



Hon. Paul Lucas MP



Queensland
Government

Our ref: MC21539

10/4/06
LAID UPON THE TABLE OF THE HOUSE
THE CLERK OF THE PARLIAMENT

Minister for
Transport and Main Roads

10 APR 2006

Mr Neil Laurie
Clerk of the Parliament
Parliament House
George Street
Brisbane Qld 4000



Dear Mr Laurie

Neil

Re: Travelsafe Report No. 43 entitled *Driving on Empty: Fatigue Driving in Queensland*

I refer to the Parliamentary Select Committee on Travelsafe Report No. 43 entitled *Driving on Empty: Fatigue Driving in Queensland* which was tabled in the Legislative Assembly on 6 October 2005.

In accordance with the *Parliament of Queensland Act 2001, s.107(5)(b)*, I attach a copy of the government's response to be tabled in the Legislative Assembly.

Yours sincerely

PAUL LUCAS MP
Minister for Transport and Main Roads

Enc (1)

Recommendations of the Parliamentary Select Committee on Travelsafe report *Driving on Empty: Fatigue Driving in Queensland*; Report No. 43, October 2005

RECOMMENDATION 1

That Queensland Health should actively promote the importance of sleep to health and the adverse health consequences of insufficient or poor quality sleep.

Ministerial responsibility:

Minister for Health

Response:

This recommendation is supported.

Comment:

Queensland Health will seek to incorporate awareness of the importance of good sleep into existing mental health promotion, physical activity promotion and falls prevention programs.

Discussions will be held with the Queensland Injury Surveillance Unit (QISU) around the possibility of researching and producing an Injury Bulletin in the near future focussing on sleep deprivation and its contribution to injury. This Bulletin will be distributed to clinicians and medical centres state-wide.

Discussions will be held with the Queensland Health Staff Health Unit about including awareness of the importance of good sleep patterns in existing Queensland Staff Health induction programs, particularly for those on shift work and on-call duties.

RECOMMENDATION 2

That the Minister for Transport and Main Roads should seek the support of all Australian Transport Council members for the development of standardised fatigue crash definitions and reporting for road safety purposes.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported.

Comment:

Queensland Transport recognises the value of developing standardised fatigue crash definitions and reporting for road safety purposes. To this end Queensland Transport will commence the process by tendering a discussion paper to the Australian Transport Council members in order to facilitate development of a nationally recognised standard. However, this will be subject to the completion of higher priority projects, in particular those arising from the 2006 Queensland Road Safety Summit.

As will be discussed in Queensland Transport's response to recommendation 4, the proposed discussion paper would suggest moderating the current fatigue crash definition and considering the following.

Exclude:

- 0.05 BAC and higher drink driving crashes; and
- All non-motorised single vehicle crashes.

Include

- Head on crash where no one was overtaking.

Consider excluding crashes involving the following circumstances:

- Animal/s uncontrolled on Road;
- Vehicle tyres (that is, low tread, puncture/blow out);
- Driver taking evasive action to miss another road user;
- Driver underage (inexperience);
- Road wet or slippery;
- Road – rough surface;
- Road – water covering;
- Atmospheric – heavy rain;
- Road – temporary object on carriageway;
- Driver – medical condition (heart attack; epilepsy and so on.); and
- Police chase.

RECOMMENDATION 3

That Queensland Transport should not adopt the ATSB fatigue crash definition in its present form.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported.

Comment:

Queensland Transport supports this recommendation to not adopt the current ATSB fatigue crash definition. However, Queensland Transport notes that many parts of the ATSB definition do have merit. The ATSB definition will be considered in the context of developing a national consensus for a fatigue crash definition between various stakeholders and government agencies.

RECOMMENDATION 4

That Queensland Transport should, in consultation with the Department of Main Roads, the Queensland Police Service and other stakeholders, consider amending its fatigue crash definition to exclude 0.05 BAC and higher drink driving crashes and to remove the speed limit criteria. Crashes identified by police as being caused by fatigue and drink driving would continue to be included.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is partially supported.

Comment:

Queensland Transport supports amending its fatigue crash definition to exclude 0.05 BAC and higher drink driving crashes. However Queensland Transport does not support removing the speed limit criteria as such a move could lead to over reporting of fatigue related crashes. For instance, the Queensland Transport surrogate fatigue criterion relies on the speed zone to identify crashes occurring along roads that are not suburban streets (that is, 50 and 60 km/h). Whereas, the ATSB surrogate measure relies on 80km/h plus. In Queensland, crash statistics indicate that most crashes occurring in 80km/h zones showed fatigue was a minor factor. Queensland Transport may consider moderating the current speed limit criteria from 100km plus to 90km plus, after evaluating fatigue-related crash data.

There will need to be considerable consultation between Queensland Transport, Department of Main Roads, the Queensland Police Service and other stakeholders to achieve consensus on an amended fatigue crash definition. This will be an on-going process, with an expectation that Queensland Transport will prepare a discussion paper for the Australian Transport Council in 2006. The proposed discussion paper would suggest moderating the current definition considering the following:

Exclude:

- 0.05 BAC and higher drink driving crashes; and
- All non-Motorised single vehicle crashes.

Include:

- Head on crash where no one was overtaking.

Consider excluding crashes involving the following circumstances:

- Animal/s uncontrolled on Road;
- Vehicle tyres (that is, low tread, puncture/ blow out);
- Driver taking evasive action to miss another road user;
- Driver underage (inexperience);
- Road wet or slippery;
- Road – rough surface;
- Road – water covering;
- Atmospheric – heavy rain;
- Road – temporary object on carriageway;
- Driver – medical condition (heart attack; epilepsy and so on.); and
- Police chase.

RECOMMENDATION 5

That the Queensland Police Service should trial the collection of "time on task" and "amount of sleep" information by police who attend crashes. The trial should consider the benefits and costs of collecting the extra data as well as the feasibility of collecting the data for all crashes attended by police in Queensland.

Ministerial responsibility:

Minister for Police and Corrective Services

Response:

This recommendation is not supported.

Comment:

While Queensland Police Service recognises that fatigue driving is a major road safety concern the following issues are significant barriers to undertaking a trial of this nature at this time.

- A national consensus must be achieved regarding a definition for fatigue before this information can be collected, analysed and applied effectively.
- The recommended measures, "time on task" and "amount of sleep", will need considerable investigation due to the subjective nature of such a measure and the possible legal ramifications of admitting to driving while tired.
- Resourcing and funding of a trial of this nature is not feasible at this point in time.
- In addition, the costs involved in collecting "time on task" and "amount of sleep" data would be significant (on average there were 38,400 motorised vehicle units involved in crashes in Queensland each year for the last five years). The types of cost related activities involved in collecting this data include redesigning and reprinting crash incident forms, redesigning Queensland Police Service and Queensland Transport databases and training in collecting, analysing, storing and retrieving the data.
- Further, the suggested benefits of this process leading to successful prosecutions and deterring motorists from fatigued driving are yet to be demonstrated.

However, a significant amount of resources are already allocated to the detection and enforcement of fatigue driving. The Accident Investigation Squad (AIS) currently examines serious and fatal crashes and has specific indicators to determine the contribution of fatigue to a crash including the movements of the driver in the 36 hours prior to the crash (that is, work hours/workload, recreational activities and hours of sleep). Other symptoms of fatigue considered by the AIS include lack of braking or evasive tactics and/or a vehicle travelling off road at a very shallow angle.

RECOMMENDATION 6

That the Queensland Police Service should, with assistance from Queensland Transport, provide comprehensive training for traffic and general duties officers who attend road crashes to assist in their identification of fatigue-related crashes and the detection of drivers who are impaired by fatigue.

Ministerial responsibility:

Minister for Police and Corrective Services and Minister for Transport and Main Roads

Response:

This recommendation is not supported.

Comment:

As discussed in the response to recommendation 5 fatigue driving is a complex issue and the training required for detection would be extensive. In order to maximise the collection of fatigue related data, that encompasses the range of symptoms accepted as being indicators of fatigue, consensus for a definition must be achieved on a national basis. Training and data collection would need to encompass a range of outcomes and be supported by legislation that would allow successful prosecutions (identification of physical and non-physical evidence) and/or provide information suitable for developing education campaigns to reduce driving while tired.

Again, the predicated costs involved in providing this type of training are expected to be significant, and beyond current budget constraints. Training in identification of fatigue crash symptoms used by the AIS (as referred to in the response to recommendation 5) would be a suitable model on which to base fatigue identification training for traffic and general duties officers. However given the known costs of providing this training to the AIS, there are currently insufficient resources to provide this training on a broader scale. If at a later stage resources did become available to provide such training to traffic officers, Queensland Police Service recommend that it should be provided by accredited personnel from Queensland Transport. Costs associated in the provision of such training to all general duties police would be prohibitive.

RECOMMENDATION 7

That Queensland Transport and Queensland Health should consult with the Queensland Divisions of General Practice regarding the best way to inform general practitioners about the need to:

- *better inform their patients about the dangers of driving and riding while fatigued*
- *identify patients with sleep disorders and*
- *help them seek treatment.*

Ministerial responsibility:

Minister for Transport and Main Roads and Minister for Health

Response:

This recommendation is supported.

Comment:

Queensland Transport will work with Queensland Health to consult with the Queensland Divisions of General Practice regarding the best way to inform general practitioners about the issues surrounding driving while tired. It may be useful to complement this consultation with formal market research involving general practitioners. This will promote effective engagement and participation of general practitioners in providing best practice patient care regarding education and legal requirements of fatigue driving/riding.

Queensland Transport recognises the important role that the Queensland Divisions of General Practice and their members play in educating their patients and has established collaborative relationships with medical representatives, which should facilitate the best possible outcome. Queensland Transport currently works with medical representatives on the Queensland Drug Driving Prevention Working Group (QDDPWG) and education subgroup to address drug driving among Queensland motorists. Medical representatives include:

- Government Medical Officer;
- Queensland Health Scientific Services;
- Queensland Nursing Council;
- Pharmaceutical Advisory Service; and
- Queensland Health.

The education subgroup has worked on a number of drug driving campaigns over the past six years. Key messages of campaigns run in 1999, 2001, 2002 and 2003 have included adhering to advice from medical professionals and not driving when taking drugs that cause the driver to be drowsy. These key messages continue in current publicity efforts and for future drug driving campaigns.

RECOMMENDATION 8

Following the consultation in recommendation 7, Queensland Transport and Queensland Health should contact general practitioners and advise them about their obligation to better inform their patients about the dangers of driving and riding while fatigued, identify patients with sleep disorders and help them seek treatment.

Ministerial responsibility:

Minister for Transport and Main Roads and Minister for Health

Response:

This recommendation is partially supported

Comment:

In line with this recommendation Queensland Transport agrees with the Committee's assessment that general practitioners have a vital role to play in informing their patients about the dangers of fatigue-driving, identification of sleep disorders and the provision of treatment for such patients. With this in mind, a national group comprising transport authorities and health professionals has been established for the purpose of reviewing the national guideline regarding the role general practitioners play. The review is considering a wide range of medical conditions that affect the ability of clients to drive safely, including fatigue and sleep disorders. The review is considering marketing and promotion of the publication to health professionals.

On 1 March 2006 the first stage of new medical reporting arrangements became operational, with a new requirement for licence holders to self-report to Queensland Transport, between licence renewal periods, any permanent or long term medical condition which may affect their ability to drive safely. The second phase consists of a review of reporting arrangements for health professionals. Consultation will be undertaken with the Queensland Divisions of General Practice, and a range of options examined, including mandatory reporting requirements where licence holders continue to drive against the advice of their health professional.

Queensland Transport and the Queensland Divisions of General Practice promote the Austroads medical standards guideline *Assessing Fitness to Drive*. The Queensland Divisions of General Practice promote this publication in a monthly newsletter that is sent to their members. Queensland Transport has established a link between its internet site and the Austroads internet site that contains the national guideline.

Queensland Transport and the Queensland Divisions of General Practice will continue to work together to promote the guideline within the medical community. This approach is supported by Queensland Health.

RECOMMENDATION 9

Queensland Transport should advise general practitioners that, if a patient continues to drive against their advice, it is their ethical and legal responsibility, to advise the patient that in the interest of public safety, they must inform Queensland Transport. Queensland Transport should provide information to general practitioners regarding their legal rights and protections when informing Queensland Transport about a patient's inability to drive safely.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is partially supported

Comment:

Queensland Transport is conducting a review of medical reporting arrangements. The Transport Operations (Road Use Management - Driver Licensing) Regulation 1999 was amended to introduce the mandatory reporting obligations.

The first stage of medical reporting arrangements became operational on 1 March 2006, with a new requirement for licence holders to self-report to Queensland Transport, between licence renewal periods, any permanent or long term medical condition which may affect their ability to drive safely. These medical conditions include, but are not limited to:

- Diabetes (early and late onset);
- Epilepsy;
- Heart disease;
- Strokes;
- Arthritis and other joint problems;
- Eye problems (for example cataracts);
- Hearing disorders;
- Sleep disorders;
- Parkinson's disease and other neurological disorders;
- Dementia and Alzheimer's disease;
- Depression and other mental health problems;
- Lung disease; and
- Injuries and disabilities.

People with the above medical conditions may still be fit to drive. In the normal course of a medical assessment, a medical practitioner would determine in consultation with the patient their suitability to drive. Following this assessment, many people with conditions on this list would not be prevented from driving.

Prior to this date legislation only required the disclosure of such information to Queensland Transport at the time of the initial granting of a licence, or upon renewal.

The second phase consists of a review of reporting arrangements for health professionals. Consultation will be undertaken with the Queensland Divisions of General Practice, and a range of options examined, including mandatory reporting where licence holders continue to drive against the advice of their health professional. Queensland Transport supports this recommendation in principle, pending the outcome of the second phase of the review.

RECOMMENDATION 10

That the Queensland Police Service should, in conjunction with Queensland Transport, increase the level of on-road enforcement of driving hours for heavy vehicle drivers.

Ministerial responsibility:

Minister for Police and Corrective Services and Minister for Transport and Main Roads

Response:

This recommendation is partially supported.

Comment:

Queensland Transport has discussed this recommendation with Queensland Police Service and it has been agreed that Queensland Transport should adopt the lead agency role for this recommendation, as on-road enforcement of driving hours for heavy vehicles represents a core component of Queensland Transport's compliance responsibilities.

While Queensland Transport supports the recommendation to increase the level of on-road enforcement of driving hours for heavy vehicle drivers, this will need to be considered in line with other projects, in particular those arising from the 2006 Queensland Road Safety Summit.

Similarly, Queensland Police Service recognises that there is a requirement for increased training of police officers in relation to the enforcement of heavy vehicle driver fatigue and associated legislation before an increase in enforcement can be supported. This training is currently being conducted by Queensland Transport but is limited due to availability and resource constraints.

The Queensland Police Service has an already high focus on heavy vehicle enforcement and the priority is maintained with dedicated operations such as *Austrans*.

A comparison of the level of on-road enforcement of driving hours for heavy vehicle drivers QT over the period July 2003 until end of June 2005 indicates that these figures have increased over that period of time.

July 2003-June 2004

Hours of on-road activity	62 416
Hours of on-road compliance checks including fatigue	24 383
Fatigue related offences	3 440

July 2004 – June 2005

Hours of on-road activity	64 558
Hours of compliance checks including fatigue	30 372
Fatigue-related offences	4 211

The hours of on-road activity are related to the Transport Inspectors only (including operations). The offence totals include any fatigue offences written by Transport Inspectors or QPS Officers

The Queensland road freight sector carried 407.6 million tonnes in 2001/02, an increase of 14.1 million tonnes or 3.6 per cent growth compared with the previous year and 56.1 per cent (or 146.5 million tonnes) relative to 1990/91. Growth in the economy, continued improvements to productivity in the Queensland road freight sector and a projected increase in average laden distance may increase the annual road tonne-kilometre task by 80.9 per cent to 87.1 billion tonne-kilometres in 2011/12.

Given this pattern of growth across a large widely distributed transport system, it is Queensland Transport's view that further small increases in the amount of time spent on-road checking compliance with provisions of the Fatigue Management Regulation are unlikely to produce substantial benefits or be responsive to this growth.

Queensland is leading the way nationally with the prosecution of chain of responsibility offences. Chain of responsibility legislation targets other parties in the transport supply chain (such as consigners and customers) that can apply significant pressure for drivers and transport operators to breach fatigue management regulations. It is Queensland Transport's view that all who bear responsibility for conduct which affects compliance should be made accountable for failure to discharge that responsibility. This chain of responsibility is implemented through provisions such as 57B of the Transport Operations (Road Use Management) Act 1995, and Queensland Transport will continue to invest in this approach after the enactment of the national Road Transport Reform (Compliance and Enforcement) Bill.

Queensland Transport's preferred model is to adopt an integrated package of enforcement, education and technological solutions to address the real causes of aberrant behaviour. To further address these causes, following the 2006 Queensland Road Safety Summit, the Premier announced a commitment to progressing, as a matter of urgency, the introduction of demerit points for heavy vehicle fatigue offences. This will be included as part of the penalties and sanctions review process.

In the future, there may be the opportunity to use new approaches and technology to address fatigue management issues in the heavy vehicle industry. The Intelligent Access Project utilises GPS technology to monitor vehicle movements, while there are some significant issues with using this technology to monitor driver behaviour, there is potential for driving hours issues to be incorporated.

Queensland Police Service further notes that to increase enforcement there is a necessity for an increase in safe workplace areas to intercept heavy vehicles on highways.

Therefore the committee's recommendation is partially supported in the area of traditional on-road enforcement.

RECOMMENDATION 11

That Queensland Transport should review the New South Wales and Victorian legislation that directly addresses fatigue driving to identify if it reduces the incidence of fatigue-related crashes; the success rate of prosecutions; the ease of enforcement; and the likely benefits of introducing similar legislation in Queensland.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported

Comment:

Queensland Transport has reviewed the New South Wales and Victorian legislation that directly addresses fatigue. The overall finding is that the New South Wales legislation is unlikely to be beneficial to Queensland at this stage, although there may be some benefits to introducing legislation similar to the Victorian provisions.

New South Wales

The advice of the Traffic Services Unit of the New South Wales Police is that Section 38(1A) (a) of the *Road Transport (Driver Licensing) Regulation 1999* (NSW) does not relate to fatigued driving. It was introduced to overcome an anomaly in the New South Wales legislation (which is not an issue in Queensland) where a driver charged with offences arising from a serious or fatal road crash claimed a defence that they "were asleep or unconscious" and therefore not responsible for their actions. The section allows the RTA to suspend the driver's license until the matter has been heard and determined by the Court.

Victoria

The advice from the Major Crash Investigation Unit of the Victoria Police is that Section 318 (2A) (a) and (b) of the *Crimes Act 1958* (Vic), operate as circumstances of aggravation to a charge arising from the death or serious injury of a person as a result of a vehicle crash. Recourse to these provisions allows a Court to impose a greater penalty for an offence that is proven than would otherwise be possible. Effectively this means that it is possible for a Court to impose a greater penalty if it can be proven that the driver, as a result of driving fatigued, caused injury and/or death to another person or persons.

The Victorian Major Crash Investigation Unit advises that the provisions have been only infrequently relied on. This is due to the difficulty in gathering sufficient evidence which objectively measures and proves the fatigue level of the driver. While prosecutions in these instances have been successful, there was a substantial cost to the Crown (for expert witness evidence) in proving the matters.

Queensland Transport believes that it may be possible to include a provision similar in effect to sections 318 (2A) (a) and (b) of the *Crimes Act 1958* (Vic) within the section 328A of the *Criminal Code* (Qld). This may have deterrent properties notwithstanding the current difficulties in measuring fatigue. This will be the subject of further consultation with the Queensland Police Service and the Department of Justice and Attorney General.

As Travelsafe recommends, Queensland Transport will continue to monitor innovative Australian and international legislation to ensure Queensland has the most effective measures

for reducing driver fatigue and prosecuting unsafe driving behaviour. Should developments enabling the definition and measurement of fatigue eventuate, therefore enabling enforcement of the requirement not to drive fatigued, QT would consider favourably the introduction of legislation that explicitly proscribes fatigued driving as an offence.

RECOMMENDATION 12

That the Department of Industrial Relations should provide guidelines for employers and workers on the extent of eligibility for compensation injuries sustained in crashes by workers who have a short sleep before travelling home after work, particularly in industries where employees have a higher risk of a fatigue-related crash.

Ministerial responsibility:

Minister for Employment, Training and Industrial Relations

Response:

This recommendation is partially supported

Comment:

A key component to effectively reducing driving while fatigued is public education aimed at encouraging drivers to self-manage their driving to prevent and limit fatigue.

Worker's compensation will in some cases provide for compensation for workers who sustain injuries from a crash which occurs during their travel to or from their workplace. However, it is not possible to provide definitive guidance regarding every scenario surrounding a journey claim as there are many factors that may impact on a claimant's entitlement to workers' compensation. Every claim will have its own facts and must be considered on its own merits. The *Workers' Compensation and Rehabilitation Act 2003* provides for this by requiring an insurer to consider the reason for a delay or interruption of a journey in deciding a worker's application for compensation.

The provision of broad guidance material regarding the application of the Act to journey claims is supported; WorkCover Queensland is the agency responsible for providing information to employers and workers on the Workers' Compensation and Rehabilitation Act as WorkCover Queensland provides information to the public in relation to journey claims, further guidance regarding delaying/interrupting a journey to undertake fatigue management countermeasures would be more appropriately placed with the information already published by this Agency. Accordingly, the Department of Industrial Relations has written to WorkCover Queensland requesting that they consider updating their information regarding journey claims to include examples of a driver delaying or interrupting a journey to undertake fatigue management countermeasures.

RECOMMENDATION 13

That the Department of Industrial Relations should work with organisations to provide opportunities for employees to have a short sleep before travelling home after work, particularly in industries where employees have a higher risk of fatigue-related crashes.

Ministerial responsibility:

Minister for Employment, Training and Industrial Relations

Response:

This recommendation is not supported.

Comment:

While the intent of recommendation 13 is understood, it is not considered an effective policy response that is conducive to fatigue management. The effects of fatigue are cumulative. If workers require a sleep prior to driving home from work after a shift, then it is likely that these workers are suffering from fatigue for the last few hours of their work shift. Given that Employment Training and Industrial Relations portfolio has a responsibility to ensure workplaces are safe and without risk to health, work practices where workers are continually subjected to fatigue during working hours, and then provided with an opportunity for sleep prior to driving home are not supported. These work arrangements would have negative implications for workplace health and safety, particularly in the last few hours of a shift, and if endured medium or long term could also have consequences for worker health. Fatigue has been linked with heart disease and high blood pressure, stomach ulcers and other gastrointestinal disorders, depression and lower fertility for women. Implementing this recommendation would support, and possibly encourage, such work practices. For these reasons, the recommendation is not supported.

The Department of Industrial Relations has released a *Fatigue Management Guide*. This document was developed to assist business operators and workers to address the issue of fatigue within Queensland workplaces. It recommends that business operators should use a risk management approach to manage fatigue as it relates to their business.

The brochure addresses driving while tired, and offers some driving precautions to assist in avoiding road crashes. Workers should not be continually exposed to fatigue levels at the end of a work shift where it is necessary for them to sleep before it is safe for them to drive home from work. Fatigue is best managed systematically, using processes such as the risk management. By using such an approach, the causes of fatigue (such as roster systems and work practices) can be identified and effectively managed. Implementing recommendation number 13 only addressed the effects of fatigue and will not assist in controlling fatigue within workplaces.

RECOMMENDATION 14

That the Department of Industrial Relations should develop a directive similar to those used by Department of Main Roads, Department of Industrial Relations and other Queensland Government agencies for all state government departments and agencies that will reduce the risk of public servants experiencing a fatigue-related crash while driving for work.

Ministerial responsibility:

Minister for Employment, Training and Industrial Relations

Response:

This recommendation is partially supported.

Comment:

Ministerial Directives are issued under s34(2) of the *Public Service Act 1996*, which states:

- The industrial relations Minister may issue directives and guidelines only about the remuneration and conditions of employment of public service employees other than those mentioned in subsection (1) (b).

It is not appropriate to issue a Ministerial directive under section 34 (2) of the *Public Service Act 1996*, as a fatigue related crash while driving from work is not a remuneration or condition of employment issue.

It is proposed to meet the intent of recommendation 14 by the Director-General of the Department of Industrial Relations writing to the chief executives of all government departments and agencies with a copy of the existing *Fatigue Management Guide* and *Managing fatigue: handy tips for shift workers* brochure. This document can be used by agencies to inform their own internal policies to manage fatigue.

RECOMMENDATION 15

That the Department of Natural Resources and Mines should work with employers, employees and other stakeholders within the mining industry to support and encourage the development of countermeasures such as more effective rostering systems, public education, health programs and alternative transport arrangements to reduce the incidence of fatigue-related crashes on the way to and from work.

Ministerial responsibility:

Minister for Natural Resources and Mines

Response:

This recommendation is supported

Comment:

The Department of Natural Resources and Mines will continue to work with mining stakeholders to implement Recommendation 15 of the Travelsafe report.

Over the past 10 years the Department of Natural Resources and Mines, through its research facility the Safety in Mines Testing and Research Station (Simtars), has conducted numerous research projects into the effects of fatigue and into the design of circadian rhythm friendly shift rosters which will minimise this problem. Some of this research was funded by the Australian Coal Association Research Program, which widely disseminated the research findings to all interested stakeholders. Research funded by the Department of Natural Resources and Mines was disseminated through the Queensland Mining Journal and through regular industry seminars organised by the Queensland Mines Inspectorate. Research into this problem is ongoing and was the topic of a major workshop at the most recent Queensland Mining Industry Health and Safety Conference which was held in Townsville in August 2005.

Many coal mines have introduced or are starting to introduce health and well being programs which are designed to improve the overall health profile of the mine worker and their family. These programs will also emphasise the problems associated with driving after a long shift and the steps that can be taken to minimise these risks.

RECOMMENDATION 16

That the Department of Industrial Relations should identify particular industries where employees have a high-risk of experiencing a fatigue-related crash either at work or while travelling to or from work and then, using information gathered from the implementation of recommendation 15, support and encourage the development of countermeasures to reduce fatigue-related crashes within high risk industries.

Ministerial responsibility:

Minister for Employment, Training & Industrial Relations

Response:

This recommendation is supported.

Comment:

Qualitative data indicates that industries where people work over 44 hours a week and/or perform shift work (outside of standard work day) are at a higher risk of fatigue. This is because long hours and shift work patterns disrupt the body's circadian rhythms and often result in workers becoming fatigued. Extended working hours, particularly for shift workers, adversely affect the amount of time available for sleep and other activities. Research indicates that once a person works for more than 48 hours within a week, the increased competition between sleep and other activities results in sleep of a limited quality and length. As hours of sleep are reduced, the individual begins to accumulate a sleep debt. This causes fatigue levels to rise, which leads to poor effects on health and safety.

The Department of Industrial Relations is able to use working hours data from the Australian Bureau of Statistics to identify high risk industries and occupations within Queensland. Once the Department identifies high risk industries and/or occupations, it will then be able to support and encourage the development of countermeasures to reduce fatigue-related crashes within these industries. The Department will also liaise with the Department of Natural Resources and Mines with regard to the work they are to perform under Recommendation 15, and use its findings to inform the work to be performed to meet Recommendation 16.

Current initiatives being undertaken by the Department include:

- The *Fatigue Management Guide* and the *Managing fatigue: handy tips for shift workers*. The Department has developed a comprehensive Communication Strategy to distribute these documents to industry. Targeted industries include transport, health and community services, manufacturing, and hospitality and recreation. The documents are currently being distributed to key employer groups and unions. In addition, the Department has completed some interviews for radio (ABC, Triple M and B105).
- Working with the National Transport Commission, and other state and territory occupational health and safety authorities and transport authorities to develop the *Guidelines for Managing Heavy Vehicle Driver Fatigue*.

RECOMMENDATION 17

That Queensland Transport should introduce public education campaigns targeted at all high-risk groups outlined in Part 5 of this report. These campaigns should incorporate information on a range of symptoms and effects of driving fatigued and countermeasures that can be used to prevent fatigue-related crashes.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported

Comment:

Queensland Transport will undertake qualitative market research in the development of the 2006-2007 financial year fatigue public education campaign. This market research will include rural and young drivers and riders, shift workers and commercial drivers. This market research will assess the most effective way of communicating this information, and if the audiences are prepared to pay attention to the information.

It should be noted that previous fatigue public education campaigns have focussed on the range of symptoms and effects of driving tired, as well as countermeasures to prevent fatigue. Full details of these campaigns were contained in the response to *Issues Paper No.9: Educating Drivers to Stop Driving Tired*.

RECOMMENDATION 18

That Queensland Transport should complement existing mass media fatigue-related campaigns by using alternative, more targeted communication methods which target key groups such as passengers and children to influence drivers.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported

Comment:

As mentioned in the response to Recommendation 17, Queensland Transport will undertake qualitative market research in the development of the 2006-2007 financial year fatigue public education campaign. This market research will assess whether this type of information would motivate drivers to change their behaviour. The results of this market research will be used to determine whether alternative, more targeted communication methods aimed at key groups including passengers and children are likely to be an effective social marketing tool.

RECOMMENDATION 19

That Queensland Transport should liaise with non-government organisations such as the RACQ and insurance companies in order to enhance the effectiveness of alternative, more targeted education campaigns.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported.

Comment:

Queensland Transport will consider this as part of broader campaign planning for the 2006-2007 financial year fatigue public education campaign. This would be subject to findings of the qualitative market research which will be used to determine the most likely to be effective education and marketing campaigns.

RECOMMENDATION 20

That Queensland Transport should include questions on driver fatigue in some versions of the novice driver and rider licence theory tests.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is not supported

Comment:

Queensland Transport encourages all drivers and riders to achieve awareness of all aspects of road safety including the dangers of driver fatigue.

Queensland Transport road rules test questions are designed to test learner drivers' knowledge of the Queensland road rules. The questions in the "General Test" and "Motorbike Test" are based on the road rules contained in the *Transport Operations (Road Use Management – Road Rules) Regulation 1999* (the Road Rules Regulation) while the questions in the "Heavy Vehicle Test" are based on specific rules relating to the legislative requirements for the driving of these types of vehicles.

At this point in time Queensland has not introduced legislation which explicitly identifies fatigued driving as an offence. As outlined earlier in response to recommendation 11, there are difficulties in successfully prosecuting fatigued drivers due to the international lack of an agreed definition of fatigue and a corresponding inability to measure fatigue. Should technology be developed which enables both an accepted definition and means of accurately measuring fatigue, then QT would consider favourably the introduction of legislation which explicitly proscribes fatigued driving as an offence.

While drivers of commercial buses (with a seating capacity of more than 12 adults) and heavy vehicles (with a vehicle mass of more than 12 tonne) are required to comply with the *Transport Operations (Road Use Management – Fatigue Management) Regulation 1998*, there are no specific rules in the Road Rules Regulation relating to fatigue management for drivers and riders of other vehicles. Therefore questions regarding driver fatigue will not be included in the novice driver and rider license theory tests.

However, there are a number of activities including road safety campaigns targeting major contributing crash factors such as speeding, drink driving, driving tired and not wearing seat belts. Other avenues to achieve continued awareness include future reviews of:

- "Your Keys to Driving in Queensland" publication;
- the "Ready to Go Guide" booklet for learners and supervisors that accompanies "Your Keys to Driving in Queensland";
- the Department website www.transport.qld.gov.au; and
- public education material provided to learner drivers.

RECOMMENDATION 21

That Queensland Transport should liaise with the community sector and the Department of Transport and Regional Services to provide a stable and recurrent source of funding for Driver Reviver programs on national highways and roads of national importance.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported.

Comment:

Queensland Transport currently liaises with the community to gain funding and/or premises where possible, for new sites and/or improvement to sites. Queensland Transport currently funds new site buildings, signage and equipment, if required. Regional Queensland Transport offices maintain signage and equipment at sites through Community Road Safety Action funding. In addition Bushells Tea provide national sponsorship by supplying products to Driver Reviver sites including coffee, tea, snacks, cups, sugar, spoons, signage and so on.

Queensland Transport will liaise with the Department of Transport and Regional Services to seek assistance in providing recurrent funding for the Driver Reviver program on national highways.

RECOMMENDATION 22

That Queensland Transport, the Department of Main Roads and the Queensland Police Service should review the location and messages provided by signage for Driver Reviver sites.

Ministerial responsibility:

Minister for Transport and Main Roads and Minister for Police and Corrective Services

Response:

This recommendation is supported

Comment:

Queensland Transport currently assesses the following factors before a site can be considered for inclusion in the Driver Reviver program.

- Number of fatigue-related crashes in the area;
- Strong community support;
- Number of vehicles travelling through the area;
- Site location including amenities;
- Impact on local businesses;
- Preferred operating times; and
- Determining the suitability of a Temporary Site for Special Events (for example, Birdsville Races).

Specific Driver Reviver information signs have been designed to alert motorists to the Driver Reviver site ahead and give them time to make a decision about whether or not to stop.

Signs for new sites are supplied by Queensland Transport and installed at distances of 5km and 2km prior to the site. These distances may be varied to meet local requirements. All sites have directional arrows indicating "Driver Reviver Here". The current advance Driver Reviver signing exceeds the current Queensland Manual Uniform of Traffic Control Devices which is based on Australian Standard 1742.

All sites undergo annual Department of Workplace Health and Safety reviews including ensuring that adequate signage is visible and maintained at sites. Queensland Transport has also been working closely with Main Roads to use 'Variable Message Signs' located on highways when these signs are not in use for road works and/or accidents. An example of this is the Forest Glen site located on the Bruce Highway. Verbal advice received from Driver Reviver operators at the site is that these signs appear to increase patronage.

Queensland Transport will continue to work with the Department of Main Roads and the Queensland Police Service to review the location and messages of the signs to ensure motorists have adequate time to make a decision to stop.

RECOMMENDATION 23

That Queensland Transport should explore alternative models to Driver Reviver for the provision of rest facilities for drivers. This should include partnership with fuel and food outlets, along with other businesses with a presence across Queensland's road network.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported.

Comment:

In the past two years Queensland Transport has been exploring alternative regional fatigue initiatives to encourage drivers to rest at other alternative sites and/or businesses to Driver Reviver sites, as listed below.

Northern Region

- A Stop-Revive-Survive site at the Dimbulah Railway Museum. This involves local sponsorship from Mareeba Coffee Works, Bundaberg Sugar, Daintree Tea, Currey (NQ) Pty Ltd, Dairy Farmers and Mareeba Shire Council.
- A Stop-Revive-Survive site at Hell's Gate service station, located 100km west of Burketown on the way to the Northern Territory border. They provide free tea and coffee for anyone who wants it and encourage people to give a donation to the Royal Flying Doctors in return.
- The *Draft Regional Policy and Action Plan on Fatigue Management (North Queensland Region)* is a joint initiative by the Department of Main Roads and Queensland Transport which aims to ensure a consistent and coordinated approach to fatigue countermeasures in North Queensland. The action plan supports the objectives of the *Queensland Road Safety Strategy 2004-2011* and the *Northern Regional Road Safety Action Plan*.

Queensland Transport plans to increase alternatives for the provision of rest facilities for drivers by continuing to work with communities and businesses like fuel and food outlets across Queensland's road network.

RECOMMENDATION 24

That Queensland Transport should, in conjunction with Queensland Health and the Victorian authorities, evaluate the HealthBreak program to determine whether it should be adopted in Queensland. When making a decision about the adoption of the program, Queensland Transport and Queensland Health should consider the existing resources allocated to treat sleep disorders, the resources required to effectively treat the individuals diagnosed with a sleep disorder and, if necessary, allocate more resources.

Ministerial responsibility:

Minister for Transport and Main Roads and Minister for Health

Response:

This recommendation is not supported.

Comment:

Given Queensland Health's limited resources and current organizational priorities, active implementation of such a program would not be possible by Queensland Health at this stage. However, any information and potential opportunities for collaborative work that may be able to be provided in terms of any current/ or planned activities for other future general population programs which raise awareness/ test for the conditions also covered by the HealthBreak program (including chronic diseases such as diabetes and heart disease and so on), will be shared with Queensland Transport.

RECOMMENDATION 25

That Queensland Transport and the Department of Main Roads should construct more quality rest areas based on the Department of Main Roads rest area policy outlined in Chapter 20 of their Road Planning and Design Manual. The location of future rest areas should be decided through consultation with heavy vehicle drivers and other key stakeholder groups.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported

Comment:

Following the 2006 Queensland Road Safety Summit, the Premier announced an extension of the current \$12 million Safer Roads Sooner program for a further three years for vegetation clearing, and introduction of rest stops and crash barriers, at a cost of a further \$20 million. The Department of Main Roads will be constructing more rest areas on the state-controlled road network in accordance with the department's policy for the provision of roadside amenities and the Road Planning and Design Manual. This will be in addition to a number of opportunities to improve existing and install new rest areas which have already been identified for funding from the government's Safer Roads Sooner initiative.

The Department of Main Roads is also investigating mechanisms to better sign and recognise existing strategically located commercial facilities, in lieu of constructing new facilities.

The new rest areas will be strategically located through an assessment of the locations of existing rest areas and consultation with key stakeholders.

RECOMMENDATION 26

That, following an independent evaluation of the current audio-tactile devices, the Department of Main Roads should continue to deploy audio-tactile devices throughout Queensland.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported

Comment:

At this point in time there is insufficient reliable data regarding current audio-tactile devices for a robust, independent evaluation to be made. About two years ago, the Transport Statistical Steering Committee (TSSC) was tasked by Queensland Transport to evaluate the effectiveness of a number of road safety initiatives including the use of audio-tactile devices as a fatigue countermeasure. Owing to the lack of data on the audio-tactile devices used, the TSSC came to a conclusion that a reliable benefit/cost evaluation of the Queensland implementation of these devices was not possible. However, from Queensland Transport's previous evaluation and national and international reports, it is believed that audio-tactile devices, particularly audio-tactile lines and rumble shoulders, are highly effective in reducing fatigue related crashes.

Following the 2006 Queensland Road Safety Summit, the Premier announced an upgrade of the audible line marking program, including placing audible lines in the centre of undivided roads, targeting known danger spots first. The installation of an extra 1,000 kilometres of audible lines over the next three years will cost approximately \$8 million. The State will seek from the Commonwealth financial assistance for the upgrade on national highways.

As more data becomes available in the future, the Department of Main Roads will commission an independent evaluation on the use of the audio-tactile devices.

RECOMMENDATION 27

That Queensland Transport should, in conjunction with other transport agencies and universities, support research into different types of fatigue including hypo vigilance.

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported

Comment:

Queensland Transport agrees that further research is needed into fatigue, the different types of indicators, their effects on driving performance and the conditions that hasten their onset. The Department will continue to monitor research programs on fatigue with other transport authorities and with universities.

RECOMMENDATION 28

That Queensland Transport should liaise with other transport agencies and universities to continue research into fatigue detection technologies. This research should have a particular focus on:

- *Developing valid and reliable methods to measure fatigue or types of fatigue such as monotony*
- *Linking the fatigue detection technology to, and accurately measuring, crash risk and*
- *Providing research evidence to satisfy prerequisites for test results to be admissible in a court of law.*

Ministerial responsibility:

Minister for Transport and Main Roads

Response:

This recommendation is supported.

Comment:

Queensland Transport actively liaises with other transport agencies, universities and industry representatives to further the research and development of a number of fatigue detection technologies.

However, Queensland Transport advocates that such support should not be limited solely to technologies for on-road enforcement, favouring fatigue detection technologies that have the capacity to prevent fatigue affected road users from driving and risking harm to themselves and others.

Road-side enforcement of fatigue is judged impractical as evidence suggests that fatigue affected drivers have sufficient voluntary control over many of the currently known symptoms of fatigue to be able to temporarily evade detection. Field researchers also contend that fatigue affected drivers may enter a state of heightened physiological alertness when intercepted by enforcement authorities for fatigue detection. In this state, fatigue affected drivers may be able to evade detection.

In terms of fatigue detection technology, Queensland Transport favours in-vehicle technology that provides continual monitoring of the driver to predict the onset of fatigue and the departure from safe control of a motor vehicle. Such technology can involve monitoring of different physiological indicators believed to alter with the onset of fatigue, monitoring minor decrements in certain aspects of driver performance that suggest the onset of fatigue (for example, erratic steering wheel commands) or monitoring factors known to contribute to the onset of fatigue (for example hours of prolonged wakefulness). The future use of the Intelligent Access Project (IAP) is an example of the latter type of technology, currently under development, which can be used to prevent fatigue affected drivers from driving, by reporting on the number of hours of prolonged wakefulness, and the associated fatigue risk.

RECOMMENDATION 29

That Queensland Transport should, in conjunction with Queensland Health, monitor the development and usage of drugs, such as Modafinil, which are used to address fatigue.

Ministerial responsibility:

Minister for Transport and Main Roads and Minister for Health

Response:

This recommendation is supported.

Comment:

Modafinil reportedly increases alertness and wakefulness, and is reported to have fewer side effects than other more commonly used stimulants. As such, the recommendation to investigate the development and usage of drugs such as Modafinil which may be used to address fatigue is supported.

However Queensland Transport is concerned that wide availability of these drugs may be used to justify unsafe driving practices, and that any adverse health effects of the drugs will not be recognised due to the early stages of their development and use. It was noted in the Travelsafe Report No. 43 that sleep is the only cure for fatigue (paragraph 245). It is also noted that "prolonged sleepiness weakens immune function" and that Modafinil is used increasingly as a "lifestyle" drug (www.modafinil.com). Queensland Transport would be reluctant to recommend use of any new drug to offset fatigue.

Long term use of drugs to increase alertness should not be promoted as a means to prolong wakefulness and should not be a substitute for adequate sleep. Queensland Transport would be reluctant to recommend use of any new drug to offset fatigue. It is considered that continued monitoring of the development and usage of these drugs will be essential to assess the potential road safety impact if use by drivers becomes more widespread.

Queensland Health strongly supports the above position. Promoting a natural, behaviour based solution (better sleep) is always preferred to using medication. Drugs should only be seen as useful/valuable when prescribed by a proper medical authority for use in quite defined cases (such as with some sleep apnoea sufferers); its general endorsement would provide a very clear possibility of more widespread use and misuse.

RECOMMENDATION 30

That Queensland Transport should, in conjunction with Queensland Health, liaise with research institutions to investigate and gain an understanding of:

- ***The effect of Modafinil and other similar drugs on the central nervous system;***
- ***The effect of Modafinil and other similar drugs on healthy adults;***
- ***The effect of Modafinil and other similar drugs on driving; and***
- ***The development of additional, safer and more effective drugs to reduce fatigue.***

Ministerial responsibility:

Minister for Transport and Main Roads and Minister for Health

Response:

This recommendation is supported.

Comment:

Queensland Transport supports Recommendation 30 in principle.

As noted for Recommendation 29, Queensland Transport is concerned that drugs such as Modafinil have the potential to be abused and used to justify unsafe driving practices. These drugs may also have unrecognised adverse health effects when used outside of medical supervision.

Queensland Transport will:

- Continue to monitor research concerning the use of stimulants, including Modafinil and similar drugs, by road users;
- Monitor, with the assistance of Queensland Health, new medical research literature concerning the health implications of Modafinil(including consequences of prolonged wakefulness);
- Liaise with research institutions that have knowledge and expertise to be able to advise on the effects of Modafinil and similar drugs on health and driving; and
- Where appropriate research capabilities are identified, consider co-sponsoring relevant research projects.

Queensland Health will also monitor related development and share any information gathered.

RECOMMENDATION 31

That Ministers should report annually to Parliament on the implementation by their departments of supported or partially supported recommendations in this report.

Ministerial responsibility:

Minister for Transport and Main Roads, Minister for the Police and Corrective Services, Minister for Health, Minister for Employment, Training and Industrial Relations, and Minister for Natural Resources and Mines

Response:

This recommendation is partially supported.

Comment:

In order to facilitate both the implementation and annual reporting, Queensland Transport will enter into discussions with other departments to establish an inter-departmental committee which will oversee these processes.

Regular reports will be made to Cabinet regarding the implementation of recommendations in the Report. Departments will provide further reporting on implementation progress in their annual reports.