

Link	Length (km)	Serious Injury Crashes 2002 to 2006	Fatal Crashes 2002 to 2006	Collective Risk Annual average fatal and serious injury crashes per km	Collective Risk Band	Personal Risk Annual average fatal and serious injury crashes per 100 million vehicle-km	Personal Risk Band
SH 1 Christchurch Northern Motorway	17.9	2	2	0.04	Low-medium	0.9	Low
SH 1 from Ashburton to Timaru	70.9	13	6	0.06	Low-medium	2.2	Low
SH 1 from Blenheim to Kaikoura	129.2	33	14	0.08	Medium	7.7	Medium-high
SH 1 from Christchurch to Ashburton	71.1	25	9	0.1	Medium	2.5	Low
SH 1 from Kaikoura to Waipara	123.7	36	13	0.08	Medium	8.1	Medium-high
SH 1 from Picton to Blenheim	27.9	13	5	0.15	Medium-high	6.3	Medium
SH 1 from SH 74 to SH 73 Christchurch	10	8	2	0.2	High	2.9	Low
SH 1 from Timaru to Oamaru*	93.2	27	6	0.09	Medium	4.9	Low-medium
SH 1 from Waipara to Kaiapoi	34.8	16	6	0.14	Medium-high	4.6	Low-medium
SH 6 and SH 67 from Murchison to Westport	95.7	14	5	0.04	Low-medium	10.2	High
SH 6 from Blenheim to Havelock	40.5	13	4	0.1	Medium	5.9	Medium
SH 6 from Greymouth to Haast	317.8	25	4	0.02	Low	4.9	Low-medium
SH 6 from Haast to Wanaka*	137.8	17	3	0.03	Low	10	High
SH 6 from Havelock to Nelson	73	31	6	0.1	Medium	7.5	Medium-high
SH 6 from Richmond to Murchison	109.2	28	6	0.06	Low-medium	6.7	Medium
SH 6 from Westport to Greymouth	93.2	10	6	0.04	Low-medium	7.5	Medium-high
SH 7 and SH 7A from Waipara to Hanmer Springs	76.1	11	6	0.05	Low-medium	4.9	Low-medium
SH 7 from Hanmer Springs to Reefton	128	16	5	0.03	Low	9.5	High
SH 8 from Fairlie to Oamaru*	129.7	16	4	0.03	Low	5.6	Medium
SH 8 from Timaru to Fairlie	57.2	5	2	0.03	Low	3.1	Low
SH 60 from Motueka to Collingwood	84	24	0	0.06	Low-medium	9.4	High
SH 60 from Richmond to Motueka	32.5	17	6	0.15	Medium-high	5.8	Medium
SH 62 from Spring Creek (SH 1) to Renwick (SH 6)	12.7	2	4	0.09	Medium	722.4	High
SH 63 from Renwick to Kawatiri	117	10	1	0.02	Low	6.7	Medium
SH 65 from Ariki (SH 6) to Springs Junction	71.4	6	2	0.02	Low	7.1	Medium-high
SH 67 from Westport to Karamea	46.8	1	0	0.01	Low	1.4	Low
SH 69 and SH 7 from Inangahua Junction (SH 6) to Greymouth	109.6	14	2	0.03	Low	7.2	Medium-high
SH 73 from Christchurch to Darfield	33.8	7	1	0.05	Low-medium	2.9	Low
SH 73 from Darfield to Kumara	182.7	24	4	0.03	Low	6.1	Medium
SH 74 from Main North Rd to Burwood Rd	6.3	1	0	0.03	Low	0.6	Low
SH 75 from Christchurch to Akaroa	72.7	20	2	0.06	Low-medium	5.2	Medium
SH 77 from Ashburton to Darfield	93.7	6	1	0.02	Low	3.9	Low
SH 79 from Fairlie to Rangitata	61	5	0	0.02	Low	2.8	Low
SH 80 from Twizel to Mt Cook	54.6	3	1	0.01	Low	5.1	Medium
SH 82 from Kurow to SH 1	71	2	0	0.01	Low	2.6	Low
SH 83 from Oamaru to SH 1*	109.2	5	3	0.02	Low	4.2	Low-medium

\* These links cross map boundaries, so will appear in more than one regional list

TASMAN, NELSON, MARLBOROUGH, WEST COAST AND CANTERBURY REGION



WHAT IS KIWIRAP?

The New Zealand Road Assessment Programme, KiwiRAP, falls under the umbrella of the International Road Assessment Programme, iRAP. Similar programmes have been implemented in Europe (EuroRAP), Australia (AusRAP) and the United States of America (usRAP) and developments are underway for a programme in Africa.

KiwiRAP has been initiated in New Zealand as a partnership between the government transport agencies (Ministry of Transport, Transit New Zealand, Land Transport New Zealand, Accident Compensation Corporation, New Zealand Police) and The New Zealand Automobile Association.

The objectives of KiwiRAP are:  
 > To reduce deaths and injuries on New Zealand 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 behaviour.

HOW DOES A ROAD ASSESSMENT PROGRAMME WORK?

Road Assessment Programmes internationally consist of three 'protocols':

- > **RISK MAPPING**  
Uses historical traffic and crash data to produce colour-coded maps which illustrate the relative level of risk on sections of the road network.

- > **PERFORMANCE TRACKING**  
Involves a comparison of crash rates overtime to establish whether fewer - or more - people are being killed or injured and determine if countermeasures have been effective.

- > **STAR RATING**  
Road inspections assess the engineering features of a road (such as lane and shoulder width or presence of safety barriers). Between 1 and 5 stars are awarded to road links depending on the level of safety which is 'built-in' to the road.

RISK MAPS

Risk Mapping currently focuses on the state highway network. In the future this may extend to tourist routes or key regional non state highway routes.

The state highway network is broken up into road sections (known as 'links'), for the purpose of comparing the level of risk of crashes between different parts of the network. The Risk Maps focus on state highway links that are typically outside the urban area - that is, state highway links that have speed limits of 80km/h or more.

For the purposes of displaying the safety

risk of the state highway network, KiwiRAP looks at two different measures of risk - Collective Risk (or Crash Density) and Personal Risk. The focus of both is on crashes where people have been killed or seriously injured. The crash statistics used for the calculations are for the five-year period 2002-2006.

**Collective Risk (or Crash Density)**  
Collective Risk is a measure of the total number of fatal and serious injury crashes per kilometre over a section of road. Collective Risk can also be described as the Crash Density. Because Collective

Risk is measured in terms of the number of crashes per kilometre of state highway, links with higher traffic volumes tend to have a higher Collective Risk.

**Personal Risk**  
Personal Risk is a measure of the danger to each individual using the state highway being assessed. Unlike Collective Risk, Personal Risk takes into account the traffic volumes on each section of state highway.

This brochure contains the Tasman, Nelson, Marlborough, West Coast and Canterbury regional Risk Map data.

RISK RATING	COLLECTIVE RISK Average annual fatal and serious injury crashes per km	PERSONAL RISK Average annual fatal and serious injury crashes per 100 million vehicle-km	COLOUR
Low	≤0.039	<4	
Low-medium	0.04 ≤ 0.069	4 ≤ 4.9	
Medium	0.07 ≤ 0.10	5 ≤ 6.9	
Medium-high	0.11 ≤ 0.189	7 ≤ 8.9	
High	0.19+	9+	

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



HOW SAFE ARE OUR ROADS?  
Rating New Zealand's State Highways for Risk

**TASMAN, NELSON, MARLBOROUGH, WEST COAST and CANTERBURY REGION**



**COLLECTIVE RISK MAP**

Collective Risk	High	Medium-high	Medium	Low-medium	Low
Tasman, Nelson, Marlborough, West Coast and Canterbury	<1% 10 km	3% 95 km	18% 521 km	24% 686 km	55% 1594 km

Percentages may not add to 100% due to rounding

**TASMAN, NELSON, MARLBOROUGH, WEST COAST and CANTERBURY REGION**



**PERSONAL RISK MAP**

Personal Risk	High	Medium-high	Medium	Low-medium	Low
Tasman, Nelson, Marlborough, West Coast and Canterbury	14% 413 km	21% 600 km	26% 767 km	20% 587 km	19% 540 km

Percentages may not add to 100% due to rounding



**COLLECTIVE RISK**  
 High ———  
 Medium-High ———  
 Medium ———  
 Low-Medium ———  
 Low ———  
 Collective Risk  
 Annual average fatal and serious injury crashes per km



**PERSONAL RISK**  
 High ———  
 Medium-High ———  
 Medium ———  
 Low-Medium ———  
 Low ———  
 Personal Risk  
 Annual average fatal and serious injury crashes per 100 million vehicle-km