



Motorcycle-friendly Roads

- applying a customer lens to a motorcycle safety programme

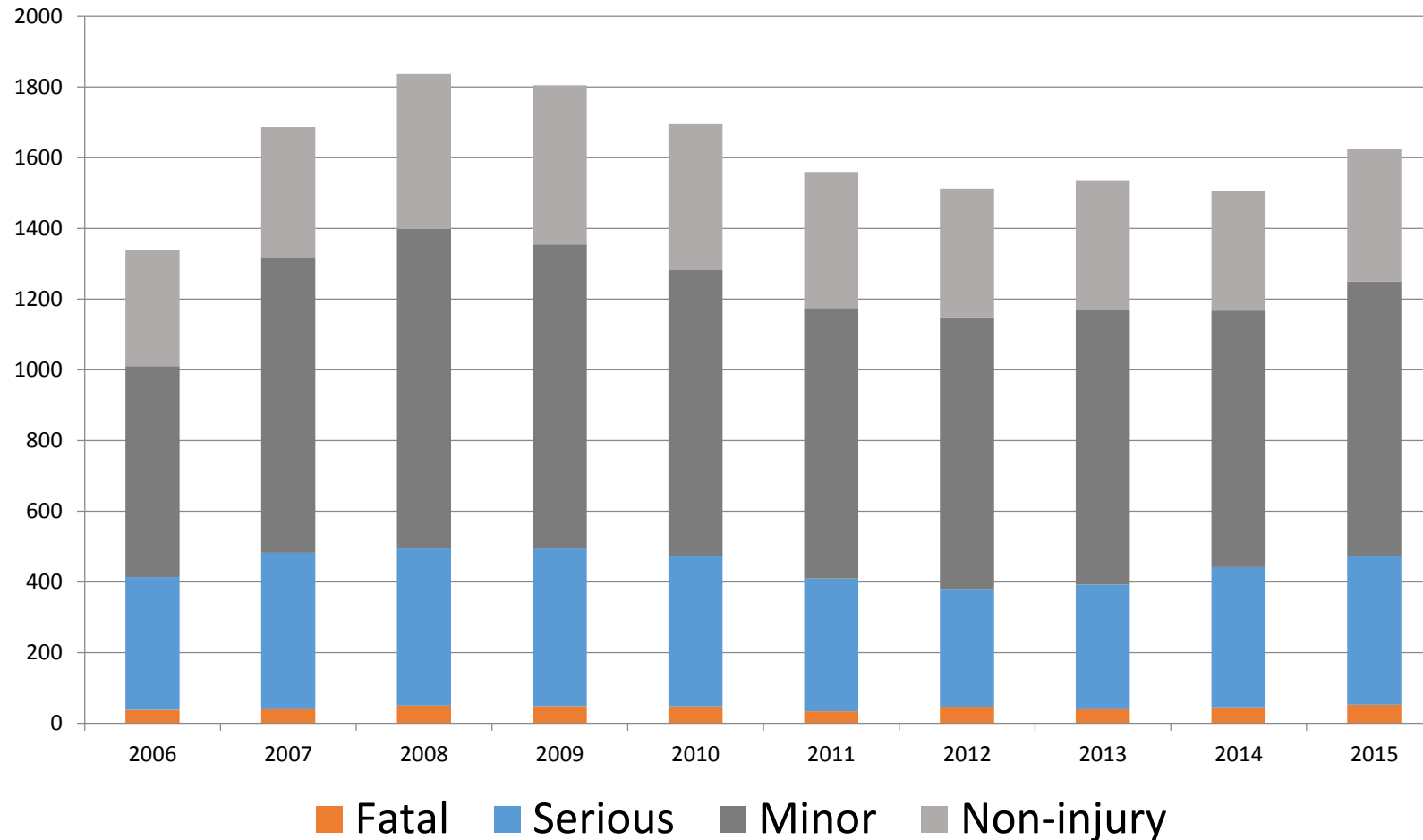


SaferRoads2017
5th International Conference

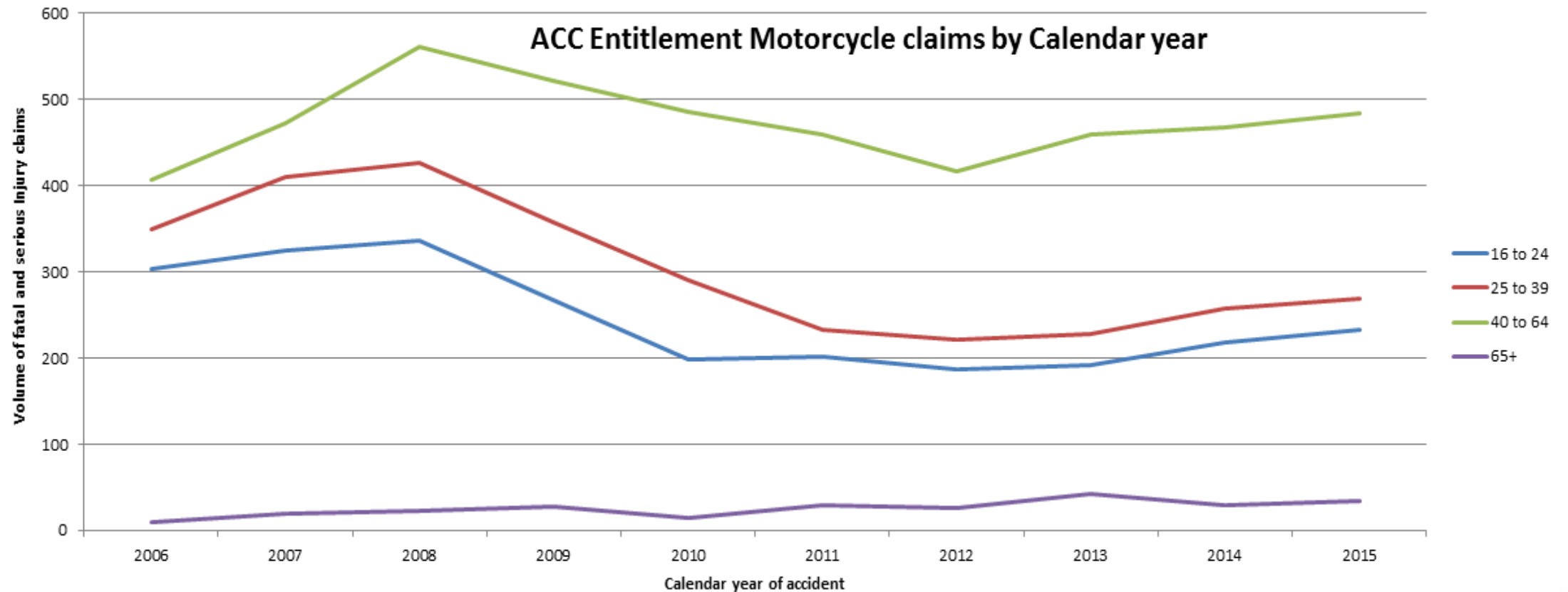
robyn.gardener@acc.co.nz



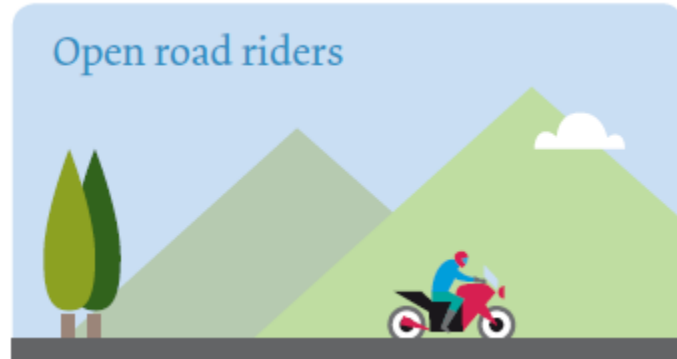
Motorcycle Crashes 2006 – 2015



ACC Entitlement M/C Claims by Year



The Strategy – what we know



- 75% m/c fatal crashes
- Loss of control on bends – m/c only crashes
- Sustain severe injuries due to speeds
- Skills are core safety factor
- Open to improving skills



- 66% m/c injury crashes
- Less severely injured due to lower speed
- Intersection crashes involving other vehicles
- Less likely to prioritise skills or wear protective gear



- At fault in over 33% m/c crashes
- Often don't see m/cs
- Think interactions with motorcycles are risky
- Less empathy because they see riders as reckless

The Strategy – priority focus areas



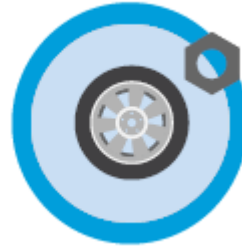
Rider Skills

- Ride Forever coaching



Human Factors

- Rider and driver attitudes through targeted communications



Vehicle Technology

- ABS for m/cs



Personal Protective Equipment

- Increase uptake of PPE to protect riders by providing better consumer info



Roads and Roadsides

- Work with RCAs to improve road design & maintenance on high-risk routes

The Strategy – desired outcome



We will achieve this by ensuring that



More riders are upskilled through Ride Forever.



Riders and drivers better understand the causes of motorcycle crashes and actions they can take to reduce the risk of injury.



Riders better understand the benefits of safety technology and are more likely to purchase motorcycles with improved safety features.



More riders are wearing better personal protective equipment.



Roads are increasingly designed and maintained to improve motorcyclist safety.

Urban KiwiRAP Risk Mapping Model

High risk motorcycle route:

A road where the injury crash density (collective risk) is classified as high or high-medium compared with other roads.

$$\text{Collective risk} = \frac{\text{Est M/C DSi equiv/\# of years of data}}{\text{Length of road section}}$$

Collective risk is a measure of the estimated DSi casualty equivalents per kilometre of road per year



What did we find?

Whole of NZ - DSi casualty approach identifies:

- 90% of the network has < 1 injury crash in last 10 years
- 3.2% of the road network accounts for 38.1% of estimated DSi's nationwide over 10-year period
- 2,798 kms over whole NZ = high risk
- 70% F & S injury crashes on rural roads >70km/h +



www.roadsafetyrisk.co.nz – Wellington

RoadSafety Risk



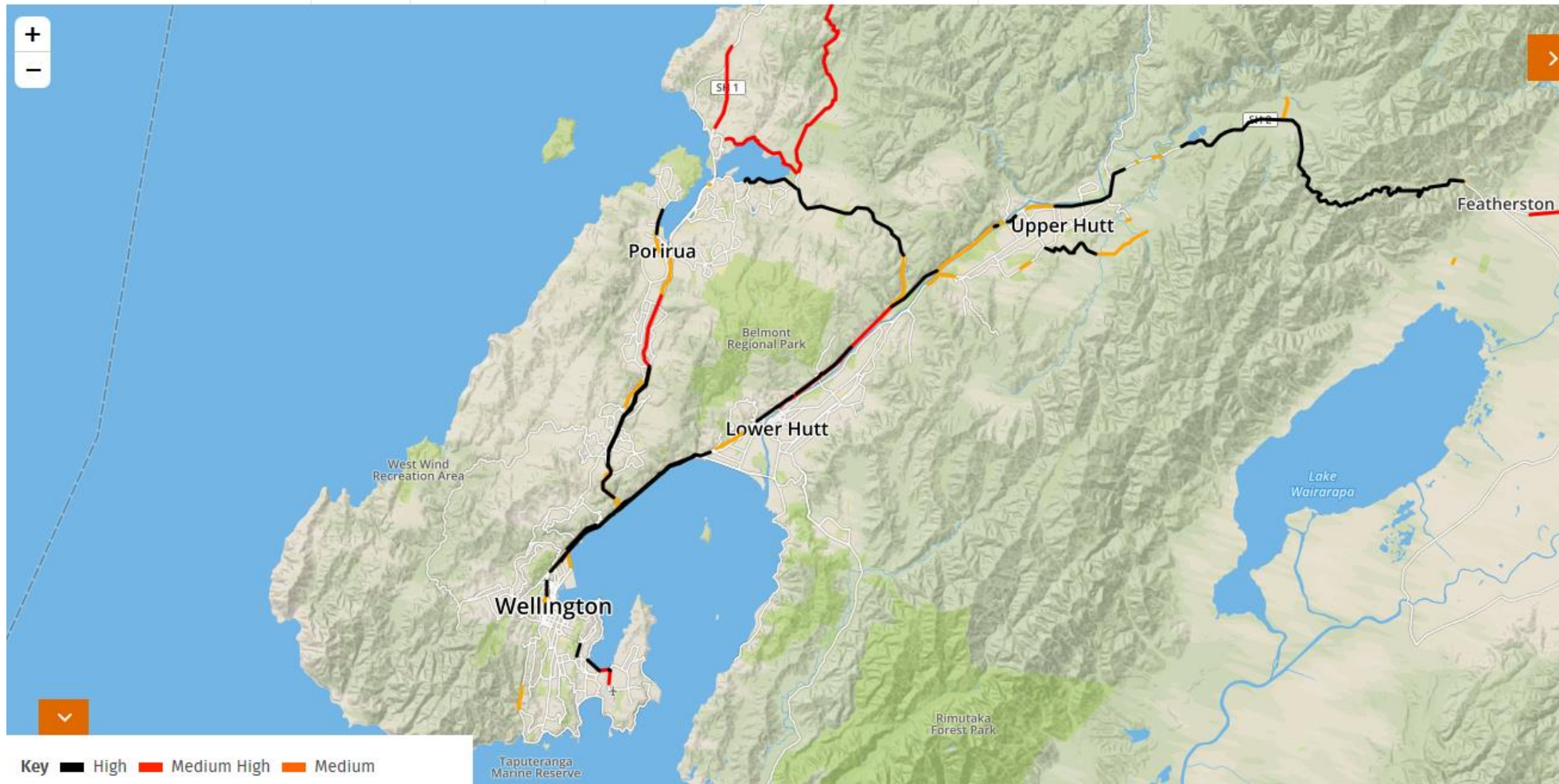
Home

Risk Maps

Urban KiwiRAP Info

Understanding Risk

Log out (Robyn Gardener) | Change Password



Detailed Motorcyclist Risk

Greater Wellington

Routes in region:

Select Route



Street Map



Satellite

Motorcycle Routes

☐ Show routes

Filter by Motorcyclist Route Survey Ranking

All

Corridor Risk (>50kmh)

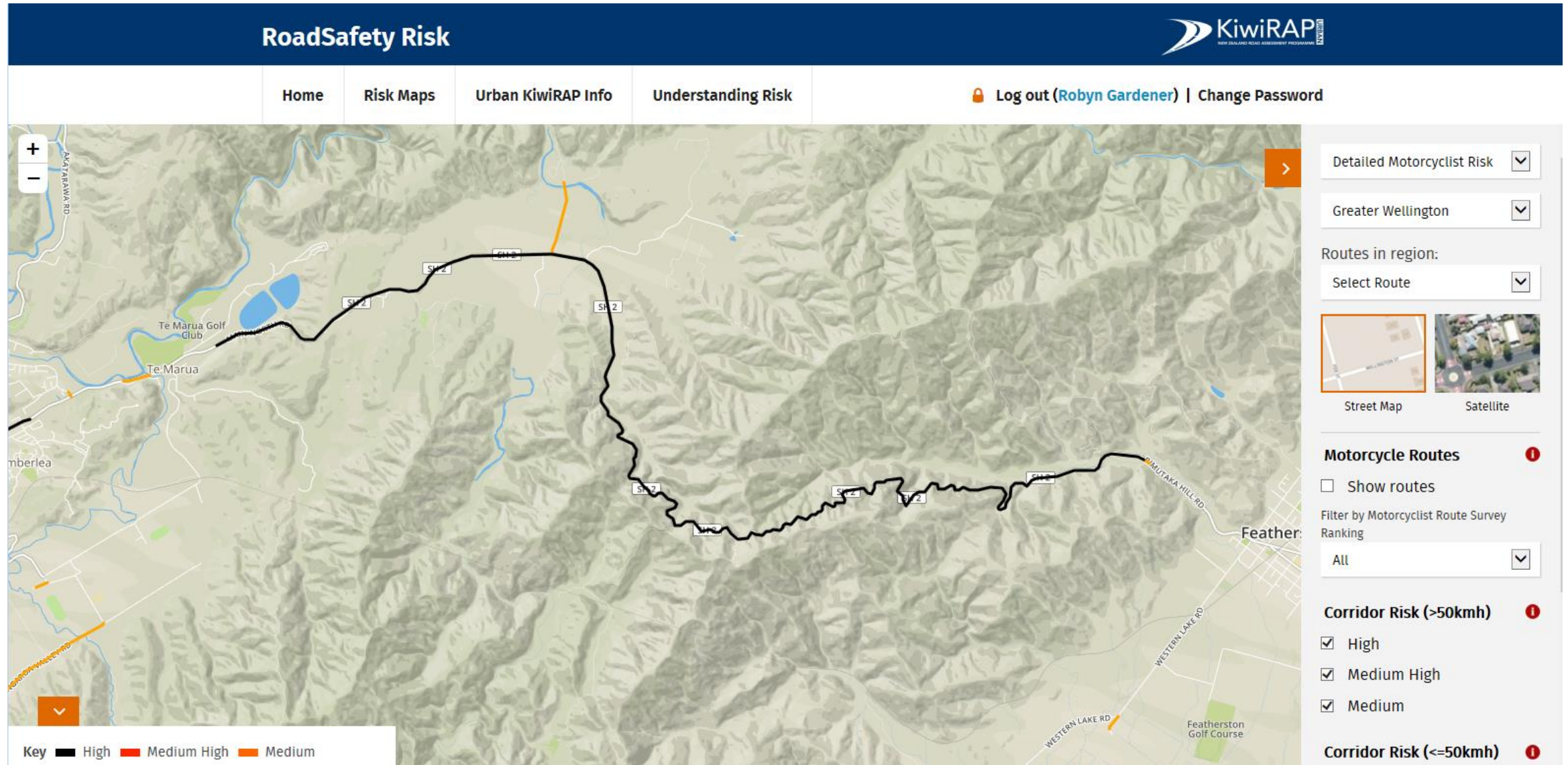
☒ High

☒ Medium High

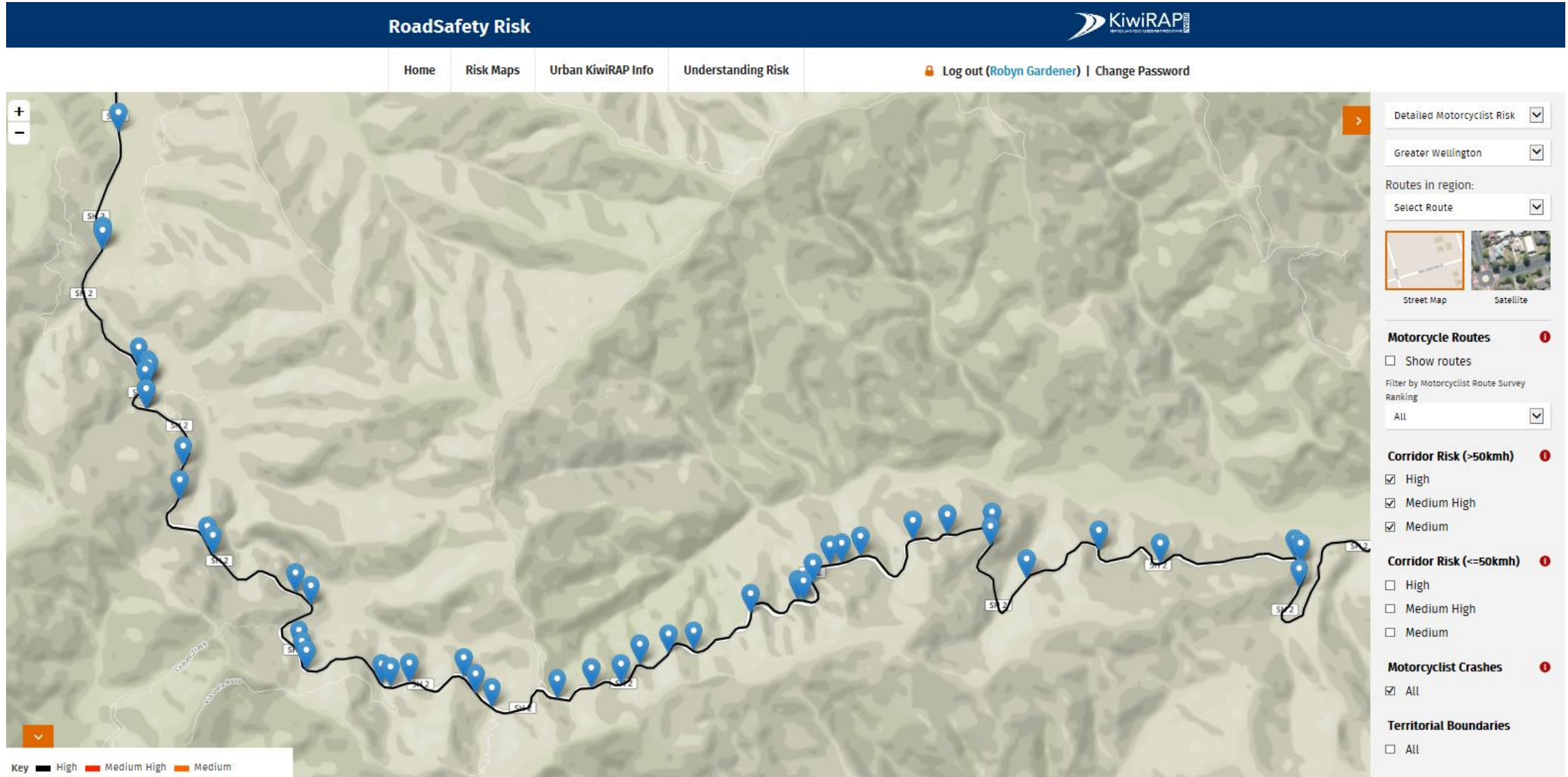
☒ Medium

Corridor Risk (<=50kmh)

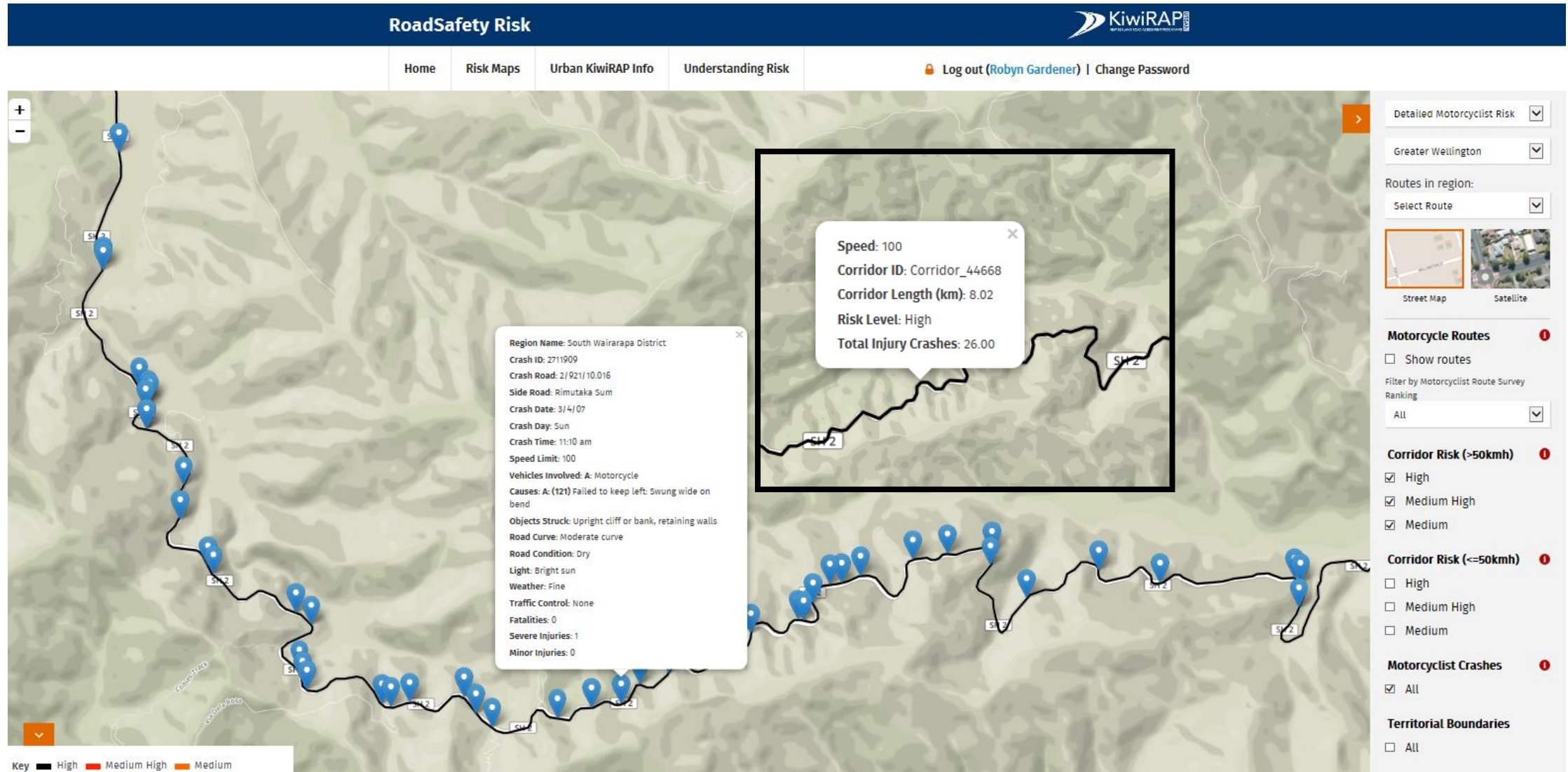
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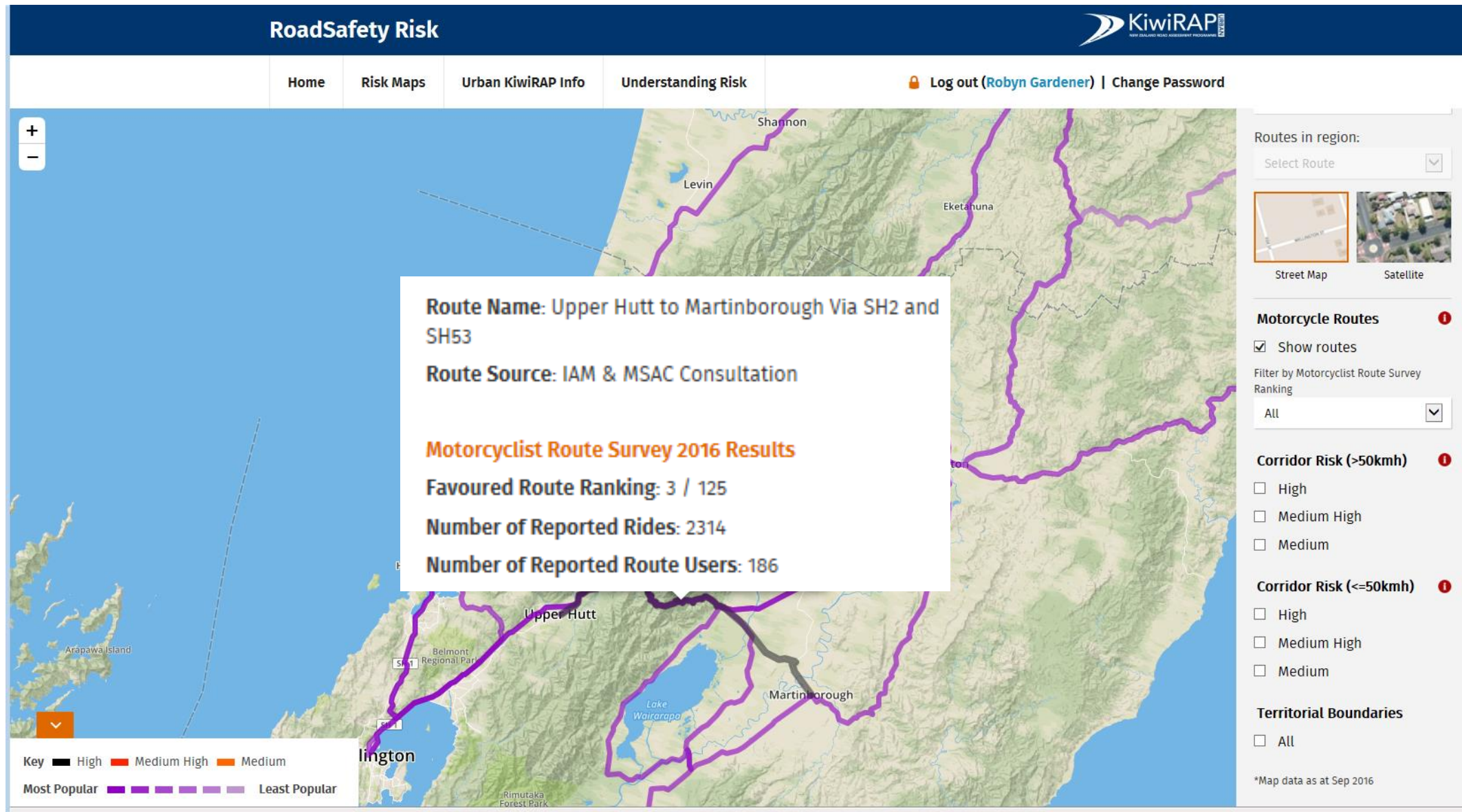
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Favoured Routes – 1567 responses

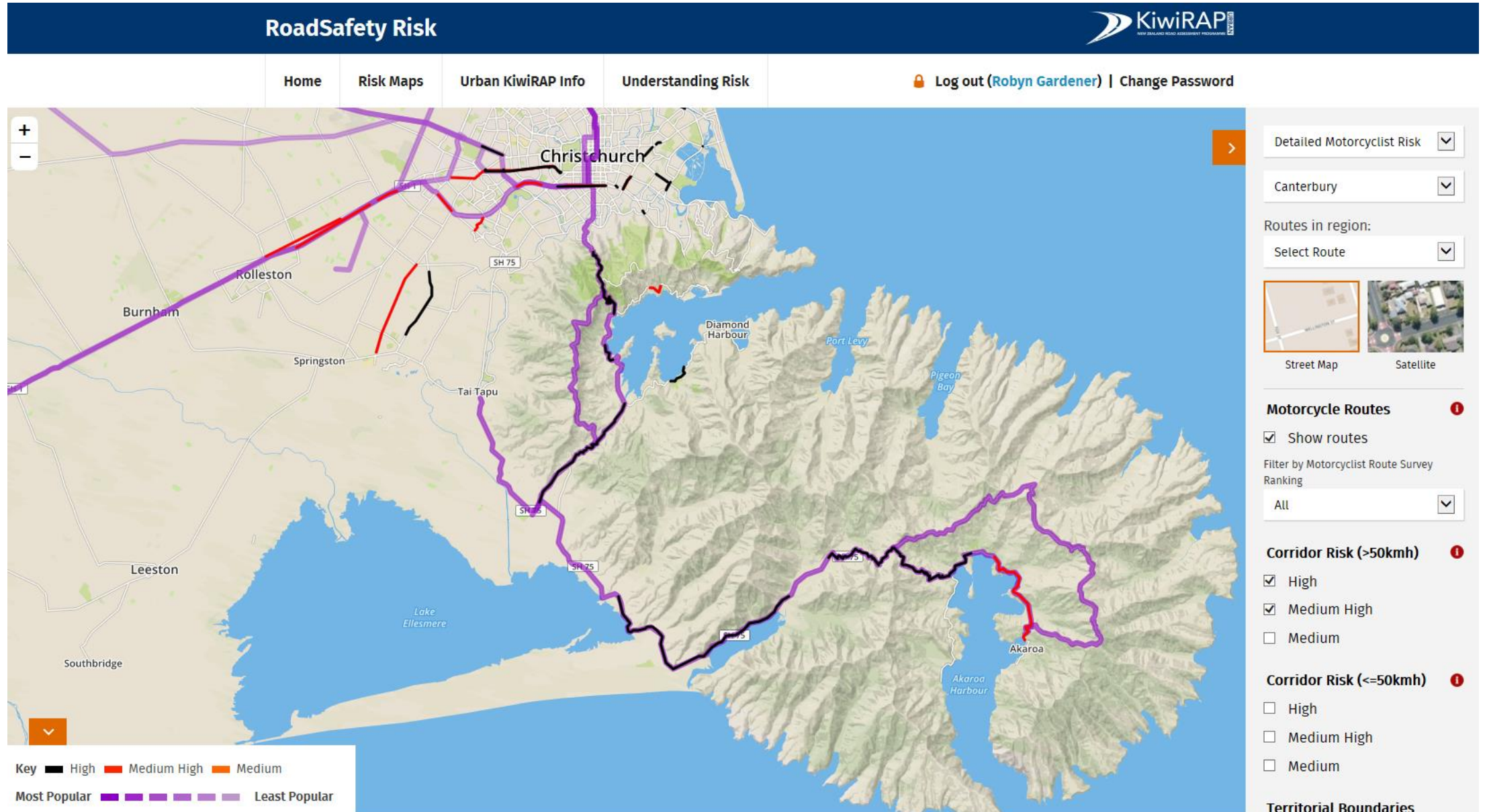


Favoured Routes – responses ranked

Results from M/C Engagement Survey - Most Favoured Routes and Their Risk

Island	Route	Number of Reported Rides	Number of Riders	Max Per Rider	Favoured Route Ranking	Grading - top 100	Sections of M/C Urban KiwiRAP Risk - High	Sections of M/C Urban KiwiRAP Risk - Med-high
N	Auckland to Drury	3991	118	730	1	Top 20		
N	Johnsonville, Paekakariki Hill & Haywards Loop	2881	174	300	2	Top 20		
N	Upper Hutt to Martinborough Via SH2 and SH53	2314	186	300	3	Top 20		
S	Tai Tapu to Akaroa	1890	160	150	4	Top 20		
N	Pukekohe to Auckland via SH22	1815	71	500	5	Top 20		
S	Sign of Kiwi to Gebbies Pass (Summit Road)	1718	133	250	6	Top 20		
S	Christchurch to Motukarara via Gebbies Pass	1696	147	250	7	Top 20		
N	Wellington to Pahiatua via SH2 and back via SH1 (loop)	1249	170	250	8	Top 20		
S	Hilltop to Akaroa (Summit Road)	1136	148	150	9	Top 20		
N	Wellington to Port Ferry	1122	118	220	10	Top 20		
N	Upper Hutt to Martinborough Via SH2 and Western Lake Road	1103	164	50	11	Top 20		
N	Martinborough to Masterton via Longbush/Te Whiti Road	1072	142	70	12	Top 20		
N	Wellington to Hastings	1066	128	700	13	Top 20		
N	Kingseat to Drury to Papakura	1040	52	300	14	Top 20		
S	Nelson to Blenheim	998	225	40	15	Top 20		
N	Auckland to Waipu	941	92	200	16	Top 20		
N	Hamilton Bypass (SH39)	934	91	365	17	Top 20		
S	Wanaka to Queenstown (Crown Range)	794	153	200	18	Top 20		
S	Christchurch to Kaikoura (SH1)	758	221	50	19	Top 20		
N	Tauranga to Rotorua	740	108	60	20	Top 20		

Favoured Routes + Risk



Safer Journeys for Motorcycles on NZ Roads



Safer Journeys

thank you

