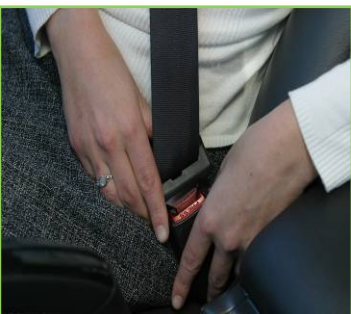


# AUSTROADS RESEARCH REPORT

## Developing Measures to Reduce Unlicensed Driving



# **Developing Measures to Reduce Unlicensed Driving**

***Developing Measures to Reduce Unlicensed Driving***

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# Developing Measures to Reduce Unlicensed Driving



*Austrroads*  
Sydney 2013

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## LIST OF TERMS AND ABBREVIATIONS

The following is a list of terms and abbreviations commonly used in the report.

### DEFINITIONS

Driver - the driver of a car, van, sports utility vehicle, bus or truck.

Driver disqualification - This means the person is not legally permitted to drive or apply for a licence for a specified period. This can apply to people who have never held a licence or did not hold one at the time of the offence for which the disqualification was applied.

Motorcyclist - the rider of a motorcycle.

Motorist - either a driver or motorcyclist.

Licence - unless stated otherwise, reference to a licence includes reference to a learner permit / any other term used in Australia/New Zealand for a learner permit.

Licence cancellation - This means that the licence ceases to exist. A person with a cancelled licence has to reapply for a licence at the end of the cancellation period.

Licence suspension - This involves the temporary withdrawal of driving privileges. The licence is automatically reinstated at the end of the suspension period.

Provisional/Probationary/Restricted Licence - This is the licence phase within the graduated licensing system when the novice driver is permitted to drive unaccompanied but is subject to a variety of restrictions. Successful completion of this phase leads to a full licence. Note that all jurisdictions in Australia use the term 'provisional licence' except Victoria, which uses the term 'probationary licence'. New Zealand uses the term 'restricted licence'.

Unlicensed driving – driving can include riding of motorcycles.

### ACRONYMS AND ABBREVIATIONS

ANPR - Automatic Number Plate Recognition

ISA - Intelligent Speed Adaptation

NEVDIS - National Exchange of Vehicle and Driver Information System

RBT - Random breath testing

RDT - Roadside drug testing



# 1 INTRODUCTION

Unlicensed motorists pose a problem to road safety authorities as they are operating independently of the established licensing system and are known to have higher than average crash rates. By operating beyond the licensing system, unlicensed motorists reduce the ability of authorities to monitor and manage driver behaviour and reduce the impact of the sanction of licence loss. In the interests of reducing the incidence of unlicensed driving on Australian roads, Austroads commissioned this report into the best candidate countermeasures. The report is based on a review of Australian and international literature, with an emphasis on articles with the greatest relevance to Australia<sup>1</sup>, and on discussions with key stakeholders. Following the literature review, and further discussions with stakeholders, a path to implementation was developed for countermeasures identified as being those most likely to be effective and feasible in Australia for reducing unlicensed driving.

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<sup>1</sup> The project was concerned with countermeasures to be recommended for Australia only.

## 2 ANALYSIS OF UNLICENSED DRIVING

Our review of unlicensed driving literature has shown that driving illegally by those without a valid licence is common on Australian roads and that unlicensed motorists have a greater risk of crash involvement than appropriately licensed motorists. Among those without licences, between 30% and 70% drive at least sometimes. Fatal crash data indicate that between 10% and 20% of such crashes involve unlicensed motorists.

Driving without an appropriate licence can take many forms, including the following broad categories:

- never obtaining a licence (including underage driving)
- licensed in another country or Australian jurisdiction only but not exempted from the requirement to hold a licence issued by the Australian jurisdiction in which they are driving
- driving with a suspended or cancelled licence, or when disqualified from driving - could be:
  - court-ordered for a driving offence
  - due to operation of an infringement notice for a driving offence
  - due to accumulation of demerit points
  - due to medical or other fitness to drive concerns
  - due to being suspended or forbidden to drive by police e.g. when detected for drink or drug driving offences
  - due to unpaid infringement notices which may not be related to driving offences
  - court-ordered for a non-driving offence
- driving unlicensed after a disqualification period has ended (i.e. driving without taking the steps to become licensed after a disqualification)
- driving with an expired licence (which could include expiration related to licence renewal bans put in place for unpaid infringement notices which may not be related to driving offences)
- driving with a licence inappropriate for the class of vehicle being driven (e.g. riding a motorcycle with only a car licence)
- driving outside the restrictions of a special licence (e.g. driving a vehicle not fitted with an alcohol interlock).

This all means that unlicensed motorists are a diverse group. The driving behaviours exhibited by the various sub-categories of motorists are likely to be different and so are the associated risks, and most appropriate countermeasures.

The two groups of greatest concern, particularly in terms of crash involvement, are those who drive while disqualified or with a suspended or cancelled licence, and those who have never been licensed. Those who are disqualified or have a suspended or cancelled licence would have a greater risk of crashing due to the same risky behaviours (e.g. drink driving) that resulted in the disqualification or suspension or cancellation, while those who have never been licensed would in many cases lack the experience and skills to drive safely, as well as exhibiting risky driving behaviours. These groups of unlicensed motorists are more likely to be male, aged in their twenties, indigenous, to have criminal histories, and to drink and drive. Rural or remote locations, and a lower socioeconomic status are also over represented. Those who have never held a licence are more likely to use drugs and to engage in sensation-seeking behaviours.

Crashes involving unlicensed motorists are more likely to involve high degrees of injury severity, alcohol and drugs, speeding, and the failure to wear seatbelts or helmets. Unlicensed motorists are more likely to be responsible for the crashes they are involved in. It is sometimes claimed that unlicensed motorists, eager to avoid detection, drive more safely. However, the evidence is clear that, irrespective of any self-reported changes in their driving habits, these motorists have an elevated crash risk associated with irresponsible driving behaviours.

Reasons for driving unlicensed are varied, but many unlicensed motorists cite the need to drive for employment. In remote and regional areas, the long distances that need to be travelled and the lack of available alternative transport options make it difficult to manage without driving. Many will weigh up the inconvenience of not driving with the perceived low likelihood of detection for driving without a valid licence, and will choose to drive.

Despite the high proportion of disqualified motorists or those with suspended or cancelled licences continuing to drive, the use of licensing sanctions within the penalty regimes in Australia is still recommended. Even if unlicensed driving occurs, the exposure of these dangerous motorists is reduced, leading to crash and offence rates lower than those of similar motorists who have not been disqualified or whose licences have not been suspended or cancelled.

For the reasons above, it is necessary that countermeasures be implemented to reduce the prevalence of unlicensed driving. The countermeasures that are needed include:

- improvements in the detection of unlicensed motorists
- more effective sanctions for those who are detected
- encouraging the uptake of licences for people who, for whatever reason, are outside of the licensing system
- making it more difficult to drive without a licence.

## **3 POSSIBLE COUNTERMEASURES**

### **3.1 Improved Detection**

Countermeasures to improve the detection of unlicensed motorists are crucial, not only to detect them, but also to increase the perceived risk of detection, which is essential for deterrence. As stated above, those without licences generally perceive the risk of detection to be low. The two main methods that can be encouraged in Australia for increasing the detection of unlicensed motorists are licence checks as standard practice during RBT and RDT operations (see section 4.1), and the use of ANPR systems to target licence checks at vehicles registered to people known to be unlicensed (see section 4.2). Licence checks during RBT and RDT operations require quick real time access to licensing databases, in order to ensure that the licence checking process does not delay motorists for too long. Ideally, hand held devices would be used to aid the efficiency of the licence checks. Also required is strict mandatory carriage of licence legislation, whereby motorists must carry their licence while driving or else an offence is recorded and a penalty applied without fail. Such legislation is generally accepted by the public, with many people in jurisdictions without such strict laws erroneously believing it to be the case already. ANPR requires the widespread deployment of the necessary technology, including the camera system and in-vehicle licensing database access. Police using ANPR have generally been impressed by its effectiveness. Increasingly, police are moving toward the use of dual systems coupling ANPR with in-vehicle video systems.

### **3.2 Effective Sanctions**

In terms of sanctions for unlicensed driving, it is unlikely that increasingly harsh penalties will have much effect on the behaviour, particularly in the absence of improvements in the likelihood of detection. The effectiveness of imprisonment and additional fines is questionable, and, again, this requires a high perceived likelihood of detection. Rehabilitation and education programs have not been as successful as would ideally be the case, although carefully designed programs should continue to be implemented on a trial basis and submitted to methodologically sound evaluations.

The most promising sanction to use with unlicensed driving is vehicle impoundment or immobilisation (see section 4.4). For those for whom licensing sanctions have clearly failed, sanctioning the vehicle is the next option to pursue. These sanctions should only be used for serious offences (e.g. driving while disqualified, rather than having a recently expired licence). Impoundment does require secure storage facilities, which can be costly. However, prices for return of the vehicle can be set high enough to recover costs and unclaimed vehicles can be sold. Cheaper options include vehicle immobilisation, such as with steering locks, seizure of number plates, and blocking registration of vehicles by disqualified drivers. Alternatively, combined sanctions could be used, with first offences resulting in immobilisation and subsequent offences being punished with impoundment. It may need to be accepted that owners of vehicles who have lent them to people they were unaware were unlicensed should not have their vehicles seized. This, however, should be recorded and the excuse only accepted once.

Better communication with penalised motorists is required within the justice and licensing systems. Many unlicensed motorists are unaware that their licences are suspended and many have difficulties understanding the legal processes and the consequences of subsequent detection for unlicensed driving (see section 4.7).

### 3.3 Encouraging Licensed Driving

Encouragement of having a licence is a particularly important issue for those living in remote communities in Australia. People in these communities often have problems with socioeconomic disadvantage, low levels of literacy, problems with understanding English, difficulties accessing licensing services from remote locations, and problems in establishing identity. Additionally, they often face challenges in gaining access to appropriate, roadworthy, registered vehicles, and to appropriate supervising drivers willing and able to fulfil the minimum hours of supervised driving requirements that are a common element of modern graduated driver licensing schemes. A number of projects are being initiated around Australia to address these issues. It is too early to be certain which approaches are working best, and so it is important that the various groups undertaking these projects communicate with one another to develop best practice models for effective delivery of licensing services to remote communities (see section 4.8).

### 3.4 Making Unlicensed Driving More Difficult

Finally, methods to make unlicensed driving more difficult include employer checks on employees' licence status (including the category and conditions of the licence) and the introduction of electronic driver licences which enable technology to link the motorist to the vehicle. Given the increasing importance of occupational health and safety provisions within modern workplaces, and the existence of laws that prohibit employment of unlicensed drivers, there should be considerable institutional support for systems allowing employers to check that their employees who drive company vehicles are appropriately licensed. A system such as Driver Check in New Zealand could serve as a good model (see section 4.9).

Perhaps the most effective tool for reducing the incidence of unlicensed driving would be the use of electronic driver licences that double as an ignition key, preventing the operation of vehicles by unauthorised or unlicensed motorists (see section 4.10). However, the much simpler technology of smart card driver licences has only been introduced thus far in one Australian jurisdiction. Most other jurisdictions are monitoring the smart card trial in Queensland to form a judgement about future plans for licence cards, and a number harbour doubts about the affordability of the infrastructure to support smart cards. Any move to electronic driver licences would require considerably more co-operation between government and industry, and much greater resources dedicated to policy development and the establishment of supporting infrastructure. One of the major barriers to the introduction of an electronic driver licence is cost.

Another issue to be solved is the ability to use other people's driver licence cards to start a vehicle. In order to prevent this, the in-vehicle system would need to be able to determine that the driver was the same person named on the licence card. This would require far more sophisticated technology to be built into the system, which would involve increased costs. Such technology could include fingerprint reading or face recognition software. This, in addition to the increased cost and the difficulty of designing foolproof technology, could also raise concerns regarding privacy and civil liberties. However, if biometric recognition systems were used, the system that recognised the identity of the driver could check the licensing database remotely, without it being necessary for the driver to have a complex licence card.

At this time, such licences, although potentially very effective, remain a long term goal. It would be worthwhile keeping abreast of technological developments in this area but it is difficult to determine any possible timelines for the introduction of electronic driver licences.

### 3.5 Summary

On the basis of the analysis, the Table 3.1 represents a preliminary assessment of the countermeasures most likely to be effective in the Australian context. Table 3.1 lists the countermeasure, its effectiveness (low, medium or high, with consideration given to the range of unlicensed motorists affected) and its feasibility (high, medium or low, and short, medium or long term) in Australia.

Table 3.1: Unlicensed driving countermeasures for consideration in Australia

Countermeasure	Effectiveness*	Feasibility
Licence checks during RBT, RDT operations	Medium Optimised by mandatory carriage of licence laws and easy access to licensing databases for police	High - short term Already used in some jurisdictions
Automatic number plate recognition (ANPR)	Medium Only detects unlicensed motorists who are registered owners/operators of vehicles Also optimised by mandatory carriage of licence laws and easy access to licensing databases for police	High - short term Already used in some jurisdictions
Trials of rehabilitation/education programs	Low Limited evidence for effectiveness of such programs	Medium - medium/long term Will take time to assess results
Vehicle impoundment/immobilisation	Medium Does require detection of unlicensed motorists	High - short term Already used in some jurisdictions
Improved communication with unlicensed motorists	Low	Medium - short/medium term
Programs to encourage licensing in remote communities	Unknown Outcomes of current programs still to be assessed	Medium - long term
Services allowing employers to check the licence status/class/category/conditions of employees	Low/Medium Only affects driving for work by employees of businesses using the service	Medium - short/medium term Already used in some jurisdictions but have been successful objections in others
Electronic driver licences linked to vehicle ignition	High in theory Yet to be demonstrated	Unknown - long term

\* Includes consideration of the range of unlicensed motorists potentially affected by the countermeasure

Table 3.2 lists some countermeasures that were considered but are unlikely to be effective.

Table 3.2: Unlicensed driving countermeasures unlikely to be effective

Countermeasure	Effectiveness*	Feasibility
Restricted licences	Low Prone to abuse	High - short term
Additional licence sanctions	Low Serious offenders already violating licence sanctions	High - short term
Fines greater than cost of relicensing	Low Will only affect those weighing up fines and costs of relicensing Optimised by perceived high risk of detection	Low - short term Difficult to set a fine at a level greater than cost of obtaining a licence

\* Includes consideration of the range of unlicensed motorists potentially affected by the countermeasure

## 4 RECOMMENDED COUNTERMEASURES AND PATH TO IMPLEMENTATION

Potential countermeasures for the problem of unlicensed driving were reviewed in order to determine the most effective and feasible for implementation in Australia. For each, a set of benefits, impacts, costs and risks is specified in the report.

Table 4.1 shows the countermeasures recommended for implementation in Australian jurisdictions to reduce the incidence of unlicensed driving. For each, the table shows whether the countermeasure can be implemented in the short, medium or long term, and whether it has already been implemented in any Australasian jurisdictions.

Table 4.1: Summary of recommended countermeasures for unlicensed driving

Countermeasure	Term	Currently implemented in Australasia
Licence checks with RBT/RDT	Short	NSW, NZ. Only RDT: NT, SA
Automatic Number Plate Recognition	Short	Yes
Operator onus offences	Short	No
Vehicle impoundment/immobilisation	Short	NZ, Qld, SA, Tas, Vic, WA
Trials of rehabilitation/education programs	Medium	No
Use of technology to reduce problem behaviours	Short: Alcohol interlocks Medium/Long: ISA	Interlocks: Yes ISA: Trials being conducted
Improved communication with unlicensed drivers	Short	Communication in court: improvements possible in all jurisdictions Proof of Service legislation: SA
Best practice programs to encourage licensing	Medium/Long	Trials being conducted
Employee licence checks by employers	Voluntary: Medium Mandatory: Medium/Long	NZ (voluntary) Heavy vehicles: NSW (voluntary)
Electronic driver licences linked to vehicle ignition	Long	No

Of the countermeasures shown in Table 4.1, a suggested path of implementation is recommended only for the following countermeasures:

- licence checks as a routine component of Random Breath Testing (RBT)/Roadside Drug Testing (RDT) operations (section 4.1)
- automatic number plate recognition (section 4.2)
- use of operator onus offences to detect unlicensed driving offences (section 4.3)
- use of technology to address problem behaviours leading to loss of licence (section 4.6)
- services allowing employers to check the category, currency and conditions of driver licences of employees required to drive for work (section 4.9).

For vehicle impoundment or immobilisation, a best practice model is suggested (section 4.4).

For programs to encourage licensing in disadvantaged groups, the report recommends that the various programs already in existence are subjected to greater overall co-ordination, with steps necessary for this specified (section 4.8).

For electronic driver licences linked to a vehicle ignition, a forum or workshop is recommended, with topics to be discussed and groups to invite being specified (section 4.10).

For some potential countermeasures, recommendations are made without a series of steps being specified. These include education or rehabilitation programs, for which it is recommended that any potentially effective programs be submitted to rigorous trials (section 4.5). It is also recommended that there is better communication with drivers whose licences have been suspended or cancelled, or who have been disqualified from driving, and that the outcomes of the Proof of Service legislation in South Australia are monitored (section 4.7).

In section 4.11, there is a list of other recommendations relevant to addressing unlicensed driving, some of which are components of the various paths to implementation but which are worth consideration separately. These include:

- the introduction of strict mandatory carriage of licence laws;
- the provision to police of immediate in-vehicle access to registration and licensing databases;
- media campaigns combining promotion of mandatory carriage of licence laws, licence checks during RBT/RDT operations and the use of ANPR;
- the prevention of unlicensed drivers from registering a vehicle; and
- a review of the effectiveness of current medical review procedures.

## 4.1 Licence Checks During RBT or RDT

Table 4.2: Licence checks during RBT/RDT combined with mandatory carriage of licence laws: Benefits, impact, costs and risks

Benefits	Improved detection, improved deterrence, ease of enforcement.
Impact	Detection and sanctions applied to unlicensed drivers of all types passing through RBT/RDT sites. Specific deterrence of these drivers and general deterrence associated with high visibility enforcement and media campaigns.
Costs	Greater delays during RBT. Costs of improved licensing cards and police in-vehicle technology for checking licence status. Administrative costs for establishing mandatory carriage of licence laws. Costs of media campaign to promote new laws and enforcement. Police resources for enforcement.
Risks	Objection to licence checks on basis of civil liberties. Public objection to mandatory carriage of licence laws. Drivers with a recent court-ordered licensing sanction may not have these recorded in the licensing database at the time of a licence check.

The following is a list of steps to be completed to increase the perceived risk of detection for unlicensed driving through the undertaking of licence checks during RBT/RDT operations. Some jurisdictions would already have implemented a number of these steps. There is no strict order in which these steps would need to be taken and a number of them could run concurrently.

1. Examine relevant legislation to ascertain whether the requirement not to unduly detain motorists precludes the inclusion of licence checks in the RBT process. If necessary, amend the legislation to permit short delays to check licences.
2. Ensure that the licensing database used by police is updated regularly. Ideally, the database being used would be NEVDIS so that interstate licences can be checked.
3. Provide the police with in-vehicle or hand-held devices to quickly access the relevant licensing database to check the validity of provided licences. The device used will need to be matched to the technology available with the licence card.
4. Introduce licence cards that simplify and increase the efficiency and timeliness of police checks of licence status. The cards could be smart cards or, if expense is a consideration, the cards could have a barcode on the back.



5. Introduce strict mandatory carriage of licence laws, so that all drivers must produce a valid licence when requested to by a police officer. If a driver is unable to produce a valid licence, a penalty for non-carriage of licence should be applied, and then the driver's licence status confirmed to ascertain if an unlicensed driving charge is also applicable.
6. Run a media campaign promoting the introduction of the strict licence carriage laws and the use of licence checks during RBT/RDT operations to enforce the new laws. The high crash risk of unlicensed drivers should be emphasised so that the enforcement is understood to be a road safety measure.
7. Begin licence checks during RDT and expand to RBT. If maintenance of vehicle throughput is a key priority, conduct licence checks only on a subsample of drivers during RBT (e.g. every third platoon pulled in for testing).

## 4.2 Automatic Number Plate Recognition (ANPR)

Table 4.3: Automatic number plate recognition: Benefits, impact, costs and risks

Benefits	Improved detection, improved deterrence.
Impact	Detection of drivers in cars registered in their name who have been disqualified or whose licence has expired or been suspended/cancelled.
Costs	Cameras and associated technology. Police resources for enforcement, including processing of offences. In-vehicle systems to check licence status. Improved licence cards. Administrative costs associated with establishing mandatory carriage of licence laws.
Risks	Need production of number plates that can be read by ANPR. Registration of a vehicle in the name of someone else with a valid licence makes it possible to evade detection by ANPR.

The necessary steps for establishing an ANPR operation would ideally include those outlined in section 4.1 for licence checks during RBT and RDT operations. This is because the use of ANPR for detecting unlicensed drivers still requires a police licence check for the driver. As such, it would be best served by quick access to a reliable licensing database using in-vehicle or hand-held technology compatible with a suitable licence card, and the strict requirement for carriage of a driver licence when driving. The media campaigns referred to in section 4.1 for promoting licence checks during RBT and RDT operations could also mention the use of ANPR to target unlicensed drivers.

In addition to the steps above, it would be necessary to obtain the necessary equipment and train traffic police personnel in its use and strategic deployment methods. The best group to approach for advice regarding these steps would be the Police in New South Wales, who have conducted the greatest amount of ANPR operations, and Western Australia, who have been at the forefront of recent vehicle-based technological advances in this area in Australia.

## 4.3 Use of Operator Onus Offences to Detect Unlicensed Driving

Table 4.4: Use of operator onus offences to detect unlicensed driving: Benefits, impact, costs and risks

Benefits	Improved detection of unlicensed drivers who are registered operators of vehicles detected committing other offences by automatic enforcement. Use of existing processes to enhance enforcement.
Impact	Detection of drivers in vehicles registered in their name who have been disqualified or whose licence has expired or been suspended/cancelled.
Costs	Additional processing resources needed prior to sending out of infringement notices.
Risks	Other people may protect unlicensed drivers by claiming to be the driver at the time that the offence was committed.

The use of automatic detections of ‘operator onus’ offences as an opportunity to check the registration of the vehicle and the licence status of the registered operator needs to be assessed for its cost-effectiveness. The steps to implementation are therefore:

1. Jurisdictions would need to calculate the extra time, and therefore cost, it would take to add this level of processing to each operator onus offence.
2. This would need to be weighed against the likely avoidance of unlicensed driving charges by registered operators who get another person to claim to be the driver. The extent to which other drivers claim offences instead of the registered operator for other operator onus offences could be used as an estimate for the extent to which it will occur for unlicensed driving offences.

## 4.4 Vehicle Impoundment or Immobilisation

Table 4.5: Vehicle impoundment/immobilisation: Benefits, impact, costs and risks

Benefits	Improved deterrence. Deprivation of means of offending.
Impact	Deterrence of unlicensed driving by those who have been disqualified from driving, those in violating alcohol interlock conditions, those with suspended or cancelled licences, and those who have never held a licence.
Costs	Impoundment costs: towing, storage, administration, disposal of unclaimed vehicles
Risks	Punishing owner of a vehicle lent to a driver not known by owner to be unlicensed. Problem of removal of vehicle from remote or disadvantaged communities. Problem of wealthy unlicensed drivers purchasing another vehicle or unlicensed drivers using an unregistered vehicle.

Most Australian jurisdictions already have vehicle impoundment/immobilisation legislation in place, with various types of unlicensed driving included in the list of prescribed offences. For this reason, it is perhaps most useful to describe a set of components that would comprise a best practice vehicle impoundment/immobilisation scheme in so far as it applies to unlicensed driving. These components are in place in a number of different jurisdictions and have been chosen largely on the basis of consultations with stakeholders.

1. Impoundment (or immobilisation) should only apply to the most serious unlicensed driving offences. These include driving despite never having been licensed, driving a vehicle without an interlock when holding a licence that specifies the requirement for an interlock-fitted vehicle, driving while disqualified or with a suspended or cancelled licence (although not for a licence suspended due to non-payment of fines), and driving a vehicle with an inappropriate licence. For the most serious offence of driving while disqualified, vehicle impoundment/immobilisation should apply for a first offence. For the other offences, jurisdictions could consider only applying impoundment/immobilisation for second and subsequent offences, if calculations determine impoundment/immobilisation to be expensive. However, this system of penalties needs to be combined with a system of enforcement that optimises the likelihood of detection so that the non-application of impoundment/immobilisation for a first offence is not too lenient a response to drivers who have likely offended on multiple occasions.
2. The key benefit of vehicle impoundment is the prevention of use of that vehicle by the unlicensed driver. This can be achieved as effectively with immobilisation of the vehicle as with impoundment. Given the lower cost of immobilisation, jurisdictions should consider it as an alternative to impoundment, particularly if it means that the penalty can be applied to a first offence.

3. The time period for impoundment or immobilisation should be 28 to 30 days for a first impoundment offence and three months for subsequent offences. Forfeiture could be considered for the third impoundment/immobilisation offence, although this should be decided by a court.
4. When vehicles are impounded, the costs of release of the vehicle should be set to offset all costs of the impoundment (towing, administration, storage and disposal of unclaimed vehicles). Costs associated with immobilisation should similarly be applied before removal of the means of immobilisation (e.g. steering lock).
5. When vehicles are unclaimed or forfeited, they should be assessed for their roadworthiness and safety standard. If the vehicle is roadworthy and meets an Australian New Car Assessment Program 4-star safety rating, it should be sold at auction. The funds raised should be used to pay impoundment costs. If there is a shortfall, this money should be sought from the owner, with debt collection used if necessary. If the vehicle is not roadworthy or of an insufficient safety standard, there are two options. One is for the vehicle to be crushed. In this case, the costs of crushing should be added to the other costs of impoundment that are charged to the owner. There are environmental concerns about crushing of vehicles, however. A second option is to sell the vehicle to a dismantler. The hazardous materials in the vehicle, such as tyres, could be removed. The removal of low-value, unsafe vehicles from the jurisdiction's roads is a safety benefit in itself.
6. Provisions need to be made for cases in which a vehicle owner lends the vehicle unknowingly to someone who is unlicensed or cases in which the vehicle is stolen. The owner in such cases should be permitted to reclaim the vehicle and seek any costs from the offender, using civil proceedings if necessary. However, the details of the owner need to be recorded, so that any subsequent unlicensed driving offences committed in a vehicle registered to that owner result in a full term of impoundment or immobilisation. In jurisdictions without it, an offence should be established for knowingly allowing an unlicensed person to drive your vehicle.
7. There should also be hardship provisions included in any vehicle impoundment/immobilisation legislation. If the impoundment or immobilisation of a vehicle denies a remote community of one of its few roadworthy vehicles, then the negative effects on that community need to be weighed against the positive effects of applying a sanction to the vehicle being used in the commission of the offence. Other forms of hardship may also warrant consideration. Administrative impoundment/immobilisation tends to be applied in a discretionary manner by the police. It is desirable that this discretion is reserved for cases of hardship.
8. To reduce the likelihood that wealthy unlicensed drivers purchase replacement vehicles, vehicle registration should require that the primary operator holds a valid driver licence at the time of registration.

## 4.5 Trials of Rehabilitation or Education Programs

Table 4.6: Trials of rehabilitation or education programs alone: Benefits, impact, costs and risks

Benefits	Possible identification of programs that address the root causes of problems leading to unlicensed driving. Could reduce unlicensed driving more cheaply than reductions achievable through enforcement.
Impact	Depends on the program. Most likely addressing drink driving problems or speeding behaviours that ultimately lead to driving while disqualified or with a suspended or cancelled licence.
Costs	Course development. Costs associated with training people to deliver the courses. Establishment and maintenance of administrative support for the programs. Funds for evaluation of program effectiveness.
Risks	Money spent on untried programs that may not work.

Consideration should be given to conducting carefully designed and rigorously evaluated trials of education or rehabilitation programs. Programs would mainly need to address behaviours such as drink driving or recidivist speeding that result in loss of licence. Ideally, any trials would involve random assignment of offenders to treatment and control groups. Random assignment is essential as it allows for greater confidence that the effects of a program can be separated from the effects of characteristics or other factors that may differ between different groups of drivers.

The best outcome measure for any trial evaluation would be reductions in recidivism among drivers in treatment and control groups. Any trial program is unlikely to have an effect on population offence rates. Such effects would only be expected once an effective program had been running for some time. The initial effect of a trial would be confined to those few completing the program. If an effect is found among these drivers, then ongoing use of the program may be expected to lead ultimately to reduced population level offending.

Although it is claimed that education programs are inexpensive compared to broad enforcement programs, there are still significant costs associated with these programs that need to be considered in light of their historical lack of demonstrable effectiveness. There is course content development, costs for training the course delivery personnel, and costs in establishment and maintenance of administrative support for the program. The need for an evaluation also means that funds must be set aside for designing an appropriate methodology and undertaking the evaluation. It may be that rehabilitation or education programs could be included in a package of reforms such that the programs complement the other reforms.

Indeed, one means by which the success of such programs could be improved is by the combination of rehabilitation and education with more direct interventions that reduce the ability to engage in the risky driving behaviour. These direct interventions are discussed in the next section (section 4.6).

## 4.6 Use of Vehicle Technology to Address Problem Behaviours Leading to Loss of Licence

Table 4.7: Vehicle technology to address problem behaviours leading to loss of licence: Benefits, impact, costs and risks

Benefits	Directly addresses problem behaviours that are the root cause of the loss of licence prior to unlicensed driving. Allows for mobility and a return to licensing but prevents high risk driving (impaired driving; speeding).
Impact	Reduced unlicensed driving but retained mobility for drivers with licensing sanctions resulting from drink or drug driving offences, and repeated speeding offences.
Costs	Costs of alcohol interlock scheme: administration, unit production, installation, monitoring, maintenance and replacement. Costs of ISA: mapping roads, developing and updating speed limit databases, program administration, cost of the ISA device and installation, maintenance and replacement.
Risks	Tampering with devices. Driving vehicles other than those fitted with devices. Granting licences to drivers fitted with interlocks or ISA devices may result in an increase in exposure for these drivers and associated greater crash risk. This risk needs to be weighed against the risk of unlicensed driving and the value of drivers' mobility and continued engagement with the licensing system.

The steps that can be taken to use vehicle technology to address the problem behaviours leading to loss of licence are as follows.

For alcohol interlocks:

1. Undertake a review within each jurisdiction of the alcohol interlock scheme. Include within the scope of the review an evaluation of the degree to which the schemes not only prevent drink driving but also assist in re-integrating the offender back into the licensing system.

For ISA (intelligent speed adaptation):

1. Develop the supporting infrastructure for intelligent speed adaptation, including a digital map of all the jurisdiction's roads and an integrated speed limit database. Although the cost will be significant, it will mean the development of infrastructure that will support the possible broader rollout of ISA across the driving population.
2. Undertake an evaluation of the best ISA devices. A methodology for evaluation will need to be developed, with particular emphasis on the choice and valid measurement of the most appropriate outcome variables. Efforts will be needed to develop devices suitable for motorcycles.
3. Following the satisfactory completion of (1) and (2), mandate the fitting of ISA devices to the vehicles of recidivist speeding offenders. The particular groups of offenders chosen for the application of ISA devices will need to be determined. The two most suitable options include those willing to undertake an education course that conforms to the best practice guidelines described in Austroads (2009)<sup>2</sup> with the incentive of reduced penalties, and those whose offences have resulted in a licensing sanction. The licence sanction could be withdrawn on the basis of adhering to the conditions of a special licence requiring the use only of vehicles fitted with a prescribed ISA device.

## 4.7 Improved Communication with Unlicensed Drivers

Table 4.8: Improved communication with unlicensed drivers: Benefits, impact, costs and risks

Benefits	Greater adherence to licensing sanctions.
Impact	Better awareness of licence status and relicensing processes among disqualified drivers and those with suspended or cancelled licences.
Costs	Administrative costs. Costs associated with Proof of Service if used, although a full cost recovery model is possible.
Risks	Possibility that the improved awareness does not lead to improved behaviour.

More effort should be expended on ensuring that offenders attending court understand their penalty, the risks of unlicensed driving, and the process needed to regain a licence. Offenders who appear in court should be aware of the licence sanction but efforts should be made to explain to them why the sanction has been applied. Additionally, written information should be provided to them concerning the penalties applied to driving when unlicensed, the key dates for them in regard to the sanction being applied, and the processes required to return to being licensed. Special effort should be made to develop processes for those from disadvantaged groups, particularly indigenous offenders, and people from culturally and linguistically diverse (CALD) backgrounds.

Focus needs to be on those drivers whose licences have been suspended or cancelled or who have been disqualified. Although many drivers who are unaware of being unlicensed are those whose licence has expired, this group is not known to have the high crash risk of disqualified drivers and their relicensing situation is not as complicated.

Consideration should be given to introducing Proof of Service legislation or Reverse Onus of Proof legislation to prevent drivers with a licence sanction claiming they never received notification of the sanction.

<sup>2</sup> Austroads 2009, Development of best practice intervention model for recidivist speeding offenders. Report no AP-T134/09, Sydney: Austroads.

## 4.8 Co-ordination of Programs to Encourage Licensing in Disadvantaged Groups

Table 4.9: Greater co-ordination of programs to encourage licensing in disadvantaged groups: Benefits, impact, costs and risks

Benefits	Better resourcing and delivery of programs promoting licensing among disadvantaged groups
Impact	Greater numbers of people in disadvantaged groups obtaining and keeping driver licences
Costs	Small cost required to make inventory of programs
Risks	None

The steps to take to accomplish greater program co-ordination are set out below.

1. It would be ideal if each jurisdiction undertook an inventory of all the programs running that relate to encouragement of licensing, whether it be for remote communities, indigenous groups, the socio-economically disadvantaged, or newly arrived migrants.
2. For each program, information should be gathered on: the organisation running it, other programs they run, what they do, how they do it, where they access funds, how much funding they have, whether they receive government support, and whether the program is evaluated. A website exists (The Australian Indigenous HealthInfoNet, <http://www.healthinonet.ecu.edu.au/>) which allows for the sharing of resources related to indigenous health promotion and this may be worth consideration for hosting information collected in this inventory.
3. Jurisdictions should also attend national road safety forums to share findings from evaluations of programs to encourage licensing among disadvantaged communities.
4. Support could then be considered for the most successful, well-run programs and any synergies between programs could be identified that make the sharing of resources feasible.

## 4.9 Employer Checks of Licence Status of Employees

Table 4.10: Employer checks of the licence status of employees: Benefits, impact, costs and risks

Benefits	Removal from driving for work population of drivers without valid licences. Support for OH&S requirements.
Impact	Reduced unlicensed driving as part of work duties by employees of businesses.
Costs	IT costs, administrative costs, possible legislation change
Risks	Privacy concerns

For the purposes of this countermeasure, an assumption will be made that the licensing database being used is regularly maintained and updated. NEVDIS would be a good option to enable checking of national licensing data given the mobile modern workforce.

1. Pursue support through OH&S channels for the introduction of a voluntary system of employer checks of employee licence status. Emphasis will need to be on issues of risk management and aligning driver licences with notions of appropriate training and accreditation to carry out work-related tasks. Also in some jurisdictions it is a road safety offence to employ an unlicensed driver.

2. Consult with New Zealand regarding their Driver Check system, including the technological and administrative components of the system. On the basis of these consultations, develop similar systems in Australia capable of allowing registered, authorised users to check employee licences online and of providing automatic notification to business managers of changes in the licence status of employees listed with that business.
3. Pursue mandating employer checks of employee licences as part of OH&S legislation. Failure to check the driver licences of employees who drive as part of the job will be considered to be non-compliance with OH&S legislation, in addition to road safety legislation in some jurisdictions.

## 4.10 Electronic Driver Licences Linked to the Vehicle Ignition

Table 4.11: Electronic driver licences: Benefits, impact, costs and risks

Benefits	Potential prevention of unlicensed driving by the vehicle, or improved enforcement, depending on model used.
Impact	Vehicle prevents unlicensed driver from starting the ignition. Or roadside infrastructure detects moving vehicles without a valid licence inside them.
Costs	High: licence card costs, vehicle or roadside infrastructure costs, administrative costs
Risks	May be cost-prohibitive, difficult to implement, may not get co-operation of vehicle manufacturers, possible privacy objections

The literature and discussions with stakeholders revealed a degree of enthusiasm for the possibilities of electronic driver licences. However, there is the lack of an evidence base on which to decide whether they are feasible and, if so, the best path to take to implement them. Despite particular enthusiasm for the idea in the 1990s, there has been very little movement in this area since then and little published material available for review. There has been a need for development of technology but it is likely that the technological side is not as large a hurdle to implementation as the difficulty of establishing workable policies and cost-effective supporting management systems. One Australian jurisdiction has introduced a smart card type driver licence but to take the next step and have the licence linked to vehicle ignitions, or in-vehicle systems using biometric recognition, will require a great deal of careful planning and significant state expenditure. Some Australian jurisdictions would find it financially challenging to introduce smart card licence cards, let alone a more advanced electronic driver licence. Consideration may need to be given to a national licensing system if such an expensive licence card and supporting technology is chosen as the best option for Australia.

There is a wide range of stakeholders with valuable input that should be sought before any serious planning for electronic licences and complex in-vehicle systems begins. Registration and licensing experts, vehicle manufacturers, vehicle after-market experts, road authorities, police, IT professionals, justice departments, and advocates for privacy and civil liberties should all be consulted in determining whether electronic driver licences or similar technology are a viable option for the future of controlling unlicensed driving, and whether other possible benefits can be maximised so that the necessary capital expenditure can be justified.

This is a long term countermeasure but the complex path to implementation requires discussions to take place in the near future. For this reason, it is suggested that a forum or workshop be held by Austroads in the next five years, in which the groups listed in the previous paragraph are invited to make presentations and hold discussions on the topic of electronic licences, focusing on the following topics:

- the possible benefits of introducing electronic driver licences and/or in-vehicle systems with biometric recognition

- the most effective and most feasible model for electronic driver licensing systems - in-vehicle devices linked to the ignition or road-based card readers detecting possible unlicensed drivers
- the likely costs of different options
- the challenges for different options
- the objections to electronic driver licences.

#### **4.11 Other Recommendations to Assist in Reducing Unlicensed Driving**

A number of other separate recommendations can be made regarding strategies to assist in reducing unlicensed driving. Some of these are components of the various paths to implementation listed above but are worth listing individually for consideration. These are listed here in no particular order.

1. Introduce strict mandatory carriage of licence laws for all classes of driver licence, such that it is an offence not to carry the licence and no grace period is given.
2. Introduce technology allowing police immediate in-vehicle access to registration and licensing databases.
3. Run media campaigns to promote enforcement programs targeting unlicensed driving. These campaigns could, where applicable, include reference to licensing checks during RBT/RDT, promotion of strict mandatory carriage of licence laws, and the use of ANPR to detect unlicensed drivers.
4. Prevent people who are unlicensed from registering a vehicle, including those who are unlicensed for a particular class of vehicle for which they seek registration.
5. Review the operation and effectiveness of current medical review procedures.



## INFORMATION RETRIEVAL

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**Abstract:**

This report considers countermeasures to reduce the incidence of unlicensed driving on Australian roads.

Unlicensed motorists pose a problem to road safety authorities as they are operating independently of the established licensing system and are known to have higher than average crash rates. By operating beyond the licensing system, unlicensed motorists reduce the ability of authorities to monitor and manage driver behaviour and reduce the impact of the sanction of licence loss.

The report is based on a review of Australian and international literature, with an emphasis on articles with the greatest relevance to Australia and discussions with stakeholders. It identifies the countermeasures most likely to be effective and feasible in Australia and provides a path to their implementation.