1 – Overview and challenges

• Scope
  – The BIG Picture
  – Essentials of Road Management in LGs
  – Balancing asset preservation, customer service and safety

• Aims and objectives
  – Understanding the challenges and issues
  – Knowing the obligations of the road manager
  – Maximising community benefits
The BIG picture
Unsealed roads: the BIG picture

- Unsealed roads account for almost 50% of the nearly 900,000 km of public roads in Australia
- They perform a critical role in connecting this huge country (communities, production centres, etc)
- Nearly all are managed by local councils.
- They carry all types of traffic, especially heavy vehicles.
- We struggle with limited $$$
Unsealed roads: the BIG picture

Where are they used?

<table>
<thead>
<tr>
<th>Primary uses:</th>
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<tbody>
<tr>
<td>• access to rural and remote communities</td>
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<tr>
<td>• freight routes &amp; haul roads servicing</td>
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<tr>
<td>– agricultural industries</td>
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<tr>
<td>– processing industries</td>
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<td>– mining and timber industries</td>
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<table>
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<th>Other uses</th>
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<tr>
<td>• emergency services access</td>
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<tr>
<td>• 4WD club activities</td>
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<td>• Military use for training, or remote access</td>
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Unsealed roads: the BIG picture

Nature of unsealed roads:

- higher costs with surface maintenance and replenishment
- restricted /no access during /after periods of heavy rainfall
- higher risks: corrugated, potholed, dusty, slippery & loose
- higher environmental and heritage impacts due to high consumption of materials from natural gravel pits
- high demand for water: frequent maintenance operations.
Unsealed roads: the BIG picture

Unformed earth road

Formed earth road

Engineered gravel roads
Unsealed roads: the BIG picture

The workshop is structured as good practice guidelines to the design, maintenance and management of a rural unsealed network.

These address the following issues:

• What roads have I got, and what condition are they in?
• What condition would I like, and what maintenance is needed?
• How do I address those ‘pinch points’?
Unsealed roads: Essentials of Road Management in LGs

- Short-term, hazards and severe defects focus
- Operational responsibility (or Stewardship)
- Predominantly reactive activities with defined
  - Inspection frequencies
  - Response times
- Examples of statutory responsibilities
- Delegations

- Asset preservation and LOS focus
- Optimises performance under available budget
- Drives Asset Management Plans
- Preventative
  - Programmed/scheduled, e.g. Patrol grading, Vegetation, Drainage
  - Potential to reduce reactive works
- Reactive
  - Intervention level driven
  - Significant defects (type and extent)
  - Major treatments / works
Reducing deterioration to make funding go further
Road materials and subgrades: How do they vary?

How do conditions change?
- Climate
- Terrain
- Drainage
- Soil types
- Road materials
- Road use
Unsealed roads: The ‘Balancing Act’

What are your challenges?

Stakeholder Expectations, Safety, Asset Preservation

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SHAPING OUR TRANSPORT FUTURE

QUESTIONS?