20,218	1.33	3,926.4	124	0.82	6.13	0.40	3.2
Snowy Valleys	8,960	14,395	1.61	3,059.4	48	0.54	3.33	0.37	1.6
Temora	2,802	6,110	2.18	1,282.9	7	0.25	1.15	0.41	0.5
Upper Lachlan Shire	7,102	7,695	1.08	2,279.6	81	1.14	10.53	1.48	3.6
Wagga Wagga	4,826	62,385	12.93	2,662.5	155	3.21	2.48	0.51	5.8
Weddin	3,410	3,664	1.07	1,134.5	6	0.18	1.64	0.48	0.5
Wentworth	26,269	6,794	0.26	2,404.4	9	0.03	1.32	0.05	0.4
Wingecarribee	2,689	47,882	17.81	1,666.9	274	10.19	5.72	2.13	16.4
Yass Valley	3,999	16,142	4.04	1,115.0	296	7.4	18.34	4.59	26.5

There is a skew with some major LGAs which are comparatively small such as Albury and Orange and the major metropolitan area of the ACT. Localities like Yass Valley, Leeton, Wagga Wagga and Goulburn Mulawree had relatively high

response rates whilst localities such as Edward River and Wingecarribee had relatively poor response rates.

Jurisdiction / LGA assessment

To commence with a strategic assessment, the specific location of the pin was disregarded and considered only by the jurisdiction / Local Government Area that pin was located in. This allows a broad comparison between the various local

government areas. Some regional areas may have received only a small number of votes, and these have been shaded. The results are as follows:

Jurisdiction / LGA	Condition Score	Condition Ratings	Congestion Score	Congestion Ratings	Safety Score	Safety Ratings
ACT	59.38	280	50.23	275	54.95	261
Albury	58.29	57	59.17	55	46.10	57
Balranald	30.00	2	70.00	2	30.00	2
Bathurst Regional	50.16	80	52.23	81	43.15	83
Berrigan	55.00	8	86.67	7	50.00	7
Bland	60.00	5	70.00	5	63.33	4
Blayney	44.00	6	60.00	6	42.00	6
Cabonne	42.12	24	46.67	20	46.67	20
Carrathool	22.86	7	39.17	10	37.50	9
Coolamon	60.00	5	60.00	5	60.00	5
Cowra	43.85	17	59.17	14	41.54	17
Edward River	50.00	6	76.00	5	56.00	5
Federation	50.83	14	78.18	13	57.50	16
Forbes	52.86	10	51.43	9	46.67	9
Goulburn Mulwaree	42.26	111	57.88	104	42.08	109
Greater Hume Shire	42.35	34	56.22	34	41.05	34
Griffith	37.58	28	45.47	28	40.85	30
Gundagai	44.68	27	58.33	27	49.26	26
Hay	45.71	7	60.00	8	40.00	8
Hilltops	42.88	55	59.40	56	40.88	54
Junee	43.33	6	54.29	8	48.33	11

Jurisdiction / LGA	Condition Score	Condition Ratings	Congestion Score	Congestion Ratings	Safety Score	Safety Ratings
Leeton	45.56	10	55.45	15	44.55	12
Lithgow	37.20	86	47.06	99	34.59	95
Lockhart	51.25	9	50.00	4	48.33	6
Murray River	41.54	13	56.15	14	41.54	13
Murrumbidgee	49.33	15	74.17	12	52.96	14
Narrandera	46.67	3	65.00	4	40.00	3
Oberon	45.19	12	61.00	16	38.00	13
Orange	46.54	133	58.14	126	41.44	126
Queanbeyan-Palerang Regional	49.89	149	55.87	162	45.06	162
Snowy Monaro Regional	42.62	106	48.11	110	38.49	110
Snowy Valleys	45.17	39	53.12	37	47.62	43
Temora	60.00	7	68.00	5	68.00	5
Upper Lachlan Shire	34.29	65	52.89	67	31.96	67
Wagga Wagga	39.83	117	51.73	122	42.10	122
Weddin	60.00	5	60.00	6	45.00	6
Wentworth	43.33	9	46.67	6	43.33	6
Wingecarribee	49.44	237	58.85	211	47.92	219
Yass Valley	44.69	262	49.14	239	37.16	243
Mann Region Average	45.82	2,066	55.00	2,027	43.39	2,038
Survey Average	48.92	22,580	49.54	21,521	44.92	21,955

Within the Mann region, the roads which are in the best perceived condition include those in Albury and Upper Lachlan Shire. The roads in Upper Lachlan Shire, Griffith, Wagga Wagga and Lithgow are in the poorest perceived condition.

Road specific

Road	Condition Score	Congestion Score	Safety Score
Barton Highway	47.1	29.7	32.1
Cargo Road	41.0	54.2	42.0
Collector Road	32.6	50.0	31.5
Great Western Highway	57.4	50.8	53.8
Hume Highway	61.6	78.6	67.2
Illawarra Highway	41.8	61.5	40.0
Kings Highway	57.8	55.3	54.1
Lachlan Valley Way	59.1	55.6	45.2
Merrigang Street	28.9	60.0	38.0
Mid-Western Highway	42.6	63.3	40.9
Mitchell Highway	54.3	48.1	47.0
Monaro Highway	50.3	40.5	44.8
Newell Highway	52.7	58.9	52.7
Northern Distributor Road	40.0	50.9	43.6
Old Cooma Road	47.3	52.4	46.3
Old Great Western Highway	60.0	56.8	62.1
Old South Road	45.0	59.4	42.3
Olympic Highway	46.3	50.8	50.3
Snowy Mountains Highway	47.7	51.2	52.5
Sturt Highway	40.2	58.3	40.2
Sutton Road	39.3	51.4	42.2
Yass Valley Way	35.3	44.1	35.3
Average of all Mann Responses	45.8	55.0	43.4

Whilst a high level assessment is beneficial in that it allows a macro-comparison, the survey allowed individuals to highlight and rate a specific section of road. 15 roads received at least 20 votes, accounting for 38% of votes. The 22 roads which received at least 15 votes are outlined below.

It is perhaps little surprise that the Hume Highway was reported to be in the best condition and the safest. It is a generally high quality multi-lane dual carriageway road. Some major roads reported to be in poor condition include Yass Valley Way, Collector Road and Merrigang Street.

Other assessments

Determining whether there are patterns in the outputs may support the validity of the data. The condition, congestion, safety and public transport scores were tested for their correlation to determine if there are underlying relationships between the outputs. The r-squared was calculated for the relationships between the categories.

This is reported as a number between 0 and 1. 0 indicates that there is an absence of a relationship between data points, whilst a value of 1 means that there is a perfect relationship between data points.

	Condition	Congestion	Safety	Public Transport
Condition				
Congestion	0.0007			
Safety	0.559	0.028		
Public Transport	0.0017	0.0461	0.0179	

There is a moderate correlation between the perceived condition of a road, and its perceived safety (0.559). In other words, where the condition of the road is perceived as poor, its safety will also be perceived poorly. In contrast, where the

condition of the road is perceived as good, its safety will also be perceived as good. In simplistic terms, the 0.559 output means that 55.9% of variation in the perceived safety of the road can be explained by (attributed to) its condition.

Local streets

It is acknowledged the public did take time to nominate issues that they have with their local streets. As a result of this, the following table highlights a small random selection of local roads and the qualitative comments which were made with them.

Street	Suburb	Comment, verbatim
Snowy River Way	Springfield	<ul style="list-style-type: none"> • Too narrow and potholed for passing cars. Dodging very large potholes at the same time as oncoming cars esp wider trucks makes it dangerous.
Lacebark Ct	Thurgoona	<ul style="list-style-type: none"> • Current development around Thurgoona will soon make this road inadequate due to rapid population growth. Steps should be taken now to widen this and surrounding roads to avoid future serious traffic problems. • Traffic already banks up at the intersection of Thurgoona Drive and Elizabeth Mitchel Drive each morning between 8 and 9 am and between 3 and 4. This is certain to get worse in future.
Railway Parade	Henty	<ul style="list-style-type: none"> • Along Olympic highway from Henty to Wagga Wagga a lot of potholes
Glenfield Road	Mount Austin	<ul style="list-style-type: none"> • When I drive it I feel like my car is going to fall apart
Marrar Road	Coolamon	<ul style="list-style-type: none"> • Some parts are great some are terrible
Gibraltar Road	Brayton	<ul style="list-style-type: none"> • I have been lobbying our Council for 3 years to maintain the road and they won't. The Roads Act (1993) does not require a Statutory Authority to maintain roads under their control and Crown Lands are not funded to maintain any road under their control either
Lachlan Valley Way	Boorowra	<ul style="list-style-type: none"> • Upgrades are done and then the older parts suffer and its generally better as road base than finished product. Mostly just gets resealed in bits and pieces and its as bad as before within 6 months

Street	Suburb	Comment, verbatim
Canola Way	Old Junee	<ul style="list-style-type: none"> • Too narrow compared to the Coolamon Shire Council section of the road. A lot of heavy vehicles use the road to travel from Adelaide to Sydney. There isn't much room between opposing vehicles.
Windellama Road	Quialigo	<ul style="list-style-type: none"> • There have been several serious accidents on this stretch in the last year
Burra Road	Jones Creek	<ul style="list-style-type: none"> • This road from reno turn off to muttama is only wide enough for one vehicle

Cost of road trauma

Costs of road trauma were analysed using NSW Centre for Road Safety data and Economic Parameter Values established by Transport for NSW.

The NSW Centre for Road Safety statistics are reported by LGA and cover the 5 years from the beginning of 2014 to the end of 2018. It is important to be cognisant that these figures represent only the reported crashes, and that over the years, reporting requirements around minor crashes have evolved.

The Economic Parameter Values handbook, aggregates the total economic costs of different types of road crashes, and includes all costs associated with an accident including (for example), emergency response, hospital care, rehabilitation costs and

crash accident research reporting and loss of economic productivity. The costs are generally summarised as follows:

• Fatal Accident	\$8,586,767
• Serious Injury Accident	\$574,265
• Moderate Injury Accident	\$97,512
• Minor Injury Accident	\$89,313
• Non-Injury Accident (Towaway only)	\$10,338

Economic Parameter Values have not been determined for the ACT and it is therefore excluded from the analysis.

LGA	Deaths	Serious Injury	Moderate Injury	Minor Injury	Towaway	Cost of Trauma (\$)	Cost of Trauma/person (\$)	Cost of Trauma/km (\$)	Cost of trauma/person/km (\$)
Albury	4	127	217	79	357	139,185,220	2,725	194,848	3.81
Balranald	2	5	4	21	13	22,444,874	9,814	10,838	4.74
Bathurst Regional	20	153	302	48	258	296,000,737	7,167	170,891	4.14
Berrigan	3	6	22	28	26	34,120,707	4,032	26,104	3.08
Bland	10	30	33	5	37	107,142,587	17,872	31,386	5.24
Blayney	4	38	59	4	36	62,651,766	8,633	73,775	10.17
Cabonne	9	105	117	28	114	152,666,928	11,405	63,219	4.72
Carrathool	7	29	22	10	30	80,109,588	29,463	23,760	8.74
Coolamon	4	19	16	4	24	47,423,659	10,990	32,796	7.60
Cowra	9	43	69	18	87	111,209,666	8,925	75,510	6.06
Edward River	3	21	38	6	23	42,298,974	4,779	22,429	2.53

LGA	Deaths	Serious Injury	Mod Injury	Minor Injury	Towaway	Cost of Trauma (\$)	Cost of Trauma/person (\$)	Cost of Trauma/km (\$)	Cost of trauma/person/km (\$)
Federation	8	35	26	27	45	94,205,384	7,373	33,965	2.66
Forbes	7	39	57	7	37	89,069,585	9,291	45,612	4.76
Goulburn Mulwaree	18	112	303	76	215	257,436,080	8,695	159,199	5.38
Greater Hume Shire	10	75	81	29	119	140,656,316	13,589	57,558	5.56
Griffith	9	86	145	29	131	144,751,288	5,645	105,570	4.12
Gundagai	13	98	68	28	100	178,071,321	15,983	108,628	9.75
Hay	3	28	14	5	17	43,827,200	14,877	32,439	11.01
Hilltops	14	89	145	49	136	191,245,868	10,339	64,269	3.47
Junee	6	39	22	8	27	77,055,831	12,241	77,413	12.30
Leeton	5	30	55	8	39	66,642,631	5,967	71,377	6.39
Lithgow	6	131	206	32	205	151,814,095	2,972	116,174	2.27
Lockhart	1	10	7	3	10	15,383,320	4,932	10,507	3.37
Murray River	5	15	29	69	55	61,106,845	5,232	18,899	1.62
Murrumbidgee	5	20	20	3	39	57,040,496	14,870	27,539	7.18
Narrandera	5	28	31	11	41	63,442,428	10,839	37,933	6.48
Oberon	5	49	37	20	53	77,014,938	14,528	49,158	9.27
Orange	8	82	208	51	209	142,781,967	3,539	245,295	6.08
Queanbeyan-Palerang Regional	8	56	293	226	361	153,340,748	2,737	70,723	1.26
Snowy Monaro Regional	16	90	173	109	236	218,116,583	10,788	55,551	2.75
Snowy Valleys	16	86	86	54	140	201,431,316	13,993	65,839	4.57

LGA	Deaths	Serious Injury	Mod Injury	Minor Injury	Towaway	Cost of Trauma (\$)	Cost of Trauma/person (\$)	Cost of Trauma/km (\$)	Cost of trauma/person/km (\$)
Temora	2	23	22	7	40	33,565,604	5,494	26,163	4.28
Upper Lachlan Shire	8	54	96	38	91	113,400,250	14,737	49,745	6.46
Wagga Wagga	10	210	280	79	338	244,316,651	3,916	91,761	1.47
Weddin	1	22	22	8	17	24,256,111	6,620	21,381	5.84
Wentworth	6	1	4	78	45	59,916,539	8,819	24,919	3.67
Wingecarribee	25	187	316	100	309	364,996,264	7,623	218,971	4.57
Yass Valley	16	37	130	136	208	185,609,509	11,499	117,400	7.27

The headline cost of trauma varies in the Mann region from \$365 million in the Wingecarribee LGA, to around \$15 million in Lockhart. There is significant variance of these due to the population and size of the road network of the respective LGAs. But on average, the cost of road trauma is approximately \$120 million per LGA.

When adjusted per head of population, each LGA is in a much narrower band of generally \$5,000 to \$15,000 per person, with Carathool a significant outlier at road trauma cost of \$30,000 per person.

Some LGAs might have a disproportionately large or small road network, and a road

trauma cost/km may be beneficial. There is a range of \$10,000 of trauma/km in Lockhart and Balranald to nearly \$250,000/km in Orange.

Adjusting for both population and road network size might be considered a pseudo-equitable outcome. On this specific metric, the Quenbeyan-Pelarang LGA represents the 'safest' LGA in the NRMA Mann region, with a road trauma cost of \$1.26/person/km. In contrast, Junee is the 'least safe' LGA, with a road trauma cost of \$12.30/person/km. That is to say that adjusting for population and the size of the road network, Junee has 10 times more road trauma than Quenbeyan-Pelarang even though Junee's headline trauma cost is far lower.

