

## Registration Form

- Please complete the registration and fax to IPWEAQ on 07 3632 6899 or Email to: info@ipweaq.asn.au
- Not a member? Take advantage of the best possible rates and receive regular updates - join IPWEAQ now!
- Confirmation of registration and further details will be advised prior to the Program.
- This form may be used as a Tax Invoice
- Please tick if you do not wish to receive information from IPWEAQ

Name: ..... Position/Title: ..... Member  
Yes/No

Please indicate any special dietary requirements: .....

Council/Organisation: .....

Mailing Address: .....

Contact Ph: ..... Fax: ..... Email: .....

Location and Dates of Program: .....

All prices include GST

Payment for:	IPWEA Member	Non Member	Total Amount (inc GST)
Registration	\$875.00	\$975.00	\$.....
Discount Registration	\$825.00	\$925.00	\$.....
<b>TOTAL:</b>			\$.....

\*\* Note: Discount applies where three or more persons attend from one Council/Organisation

Mastercard    Visa    Purchase Order No: \_\_\_\_\_

Card number: \_\_\_\_\_

Expiry: \_\_\_\_ / \_\_\_\_    A fee of 1.5% will be added to your payment for Mastercard or Visa

Name on Card: \_\_\_\_\_

Signature of Card Holder: \_\_\_\_\_

Email address for Credit Card receipt: \_\_\_\_\_

Cancellations received less than one week prior to a training program will incur a \$200.00 inc GST administration charge. Substitutions may be made, however, advice of substitutions must be received three days prior to each program. Non attendance on the day will incur full fees.

Institute of Public Works Engineering Australia  
Queensland Division Inc



## Unsealed Roads

CPD points for CPEng & RPEQ = 14 hours



Educates > Represents >  
Connects > Leads >



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Direct Debit into IPWEAQ Bank Account:  
BSB 084 123 Account 205038440  
Please note Unsealed Roads and your surname as the reference.

## Unsealed Roads

### Course overview

This two-day program is designed to assist Councils in the management of their unsealed road networks within financial restraints, by managing the aspects and approaches to maintenance and renewal works. Processes learned will help guide the formulation of maintenance budgets, programs and objectives.

### Designed for

Day 1: Operators, Supervisors and Managers

Day 2: Supervisors and Managers

PLEASE NOTE: Having all levels of staff at the Day 1 training session is highly recommended. Experience from past delivery of this program has shown it to be highly successful in helping staff understand the issues that relate to achieving best practice operational techniques.

### Suggested Outcomes

Day 1

Following this full-day session, participants will understand the major aspects to gaining production and performance increases and also understand how these techniques deliver defined service levels to the community.

Day 2

These sessions will cover some proven management techniques to help manage a network of unsealed roads in either a rural or urban setting.

Participants will complete live budgeting examples for their own council network (Excel template provided) based on different service levels. The budget model is a very useful tool in developing service level-based budgets.

They will also be shown examples of how to program works based on set intervention levels and review some standard procedures and business case templates.



### Your presenter

Darren Shepherd

Darren is a consulting engineer based in Central Queensland. He holds a Degree in Civil Engineering, is a Registered Professional Engineer of Queensland and an active Member of the IPWEAQ Central Queensland Branch. Having worked for Local Councils facilitating the management of unsealed roads for the last 8 years, Darren's wealth of roads knowledge puts his consulting and speaking expertise in high demand. He also has a strong background in information technology and project management and has managed a diverse range of Road, Drainage and Sewage construction projects.

Darren developed the Shepherd Services Maintenance Management System (SSMMS) computer system used to manage unsealed road networks. His other key areas of expertise include:

- Total Asset Management – Implementation of Asset Management Software Systems for all asset types. Road valuations and maintenance programming. Fleet maintenance budgeting and programming.
- Management Services – Budgeting and Programming Infrastructure works, managing construction and maintenance personnel and QA systems. Management Information Systems, development and implementation.



### Program structure

Day 1

8.00 – 8.30 am

Registration

8.30 – 9.15 am

Introductions

- Group review of experience and expertise and group discussions on current practices
- Introduction to the management of unsealed road networks

9.15 – 10.30 am

Session 1 - Best Practice Operational Techniques - Grading Techniques

- Criteria for Successful Grading
- Review of 4-5 Crew Grading Videos using Criteria
- Open Forum Discussion on Techniques

10.30 – 11.00 am

Morning Tea

11.00 – 12.30 am

Session 2 - Best Practice Operational Techniques (Cont'd)

- Continuation of Grading Techniques Review
- Equipment Review Discussion - Rollers, graders, water trucks and trucks.

12.30 – 1.00 pm

Lunch

1.00 – 2.30 pm

Session 3 - Gravel Quality, Water Management & Design

- Review Gravel Quality Standards for Unsealed Roads
- Review soil test examples brought by individual councils
- General discussion on Water Management Techniques
- Review of basic road design principles.

2.30 – 3.30 pm

Session 4 - Gravel Quality, Water Management & Design

- Introduction into the Practical Service Levels that Council Provide to the Community
- Service Level 1: Running Surface Condition and intervention levels
- Service Level 2: Gravel Pavement Condition and intervention levels

3.30 – 4.00 pm

Afternoon Tea

4.00 – 5.00 pm

Session 5 – Service Levels (Cont'd)

- Service Level 3: High Risk defects and intervention levels
- Ways to measure services (Visual and electronic methods)

Day 2

8.00 – 8.30 am

Registration

8.30 – 10.00 am

Session 1 – Budget Model Development

- Review road classification of your network
- Review standard operational activities descriptions
- Review/develop unit rates for standard operational activities
- First principle calculation review and bench-mark review

10.00 – 10.30 am

Morning Tea

10.30 – 12.00 am

Session 2 – Budget Model Development (Cont'd)

- Service levels and relationship with operational standards and their frequency of use
- Determine your estimated services levels and apply to model.

12.00 – 12.30 am

Lunch

12.30 – 2.00 pm

Budget Model Development (Cont'd)

- Refine Budget Model to match current council budget
- Develop improvement model
- Education Process for successful implementation at your council

2.00 – 3.30 pm

Session 4 – Service Delivery Methods

- Delivery Method Introduction
- Condition Monitoring & Intervention Levels
- Education Process
- Programming by Condition Procedures

3.30 – 4.00 pm

Afternoon Tea

4.00 – 5.00 pm

Session 5 – Recording and Reporting

- Standard procedures: Record and reporting history examples