AusRAP
Assessing the Safety of Rural Roads

Rita Excell
RAA Manager Traffic and Safety

RAA and Road Safety

• Represents over 560,000 members
• Undertakes Audits of 5000km road network
• Involved in National Programs
  – Safer Roads,
  – Safer Drivers,
  – Safer Cars

Safety Who Can Afford It

• Crashes are unpredictable events
  – Use trends over period to try and predict
• Limited funds leads to prioritisation
  – Reactive
    □ Black spot
  – Proactive
    □ Mass Action

AusRAP

• Australian Road Assessment Program
• Commenced in 2003
• Based on European Program
• EuroRAP, AusRAP, iRAP, usRAP, KiwiRAP.

Philosophy

• Communication tool for Public
• Based on the Safe System
  – Not permitted into the system
    □ Drunk
    □ Unlicensed
    □ Speeding
    □ Fatigued
  – Can't design a Safe System for these drivers
    □ Nor should you.
Two Protocols

- Risk Maps
  - Collective risk
    - Compare risk of roads with similar traffic volumes
  - Individual Risk
    - Crashes per 100m veh-km travelled
    - Can compare all roads

- Star Ratings
  - Analogous to ANCAP
  - Safety features of a vehicle of safety features of a road.
    - ESC of roadside barriers

Star Ratings

- Most common crash type
  - Head On
  - Run Off Road
  - Intersection

- Five Star
  - No undivided road can be 5 star
  - Safe roadsides, wide lanes, sealed shoulders

- Four Star
  - May be undivided
  - Straight with good overtaking, linemarking and safe roadsides
  - Divided road with deficient roadsides, lane width etc

- Three Stars
  - Major Deficiencies in some features
  - Poor median control
  - Intersections at regular intervals
  - Sight distance

- Two Stars
  - Many Deficiencies
  - Poor roadsides
  - Many intersections

Risk Rating - Crash Risk

<table>
<thead>
<tr>
<th>Risk Rating</th>
<th>Percentage</th>
<th>Collective risk (average annual casualty crashes/km)</th>
<th>Individual risk (average annual casualty crashes/100m)</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>20%</td>
<td>&gt; 0.29</td>
<td>&gt; 16.44</td>
<td>Black</td>
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<tr>
<td>Medium-high</td>
<td>20%</td>
<td>0.17 - 0.29</td>
<td>12.34 - 16.44</td>
<td>Red</td>
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<tr>
<td>Medium</td>
<td>20%</td>
<td>0.10 - 0.17</td>
<td>9.56 - 12.34</td>
<td>Yellow</td>
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<tr>
<td>Low-medium</td>
<td>0.03 - 0.10</td>
<td>6.85 - 9.56</td>
<td>6.85 - 9.56</td>
<td>Light green</td>
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<tr>
<td>Low</td>
<td>&lt; 0.03</td>
<td>&lt; 6.85</td>
<td>&lt; 6.85</td>
<td>Dark green</td>
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</tbody>
</table>

Trust the A to keep you safe.
Riddoch Highway

### FROM-TO LENGTH TRAFFIC CASUALTY CRASHES DEATHS COLLECTIVE RISK COLLECTIVE RATING INDIVIDUAL RISK

<table>
<thead>
<tr>
<th>Km</th>
<th>Vehicles per day</th>
<th>Annual average casualty crashes</th>
<th>Annual average casualty crashes per 100m veh-km</th>
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<tbody>
<tr>
<td>35</td>
<td>2000</td>
<td>7</td>
<td>0.04</td>
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<tr>
<td>29</td>
<td>5100</td>
<td>14</td>
<td>0.10</td>
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<tr>
<td>21</td>
<td>1800</td>
<td>7</td>
<td>0.07</td>
</tr>
<tr>
<td>26</td>
<td>1800</td>
<td>15</td>
<td>0.12</td>
</tr>
<tr>
<td>34</td>
<td>1900</td>
<td>10</td>
<td>0.06</td>
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<tr>
<td>17</td>
<td>5300</td>
<td>22</td>
<td>0.26</td>
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<td>29</td>
<td>6300</td>
<td>15</td>
<td>0.10</td>
</tr>
<tr>
<td>21</td>
<td>10600</td>
<td>18</td>
<td>0.17</td>
</tr>
</tbody>
</table>

### National Program

**AusLink Network**
- Includes Riddoch, Princes in SA

### RACV Auditing

- All major highways

### RAA and AusRAP

- **National Program**
  - AusLink Network
- **State Program**
  - Strategic Arterial Network
  - Includes Riddoch, Princes in SA
  - RACV auditing all major highways

### RAA Advocacy

- **AusRAP rating**
- **Condition Rating**
- **Transport Safety and Efficiency**
  - Introduction of B-Triples
  - Overtaking Lanes
  - Duplication
  - Road Condition

### RAA Audit Program

- **Collection Sample**
  - Roadsides
  - Lane widths
  - Intersections
  - Sight distance
Riddoch Highway

- Improvements required
  - Address increasing freight task
  - Mix of Traffic
  - Federal Government
  - Link to AusLink network
    - Ports, Rail and Road

iRAP

Rap Internationally

- iRAP
- Pilot projects in
  - Partners EuroRAP, AusRAP and usRAP
  - TRL and ARRB major partners
  - Exporting AusRAP program to Malaysia
    - Trial in Malaysia
    - Results expected September 07

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