1. Purpose of this Fact Sheet

The purposes of this paper are:
- outline the current management strategies for speeding;
- identify how the current management strategies address recidivist speeding;
- outline research into the effectiveness of the current management strategies; and
- comment on WA’s *Towards Zero* road safety strategy’s focus on speed management.

2. Speeding

In this Fact Sheet, the term ‘speeding’ refers to driving at a speed over the designated speed limit or at a speed that is inappropriate for the prevailing conditions and includes both low level and excessive speeding offences:
- **excessive speeding** is usually a deliberate behaviour, involving speeds well above the designated speed limit. It is the leading cause of death on Western Australian roads. Across Australia, driving at speeds of 45km/h or more above the speed limit can result in licence disqualification and/or vehicle impoundment;
- **low level speeding** typically refers to exceeding the designated speed limit by 5 km/h or less, often incidentally through driver inattention to the vehicle speed or to the designated speed limit.

Many low level speeders consider their offence to be a minor misdemeanour, however, exceeding the speed limit by 5km/h doubles your crash risk. Research suggests that the majority of drivers engage in low levels of speeding. Drivers with prior speeding convictions reported that it was harmless to travel a few kilometres over the speed limit even in built up areas, played down the risks of hitting a pedestrian in these built up areas, and viewed low level speeding on highways as not dangerous. Comparisons between 2005 and 2007 speeding offence rates show that compliance with the speed limit has decreased in both Perth and rural areas in WA, and 40-45% of drivers/riders regularly driving over the speed limit.

The *Towards Zero* road safety strategy was adopted in Western Australia in March 2009 and lower speeds is recognised as one of the four cornerstones of this strategy. It is predicted that the adoption of the Toward Zero strategy could result in 11,000 fewer
fatalities or serious injuries on Western Australian roads over a 12 year period, 29% of which reduction has been attributed to the management of speeding.

Describe what we know about the levels of problem that recidivist driving is in WA.


Technological advances in vehicle speed detection such as automated speed cameras is a likely explanation (at least in part) for the number of drivers being detected for speeding offences continuing to increase. This also means a greater number of drivers being detected and convicted for recidivist speeding. For the purposes of this Fact Sheet “recidivist speeding” will refer to a second or subsequent speeding offence within a 3 year period.

Strategies either implemented or being developed to address recidivist speeding include enforcement strategies and penalties, as well as education/rehabilitation programs and vehicle technology.

3. Enforcement and penalties

The most commonly applied strategy in the management of recidivist speeding is enforcement. Enforcement effectiveness is based on two types of deterrence: general deterrence, when a driver avoids speeding due to a general perception or fear of detection; specific deterrence, when a driver avoids speeding because of previous, negative experiences from having been detected and punished. While specific deterrence principles are particularly pertinent to recidivist speeders, general deterrence strategies such as covert speed enforcement operations are also relevant.

Speed enforcement can be undertaken through police operations or by automated traffic infringement systems such as fixed speed cameras. While on-road police traffic enforcement is a proven effective method of deterrence, it is also a resource intensive and costly strategy. Automated speed detection strategies complement police enforcement providing surveillance of multiple sites in a cost effective manner.

The penalties arising from speed enforcement are used as punishment to deter recidivist speeding behaviour by increasing the degree of punishment in relation to the number of prior offences (eg. whether first offence or a subsequent offence). Penalties include demerit points, monetary fines, licence suspension, licence disqualification and for chronic recidivists, perhaps imprisonment. Impounding and Confiscation of Vehicles (“hoon”) legislation can also be applied as a penalty for speeding offences of 45km/h or more over the speed limit.

A good overview of the effectiveness of various speed enforcement operations, optimum enforcement intensity and their associated effects on crash outcomes and deterrence can be found in C-MARC Fact Sheet No. 5 Safety Benefits of Speed Cameras (see: [http://c-marc.curtin.edu.au/local/docs/CMARC%20Fact%20Sheet%205%20Speed%20Cameras.pdf](http://c-marc.curtin.edu.au/local/docs/CMARC%20Fact%20Sheet%205%20Speed%20Cameras.pdf)). However, as with most speeding enforcement evaluations, the information is in reference to the general driving population and does not specifically address the issue of recidivist speeding behaviour.
4. Demerit points system and monetary fines

Within Australia and throughout the western world, the most commonly applied first level penalty used in speed management is the combination of demerit points and monetary fines. The demerit point system (DPS) was designed to deter recidivist behaviour through the accrual of demerit points for subsequent offences, with ongoing recidivist behaviour resulting in licence suspension/disqualification. Table 1 below lists the demerit points associated with the various speeding offences currently applied in WA, with the accompanying monetary fines. Full licence holders face licence suspension if they incur 12 or more demerit points within a three year period.

<table>
<thead>
<tr>
<th>Speeds (km/h) over the designated speed limit</th>
<th>Demerit points</th>
<th>Fines for cars and motorcycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 km/h</td>
<td>0</td>
<td>$75</td>
</tr>
<tr>
<td>10 - 19 km/h</td>
<td>2</td>
<td>$150</td>
</tr>
<tr>
<td>20 - 29 km/h</td>
<td>3</td>
<td>$300</td>
</tr>
<tr>
<td>30 - 40 km/h</td>
<td>5</td>
<td>$850</td>
</tr>
<tr>
<td>&gt;40km/h</td>
<td>7</td>
<td>$1000</td>
</tr>
</tbody>
</table>

Note: Demerit points may be doubled on designated long weekends or public holidays.

A Double or Nothing Option which replaced the previous Extraordinary Licence Option is now available to drivers in Western Australia who reach the 12 demerit point limit:

“Double or Nothing is an option that eligible drivers with 12 or more demerit points can elect once they have been served an Excessive Demerit Points Notice. By electing the Double or Nothing option a driver can continue to drive on a 12 month Good Behaviour Period. However, if they accrue more than one demerit point in the 12 month Good Behaviour Period or if they commit an offence which results in a disqualification, they will be disqualified for DOUBLE the original disqualification period.”

In 1969 NSW became the first State in Australia to implement a DPS and it is now adopted Australia wide. Research conducted by the NRMA (2002) into the NSW DPS revealed that 50% of drivers had accrued demerit points during their driving history with 21% holding demerit points at the time of the research. Demerit point offences were more common amongst males and drivers aged 30 to 49 years. The majority of drivers surveyed (67%) viewed the DPS as effective, with females reporting stronger support for the 12 point limit. However 65% of drivers who had previously incurred demerit point losses, reported that they had not changed their driving behaviour since accruing their demerit points.

The NRMA (2002) research recommends that to be successful, the DPS needs to be viewed as credible within the community in relation to the perceived severity of the offences and the appropriateness of the associated penalties. This need for community credibility poses a problem in relation to low level speeding as they found a common community attitude viewing lower level speeding as a minor road safety risk. Many drivers reported that the number of demerit points accrued for low level speeding offences should be reduced. When asked to rank a list of traffic offences in order from
lowest to highest according to how many demerit points they should attract, low level speeding was listed second after parking infringements and was ranked behind other demerit point offences such as not wearing seatbelts and failing to indicate. As a greater number of recidivist speeding offences result from low level speeding, education programs that highlight the risks associated with low level speeding may be necessary to challenge these community attitudes.

Research has identified that a driver’s prior demerit point accrual was found to be a predictor of subsequent crash involvement. While little research has been undertaken to evaluate the DPS’ effectiveness as a punishment it has been found that speeding recidivism reduces the closer a driver gets to facing licence suspension/disqualification, with longer time spans occurring between subsequent offences.

A Victorian Sentencing Advisory Committee (SAC) formed to examine the increasing incidence of driving while disqualified or suspended, found that many of these licence disqualifications or suspensions had resulted from an accumulation of demerit points. The SAC identified that the number of drivers in Victoria whose licenses were suspended as a result of demerit point accrual rose from 9,500 in 1993 to more than 28,000 in 2006-07. Although improved detection methods have played a key role in these increased recidivism rates, namely the number of drivers accruing multiple demerit point losses, it is also indicative that the DPS and the threat of facing licence suspension is an ineffective method of deterrence for certain driving sub-populations.

Basili and Nicita (2005) highlighted the variable effectiveness of the DPS across the road user population. They suggest that there are three distinct driving sub-populations who engage in illegal driving behaviours such as speeding:

- **completely deterred agents** - who aim to comply with the road laws and not lose any demerit points;
- **partially deterred agents** - who occasionally break road rules but value keeping their licence; and
- **not deterred agents** - who frequently disobey road laws and are not deterred by demerit point or licence loss.

Their research draws attention to a potential anomaly within the group of drivers categorised as partially deterred agents. They suggested that the deterrence effect of the DPS eventuates for this group of drivers as they approach the threat of licence disqualification and that re-instatement of demerit points over time for conforming driving behaviour may reduce the threat of licence disqualification and therefore the effectiveness of this sanction for this group of drivers. At the same time, Basili and Nicita acknowledged that the DPS does impose harsher punishment on recidivists while allowing for occasional errors by the generally compliant driving population.

More research is needed to evaluate the effectiveness of the DPS method of deterrence across the various illegal driver behaviours for which it is implemented, and more specifically its impact upon speeding recidivism.

It needs also to be recognised that there are variations to the basic DPS structure such as the Graduated and Double demerit point strategies.
Graduated Demerit Points
The greater crash and injury risk for novice drivers is well recognised: in Western Australia novice drivers are twice as likely to be killed in a vehicle crash compared to full licence holders. As a means to promote safer driving behaviour early in the licensing process, the Graduated Demerit Point System for Novice Drivers was introduced in Western Australia on the 1st December 2010. Novice drivers who lose more than three demerit points during the first two years of driving or more than seven demerit points during the first three years, will have their drivers license cancelled.

Double Demerit Points
Double demerit points are another strategy used to deter speeding behaviour and recidivism. The prescribed demerit point losses are doubled during designated long weekends, public holidays and holiday periods. Double demerit points on long weekends and holidays have been in effect for speeding, drink driving, drug driving and failing to wear a seat belt offences since Easter 2002.

A review of the double demerit point scheme undertaken in 2009 found the majority of the community supported the scheme (69%), with 62% of drivers reporting a reduction in their speeding behaviour. Despite the level of police enforcement being increased during double demerit times, the number of infringements per enforcement hour was found to be 42% lower than during non-double demerit point times. Double demerit points data from 2008 found the average number of daily reported crashes (total and injury) is lower during double demerit times compared to non-double demerit point times. However, speed related crash data has shown mixed results. Reported crashes where speed was identified as a factor were 40% lower than during double demerit point periods during 2002/03, with speed involved fatal crashes and injury crashes down by 52% and 43% respectively. However during 2008 the daily average speed involved crash rate was slightly higher during double demerit compared to non-double demerit periods.

Neither the Graduated nor Double demerit point variations to the basic DPS structure have been evaluated for impact on recidivist speeders.

5. Licence suspension or disqualification
Licence suspension or disqualification is the next level of penalty applied in recidivist speeding management and can result from reaching or exceeding the permissible demerit point limit for one’s licence type or under the Impounding and Confiscation of Vehicles (“hoon”) Legislation for exceeding the speed limit by over 45km/h.

A Victorian Sentencing Advisory Council (SAC) found that one fifth of suspended prison sentences imposed across all crimes during 2006-07 were for driving while disqualified or suspended. During 2000-01 approximately 2,850 people were sentenced for driving while disqualified or suspended; a number which increased nearly threefold to 8,600 people in 2006-07. The SAC findings suggest that with the evolving traffic legislation and detection methods, a broader range of driving behaviours now result in licence disqualification or suspension – and in driving while disqualified or suspended. This finding has at least two implications. First, licence disqualification or suspension seems to be ineffective for a growing number of recidivist traffic offenders. Secondly, legislation and punitive measures may need to be tailored to accommodate the different sub-groups of recidivists. For example, deterrence strategies aimed at a driver who accrues 12 demerit points over a period of three years for low level speeding may not be applicable
to a recidivist speeding driver convicted of exceeding the speed limit by 45km/h or greater. Currently both may result in the same penalty of licence suspension or disqualification, perhaps with differing levels of compliance.

6. Vehicle sanctions

Vehicle sanctions for speed offences include immobilization using wheel locks (booting), impoundment, forfeiture and confiscation. While vehicle sanctions have been used in the USA, Canada and New Zealand for over a decade, they are a relatively recent introduction in Australia. Vehicle impoundment has been the main vehicle sanction option, although some states such as Tasmania are currently exploring the use of wheel locks. Vehicle impoundment involves the confiscation of a vehicle usually at the time of detection, with the vehicle then impounded at a storage facility for a specified time period. After the time period has lapsed, the vehicle can then be collected, with the driver/owner of the vehicle responsible for paying the associated towing, impoundment and storage costs.

While international vehicle sanction programs have typically focused on disqualified and drink driving offences, Australian vehicle impoundment legislation also addresses antisocial driving behavior, commonly referred to as “hoon” legislation. In Western Australia under the Impounding and Confiscation of Vehicles (“hoon”) Legislation, Police have the authority to immediately impound a vehicle detected travelling 45km/h over the designated speed limit. For a first offence the vehicle is impounded for 28 days at the driver’s expense – with a second offence resulting in impoundment for three months and a third offence, six month impoundment or permanent confiscation of the vehicle.

The few existing evaluations into vehicles sanctions suggest that it is an effective sanction resulting in significant crash reductions which is particularly useful for targeting challenging driving sub-populations such as recidivist disqualified drivers. Its effectiveness in managing speeding recidivism specifically has yet to be evaluated.

7. Education and rehabilitation

Education and rehabilitation programs, often referred to as “offender programs”, have become a common management strategy in addressing drink driver behaviour both nationally and internationally. The incentive for attendance at these courses varies for example in the Nederlands and many EU Countries is that attendance is compulsory to avoid licence suspension whereas in Belgium and Sweden attendance may result in a reduced sentence or fine. In Australia, attendance is often a re-licensing requirement following licence suspension with these programs currently available for drink driving offences but not for speeding.

While the use of rehabilitation programs for drink driving offenders is well established, countries such as the UK and Belgium are exploring the effectiveness of programs for recidivist speeding offenders. Incentives for attending the program may include a deduction of demerit points, reduced fines or shortened licence suspension time frames. In South Australia Driver Intervention Programs (DIP) are conducted for any driver under 25 years of age (L or P-platers) who have had their licence disqualified. The DIP has had over 25,500 attendees since its commencement in 1994. It is an interactive workshop of 1.5 hrs duration which aims to encourage young drivers to explore their attitudes
surrounding illegal driving behaviour and the associated road safety risks. Following an evaluation of the program it was recommended that the duration of the workshop be increased and a greater emphasis placed on engaging the participants psychologically using strategies such as computer based sessions.\textsuperscript{15} It is important to note that the DIP is not limited to speeding offenders and also that its effect on subsequent offence and crash rates has yet to be evaluated.

Evaluations into the effectiveness of offender education/rehabilitation programs have predominantly focused on drink driver programs and are not necessarily generalisable to recidivist speeding management. In general these rehabilitation programs appear to be more successful: when combined with other sanctions such as licence suspension; with the adoption of an empathic rather than confrontational approach; and when implemented as an early intervention targeting novice and young offenders to prevent the development of inappropriate driving behaviour.\textsuperscript{16}

In 2009 Austroads conducted a review to identify best practice speed management intervention models.\textsuperscript{13} In this report they present the findings from an evaluation into the Speed Awareness Scheme (SAS), a well established UK program. Typically this program consists of a computer based driving assessment from which a personalised driving profile is compiled. This is followed by a group discussion session exploring topics such as hazard perception skills, and strategies to modify speeding behaviours. Evaluations of the SAS have identified that avoiding demerit point loss was the key motivation for attending the course and that participants viewed the computer session and driving profile as the most valuable aspects of the program. A reduction in re-offending rates for program attendees compared to non-attendees was found to be statistically significant (Flyan et al., 2006 cited in Styles et al., 2009\textsuperscript{13}). The importance of evaluating education programs using participant outcomes such as reductions in crash and recidivism rates, rather than relying on self report evaluations is highlighted in the Austroads evaluation. This recommendation is based on findings that intentions do not necessarily result in actual behaviour change, Flynn et al., (2006) cited in Styles et al., 2009 found re-offending rates for drivers who reported positive driving behaviour changes were comparable to drivers who reported no driving behaviour change.

### 8. Vehicle technology

Intelligent Speed Adaptation (ISA) is a generic term for a class of Advanced Driver Assistance System (ADAS) in which the driver is warned and/or the vehicle speed is automatically limited when the driver is travelling over the posted speed limit, identified via GPS.\textsuperscript{22} ISA systems that override a driver’s ability to exceed the designated speed limit by use of speed governors or retarders, is currently being explored for its applicability to recidivist speeding behaviour. Potentially the ISA would be fitted in the car of a recidivist speeding offender (similar to the use of alcohol interlocks for drink driving offenders) and would inhibit the driver from travelling over the designated speed limit. It is envisaged that the ongoing advancement of this technology will result in ISA becoming a standard safety feature in all new vehicles.

A report into traffic enforcement in EU Countries identified the potential of using ISA as a preventative measure in addressing speeding behaviour.\textsuperscript{8} It was suggested that the application of ISA would result in a cost saving method of deterrence (compared to the expense of on-road police enforcement) that would assist the current enforcement focussed speed management strategies. ISA is still in the development stage so while the
potential to address recidivist speeding behaviour is anticipated by road safety stakeholders, its effectiveness as a sanction is yet to be proven.

9. Summary

The most common speeding management strategy is enforcement which is undertaken via on-road police operations and automated technology such as speed cameras. Penalties are applied as a punishment to deter recidivism, as well as initial speeding offences. The DPS combined with monetary fines is the first level of penalty administered. Recidivist speeding behaviour results in the accumulation of demerit points and when these exceed the permissible limit, licence sanctions such as licence suspension or disqualification are implemented. Amendments to the hoon legislation now enable the immediate impoundment of vehicles from drivers travelling at excessive speeds. While traffic offender education and rehabilitation programs have traditionally focussed on drink driving behaviour, their effectiveness in addressing recidivist speeding behaviour is now being explored. The installation of ISA into recidivist speeding offenders’ vehicles is keenly anticipated by road safety stakeholders as a likely effective countermeasure, although further development of this technology is required before this approach can be fully endorsed.

The majority of research into traffic offence recidivism has focussed on drink driving behaviour and the paucity of research exploring recidivism in relation to speeding behaviour makes it difficult to evaluate the effectiveness of the current management strategies. In particular, further research is needed to identify the various subgroups within this driving/riding population to enable the development and evaluation of the most appropriate management strategies to target recidivist speeding.
10. References


22 Young & Lenné, 2010, p.22.

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