

21 June 1999

Ms Meg Crooks
Committee Secretary
House of Representatives Standing Committee
on Communications, Transport and the Arts
Parliament House
CANBERRA A.C.T. 2600

Dear Ms Crooks

**INQUIRY INTO MANAGING FATIGUE IN TRANSPORT
SUBMISSION BY THE TRANSPORT ACCIDENT COMMISSION (TAC)**

The Transport Accident Commission of Victoria (TAC) was established, and is governed by, the Transport Accident Act 1986. The TAC administers a comprehensive no-fault compensation scheme for Victorians who are injured or die as a result of a transport accident.

As a partner with VicRoads and Victoria Police in the implementation of Victoria's road safety strategy, "Safety First", the TAC's primary role is to introduce initiatives to modify road user attitudes and behaviours. One means of achieving this objective adopted by the TAC is through the conduct of integrated communication campaigns addressing road safety issues of concern. One of these road safety issues is "fatigue".

Against this background, the TAC is making this submission to the Inquiry into Managing Fatigue in Transport. Information will be provided under the four key headings within the Terms of Reference.

Causes of, and contributing factors to, fatigue:

Fatigue is a complex issue which, at present, is not as well understood as we would like. Although evidence is limited, important factors that are deemed to contribute to fatigue (or sleep loss) and, therefore, to the risk of crashes involving drowsy or sleepy drivers include:

- Sleep loss that can build up over time and serve as a "sleep debt"
- Patterns of use of the road - driving for long hours, at times you would normally be asleep and in the mid-afternoon
- Specific sleep disorders (such as sleep apnoea) that are undiagnosed and, hence, untreated

- Alcohol consumption which, even in small doses, can interact with drowsiness to increase crash risk.

Consequences of Fatigue in Road Transport:

Sleepiness at the wheel is an important contributor to the level of road trauma in Victoria. Unfortunately, it is difficult to gauge the extent of fatigue-related trauma from police-reported mass accident data. We must currently rely on in-depth accident studies in order to better assess the degree to which sleepiness contributes to road trauma.

An important, earlier study conducted in Victoria by Armour, M. et al (1988) used a multi-disciplinary team to investigate single-vehicle crashes involving hospitalisation in the Gippsland region. The authors concluded that fatigue was a possible or probable contributor in about 30% of these severe crashes. Survey studies conducted by the Roads and Traffic Authority of New South Wales (RTA) confirm that drowsiness at the wheel is a problem that drivers experience in urban as well as in rural areas.

As well as the significant contribution of “fatigue” to crash causation, crashes involving “fatigue” are typically very severe. Impact speed is a strong predictor of injury outcomes with fatigue-related crashes often occurring on high-speed zones and after little or no braking has taken place.

Initiatives Addressing the Causes and Effects of Fatigue:

Within the framework of Victoria’s road safety strategy, the TAC has developed a number of communication campaigns over several years with the specific aim of reducing fatigue-related crashes.

The campaigns typically involve a range of media including television, radio, press and outdoor advertising, both static and mobile. Campaigns have often been timed to coincide with holiday periods where long-distance, recreational travel is most likely.

Key campaign messages over time have included:

- Take a break at regular intervals to prevent the onset of fatigue;
- Don’t travel at times that you would normally be asleep;
- Share the driving whenever practicable;
- Take advantage of the Operation Coffee Break sites coordinated by the Lions Club and State Emergency Services at holiday times across Victoria.

The most recent campaign draws on expertise provided by VicRoads and the outcomes of a major review of the issue conducted by an expert panel in the United States “Drowsy Driving and Automobile Crashes”. In particular, the campaign promotes as its central theme the finding drawn from Sleep Disorder research that “taking a break for a short nap (about 15 to 20 minutes) ...can... improve subsequent performance, even among sleep-deprived people”.

Based on focus group market research outcomes, the campaign coined the term “powernap” as a catch phrase for conveying the value of short naps while on trips as a means of improving performance.

Quantitative post-campaign telephone surveys indicate that:

- 68% of the sample recalled the campaign, upon prompting;
- about one in five who recalled the “powernap” message reported that their actual driving behaviour had changed (in terms of either taking a nap, stopping for a snack or stopping to walk around).

Results point to the success of the communication campaign, although caution should be exercised in the interpretation of self-reported behaviours.

Achieving Greater Responsibility:

Apart from public education campaigns which aim to better inform the general driving population of practical steps that they can take to avoid the onset or to counter the effects of fatigue, the development of corporate fleet safety programs provides a complementary way to influence driver behaviour.

A significant proportion of the vehicle population on-road comprises fleet or company vehicles. Company management are in a position to provide guidelines for employees using company vehicles. Such guidelines can include reference to the adoption of responsible practices that counter the effects of fatigue. Examples of such practices could include the need to:

- Share the driving whenever practicable;
- Take regular breaks as required (including taking a nap);
- Avoid driving at times that you would normally be asleep;
- Allow for overnight stays when on longer trips or when the alternative is to undertake a long return trip in the evening or at night;
- Prohibit the taking of any alcohol prior to or during a trip of some length.

The employer-employee relationship can provide a powerful means of ensuring compliance with rules (such as those listed above) to reduce the incidence of fatigue-related crashes. The Occupational Health and Safety Act, in turn, provides the broad regulatory framework in which employers are required to show a “duty of care” with respect to the well being and safety of their employees.

Should further information be required, please contact myself on (03) 9664 6658.

Yours sincerely

David Healy
Manager, Road Safety

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References

ARMOUR, M. CARTER, M. CINQUEGRANA, C, GRIFFITH, J (1988) "Rural Accident Study: Summary Report". Road Traffic Authority (VicRoads)

EXPERT PANEL ON DRIVER FATIGUE AND SLEEPINESS "Drowsy Driving and Automobile Crashes". National Centre on Sleep Disorders Research/ National Highway and Traffic Safety Administration