

**SUBMISSION BY SOUTH AUSTRALIA POLICE**  
**TO THE**  
**PARLIAMENT OF AUSTRALIA'S**  
**HOUSE OF REPRESENTATIVES**  
**STANDING COMMITTEE ON COMMUNICATIONS, TRANSPORT AND THE**  
**ARTS**

**INQUIRY INTO MANAGING FATIGUE IN TRANSPORT**

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## **ABSTRACT**

This submission is presented on behalf of South Australia Police (SAPOL). It identifies the responsibilities of police within S.A. in relation to road safety and traffic law enforcement. Current methodologies of collating road crash data by police are described. Information is provided on crash risk reduction strategies undertaken by SAPOL in conjunction with other stakeholders. This report suggests that significant potential exists for nationally linked intelligent highway systems to provide independent verification of responsible road use and vehicle movements. The report expresses a view that timely and accurate intelligence in relation to vehicle road use operations enhances potential for the strategic deployment of enforcement resources. Police have a role in reducing risk to drivers exposed to fatigue as part of a general road crash reduction strategy, by appropriate use of both education and enforcement interventions.

## **1. Background**

In South Australia police are responsible for collation of data and investigation of vehicle crashes. Where an investigation is conducted, its primary purpose is to identify whether breaches of law have been committed, and to report those circumstances for determination of either prosecution or other outcomes.

The incidence of fatigue as a contributing factor in road crashes is widely agreed by both the public and private sector to be significantly high. There are varying estimates as to the percentage of road crashes for which fatigue may be attributed as a contributory cause. The road crash data used to cite the incidence of fatigue in road crashes are sourced from police records.

## **2. Road Transport Policing**

SAPOL provide the policing function for road law compliance within South Australia. There is a shared responsibility for enforcement in relation to commercial freight vehicles with Transport SA which employs Safety and Compliance Inspectors who specialise primarily in heavy vehicle compliance responsibilities including mass and fatigue management compliance.

South Australia policing services are divided into 14 geographic boundaries designated as Local Service Areas (LSA's) where a locally based police commander is responsible for the provision of the entire scope of policing services to their respective local communities.

Road safety issues although important at a local level, are often not restricted to either local or state boundaries. Australia has a comprehensive road network and there is significant travel by road between jurisdictions, for both business and recreational purposes. SAPOL recognise the importance of nationally uniform road laws and are supportive of road crash reduction strategies that have local, state and national perspectives.

Within South Australia all uniform general duties police share responsibilities for road safety policing and enforcement of compliance to road laws. They are supported in achieving those objectives by traffic police, who have particular technical skills and specialist knowledge in relation to road crash investigations and other issues related to vehicles, road safety and traffic law enforcement.

### **3. Road Crash Investigations**

Accurately determining the incidence of fatigue and the contribution it makes to road crashes is of considerable interest to SAPOL.

Police do not attend every road crash that occurs. Police are informed of a variety of road crashes ranging from minor no-injury crashes, that may be impeding safe traffic flow, to those involving injury and fatalities. The level of resources that police dispatch to a road crash is determined generally upon assessment by the primary police responder. The degree of experience of police who are charged with the responsibility of investigating a road crash will vary.

Police recruits are provided rudimentary knowledge and skills pertaining to police responsibilities at road crash incidents. Police patrol officers then acquire experience and tutoring from their supervisors. They have access to reference materials including police policies and procedures related to road crash investigations.

Police road crash investigations have generally focussed on determination of evidence to enable prosecution against road users identified as suspected of committing breaches of road law.

Police vehicle collision reports are not of a standard format throughout Australia, they vary between jurisdictions. However, much of their content is common. They require information relating to driver and vehicle details, blood alcohol, environmental features and alleged vehicle movements prior to impact. They all require a subjective conclusion on behalf of the police officer responsible for their compilation as to the possible cause of the crash. It is not unreasonable to suggest that police are reluctant to indicate fatigue as a contributing factor in a road crash, particularly where there may be little evidence to substantiate such a suspicion. It could be argued that this may contribute to under reporting the extent to which fatigue contributes to road crashes. South Australia does not include within the vehicle collision report, any field which provides the investigating officer an opportunity to specifically nominate "fatigue" as either the probable cause or to be a contributing factor. Vehicle collision reports for other jurisdictions reflect this omission. Any conclusion alleging fatigue must therefore be included within the brief narrative of events upon the report. This may or may not be included, depending on the police officers conclusions from the evidence presented. In other words there is no "prompt" upon the vehicle collision report form that might inspire a course of enquiry by police where fatigue was not an obvious conclusion. To research the narrative content of vehicle collision reports in S.A. requires the selected reports narrative to be viewed individually.

Anecdotal evidence suggests that very few drivers and parties who may be interviewed by police in the course of their investigations, to identify the

circumstances which may lead to the determination of probable causes of a road crash, actually identify that a driver was falling asleep at the wheel. Most of the evidence which police may offer in this regard will be either circumstantial or obtained from independent witnesses.

Knowledge of circumstances which precede a road crash are vital to determination of cause. In the case of fatal road crashes, police allocate considerable time and resources to ensure comprehensive investigations. This is unlikely to occur for other than fatal and the most serious injury crashes. Resource priorities determine that to do otherwise may considerably impact on other policing responsibilities.

Most road crashes, that result in multiple fatal injuries are investigated by traffic police who specialise in road crash investigations and incident reconstruction. Evidence is gathered which may be important to a prosecution for road law breaches and/or be presented for the conduct of a Coroners enquiry.

The majority of road crash scene attendance and investigations are conducted by local police. They are also responsible for the investigation of single occupant fatal road crashes in S.A. where there is no survivor.

#### **4. Heavy Vehicles - Time, Distance and Fatigue**

The impact of fatigue upon long distance transport drivers is well researched and documented.

Research conducted in Western Australia, with road conditions and a driving environment not dissimilar to S.A. indicated that close to one third of heavy transport drivers actually drove in excess of 72 hours per week (HARTLEY et al – 1996). Most road freight transported to and from the eastern states to W.A. traverses South Australia.

There is some evidence to suggest that prescriptive driving hours regimes are not succeeding in managing fatigue. Police interact with various representatives of sectors of the road transport industry, many indicate to police that log books have been treated with some contempt by segments of the transport industry. Industry self-regulation and “chain of responsibility” requirements are principals which require management responsibility and employee accountability.

## **5. Training of Police**

The corporate slogan of South Australia Police is “leading the way to a safer community”. SAPOL strive to remain informed of the most recent research findings and issues relating to fatigue in the workplace and road transport.

SAPOL is currently engaged in preparation of a coordinated fatigue related training initiative, which will be jointly presented to Transport SA and Police enforcement personnel. Training will comprise of fatigue issues, policy and regulation in relation to compliance and enforcement of the Road Transport Reform (National Driving Hours) legislation. This will occur prior to S.A. implementing the new driving hours requirements effective on the 1<sup>st</sup> of October 1999. The new regulations will apply to the drivers of heavy trucks over 12 tonnes gross vehicle mass.

## **6. Chain of Responsibility**

The new prescribed hours of work legislation for heavy vehicles commencing 1<sup>st</sup> October 1999 culminates from the National Road Transport Commission national reform agenda. An important inclusion within this legislation which has resulted from significant consultation between the NRTC, Regulatory Authorities, Transport Industry Representatives and Police is the “Chain of Responsibility” concept.

SAPOL like most other enforcement agencies involved with enforcement of prescriptive driving hours legislation have in the past generally targeted the driver of the transport vehicle in relation to exceeding driving hours and log book offences. The imperative was on penalising the driver for not taking sufficient rest as required by legislation.

Police are supportive of the “Chain of Responsibility” legislation, the aim of which is to shift some of the onus of responsibility for journey and delivery time considerations to those in management positions who exercise some direct control over the drivers journey duration requirements. Police are concerned that some transport operators continue to structure journeys on long distance routes which provide little or no opportunities for drivers to obtain restorative rest.

There are some practical considerations which will require close liaison between jurisdictions who are charged with enforcing chain of responsibility investigations in relation to the management of fatigue within the transport industry. Transport operators conduct business within jurisdictions other than those at which they are based. Enforcement officials within one jurisdiction who

identify evidence of circumstances which may lead to “chain of responsibility” offences requiring investigation, will need to liaise with interstate enforcement agencies to conduct local investigations on their behalf. Should prosecutions be defended, then there is potential for expenses involving enforcement officials from other jurisdictions being required to attend S.A. to give evidence (or vice versa). The severity of offences disclosed may then ultimately determine the voracity with which the prosecution might be pursued.

In serious matters involving fatal injuries as a result of road crashes where fatigue has been suspected as a contributing factor, police investigators have attended interstate to conduct follow up enquiries, so minimising the involvement of other enforcement officials within the evidentiary chain. Selected members of SAPOL are sworn special constables providing them police powers of various other jurisdictions around Australia. Arrangements such as these enable some flexibility of operational functionality, but cross jurisdictional investigations will remain expensive and incur some difficulties in coordination.

South Australia is strategically situated where long distance road freight haulage is required to traverse S.A. for travel between the eastern states and W.A. and the Northern Territory. Both of those jurisdictions which share borders with this state manage heavy transport driver fatigue by “Code of Practice” initiatives.

The effect of this lack of uniformity between jurisdictions in relation to their strategies to manage fatigue within the road transport industry is noticeable from an enforcement perspective. For on road enforcement officers, lack of national uniformity raises real difficulties in relation to proving driving hours, when attempting to ascertain journey times and what amount of rest a driver has been able to acquire. For example, a driver who has departed Perth to return to the eastern states has a 1450 kilometre journey before reaching the S.A. border. Generally no driving hours records will be recorded within the drivers log book preceding the S.A. border, as the driver has been travelling within a jurisdiction where prescriptive hours records by a drivers log book is not required to be kept by the driver. It likely that even with the adoption of the new national log books prescriptive hours there will be practical difficulties in establishing the efficacy of drivers log book entries as to their last significant rest break which may allegedly have been taken in another jurisdiction. For long distance transport drivers who are travelling routinely between jurisdictions where one prescribes log book records and others do not, it is common for them to express skepticism about the requirements imposed on them keeping log book records. It is not unusual for log books to be referred to as cheat books (or worse).



## **7. Intelligent Highway Systems and Independent Verification**

Some sections of remote highways with sparsely populated areas receive limited policing presence. There is anecdotal evidence to suggest that drivers of long distance transport vehicles travelling from coast to coast in Australia perceive that the 'risk' of interception by an enforcement officer is about one trip in forty. This perception, if only reasonably accurate, does indicate that valuable policing resources require good intelligence to enable them to be strategically deployed. Intelligence led policing presumes that intelligence received is timely, reliable and accurate.

Accurate and timely intelligence is important to assist police and other road safety stakeholders in formulating strategies to reduce road crash occurrence.

SAPOL support the use of intelligent highway systems where independent monitoring and verification of passing vehicle traffic from static sites occurs. S.A. is geographically situated whereby the installation of a relatively few strategically located surveillance sites could effectively monitor and collect valuable intelligence data of passing vehicles. The data would be useful from a number of perspectives. Real time records of vehicle road use and journey times between fixed points assists in producing both individual and routine travel patterns of vehicles. Sites can provide vehicle and occupant identification capabilities and automated registration, mass and dimension checking.

Provided with suitable legislative support, intelligent highway surveillance technologies can greatly assist compliance and enforcement strategies. Ideally such technologies would reflect similar capabilities to those of the NSW "SafeTCam" network. This provides those agencies responsible for road safety, enforcement and compliance, the ability to obtain timely data of vehicle movements. It can provide regulatory authorities and police valuable data to enable targeting of those individuals or transport operators which the technology identifies to be in breach of legislative requirements. Such technologies are capable of providing independent verification 24 hours a day, every day, of journey times and vehicle movements across the major highway networks. It is apparent that the NSW "SafeTCam" network has provided considerable advantages to authorities to enable independent verification of actual industry practices, and where necessary ensure enforcement strategies are invoked to remedy inappropriate conduct by those responsible for actions routinely captured by the "SafeTCam" network. Transport Operators whose vehicles are routinely recorded by that technology in breach of defined parameters are subject to investigation in relation to "chain of responsibility" principals, initially being encouraged to review scheduling and operating practices.

## **8. Intelligent Vehicle Systems**

SAPOL have some reservations about the sustainability of the integrity of Intelligent Vehicle Systems (IVS), which are either affixed to, or contained in or on a vehicle. IVS technologies provide some direct access and control by an operator or driver.

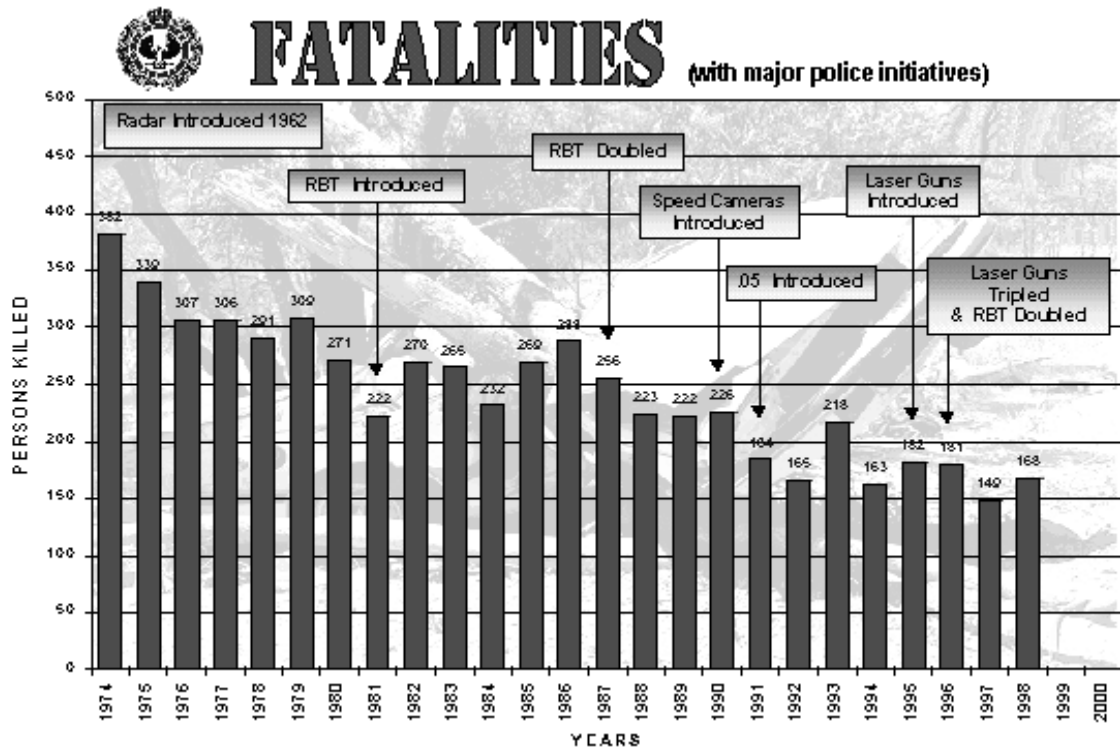
Vehicle speed limiting devices are an intelligent vehicle system devised to reduce the incidence of heavy vehicles speeding. Many heavy transport vehicles display signs “Speed Limited to 100 km/h”. Later models have design specifications requiring speed limiting. SAPOL experience indicates that there are numerous means to either bypass or negate the effectiveness of vehicle speed limiting. Some methods of interference require sophisticated modifications to the engine management input, others are quite simple, others are crude but effective. Police have seized a variety of devices from drivers used to circumvent speed limiting. It is apparent that some operators still consider speeding as acceptable to service unrealistic schedules. Penalties for interference with speed limiting devices are not high. Police have distinct reservations about the potential for interference with the integrity of other forms of on/in vehicle monitoring systems.

There is a distinct difference between on vehicle monitoring systems that enable a transport operator to remotely manage their vehicles operating parameters, to gain location and load data and so better manage fleet efficiencies which deliver obvious commercial benefits. Contrast that to a device or devices in or on an individuals or operators vehicle, independently scrutinising vehicle passage by a regulatory authority. There is considerable potential for some individuals to interfere with or disable such monitoring devices.

Dinges and Mallis (1998) report that much research is being conducted to devise in vehicle technologies to monitor drivers alertness and condition, to provide intervention prior to fatigue becoming critical to the driving task. Devices such as these once their effectiveness and rigor have been established may well assist in combating fatigue onset in real driving environments.

## 9. Community Awareness and Partnerships

There is considerable evidence that confirms the success of various road safety initiatives. Engineering, education and enforcement all play important roles to deliver benefits to road users.



**Road Crash Fatalities - South Australia**

The introduction and deployment of intensive random breath testing throughout S.A. since 1981 has led to a marked reduction in road crash fatalities. It is apparent that it is now generally socially unacceptable to drink and drive. Policing strategies will persist to achieve similar societal response in relation to speeding. The provision of good information, education and reinforcement to the community in relation to fatigue management is essential. It is necessary to reinforce the potentially dangerous outcomes that may occur when one either chooses or is required to drive while fatigued. The concepts of sleep debt, coping strategies, power naps and planning fatigue management are not well understood within the community.

Police have an important role to contribute, assisting in educating the community by promoting awareness in fatigue as an important factor prior to

driving a motor vehicle. There is considerable attention about the affects of fatigue on long distance transport drivers, the risks to this sector is well recognised. However there are many other groups for which less research has been conducted and who may share similar risks. These include shift workers, taxi and courier drivers and particularly any groups required to drive through the night.

The 1997 study by Dawson and Reid of the affects of fatigue, equating the risk to intoxication levels, the latter well understood within the community, is a valuable contribution which assists in explaining the real risks of driving fatigued. “Even relatively short periods of sustained wakefulness produce performance impairment equivalent to or greater than is currently acceptable for alcohol intoxication.”

It is important that through education, consultation and enforcement we strive to change the culture which for example determines that Adelaide to Sydney for a solo driver is a 14 to 16 hours drive (1424 kms) and Adelaide to Perth (2707 kms) can be achieved solo between 27-30 hours.

## **10. Drugs**

The incidence of drug use by long distance transport drivers has been researched both within Australia and overseas. This group are not identified to be recreational drug users, which supports the contention that they take stimulant drugs as a coping strategy to enable them to carry out their driving task which often requires long periods of wakefulness.

A study by Mabbott and Hartley (1998) indicated that transport drivers who travelled interstate, used prescription and illegal drugs more than W.A. intrastate drivers [28%]. The study also revealed “a significant relationship was found between drug use and hours of sleep the drivers had before the trip during which they were interviewed”...and that... “drivers based outside of W.A. and interstate drivers responded more than expected that it is more responsible to use drugs than risk falling asleep”.

Research findings overseas and within Australia conclude that about 30% of long distance transport drivers use drugs. Illicit drugs are not difficult to obtain, there is also evidence which indicates organised crime is involved to some extent in the distribution of illegal drugs which are available to transport drivers.

SAPOL are researching the viability of a driver roadside screening device which allegedly has the capability to enable accurate roadside testing of saliva samples for a spectrum of illicit drugs, while imposing minimal intrusion upon the donor. Legislative support would be required prior to implementation for enforcement purposes.

## **11. Investigations and Court Findings**

A medical general practitioner was recently successfully prosecuted after police investigations disclosed that the doctor regularly and routinely prescribed a certain medication to transport drivers who used it contrary to its purpose, as a stimulant to counter the onset of fatigue. Many of the G.P's transport driver clientele resided elsewhere in Australia and sought consultation from that source while in S.A. Anecdotal evidence suggests that there is significant demand for such services and drivers seek out medical practitioners sympathetic to provision of prescription drugs for purposes other than intended.

A recent Coronial inquiry in S.A. into a multiple fatality caused by a truck driver falling asleep at the wheel of his articulated vehicle resulted in the Coroner recommending that:

*“Modern expert knowledge about fatigue management, and in particular the cyclic effects of fatigue, ...be further incorporated in a legislative framework regulating driving hours;*

*The granting to the police of power to enter and search commercial motor vehicles or relevant defined premises, and to seize secondary evidence...which will either verify, or contradict entries in log books; These powers are particularly necessary if the sanctions against employers are to prove effective;*

*The level of penalties, including the level of fines, and the imposition of demerit points, for hours of driving breaches, and whether the present low penalties provide a disincentive to the police to adequately investigate offences;*

*The extent to which the current system, whereby drivers are paid by the trip, or by the kilometre, represents an incentive to break the law (the evidence from this inquest certainly proves that it does), and whether it is possible to design a different system which provides drivers with more incentive to comply with the law, and with safe working practices;*

*Whether the role of the Office of Workplace Services, in the education about and enforcement of the Occupational Health, Safety and Welfare Act, 1986, needs to be enhanced in relation to the heavy transport industry”.*

## **12. Fatigue and Road Safety Initiatives**

SAPOL and Transport SA have recently initiated a series of combined strategies to raise the profile of policing attributed to heavy transport enforcement. Industry representation had indicated a desire for more visible on road enforcement to occur. Particular concerns were expressed that some transport operators gain competitive advantage by breaching road laws, that they were routinely escaping detection, to the detriment of other operators who routinely conduct their transport business within the parameters determined by legislation.

SAPOL have conducted a number of joint task force investigations with other agencies related to hours of driving fatigue related offences within the heavy transport industry. Police liaise closely with Workplace Services inspectors concerning the utilisation of Occupational Health and Safety legislation where significant breaches of workplace safety are identified, particularly in relation to driving hours.

SAPOL participate in regular discussions with the transport industry at the South Australian Law Enforcement Liaison Group (SALELG) where enforcement issues of mutual interest between enforcement agencies and industry are discussed and in many instances quickly resolved. Road safety and specifically fatigue management are regular topics of discussion. This liaison includes representatives from Transport Associations, Transport Workers Union, Bus and Coach Association, Transport SA, Workplace Services, Primary Industries and the Department of the Environment.

SAPOL are conducting a fatigue related initiative in cooperation with Victoria Police, Transport SA, Vicroads, local businesses and community groups. On the Dukes and Western Highways, linking Melbourne and Adelaide a fatigue pilot project is underway. Police can issue vouchers to motorists entitling them to free tea or coffee (not take away) to encourage them to redeem them at any of the roadhouses along the highway nominated on the voucher. Discount accommodation is also available. This initiative was launched for Easter 1999, indications so far are positive from both recipients and participating businesses. Roadhouses and participating motels display targeted road safety information from wall posters, brochures are available from dispensers which are regularly updated by police patrols. The theme of "Drowsy Drivers Die" is reinforced by roadside signs to complement that message on posters erected within roadhouses, with advice to "Plan Your Next Break Now". The roadside reflective signage also indicates distances and information about the next available facilities.

Traffic police conducted a series of road safety audits on 16 major highways during 1998 – 1999, and 6 others within police districts with major population centres adjoining major highways. Of the recommendations made, some related to road design features which may prevent a drowsy inattentive driver from steering their vehicle off the carriageway, for example audible tactile edge

markers, and identification of locations where lane widening and overtaking lanes would be appropriate. Long distances of straight featureless highways with undemanding driving tasks, noise and vibration from wind and road surfaces all contribute to the accelerated onset of fatigue. The provision of attractive and well featured driver rest facilities for road travellers at regular intervals were also identified as necessary to further encourage drivers to interrupt a journey between their predetermined final destination.

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