OUTLINE

- Work related road travel and trauma
- Workplace safety perspectives on road trauma
- Vehicle and driver interventions
- Corporate road safety programs
- Fleet managers’ discussions
- Priority actions
MOST ROAD TRAVEL IS WORK RELATED

- ABS estimate of passenger & light commercial vehicle travel in 12 months to 31 October 2010 is 206,075 million km, of which
  - 29% business trips
  - 25.6% travelling to and from work
  - 44.8% personal and other travel
HALF OF ALL WORK RELATED FATALITIES OCCUR ON THE ROAD

- Safe Work Australia report on 337 work related fatalities in 12 months to 30 June 2010
  - 77 worker fatalities (at work or travelling for work in road traffic)
  - 79 commuter fatalities (almost all in road traffic)
  - 66 bystander fatalities (42% in road traffic)
VEHICLE RELATED INJURY COSTS ARE ABOVE AVERAGE

- In 2008/09, the median working time lost from a vehicle incident recorded by Safe Work Australia was 5.8 weeks at a cost of $10,000, compared to the average 4.0 weeks and a cost of $7,700 for all injury/disease mechanisms.
THE HIERARCHY OF RISK CONTROL PROVIDES USEFUL ROAD SAFETY DIRECTION

- ELIMINATE
- SUBSTITUTE
- SAFEGUARD
- TRAIN
- PROTECT

MARTIN SMALL CONSULTING
Can we *eliminate exposure* to the hazard (through reducing the need for travel)?
Can we substitute the hazard for one with a lower risk (through shifting to a safer mode of travel)?
Can we use technology to establish a safeguard from the hazard (through safer road or vehicle design)?
Can we introduce *training* or *procedures* to mitigate the presence of the hazard (such as legislation)?
PROTECT

ELIMINATE

SUBSTITUTE

SAFEGUARD

TRAIN

Can we provide *personal protective equipment* against the hazard (such as helmets or clothing)?
VEHICLE SAFETY OPPORTUNITY

- Plenty to suggest that fleet management has an important road safety role to play in vehicle safety
  - 40% of light vehicles purchased firstly in fleet context
  - Major steps taken by private sector (e.g., BHP), and public sector (e.g., QFleet)
  - AFMA/ANCAP annual awards

- Plenty also to suggest that this role is underplayed
  - Perceived financial constraints
  - Tax liabilities, running costs
  - Haworth, Grieg & Wishart 2008; Murray, Dubens & Rea 2009; Darby Quddus, Murray, Raeside & Ison 2011
## HIGH POTENTIAL BEHAVIOURAL TECHNOLOGIES IN AUSTRALIA

<table>
<thead>
<tr>
<th>Technology</th>
<th>Estimated annual reduction in fatal crashes</th>
<th>% of all fatal</th>
<th>Estimated annual reduction in non-fatal injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward collision avoidance</td>
<td>227</td>
<td>16%</td>
<td>54305</td>
</tr>
<tr>
<td>Alcohol interlocks</td>
<td>217</td>
<td>15%</td>
<td>9301</td>
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<tr>
<td>Fatigue management systems</td>
<td>150</td>
<td>10%</td>
<td>9233</td>
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<tr>
<td>Forward collision avoidance for ≥ 80 km/h speed zones</td>
<td>127</td>
<td>9%</td>
<td>8204</td>
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<tr>
<td>Motorcycle ABS</td>
<td>88</td>
<td>6%</td>
<td>8618</td>
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<tr>
<td>Dedicated Pedestrian Detection (Daylight)</td>
<td>43</td>
<td>3%</td>
<td>6711</td>
</tr>
<tr>
<td>Lane Departure Warnings</td>
<td>100</td>
<td>7%</td>
<td>4177</td>
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<tr>
<td>Lane Change Warnings</td>
<td>14</td>
<td>1%</td>
<td>5031</td>
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<tr>
<td>Seatbelt Interlocks</td>
<td>88</td>
<td>6%</td>
<td>726</td>
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<tr>
<td>Dedicated Pedestrian Detection (Darkness)</td>
<td>54</td>
<td>4%</td>
<td>2007</td>
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<tr>
<td>Seatbelt Reminder</td>
<td>71</td>
<td>5%</td>
<td>580</td>
</tr>
</tbody>
</table>
DRIVER INTERVENTIONS

- Some work related vehicles and driving can require specific familiarisation, training and/or licensing
- Attitudinal rather than skills-based driver training can at least be grounded in sound behaviour change theory
- Incentives, rewards and safety pledges more likely to be ineffective than to reduce crash frequency
- Driver related interventions are best considered within an individual organisational context, and managed within the normal employment relationship
CORPORATE ROAD SAFETY PROGRAMS

- ISO 39001 Road Traffic Safety Management Systems has strong grounding within safe systems approach, and is well aligned with the hierarchy of control:
  - Safe journey planning;
  - Road design and safe speed;
  - Use of appropriate roads;
  - Safe vehicles;
  - Use of safe driving speed;
  - Driver fitness;
  - Appropriate authorisation;
  - Removal of unfit drivers/vehicles;
  - Use of personal safety equipment;
  - Post crash preparedness

- Driving for Better Business (UK) also has clear journey planning and vehicle safety quality advice

- There is a lot of potential in the NTC initiated Road Safety Partnership Program for Australia
FLEET MANAGERS’ DISCUSSION

- We talked to six organisations: Roading authority; Major bank; Large energy company; Motoring organisation; Fleet management company

- Specific issues addressed:
  - Road safety context of the organisation
  - Leadership and safety culture
  - Key safety risks being managed
  - Fleet management and vehicle safety policy
  - Safe driving policy
  - Road safety policy
The safety of employees on the road is an important component of their occupational health and safety response.

Most companies have a policy of purchasing 4 or 5 star vehicles for their passenger car fleet.

Journey planning including car pooling, avoiding high risk times or locations, and using other travel modes is important.

Larger companies are questioning the need to travel and replacing travel with video or other technology.

Road safety policies are in place addressing issues such as alcohol and drug use, speed and mobile phone use.

Road safety policies need to be regularly reviewed and audited.
PRIORITY ACTIONS
ESTABLISH MANAGEMENT DIRECTION

- Calculate the company’s exposure to risk, and impact of crashes and injuries.
- Gain top management commitment to substantially reducing its road traffic safety risk.
- Undertake and document a road traffic risk assessment to identify and assess the likelihood of hazards across journey planning, vehicles and users.
- Identify and prioritise road traffic risk reduction interventions based on established workplace safety management principles.
REDUCE EXPOSURE TO RISK

- Identify current rules for planning and undertaking journeys on the road and then determine potential gaps in how exposure to risk is being reduced.
- Reduce the need to travel, or reorganise schedules to reduce the volume of travel which may reduce financial and environmental impacts as well as exposure to safety risk.
- Establish controls around use of the road network using higher volume, higher quality routes where safety protection is likely to be the highest.
FOCUS ON VEHICLE SAFETY QUALITY

- Establish an inventory of light and light commercial vehicles to improve the management of the fleet asset and assess the relative safety level of the fleet.
- Plan for any necessary upgrade to the vehicle fleet to make use of full range of ANCAP 5 star safety rated vehicles across light and light commercial market segments.
- Upgrade the purchasing policy to include proven safety features not currently required in the 5 star ANCAP rating, such as autonomous emergency braking.
RE-ASSESS DRIVER CONTROLS

- Assess current road safety advice/training/directives to company drivers to ensure safety expectations are communicated through induction and refresher mechanisms, supported by direct personal feedback in the normal employment relationship.
- Review and be prepared to change driver education programs so as to avoid (unless specifically necessary) acquisition of car-control skills, and to focus on acquisition of higher order skills such as risk awareness and self management in the driving environment.
PRACTISE MANAGEMENT DISCIPLINES

- Establish simple audit and monitoring systems with data that is meaningful to the company being analysed and reported by line managers charged with reducing safety risks.
- Establish simple feedback and consequence measures to reinforce the purpose of policies with the support of top management.
THIS STUDY WAS UNDERTAKEN THROUGH THE SUPPORT FROM RACV (THE ROYAL AUTOMOBILE CLUB OF VICTORIA)