

Making Tasmanian Roads Motorcycle Friendly: Lake Leake Road Demonstration Project

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Abstract

Lake Leake Road, a popular Tasmanian motorcycle touring route, also presents as the State's highest risk motorcycle road. To consider optimum risk mitigation strategies: (a) experienced motorcycle riders alongside road safety auditors both examined the road on instrumented bikes that recorded road conditions and the riders' observations; and (b) the results were workshopped with representatives from major stakeholder groups.

This method is observed to have both technical validity and social validity by covering all of the elements of the Safe System – Safer Roads, Safer Speeds, Safer Vehicles, Post-Crash Care and Safer People.

Background

Touring and recreational motorcyclists have more serious injury crashes than other motorcyclists (Austroads, 2015). Tasmania has many popular motorcycle touring routes for both local riders and tourists. The motorcycle crash risk index developed by the Department of State Growth identifies Lake Leake Road as Tasmania's highest risk motorcycle route (Figure 1). Between 2013 and 2018, 15% (80 of 517) of motorcyclists seriously injured or killed on Tasmanian roads were non-Tasmanian residents. Between 2008 and 2018, 40% (11 of 27) of all motorcycle crashes, and 28.5% (4 of 14) of serious casualties, on Lake Leake Road were non-Tasmanians.

With the launch of Towards Zero, the Tasmanian Government (2017) reinforced their commitment to addressing road trauma, especially motorcycle safety. Because Tasmania's popular motorcycle touring routes include their highest trauma routes, possible mitigation approaches were developed. The Lake Leake Road project investigated best practice from the Making Roads Motorcycle Friendly guide (VicRoads, 2014) for maintenance and treatments for existing roads (Beer, 2016) as opposed to roads under construction (Beer et al., 2017).

Method

Safe System Solutions Pty Ltd arranged a Safe System Road Safety Audit – firstly with a preliminary consultation with local engineers, motorcycle safety experts, motorcycle riders, police, and policy makers to confirm the pilot route. Then road safety auditors and experienced motorcyclists rode the route with instrumented motorcycles. They then collectively identified areas of high risk and issues and finally held a full day World Café workshop to develop possible solutions.

Results

Knowledge is obtained by the alchemy of transforming data into information. Good data complemented by good analysis, such as in Figure 1, is needed before workshopping. All motorcycle crashes on Lake Leake Road occurred in dry conditions and in the daytime. All crashes were on bends/curves (9 Left, 5 Right). There is a high severity ratio for motorcyclists (3:5:6, Fatal: Serious Injury: Minor). Thirteen of the fourteen crashes were single vehicle loss of control.

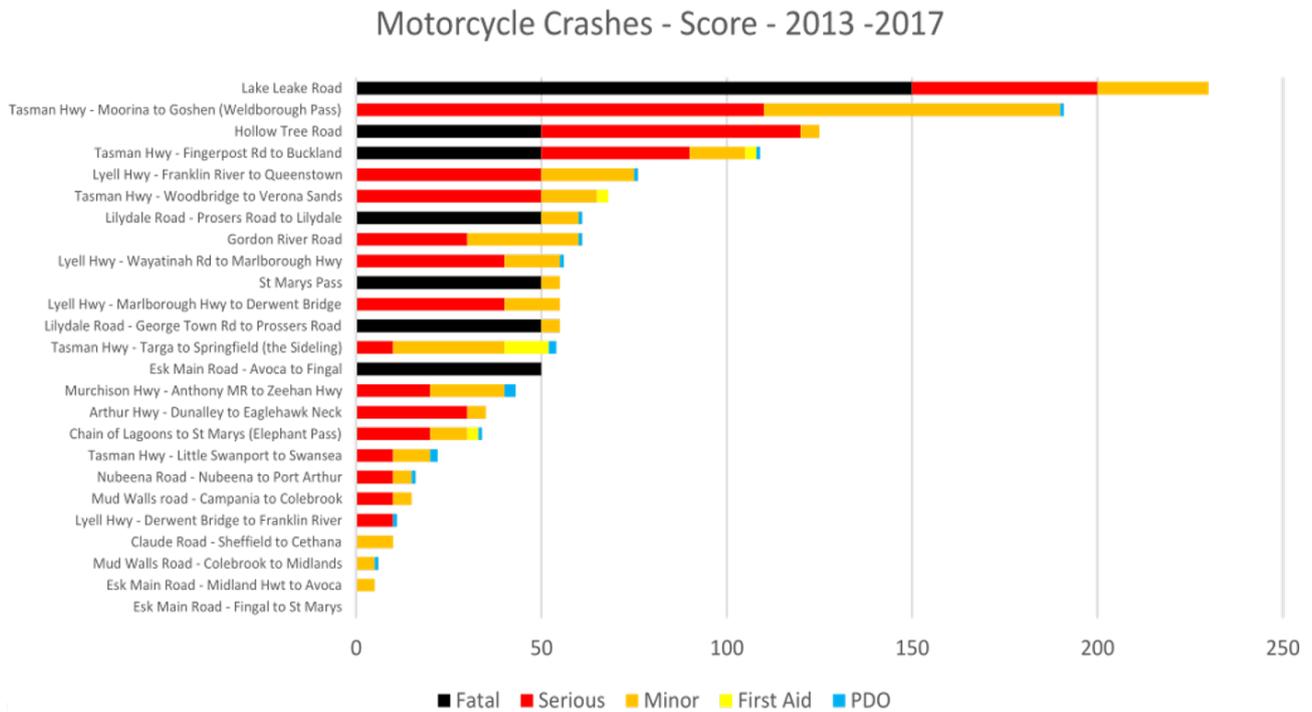


Figure 1. Motor cycle crash scores indicate that Lake Leake Road has the highest motorcycle crash risk index of Tasmanian roads

World Café Workshop Format

The value of any workshop relies on capturing a ‘broad church’ and encouraging participation. Stakeholder engagement is critical, and the time and effort to bring people together is crucial to success. Presentations and discussions generated ideas for countermeasures as in Table 1. World Café tables were:

- Safer Roads and Roadsides
- Safer Speeds
- Safer People (riders and drivers)
- Safer Vehicles, Gear and Post-Crash Care

Conclusion

The Lake Leake Road project methodology appears valid. Because it is based on technical analyses covering firstly which road to examine, and then secondly detailed technical analysis of the road itself (Beer, 2016) it has technical validity. It also attains social validity through consultation and workshops incorporating the views of stakeholders covering all elements of the Safe System.

The final list of counter-measures resulted in an action plan. We are confident that implementation of the action plan will reduce crashes on Lake Leake Road.

Table 1. Representative countermeasures selected from the comprehensive list developed by World Café participants

Safe System Pillar	Countermeasure	Comment	Cost/Time	Achievability/Impact
Safer Roads and Roadsides	Remove trees on some corner exits (visibility).	Looking for opportunities to improve sight lines through a small amount of vegetation removal/trimming	Low/Quick	Low/High
Safer Speeds	Advisory signs (speed)	Effective well-established treatment. See Audit for more details.	Low/Quick	Medium/High
Safer Vehicles (Motorcycles)	Reward scheme at service station free coffee/water for tyre pressure check	Initiative has merit. Trial at service stations	Low/Quick	Medium-Low/High
Safer Gear	5 Star rating system for gear for Safety and for Comfort	Promotion of the new national Star rating website is encouraged. Will look for ideas to promote to riders in this area.	N/A	N/A
Safer Post Crash Care	G-force / mercury switch sensor to alert emergency services to crash ie Rally Safe	This idea has merit. Implementation will require a business case. Not expected to have high benefit. This is wider than the Lake Leake Road, but has been noted and communicated to the Road Safety Advisory Council for consideration.	N/A	N/A
Safer People (Riders)	Protect yourself Personal responsibility Attitude Manners Respect	There are all valid points. We will look for actions that promote these sentiments	N/A	N/A
Safer People (Drivers)	Situational Awareness Education – vulnerability of motorcyclists	There are all valid points. We will look for actions that promote these sentiments	N/A	N/A

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