Heavy Vehicle Safety
Plenary Panel Session

Prof Ann Williamson
Transport and Road Safety (TARS) Research Centre
Does current Heavy Vehicle Law make us safer?

**Yes**

- National consistency (almost)

**No**

- Hours of work allowed are too long
- Law fails to acknowledge contextual and work-related influences
Very long hours of work are permitted compared to any other industry, and with too little time for rest/recovery

- **Standard**
  - = 12 hrs work in 24, 72 hrs/week, 7 hr continuous rest in 24

- **Basic Fatigue Management (BFM)**
  - = 14hrs work in 24, 84 hrs/week, 7 (6+2) continuous rest in 24

(Industrial Awards allow 35-38hrs per week)
Recognising context of driving/moving freight

- Heavy vehicles are used for work.
- The road is a workplace
- Heavy vehicle drivers do so to earn a living
- Companies move freight to make money

It's about work....
Practice implications of work-relatedness

• Most drivers (65%) paid only for driving-related work (by trip or load)

• Few paid for loading (<50%), or waiting/queueing (< 26%)

• Remuneration based on competitive pressures for loads, not the work task required - Enormous differences in remuneration for loads between different centres (Melb to anywhere Vs anywhere to Melb)

• Many trips costed at rates below break even!
But do these characteristics allowed by the current Heavy Vehicle Law make us less safe?

Evidence.........You decide
Allowing long hours and limited remuneration…..

- Drivers are doing longer hours
- 53.8% drivers do >70hrs per week
- BFM (allowed in 2008), now 65% drivers work it

⇒ when we allow longer hours: industry takes them
Does allowing long hours matter…..?

• Fatigue is a common experience for drivers
  – 72% on at least some trips
  – 55.2% on the last trip

• Safety-related events are also common.
  Driver reports:
  – 49% crossing over lane lines
  – 45% near-misses
  – 36% nodding off while driving
  – 14% run-off-road events

• Especially where driver reports fatigue as common

  ➔ there are adverse effects of current practices
Demonstrated link between context/hours and adverse safety outcomes

• 5 surveys show:
  - long hours for drivers = greater fatigue

• 3 surveys show:
  - trip-based payment = longer hours and greater fatigue
    (but did not earn more!)
    – Same for no pay for loading/waiting

• Crash case-control study showed predictors of crashes:
  – Empty loads (x2-3)
  – Night driving (x3)
  – No break for >4hrs (x2-3)
Relationship - External pressures and safety

- Competition
- Productivity-based remuneration
- Tight margins

Need to complete freight task quickly
- Speeding
- Fatigue
- Stimulant use

Long distances
Irregular working hours etc

Pressures Payment style etc
Work practices of drivers/company
Unsafe outcomes

Poor maintenance
Poor maintenance
Poor maintenance

Crashes
What do we need to do about it?

**NOT**

- Focus on technology  
  (without also dealing with context)

- Tell drivers that it's all about sleep  
  (prescribed hrs do not allow enough time)

- Tougher enforcement  
  (without also dealing with context)
What do we need to do about it?

**MUST** - Expand our focus to include **WHS** issues

- Competition
- Productivity-based remuneration
- Tight margins

- Need to complete freight task quickly
- Long distances
- Irregular working hours etc

- Speeding
- Fatigue
- Stimulant use

- Pressures
- Payment style etc

- Work practices of drivers/companies

- Unsafe outcomes

- Crashes

- Poor maintenance

- Poor maintenance

- Poor maintenance

Aviation

UNSW Australia
What do we need to do about it?
(if we really want to)

- Explore ways of addressing pressures due to work context
  - Review prescribed work-rest hours (again)
  - Review influence of motivators for unsafe practices:
    - Paying drivers for all work (driving, nondriving work, backloads)
    - Costing based on real costs
- Avoid pressures based on ‘operational need’ blinding awareness/recognition of good safety practices
- Involve WHS

⇒ Tackle the causes of these safety problems
OWNER-DRIVERS SHOULDN'T BE PAID FOR FATIGUE BREAKS, COMMISSION RULES

NSW Industrial Relations Commission ruled that owner-drivers working under the Transport Industry - General Carriers Contract Determination were not entitled to receive payment for fatigue breaks on the basis that, like meal breaks, they are an interruption to work and defined as not work, so should not be paid.

ATN, Brad Gardner
25.06.2014

• Example of road and workplace perspectives not working together.....
“Unfortunately, there’s no law against driving after doing triple shifts.”

(Not funny)
## Payments and fatigue

### Characteristics of driver work and fatigue experiences

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hrs/wk</strong></td>
<td>62.6</td>
<td>57.8</td>
<td>55.9</td>
<td>?</td>
<td>68.6</td>
</tr>
<tr>
<td>% &gt;72hrs per week</td>
<td>30.1%</td>
<td>22.6%</td>
<td>16%</td>
<td>53.8%*</td>
<td>29.4%</td>
</tr>
<tr>
<td><strong>Experience fatigue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on at least half of trips</td>
<td>56.0%</td>
<td>30.9%</td>
<td>?</td>
<td>72%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>Fatigue on last trip</strong></td>
<td>50.6%</td>
<td>45%</td>
<td>?</td>
<td>?</td>
<td>55.2%</td>
</tr>
<tr>
<td><strong>Payment by trip</strong></td>
<td>&gt;50%</td>
<td>68.3%</td>
<td>76%</td>
<td>?</td>
<td>65%</td>
</tr>
</tbody>
</table>

* Response category was 70-99hrs
## Payments and fatigue

### Relationship between payment type and fatigue

<table>
<thead>
<tr>
<th></th>
<th>Fatigue on at least half of trips</th>
<th>Fatigue on last trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment by result</td>
<td>53.5%</td>
<td>32.6%</td>
</tr>
<tr>
<td>Payment by time</td>
<td>28.9%</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

|                          | p<0.001                          | p<0.001              | P<0.001         | p<0.001          | ns              | P<0.001          |