

PIARC (the World Road Association)

PIARC was established in 1909 and is the oldest international association concerned with road engineering, road policy and the management of road networks.

There is a strong focus on developing countries/countries in transition. National governments are represented by delegates who are usually senior officers of national road administrations. Transit co-ordinates New Zealand participation on PIARC committees and Transit staff participate in the work of several committees to develop reports on best practices and recommendations.

With the implementation of the new PIARC Strategic Plan for 2004-2007 there are four new strategic themes under which the technical committees will operate, with revised terms of reference. The new strategic themes and their committees are:

Theme 1: Governance and Management of the Road System, with the goal to improve the governance and management of road administrations in the provision of road systems in accordance with international best practice.

Technical Committees for this theme are:

- ▼ TC1.1 - Road System Economics
- ▼ TC1.2 - Financing Road System Investment
- ▼ TC1.3 - Performance of Road Administrations
- ▼ TC1.4 - Management of Network Operations

Ian Melsom, Transfund is the NZ representative on the Road System Economics committee, Brian Hasell, Transit

is the representative for the Performance of Road Administrations and Dave Bates, Transit for the Management of Road Operations Committee.

Theme 2: Sustainable Mobility, with the goal to encourage the development of road transport policies and programs that result in beneficial community outcomes for sustainable and safe mobility in economic, environmental and social terms, and take full account of the need for integration with other transport modes.

Technical Committees for this theme are:

- ▼ TC 2.1 - Sustainable Development and Road Transport
- ▼ TC 2.2 - Interurban Roads and Integrated Interurban Transport
- ▼ TC 2.3 - Urban Areas and Integrated Urban Design
- ▼ TC 2.4 - Freight Transport and Inter Modality
- ▼ TC 2.5 - Rural Transport Needs

Lisa Rossiter, Transit is the NZ representative on the Sustainable Development and Road Transport committee and Murray Russell, Transit is the NZ representative for Urban Areas and Integrated Urban Transport committee.

Theme 3: Safety and Road Operations, with the goal to improve the safe and efficient use of the road system, including the movement of people and goods on the road network, while effectively managing the risks associated with road transport operations and the natural environment.

Technical Committees for this theme are:

- ▼ TC 3.1 - Road Safety
- ▼ TC 3.2 - Risk Management for Roads
- ▼ TC 3.3 - Road Tunnel Operations
- ▼ TC 3.4 - Winter Maintenance

Denis Davis, Transit is the NZ representative for the Road Safety committee and Terry Brown, Transit is the representative for the Risk Management for Roads committee.

Theme 4: Quality of Road Infrastructure, with the goal to improve the quality of road infrastructure through effective management of road infrastructure assets in accordance with user expectations and managers' requests.

Technical Committees for this theme are:

- ▼ TC 4.1 - Management of Road Infrastructure Assets
- ▼ TC 4.2 - Road/Vehicle Interaction
- ▼ TC 4.3 - Road Pavements
- ▼ TC 4.4 - Road Bridges and Related Structures
- ▼ TC 4.5 - Earthworks, Drainage and Subgrade

Meetings of all technical committees commenced in April and May 2004 in Paris, France. Chairs of the outgoing technical committees also attended in Paris for the purpose of finalising their committees' work and where relevant ensuring a smooth transition to the new committees.

Further information in regard to the terms of reference for the strategic themes and the technical committees can be obtained from the World Road Association (PIARC) website at: www.piarc.org

27th Australasian Transport Research Forum

"Transport and society: creative responses to change"

This forum was held in Adelaide from 29 September to 1 October and was attended by a number of people from New Zealand.

The ATRF is the peak annual transport planning and policy forum for both the public and private sectors. Since 1975, the Forum has made, and continues to make, a real and significant contribution to transport in Australasia. It brings together academics and practitioners from the transport field, along with others who have an interest in transport research, policy and practice. The forum provides the opportunity to share in the latest research and initiatives with colleagues from many parts of the world and from all parts of the transport sector.

There were two key note speakers, firstly Tim Costello (chief executive of World Vision) with a topic of "Transport and an Australian social conscience" and Natalie Jackson (from the University of Tasmania) who spoke on "Population futures and the implications for society".

Natalie gave a graphic presentation on the impacts of the changing population trends and the need for governments to start planning now. The very substantial increase in elderly population in the future will mean the current emphasis on building peak hour capacity on roading networks and on passenger transport services may not even be needed in the future.

Contribution and enquires

This newsletter is published for the benefit of members. Enquires about the chapter and contributions to the newsletter may be directed to:

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REAAA[®]
Driving Progress

ROAD ENGINEERING ASSOCIATION OF ASIA & AUSTRALASIA (NZ)

REAAA Low Volume Roads workshop

Planning is well advanced for the 4th Low Volume Roads workshop. The 2005 event will be held in Palmerston North from 3 to 5 August 2005. Following positive feedback to an informal survey of past participants the workshop will commence on the Wednesday afternoon with a technical tour that is being planned to visit some repair sites from the devastating flood event suffered by the Manawatu - Wanganui region.

Three key note speakers are planned and a panel session involving those key note speakers will be held on the final afternoon.

The call for papers will be available shortly so please check out the site at www.roads.co.nz for further information.

Central Otago Rooding Collaboration

Transit New Zealand, Central Otago and Queenstown District Councils are proceeding with a collaboration to manage all roads in the Central Otago and Queenstown Lakes region.

A feasibility report demonstrating mutual benefits to all parties has been produced and has received largely positive feedback following extensive industry and public consultation.

It is expected that over time there will be considerable advantages of the three road controlling agencies working together. Some of these benefits will be a better integrated roading system and more cost-effective expenditure. The new collaboration will also have sufficient critical mass to retain roading expertise and access to Transit New Zealand road management systems. Between now and the proposed start date of 1st July 2007, contractual and management arrangements will progressively transition to the new structure. Currently the parties are working through the processes to appoint the Governance Board and the Manager.

The new entity will be managing approximately 2,900 km of roading with an annual expenditure of around \$20m.

(Article supplied by Mike O'Cain, Transit New Zealand Ltd)

Chairman's Note

Like all of you I find it difficult to believe that Christmas is almost upon us once again. As is usual at this time of year it is good to review the last year and then look forward to the coming year.



This year has been a landmark year for New Zealand Land Transport. New legislation, new industry organisations combined with significant increases in funding and changes in how projects are evaluated. At the same time some parts of the country were exposed to some of the most extreme storm events ever recorded. All these things combined to put significant workload on Road Engineers across the country. Our Roadshow this year focussed on some of the implications and impacts of these and was very well received.

Looking forward to next year it appears that for most of us it will be more of the same - but with more changes! Road Engineers will be asked to take a more integrated and sustainable approach to both project development and road management and maintenance. This will mean that we will have to learn new skills and perspectives and work with a wider range of professionals to solve problems. In response to these changes the REAAA activities next year will be very much focussed on helping members and the industry. We will do this by ensuring that the focus of the Roadshow, Newsletter and Low Volume Roads Workshop reflects these needs.

I wish you all a safe and happy Christmas

Mike Rudge

Chairman

History Corner

Skippers Road Schist: Memorials in Danger, Queenstown



The striking capping stones and schist walls are under threat. Photo: The Hocken Collections, University of Otago, Dunedin

Increased road usage and vehicle size in response to tourism ventures is seriously affecting historic Skippers Road.

The narrow, unsealed road which snakes its way through the spectacular Skippers Canyon, not far from Queenstown, is not for the faint hearted. Vertical drops to the Shotover River, negotiating slips on the road and cautiously edging past other vehicles is all part of the 17-km Skippers Rd experience. Rental car companies warn clients not to take their cars on this dramatic and at times terrifying road which branches off the Coronet Peak ski field road.

Visitors have long been lured to the Upper Shotover landscape to enjoy its dramatic schist bluffs and rock tors that stand like sculptures in this tussock-draped landscape. The road commands views of the Richardson Mountains to the west and the Harris Mountains to the east. The past few decades have seen dramatic increases in road usage and size of vehicles in response to tourism ventures in the canyon. Large wheel base vehicles, trailers, buses and four-wheel drives make regular use of the road catering for tourists keen to raft the Shotover River, leap off the historic Skippers Bridge or the pipeline bungy, or mountain bike part of the original 1860s pack track.

Built between 1883 and 1890 in four sections, the Skippers Rd was considered an engineering feat in its day. Miles of schist stonewalling, complete with their striking capping stones, once curved their way through Skippers Canyon. Today these stone memorials are becoming scarce.

Increased road use combined with naturally occurring slips, and the need to ensure safety measures and regular maintenance on the road, has resulted in accelerated erosion of the remaining stacked schist walls.

The Queenstown Lakes District Council, which manages the road, does not have an easy task. Maintenance costs are high and keeping the road open especially in winter can be a constant battle. Continual grading and widening of portions of the road over the years has caused an alarming disappearance of the stone walls.

The Historic Places Trust and locals have lobbied the council for the past two years to recognise the significance and importance of these walls. The Trust wants to see a long-term management plan created for the road, aimed at balancing practical road use and maintenance with retention, and possibly restoration, of some of the iconic heritage features along the route.

To this end the Trust initiated an archaeological report last year which provides a baseline of over 100 photos identifying remaining stone walls and significant heritage features of the road with recommendations for their future management. Transfund has recently provided the district council with funding for a strategy study for the Skippers Rd, and the Trust has been given the opportunity to ensure that the special heritage issues are identified and integrated into the document.

The Skippers Canyon overflows with history. It was the Shotover River, often referred to as the richest river in the world, which lured thousands of prospectors to its banks after gold was discovered there in 1862. A precarious pack track was the only access to the Skippers township and Upper Shotover diggings for more than 20 years.

Pressure for a dray road increased in the 1880s when quartz mining came to the fore and the need to transport heavy machinery to sites such as Bullendale [9.6 kms north of Skippers] became urgent.

The large Phoenix mine at Bullendale was already contributing greatly to the local economy and this helped sway the argument for a road. By 1886 New Zealand's first hydro-electric supply was underway up the left hand branch of Skippers Creek which was designed to drive the 30 stamp Phoenix battery at Bullendale.

A three-kilometre stretch of the road involved hand drilling and blasting solid rock to create a road platform, 183 metres above the Shotover River. This daunting task called for men with a head for heights who had to hang on ropes to complete much of the task. They built impressive stacked revetments to support the road from beneath and stone



Photo: NZ Historic Places Trust



Today, these stone memorials are becoming scarce. Photo: NZ Historic Places Trust

walls to provide a safety barrier for horse and dray. Today this section, aptly named Pinchers Bluff and the Devils Elbow remains as the most intact memorial to these pioneer road builders.

The Skippers Rd is one of the most significant gold mining access routes left in New Zealand and we are hopeful that its narrow width, impressive stone walls and rock cuttings will survive to remind us of the skill and tenacity of the road builders to forge a road through such daunting country.



The Skippers Road was considered an engineering feat in its day. Photo: The Hocken Collections, University of Otago, Dunedin

Can you help with historical information about the road, or do you hold any photographs of the road or its features which the Trust might find useful? If you think you might be able to help, please contact the Area Coordinator, at the Trust's Dunedin Area Office, P O Box 5467, Dunedin, tel. 03 477-9871 or send an email to infodeepsouth@historic.org.nz

(Article first appeared in Heritage New Zealand, Summer 2002. Permission kindly granted to reproduce the article by the NZ Historic Places Trust and The Hocken Collections, University of Otago, Dunedin)

2004 Roadshow

The 2004 roadshow was once again held at the five main centres. Commencing in Dunedin on Thursday 26 August and finishing in Auckland on Wednesday 1 September. This year there was a great range of topics which were well received. The feedback received from the 200 attendees has been very positive. It was commonly noted that the mealbreaks enabled networking opportunities. The topics covered during the roadshow are listed below and copies of the presentations are now available on the chapter's website www.reaaa.co.nz.

- ◆ Paksey Bridge Project in Bangladesh presented by Robert Aves, Maunsell NZ
- ◆ The Land Transport Management Act Crystal Ball presented by Mike Rudge, MWH NZ Ltd and Richard Paling, Beca
- ◆ Systematic Management of Road Networks for Natural Risk presented by Pathmanthan Brabhakaran, Opus International Consultants
- ◆ The February Storm - A Rooding Perspective presented by Ian McGowan, Wanganui District Council
- ◆ Planning for the Effects of the Ruapehu Lahar Hazard on State Highway 49 presented by Maurice Mildenhall, Transit New Zealand
- ◆ Presentation from members of the New Zealand Utilities Advisory Group
- ◆ Travel Demand Management presented by Peter McCombs, Transit New Zealand
- ◆ Local topics.

The committee is looking forward to coordinating another successful roadshow for 2005 and planning will begin in the New Year.

2004 Technical Paper Competition

The REAAA New Zealand Chapter promotes a technical paper competition each year to encourage members to prepare papers that would be suitable for publishing in the NZ Chapter newsletter, the REAAA journal and could also be presented at events such as the REAAA NZ Chapter Roadshow.

There are two categories open for submission;

Papers on 'innovation'

Papers on 'the practical application of research'

A prize of up to \$3000 is awarded to the best paper in each category, which goes toward travel and attendance expenses at a conference. A condition of entry must be that papers can be published in either the REAAA NZ Chapter newsletter or the REAAA journal.

The 2004 Technical Paper Competition closing date was 30 September 2004. Unfortunately this year a low number of entries were received therefore the judging panel decided not to present an award in either category.

Details for the 2005 REAAA NZ Chapter Technical Paper Competition will be out in the New Year as the committee is revising the format and conditions.