

Manawatu-Wanganui	Length (km)	Median divided	Good horizontal alignment	Safe roadside	Wide lanes (> 3.4-m)	Good sealed shoulder width (1.2 m or more)	Good/excellent delineation	Intersections
SH1N	154	0.0%	88.8%	24.5%	100.0%	25.9%	96.7%	1 every 1-km
SH2	95	0.0%	80.0%	23.6%	100.0%	19.5%	95.7%	1 every 1-km
SH3	69	0.0%	78.4%	32.2%	100.0%	30.0%	98.5%	1 every 1-km
SH54	51	0.0%	76.4%	19.4%	98.8%	8.6%	99.0%	1 every 2-km
SH56	21	0.0%	87.2%	41.1%	100.0%	39.6%	99.1%	1 every 1-km
SH57	59	0.0%	77.4%	15.1%	100.0%	23.9%	98.0%	1 every 1-km
<b>Total</b>	<b>450</b>	<b>0.0%</b>	<b>82.4%</b>	<b>24.5%</b>	<b>99.9%</b>	<b>23.6%</b>	<b>97.3%</b>	<b>1 every 1-km</b>

Wellington	Length (km)	Median divided	Good horizontal alignment	Safe roadside	Wide lanes (> 3.4-m)	Good sealed shoulder width (1.2 m or more)	Good/excellent delineation	Intersections
SH1N	100	69.1%	80.0%	52.4%	100.0%	54.6%	100.0%	1 every 1-km
SH2	118	31.8%	80.6%	42.0%	100.0%	39.0%	99.0%	1 every 1-km
SH53	16	0.0%	78.7%	15.2%	96.8%	3.9%	100.0%	1 every 2-km
SH58	13	6.0%	49.3%	19.0%	100.0%	24.6%	100.0%	1 every 1-km
<b>Total</b>	<b>246</b>	<b>43.5%</b>	<b>78.5%</b>	<b>43.3%</b>	<b>99.8%</b>	<b>42.3%</b>	<b>99.5%</b>	<b>1 every 1-km</b>



**TARANAKI, MANAWATU-WANGANUI AND WELLINGTON**

**STAR RATING KEY**



**WHAT IS KIWRAP?**

The New Zealand Road Assessment Programme, KiwiRAP, is part of the International Road Assessment Programme (iRAP) which investigates road networks in order to make roads safe.

In 2009, 384 people died on New Zealand roads and more than 2,400 people were seriously injured.

iRAP now works in partnership with government and non-government organisations in 60 countries. Programmes have been implemented in Europe (EuroRAP), Australia (AusRAP), the United States of America (usRAP), South Africa and Malaysia.

KiwiRAP's objectives are:

- To reduce deaths and injuries on New Zealand's roads by systematically assessing risk and identifying safety shortcomings that can be addressed with practical road improvement measures
- To have risk assessment as a key factor in strategic decisions on road improvements, crash protection and standards of road management
- To provide meaningful information on where the greatest levels of risk are faced, and in turn, to influence driver behaviour.

KiwiRAP was initiated in New Zealand as a partnership between government agencies (NZ Transport Agency, Ministry of Transport, Accident Compensation Corporation and New Zealand Police) and the New Zealand Automobile Association.

**HOW DOES A ROAD ASSESSMENT PROGRAMME WORK?**

KiwiRAP consists of three 'protocols'.

- RISK MAPPING** uses historical traffic and crash data to produce colour-coded maps illustrating the relative level of risk on sections of the road network. KiwiRAP produced risk maps for New Zealand in January 2008.
- STAR RATING** inspections of the engineering features of a road (such as lane and

shoulder width or presence of safety barriers), and the allocation of between 1 and 5 stars depending on the level of 'built-in' safety, ending on the level of safety which is 'built in' to the road.

- PERFORMANCE TRACKING** involves a comparison of crash rates over time to establish whether fewer – or more – people are being killed or injured; and to determine if countermeasures have been effective.

**HOW ARE STAR RATINGS CALCULATED?**

KiwiRAP assessed the safety performance of New Zealand's rural state highways with speed limits of 80kms or greater. The assessment included line markings, road alignment, lane and shoulder width, median protection barriers, roadside environment and intersection design. The roads were videoed by a vehicle equipped with five cameras and the footage was then viewed in 100 metre sections and a 5km road length allocated an appropriate star rating.

**3 STAR** – Typically roads will be undivided and have deficiencies in some road features such as alignment and road sides and/or poorly designed intersections at regular intervals. A divided 3-Star road would have deficiencies in some road features such as poorly designed intersections at regular intervals.

**1 STAR** – The least safe roads. Most likely to feature severe roadside conditions such as trees, power poles and ditches. Likely to be undivided, have narrow lanes and shoulders, include a high frequency of major intersections, and have poor alignment and mountainous terrain.

**4 STAR** – Roads are typically divided however have minor deficiencies in some road features such as shoulder width or roadside hazards. Divided 4-Star roads are very safe roads with a good safety performance. Undivided 4-Star roads are straight with good overtaking provision, feature good delineation and safe road sides. Typically an undivided 4-Star road will not have high traffic volumes.

**2 STAR** – Typically undivided roads with major deficiencies in road features such as poor roadside conditions and/or many minor deficiencies such as insufficient overtaking provision, narrow lanes, and/or poorly designed intersections at regular intervals. Any divided 2-Star road would have major deficiencies such as poor alignment, poor roadside conditions and poorly designed intersections at regular intervals.

**5 STAR** – The safest of roads. Five star roads must be divided, have grade separated intersections, good alignment, wide road shoulders, safe road sides and excellent delineation. Roads with any at-grade intersections, or those that are undivided, cannot achieve a 5-Star rating.

**RESULTS**

This table shows the proportion of the Taranaki, Manawatu-Wanganui and Wellington state highway networks in each Star band, compared to the national result.

Region	Proportion in each Star Rating				
	1-star	2-stars	3-stars	4-stars	5-stars
Taranaki	0%	59%	40%	1%	0%
Manawatu-Wanganui	0%	49%	51%	0%	0%
Wellington	0%	26%	38%	36%	0%
<b>New Zealand</b>	<b>0%</b>	<b>39%</b>	<b>56%</b>	<b>5%</b>	<b>0%</b>

KiwiRAP is a road safety partnership between the Automobile Association and New Zealand's main transport agencies: New Zealand Transport Agency, Ministry of Transport, ACC and New Zealand Police.



**HOW SAFE ARE OUR ROADS?**  
Star Rating New Zealand's State Highways

## BY STATE HIGHWAY

The following tables show the proportion of the Taranaki, Manawatu-Wanganui and Wellington state highway network in each Star Rating.

Taranaki	Length (km)	Proportion in each Star Rating				
		1-star	2-stars	3-stars	4-stars	5-stars
SH1N	33	0%	0%	85%	15%	0%
SH3	201	0%	61%	39%	0%	0%
SH3A	15	0%	100%	0%	0%	0%
SH4	188	0%	40%	60%	0%	0%
SH41	23	0%	0%	100%	0%	0%
SH43	132	0%	97%	3%	0%	0%
SH45	91	0%	100%	0%	0%	0%
SH47	26	0%	0%	100%	0%	0%
SH48	6	0%	0%	100%	0%	0%
SH49	34	0%	29%	71%	0%	0%
<b>Total</b>	<b>749</b>	<b>0%</b>	<b>59%</b>	<b>40%</b>	<b>1%</b>	<b>0%</b>

Wellington	Length (km)	Proportion in each Star Rating				
		1-star	2-stars	3-stars	4-stars	5-stars
SH1N	97	0%	5%	34%	61%	0%
SH2	113	0%	29%	48%	23%	0%
SH53	16	0%	68%	32%	0%	0%
SH58	13	0%	100%	0%	0%	0%
<b>Total</b>	<b>239</b>	<b>0%</b>	<b>26%</b>	<b>38%</b>	<b>36%</b>	<b>0%</b>

## KEY SAFETY FEATURES

The following tables provide a snapshot of the key safety features of the Taranaki, Manawatu-Wanganui and Wellington state highways.

Taranaki	Length (km)	Median divided	Good horizontal alignment	Safe roadside	Wide lanes (> 3.4-m)	Good sealed shoulder width (1.2 m or more)	Good/excellent delineation	Intersections
SH1N	33	0.0%	88.7%	44.3%	100.0%	24.1%	91.4%	1 every 7-km
SH3	206	0.0%	78.8%	15.6%	100.0%	19.4%	97.5%	1 every 1-km
SH3A	15	0.0%	92.7%	3.3%	100.0%	2.7%	88.7%	1 every 2-km
SH4	188	0.0%	61.7%	13.1%	95.6%	3.0%	87.1%	1 every 3-km
SH41	23	0.0%	56.0%	13.0%	100.0%	3.5%	96.0%	1 every 8-km
SH43	144	0.0%	33.9%	4.0%	100.0%	0.1%	16.7%	1 every 4-km
SH44*	0	NA	NA	NA	NA	NA	NA	NA
SH45	91	0.0%	79.8%	11.6%	100.0%	6.6%	97.6%	1 every 1-km
SH47	26	0.0%	90.2%	26.2%	100.0%	2.5%	96.5%	1 every 6-km
SH48	6	0.0%	94.8%	1.7%	100.0%	3.4%	100.0%	None
SH49	34	0.0%	81.2%	26.6%	100.0%	4.1%	97.4%	1 every 2-km
<b>Total</b>	<b>766</b>	<b>0.0%</b>	<b>67.4%</b>	<b>14.0%</b>	<b>98.9%</b>	<b>8.3%</b>	<b>79.2%</b>	<b>1 every 2-km</b>

\*The entire length of highway 44 is urban and has not been assessed.

## BY VEHICLE KILOMETRES TRAVELLED

The following table shows the proportion of the Taranaki, Manawatu-Wanganui and Wellington state highway network in each Star Rating based on the annual vehicle kilometres travelled (VKT). Four per cent of New Zealand's annual vehicle kilometres travelled occurs on Taranaki state highways, while 6% occurs on Manawatu-Wanganui highways, and 9% on Wellington highways.

Region	VKT (x10 <sup>8</sup> VKT/year)	Proportion in each Star Rating				
		1-star	2-stars	3-stars	4-stars	5-stars
Taranaki	6.75	0%	62%	37%	1%	0%
Manawatu-Wanganui	8.77	0%	50%	50%	0%	0%
Wellington	13.24	0%	16%	31%	53%	0%
<b>New Zealand</b>	<b>154.76</b>	<b>0%</b>	<b>33%</b>	<b>40%</b>	<b>28%</b>	<b>0%</b>

Manawatu-Wanganui	Length (km)	Proportion in each Star Rating				
		1-star	2-stars	3-stars	4-stars	5-stars
SH1N	154	0%	27%	73%	0%	0%
SH2	92	0%	57%	43%	0%	0%
SH3	69	0%	58%	42%	0%	0%
SH54	51	0%	49%	51%	0%	0%
SH56	19	0%	53%	47%	0%	0%
SH57	59	0%	83%	17%	0%	0%
<b>Total</b>	<b>445</b>	<b>0%</b>	<b>49%</b>	<b>51%</b>	<b>0%</b>	<b>0%</b>



Total percentages may not add to 100% due to rounding.