Development of a South East Road Safety Strategy

Martin Small
Director, Road Safety
Department for Transport, Energy and Infrastructure

Outline

- Context and Challenges in Road Safety
- How we are currently performing in the South East
- Priority rural roads
- What we need to do from here

Serious Injuries – Good progress overall, but more effort is required

SA compared very well to the rest of Australia in 2006

Fatalities – Record result in 2006, but more effort is required
Perspectives on Road Safety

- **Ethics** – designing and managing system to accommodate human error
- **Public Health** – controlling the kinetic energy of the system
- **Responsibility** – by those who design/manage, and those who use, the system
- **Integration** – aligning safety decisions with broader transport/planning decisions

Safe, healthy and sustainable

- We need to build safety in, not add it on
- This requires us to broaden our horizons
  - Road safety is a public health issue
  - People should feel safe choosing active modes
  - There are major synergies with environmental management
  - Mass transit systems are much safer
  - The road is a major workplace
  - There are productivity losses in road crashes

Moving attention towards injuries, and designers

Problem of crashes

System user

System designer

Problem of injury

Australia’s Safe System

Human Tolerance to Physical Force (Rural)

![](Fatality Risk for Head-on or Fixed Object Crash.png)

Multiple Wins (Rural)

- Big casualty savings from small changes in travel speed (20% on 1100kms of road)
- Lower rural travel speeds reduce in vehicle operating costs, and fuel consumption
- Reducing fuel consumption has a direct effect on the volume of greenhouse gas emissions
- Estimated ideal speed on undivided rural roads (taking all safety, efficiency and environmental factors into account) is 80 km/h
Vehicle Safety Features (2006)

Electronic Stability Control in new vehicles sold in Australia
- Standard – 19%
- Optional – 7%
- Not available – 64%

Front Side Curtain Airbags in new vehicles sold in Australia
- Standard – 22%
- Optional – 13%
- Not available – 66%

Development of South East Road Safety Strategy

- Exchange of letters and agreement in 2006 between South East Local Government Association and Minister for Road Safety
- Steering Committee established March 2007 to lead development of strategy
- 5 evening forums late April to mid May, publicised through direct letters and advertisements in the 5 South East newspapers
Residents of South East area - 77%
Interstate - 9%
Adelaide - 10%
Other rural areas - 4%

Male - 64%
Female - 36%

Driver & rider fatalities or serious injuries by place of residence, 2002-2006

South East  - Male and Female fatalities and serious injuries, 2002-2006

Female - 36%
Males - 64%

Male - 64%
Female - 36%

South East  - Fatal and serious casualties by age, 2002-2006

Driver 59%
Motorcyclists 8%
Cyclists 2%
Pedestrians 4%
Passenger 27%

Seatbelt worn - 256 casualties
Seatbelt not worn - 58 casualties

South East  - Fatal and serious casualties by Road User Type, 2002-2006

South East  - Fatal and serious casualties by age, 2002-2006


South East - Seatbelt wearing by driver and passenger fatalities and serious injuries, 2002-2006

Seatbelt not worn - 58 casualties
Seatbelt worn - 256 casualties

South East  - Seatbelt wearing by driver and passenger fatalities and serious injuries, 2002-2006

South East  - Fatal and serious casualties by age, 2002-2006

Seatbelt not worn - 58 casualties
Seatbelt worn - 256 casualties

BAC of zero or below 0.05 - 17 fatalities
BAC of 0.05 or above - 6 fatalities
Not tested - 14 fatalities

South East  - BAC of driver and rider fatalities, 2003-2006
South East - Fatal and serious crashes by crash type, 2002-2006

South East - Fatal and serious crashes by speed limit of road, 2002-2006

South East - Fatal and serious crashes by type of road, 2002-2006

Riddoch Highway

Riddoch Highway

Dukes Highway

Princes Highway
Rural Road Safety Priorities

- Priority are road sections with high crash volumes per kilometre of road.
- National Highways, and generally 50, 60 and 80 km/h speed limits in urban areas have been excluded.
- Other factors such as the VKT rate, fatality numbers, and road function road also considered.
- Some lower crash rate sections included for the purpose of a complete road length analysis.

Priority 1

Road sections with the highest rates of casualty crashes, per km, per year

734 casualty crashes 2002-06

<table>
<thead>
<tr>
<th>Name</th>
<th>RRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adigate - White Hill</td>
<td>4.00 – 56.98</td>
</tr>
<tr>
<td>Ballarat - Littlehampton</td>
<td>0.70 – 7.00</td>
</tr>
<tr>
<td>Barossa Valley Way</td>
<td>1.64 – 25.36</td>
</tr>
<tr>
<td>Echunga - Meadows</td>
<td>0.97 – 9.78</td>
</tr>
<tr>
<td>Gawler - Kersbrook</td>
<td>14.23 – 24.80</td>
</tr>
<tr>
<td>Gorge</td>
<td>11.12 – 27.30</td>
</tr>
<tr>
<td>Lyndoch – Chain of Ponds</td>
<td>0.81 – 27.73</td>
</tr>
<tr>
<td>Magill - Lobethol</td>
<td>0.95 – 35.12</td>
</tr>
</tbody>
</table>

Priority 2

Sections with lower black spot rates meeting the Federal Black Spot eligibility criterion of a rate of 0.2 casualty crashes/km/year

466 casualty crashes 2002-06

<table>
<thead>
<tr>
<th>Name</th>
<th>RRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt Barker - Plaxley</td>
<td>0.00 – 8.48</td>
</tr>
<tr>
<td>Mt Barker - Strathalbyn</td>
<td>7.74 – 22.69</td>
</tr>
<tr>
<td>Murray Bridge - Mount Compass</td>
<td>3.56 – 7.95</td>
</tr>
<tr>
<td>Noarlunga – Cape Jervis</td>
<td>1.82 – 73.27</td>
</tr>
<tr>
<td>Noarlunga – Victor Harbor</td>
<td>1.15 – 48.46</td>
</tr>
<tr>
<td>Nuriootpa - Angaston</td>
<td>0.90 – 3.70</td>
</tr>
<tr>
<td>Old Pt Wakefield, Two Wells</td>
<td>1.00 – 7.34</td>
</tr>
<tr>
<td>Olympic Way South</td>
<td>0.00 – 3.78</td>
</tr>
<tr>
<td>Tea Tree Gully - Mannum</td>
<td>14.87 – 76.00</td>
</tr>
</tbody>
</table>
Sections with a black spot crash rate generally between 0.1 and 0.2 and are the first sections of key routes radiating out beyond Adelaide

117 casualty crashes 2002-06
Sections with a black spot crash rate generally between 0.1 and 0.2

104 casualty crashes 2002-06

### Priority 4

<table>
<thead>
<tr>
<th>Name</th>
<th>RRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border Town - Naracoorte</td>
<td>2.20 – 5.53</td>
</tr>
<tr>
<td>Hawker Stirling North (Quorn – Stirling North)</td>
<td>67.04 – 97.39</td>
</tr>
<tr>
<td>Kapunda - Greenock</td>
<td>0.00 – 9.31</td>
</tr>
<tr>
<td>Main North (End – Wilmington)</td>
<td>0.00 – 20.60</td>
</tr>
<tr>
<td>Main North (Wirrabara – Laura)</td>
<td>72.00 – 89.93</td>
</tr>
<tr>
<td>Mount Pleasant - Walker Flat</td>
<td>0.00 – 9.52</td>
</tr>
<tr>
<td>Mt Compass - Goolwa</td>
<td>0.00 – 16.32</td>
</tr>
<tr>
<td>Mt Gambier - Nelson</td>
<td>3.00 – 30.84</td>
</tr>
</tbody>
</table>

### Priority 4

<table>
<thead>
<tr>
<th>Name</th>
<th>RRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murraytown - Orroroo (Murraytown - Booleroo C)</td>
<td>0.0 – 12.0</td>
</tr>
<tr>
<td>Naracoorte - Apsley</td>
<td>3.05 – 22.95</td>
</tr>
<tr>
<td>Port Wakefield – Yorketown (Start – Ardrossan)</td>
<td>0.0 – 43.35</td>
</tr>
<tr>
<td>Princes</td>
<td>305.00 – 347.00</td>
</tr>
<tr>
<td>Princes</td>
<td>358.00 – 369.54</td>
</tr>
<tr>
<td>Templers - Daveyston</td>
<td>7.55 – 12.3</td>
</tr>
<tr>
<td>Yankalilla – Victor Harbor</td>
<td>1.15 – 20.50</td>
</tr>
</tbody>
</table>

In broad terms we need to...

- Improve community understanding of the factors affecting road trauma
- Enhance the scale of key safety initiatives to do more of what saves most lives, and prevents most serious injuries
- Increase the level of collaboration and shared responsibility for action among all stakeholders

**Wolseley rail safe at last**

**$870,000 to fix road**

**Riddoch's big fix**
... and more specifically

- Continue speed management efforts
- Improve the road infrastructure, particularly on key corridors
- Strengthen user compliance with higher behaviour expectations
- Accelerate the introduction of safer vehicle technologies

... and we must aim for excellence

Excellence required in
- Relationships
- Analysis
- Strategy
- Delivery
- Promotion