



Wangaratta, VIC

25-26 February 2010

Ararat, VIC

20-21 April 2010

ARRB is pleased to offer a two-day training workshop on the latest practices in the management of unsealed roads including practical aspects during a site inspection.

Workshop purpose

- To Learn about the latest developments, new techniques and best practices on how to improve and lower maintenance costs of your unsealed roads.

Unsealed Roads Manual –

Guidelines to Good Practice Mar 2009 (3rd edition)

ARRB Group released in Mar 2009 an updated and expanded edition of the very successful Unsealed Roads Manual, initially issued in 1993. This edition provides the latest research and developments worldwide to address issues identified by practitioners. It also includes the New Zealand Supplement to the 2000 edition of the Manual and the latest requirements and practices to make it an Australasian Manual on unsealed roads.

This updated and expanded edition of the Manual is recommended reading for practitioners in local government, state road authorities and other agencies responsible for the care, maintenance and management of unsealed roads.

The new features of the upgrade include:

- details on the latest research findings, new developments and applications of world best practice
- increased content to respond to comments made by delegates attending previous workshops held across Australasia
- equipment developments that provide objective data on unsealed road performance and the better use of often marginal pavement materials
- a new chapter covering ways to improve safety on unsealed roads
- applications for logging and haulage routes
- case studies highlighting how the application of good practice has resulted in significant cost savings or improved operating conditions
- greater emphasis on asset management requirements.

The workshop will be a practical ‘hands on’ presentation with group participation, worked examples, case studies, equipment demonstrations and a field inspection of various unsealed road sites.

Attendance at the popular workshops will be invaluable to learn and share the knowledge and experience with the other practitioners attending.

Course enquiries: To enquire about this course, please call the Event Coordinator on 03 9881 1555, or email training@arrb.com.au www.arrb.com.au/workshops

This course is endorsed by:

Institution of Engineers, Australia (IEAust): These courses are recognised by ENGINEERS AUSTRALIA for Continuing Professional Development (CPD) purposes.



Australian Local Government Association (ALGA)



Australian Institute of Traffic Planning and Management Inc (AITPM)



AUSTRALIAN INSTITUTE OF TRAFFIC PLANNING AND MANAGEMENT INCORPORATED

This course is supported by:

Institute of Transportation Engineers ANZ Section (ITEANZ)





Who should attend?

Anyone involved in the construction and maintenance of unsealed roads, including, but not limited to, the following:

- Local Road Authority Managers, Engineers and Plant Operators
- Road Consultants (Engineers and Supervisors)
- Road Contractors (Contract Managers, Road Engineers, Supervisors and Grader Operators)
- VicRoads personnel
- Forest Owners and Forestry Consultants (operations staff)
- Department of Sustainability and Environment (operations and field staff)
- Mining companies (operations staff)
- Quarry Owners (operations staff)

Numbers for the workshop are strictly limited to 25 participants due to the nature of the group activities.

Participants will receive a certificate of attendance.

The presenters:

George Giummarra

George is a Principal Consulting Engineer with ARRB Group. George has prepared the updated and expanded edition of the Manual and conducted many similar workshops across Australia and New Zealand over the past 15 years.



Registrations:

To get better value from the workshop, delegates are advised to have access to a copy of the 2009 edition of the Unsealed Roads Manual – Guidelines to Good Practice. If you are unable to bring your own copy of the Manual to the workshop, please indicate that you require a Manual on the registration form (at an additional cost of \$275 inclusive of GST).

For the field trip component of this course, participants are required to bring:

- Safety vest
- Safety boots
- Hat and sunscreen or wet weather gear (depending on the weather)
- Calculator



Program*

*Subject to change

Time	Day 1	Time	Day 2
8.30am	Registration/Welcome	8.00am	Road maintenance techniques: <ul style="list-style-type: none"> ▪ Causes and cures to various road problems ▪ Routine/periodic operations ▪ Grading techniques ▪ Unsealed shoulders on sealed roads
8.45am	Introductions/maintenance overview	10.15am	Morning tea/coffee break
9.00am	Road design requirements: <ul style="list-style-type: none"> • Geometric design • Horizontal and vertical sight distance requirements • Drainage considerations • Safety measures to reduce risk 	10.30am	Site inspection of various unsealed roads (Roads to be inspected are to be advised)
		1.00pm	Lunch in the field
		3.00pm	Afternoon tea/coffee break (back in classroom)
10.30am	Morning tea/coffee break	3.15pm	Environment considerations <ul style="list-style-type: none"> ▪ Techniques to minimising soil erosion ▪ Improving run-off water quality ▪ Vegetation clearing requirements
10.45am	Pavement and material selection <ul style="list-style-type: none"> ▪ Pavement design with worked examples ▪ Pavement material properties and grading requirements ▪ Base and wearing course specifications 	3.30pm	Asset management activities and tools <ul style="list-style-type: none"> ▪ Establishing road hierarchy ▪ Determining maintenance intervention levels/road class ▪ Estimating a roads works program
1.00pm	<ul style="list-style-type: none"> • Lunch 	4.00pm	Maintenance specifications
1.30pm	Getting better value from existing pavement materials <ul style="list-style-type: none"> ▪ Stabilisation techniques ▪ Basic soil testing methods ▪ Examples on how to calculate material mixes ▪ Reducing dust and gravel loss ▪ When to seal a road 	4.15pm	Forum discussions
3.30pm	Afternoon tea/coffee break	4.30pm	Close
3.45pm	Road construction techniques <ul style="list-style-type: none"> ▪ Construction sequence ▪ Compaction methods ▪ Plant/equipment requirements 		
5.00pm	Close		

