

Number 75  
November 2010

Published by ARRB Group Ltd  
• ARRB Research and Consulting  
• ARRB Systems

### VICTORIA

500 Burwood Highway  
Vermont South VIC 3133  
P: +61 3 9881 1555  
F: +61 3 9887 8104  
Email: [info@arrb.com.au](mailto:info@arrb.com.au)

### WESTERN AUSTRALIA

191 Carr Place  
Leederville WA 6007  
P: +61 8 9227 3000  
F: +61 8 9227 3030  
Email: [arrb.wa@arrb.com.au](mailto:arrb.wa@arrb.com.au)

### NEW SOUTH WALES

2 -14 Mountain Street  
Ultimo NSW 2007  
P: +61 2 9282 4444  
F: +61 2 9280 4430  
Email: [arrb.nsw@arrb.com.au](mailto:arrb.nsw@arrb.com.au)

### QUEENSLAND

123 Sandgate Road  
Albion QLD 4010  
P: +61 7 3260 3500  
F: +61 7 3862 4699  
Email: [arrb.qld@arrb.com.au](mailto:arrb.qld@arrb.com.au)

### SOUTH AUSTRALIA

Level 5 City Central  
Suite 507, 147 Pirie Street  
Adelaide SA 5000  
P: +61 8 7200 2659  
F: +61 8 8223 7406  
Email: [arrb.sa@arrb.com.au](mailto:arrb.sa@arrb.com.au)

Luxmoore Parking Consulting  
Ground Floor  
12 Wellington Parade  
East Melbourne, VIC 3002  
P: +61 3 9417 5277  
F: +61 3 9416 2602

### INTERNATIONAL OFFICES

Xiamen, China  
Dubai, United Arab Emirates  
Abu Dhabi, United Arab Emirates

Editor: [ian.steele@arrb.com.au](mailto:ian.steele@arrb.com.au)

## Proactive Safety Assessment of Queensland's Local Roads – progress update

As part of the Queensland Roads Alliance NetRisk assessment and data collection initiative, work is well underway collecting road safety information across approximately 20,000 km of Queensland's Local Roads of Regional Significance (LRRS). This mammoth data collection task has been split between ARRB Group and RoadTek Network Services (a Government Business of the Queensland Department of Transport and Main Roads), with approximately 10,000 km of collection being undertaken by each organisation.



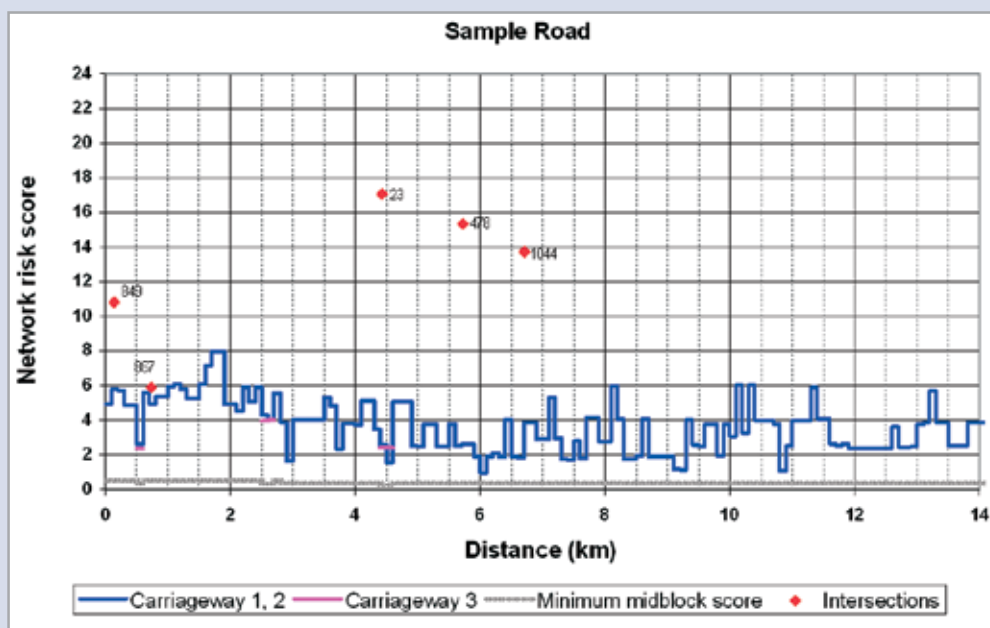
For this project, both ARRB and RoadTek are using Hawkeye 2000 Network Survey Vehicles, designed and built by ARRB.

The Network Survey Vehicles simultaneously collect digital imaging, GPS, chainage, geometry and other infrastructure condition and inventory within a single pass of the vehicle. The data is collected at normal traffic speeds, eliminating the need for riskier on-site inspection practices.

ARRB is undertaking all NetRisk assessment across the state. Experienced raters extract the required road engineering information and roadside features by reviewing the digital images captured during the drive-over survey. These calibrated images allow the rating team to measure widths, areas and offsets to hazards straight from the desktop. Based on a defensible robust engineering assessment a network risk score is calculated, highlighting potential hazards.

The survey work for the Banana, Brisbane, Central Highlands, Western Downs, Eastern Downs, Gladstone, Rockhampton, Scenic Valleys, South West, Southern, Southern Border, Whitsunday and Wide Bay Burnett Regional Road Groups with over 14,000 km has already been completed. NetRisk reports have been delivered to Brisbane, Southern, Southern Border and Wide Bay Burnett. All data will be processed, with NetRisk and asset management information being delivered to councils through 2010 and 2011.

For more information on the Queensland Roads Alliance NetRisk assessment and data collection initiative, please contact Ian Steele + 61 7 3260 3503, [ian.steele@arrb.com.au](mailto:ian.steele@arrb.com.au).



Example of NetRisk worm



## Squeezing them in: integrating cycle lanes into an existing road network

In many parts of Australia, fuelled by the combination of the global economic downturn, environmental concerns and increased health awareness, the number of cyclists and the sales of bicycles have been ever increasing – since 2001 sales of bicycles have outsold motor vehicles (excluding heavy vehicles).

This has created the need for increased bicycle networks – not just routes, or pieces of routes. The desired network nearly always includes the creation of bike routes within existing road corridors – ‘squeezing them in’ – corridors which have existing space and infrastructure constraints. Some estimates show a planned increase of 200-400 km per annum of new cycleway infrastructure in Australia.

Based on the increasing cycle infrastructure, planning and implementation of cycle networks are critical. Due to the significant investment that communities commit via local government, there is a critical need to get it right, or functional obsolescence of the asset may result from the day of construction.

Local government must employ a methodical Safe System approach to the creation of cycle infrastructure. Not only does the risk of obsolescence exist, so does the ongoing necessity to minimise the risk to the public and local government through a documented and methodical planning and design process.

It is recommended that a systematic and documented process is implemented to ensure that the community's investment hits the mark. This can be achieved through overall management of the steps below:

- use of experienced cycleway designers
- auditing the final designs prior to implementation
- construction supervision by those familiar with cycleways.

While individual cycle routes, as part of a larger network may seem like a ‘must have’, the implementation of new routes should not be consigned to arbitrary ‘ticking the boxes’. A thorough process including life-cycle and risk assessment should be conducted. Quite simply if existing roads are retrofitted with inferior cycleways that do not meet the needs of cyclists, either due to budget or knowledge constraints, the process may be counterproductive. A holistic approach and sensibility checks are encouraged – even if this means the construction of required cycle routes is spread out over more years, or more investment in capital or knowledge is required.

David McTiernan +61 2 9282 4414, [david.mctiernan@arrb.com.au](mailto:david.mctiernan@arrb.com.au)



## Upcoming workshops

The following workshops are available throughout Australia as listed below.

These courses are recognised by Engineers Australia for Continuing Professional Development (CPD) purposes.

### Basic Geometric Road Design

Hobart	22-24 February 2011
Perth	15-17 March 2011
Christchurch	11-13 May 2011
Auckland	16-18 May 2011
Sydney	mid 2011
Brisbane	mid 2011

### Unsealed Local Roads

VIC (location TBC)	early 2011
WA (location TBC)	early-mid 2011
QLD (location TBC)	mid 2011
NSW (location TBC)	mid-late 2011

### Level 1 Bridge Inspection

Sydney	4-5 May 2011
Melbourne	1-2 June 2011
Perth	22-23 June 2011

### Local Area Traffic Management

Sydney	6-7 July 2011
Brisbane	8-9 September 2011

### Planning and Design of Parking Facilities

Auckland	23-24 March 2011
Brisbane	19-20 May 2011
Sydney	21-22 June 2011

For a full list of ARRB training workshops visit [www.arrb.com.au/workshops](http://www.arrb.com.au/workshops).

Should you wish to attend a future workshop or simply request more information please register your interest by contacting [training@arrb.com.au](mailto:training@arrb.com.au) or on +61 3 9881 1680.



3rd International  
Road Surface Friction Conference  
**Safer Road Surfaces – Saving Lives**

15 - 18 May 2011, Gold Coast, Queensland  
Registration now open  
Early bird closes 31 March 2011  
Visit [www.friction2011.com.au](http://www.friction2011.com.au) for further information.