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**CARS - THE MONITORING, RESEARCH AND
EVALUATION OF MOTOR VEHICLE THEFT IN
SOUTH AUSTRALIA.**

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Introduction

Motor vehicle theft in Australia is big business. In 1995 Australia recorded 126,919 motor vehicle thefts costing the community an estimated \$654 million (NRMA, 1996). Unfortunately, national statistics indicate that these figures are rising despite concerted efforts by law enforcement agencies, vehicle manufacturers, governments and the like. During the two years 1993 to 1995 vehicle thefts have increased 12.7%. This is despite national motor vehicle registrations increasing only 4.2% and the high risk as offenders, ie. males aged 15-24 years, decreasing by 0.9% over the same period.

If these national trends continue we can expect almost 500,000 vehicles to be stolen during the next three years at a cost of \$2.5 billion. Furthermore we can expect that of these vehicles approximately 75,000 will never be recovered. In other words, during the next three years an average of one in every 23 registered motor vehicles in Australia will be stolen while one in every 150 will be stolen and never recovered.

To demonstrate the magnitude of this problem even further consider the following:

- The predicted number of motor vehicles stolen during the next three years is equivalent to the total of number registered motor vehicles in the ACT and Tasmania combined.
- The predicted number of motor vehicles that will be stolen and not recovered during the next three years, if lined up, would measure 338 kms in length, further than the distance between Sydney and Canberra or Melbourne and Albury.

While these statistics portray a disturbing national trend, the South Australian statistics convey a far more positive trend. During the 1980s South Australia, like most other States and Territories, experienced rapid growth in the rate of motor vehicle theft. For example, in 1980/81 South Australia recorded 5,802 thefts. By 1990/91 this figure had risen to 15,303 - an increase of 164% in 10 years.

By the beginning of the 1990s South Australians had decided to fight back. Government agencies, motoring organisations, and insurances companies all accepted responsibility for reducing vehicle theft and developed a number of initiatives to kerb a problem which affected either directly or

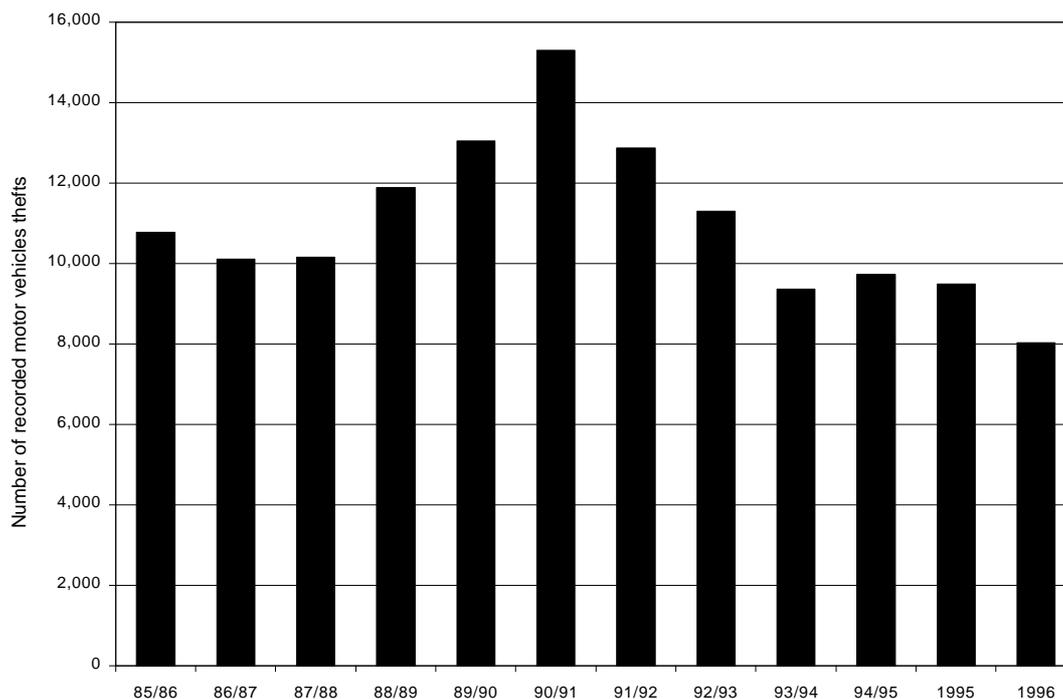
indirectly the whole community. Since that time South Australia has been at the fore-front of attempts to reduce vehicle theft.

Some of these initiatives include:

- Operation Lock Up (RAA of SA)
- 'Hot spots' Campaign (RAA of SA)
- Gotcha Car (RAA of SA, Police)
- Stop Auto Theft (RAA of SA, Attorney General's Crime Prevention Unit, 5AD 102 FM)
- Full Metal Jacket (RAA of SA)
- Marked for Life Campaign (RAA of SA)
- Establishment of a Wreck and Written Off Register in July 1993 (Department of Transport, Government Vehicle Theft Reduction Committee)
- Street Legal (Attorney-General's Crime Prevention Unit, RAA, private sector motor vehicle companies)
- Classic Holden
- Operation Cog (Police, Salisbury Together Against Crime Program.)
- SAYTAC - Car Theft Awareness Programme (Police and Family and Community Services)
- Aboriginal Driving Camp program (State Youth Strategy, Attorney-General's Crime Prevention Unit)
- Operation Bother (Police, Family and Community Services)
- Vehicle Identifiers Task Force (Government Vehicle Theft Reduction Committee)

While I do not intend discussing each of these initiatives, it seems that the direct and indirect impact of these initiatives have been significant. Preliminary statistics for the calendar year 1996 reveal that South Australia recorded just over 8,000 motor vehicle thefts with a 89.0% recovery rate. This represents a 47.5% decrease from the 1990/91 peak of 15,303 recorded thefts (see Figure 1.) Furthermore, Crime and Safety Surveys conducted by the Australian Bureau of Statistics indicate that reporting rates for vehicle theft have increased from 89.6% in 1993 to 96.8% in 1995 (ABS, 1995). During the past 12 months vehicle theft in South Australia has reduced by an additional 15.4% and is currently at its lowest level in twelve years. The decline in vehicle theft has now continued for more than five years, a claim which many other jurisdictions would surely be envious of. Furthermore, this decline has occurred in the State with the oldest vehicle fleet in mainland Australia, and thus a fleet with a greater proportion of high risk vehicles.

Figure 1. South Australian motor vehicle theft and recovery statistics, 1985/86 - 1996



In the remainder of this paper I intend describing one of the tools South Australia is now using to tackle motor vehicle theft, namely CARS – Comprehensive Auto-theft Research System.

While many individuals concerned with reducing motor vehicle theft have recognised that “progress in this area will come only by the combination of the three E’s – *Engineering, Enforcement and Education*”, few have followed the advice of David Biles (1987) who, 10 years ago, stressed the significance of a fourth E - *Evaluation*. The importance of evaluation was recognised by the South Australian Government Vehicle Theft Reduction Committee (GVTRC).

The GVTRC, comprising both government and private sector organisations is charged with advising government on strategies to reduce motor vehicle theft. The Committee is chaired by the Registrar of Motor Vehicles, and includes representation from Police, the insurance industry, Motor Trade Association of SA, Royal Automobile Association of SA, and the Attorney-General’s Crime Prevention Unit.

In late 1993 the GVTRC recognised that despite achieving a decline in the level of vehicle theft, continued successful development of theft reduction strategies required access to comprehensive, timely and reliable statistical data for research and evaluation purposes.

Furthermore they acknowledged, that although the Police Services in all jurisdictions collect and publish statistics relating to vehicle theft, this information does not necessarily convey the complete picture. For example, Police data are not particularly reliable with regard to the costs associated with motor vehicle theft. Insurance data, on the other hand, are generally much more reliable and accurate in this regard. However, while some insurance companies (eg. NRMA and the RAA of SA) do publish general claim statistics, their reports are often limited due to the need to restrict sensitive business details, or represent only a particular segment of the vehicle fleet. Furthermore, there is additional valuable data that can be obtained from registration authorities, courts, correctional services and from various crime prevention programs, all which serve to form additional pieces of a complex puzzle. With this in mind the GVTRC recommended to the Attorney-General in August 1994 that the CARS project be established.

The CARS Project

The aim of the CARS project is to facilitate the development, monitoring and evaluation of coordinated theft reduction policies via the integration and analysis of data from all possible sources. The project commenced data collection on January 1st, 1995 and is managed by the Office of Crime Statistics within the South Australian Attorney-General's Department. Reflecting the widespread support and enthusiasm for the project, it is jointly funded by the Department of Transport, the Royal Automobile Association of SA, the insurance industry and the Office of Crime Statistics within the Attorney-General's Department.

In essence the project consists of three major components. The first and, until now, the major focus has been on the development of the CARS database. The second is the research work utilising this data and the third is the dissemination of the information.

The database

The CARS database is the cornerstone of the CARS Project. It is essentially a means whereby data from a wide variety of sources can be pooled and then linked together for the purposes of statistical analysis and research. Before proceeding further it is important to stress from the outset what the database is not. The database:

- is NOT designed as a replacement for any existing operational database used by police or registration authority.
- is NOT designed to replace the work of organisations such as Insurance Statistics Australia — although there is some overlap in that the CARS project analyses insurance data, our main focus is to integrate that information with the data from other sources.
- is NOT designed as a weapon to publicly criticize anybody whether they be vehicle manufacturers, car park owners or shopping centre managers, etc. The database is simply a research tool which will help us identify problems, and develop and evaluate solutions.

The database comprises data from five primary sources, namely:

- Police
- Department of Transport, Registration and Licensing
- Insurance Companies
- Courts Administration Authority
- Various theft prevention programs

Once gathered, information from all these sources is linked together using various combinations of either the registration number, date of theft, police incident report number, apprehension number or the offender's PIN.

Police Data

As would be expected with any similar database, the majority of the information comes from the South Australian Police Department. Specifically, the Office of Crime Statistics (OCS) receives monthly downloads from the operational system 'Vehicles of Interest (VOI)' and the management information system 'PIMS'. These two extracts supply a range of information relating to the incident, the vehicle, the owner, and if applicable the recovery (see appendix 1)

In addition, OCS receives a number of 'standard' extracts from the SA police covering all criminal offences. Like the previous extracts, these contain victim and incident details but also include apprehension data, details of actions taken against juveniles and criminal history data of alleged offenders (see appendix 2).

Registration Data

The Registration and Licensing section of the Department of Transport are notified by the Police of all stolen and recovered vehicles so they can be flagged on their DRIVERS database. As a consequence the Registration and Licensing Section is able to produce a monthly extract containing details of all flagged vehicles. While this extract duplicates some of the information supplied by the Police the DRIVERS extract does contain some additional data fields, namely: date

registered “to” and “from”, date of acquisition, date wrecked, date rebuilt, mass, and seating capacity (see appendix 3).

Insurance Data

Insurance data provide the project with another angle through which to view the issue of vehicle theft. They facilitate more detailed and more accurate measures of the financial costs incurred by both the victim and the insurer, along with extra details about the extent of damage to the vehicle and details relating to a number of possible fraud indicators (see appendix 4).

With the assistance of the Insurance Council of Australia, the CARS project has gained the cooperation of every insurance company in South Australia (33 companies). These companies, in addition to jointly sponsoring the project, supply claim and salvage data for inclusion on the database. Due to variations in the level of detail stored within each company’s computer system these data are manually collected by claims staff from each company. While this requires extra work for their staff, companies were very accommodating and assisted with the development of two coding forms and a coding manual for use by claims staff.

The information collected from insurance companies includes policy details (date commenced, type of policy, type of cover, amount of excess), costings (value of parts damaged and/or stolen, total cost to insurer including assessor fees, towing and hire car fees, investigation fees etc.), age and sex of the driver prior to the theft, fraud indicators, condition of recovered vehicle, and salvage details of the vehicle if retained by the insurer.

Court Data

As part of other statistical collections maintained by OCS, regular extracts are obtained from the Court Administration Authority regarding all cases processed through family conferences and through the Youth, Magistrates, District and Supreme Courts. The type of information contained in these extracts includes details of all hearings, offence details, bail status, type of legal representation, plea, outcome and penalty details (see appendix 5)

Prevention programs

Finally, the Office of Crime Statistics has access to data from two of the State’s major vehicle theft prevention programs, namely the RAA of SA’s window etching programme ‘Marked for Life’, and the ‘Stop Auto Theft’ Campaign. Information relating to membership of these schemes can be linked to other data items for the purpose of evaluation of their effectiveness (see appendix 6 for specific data items).

In summary, with the co-operation of both public and private sector agencies we have established a database that is providing researchers in South Australia with a more detailed view of vehicle theft than ever before.

The Research Component

While collecting and publishing standard statistical tables, is useful, it represents only one aspect of the CARS project. Now that the database has been established we are at the stage where much of the focus of the project can be redirected to the analysis of the data and to specific research projects. In other words, the database can now be used as a research tool.

The range of possible research topics is considerable and some of the first projects to be undertaken will include:

- An evaluation of crime prevention initiatives such as the ‘Stop Auto Theft’ and the RAA’s ‘Marked for Life’ programme which have been operating in South Australia over the past few years. The RAA’s ‘Marked for Life’ Program involves etching the vehicle’s indication number (VIN) onto all of the vehicle’s glass panels. This scheme has been operating in South Australia since May 1993 and has recently been adopted as part of Queensland’s HEAT program.

Despite claims of success in parts of America, there has yet to be any evaluation of the program within Australia.

- Working with the local crime prevention officers to monitor the effects of their local programmes. For example, we will be able to evaluate the success of these programmes and monitor any displacement of vehicle theft to surrounding areas or displacement to other offences.
- Analysis of arson related thefts and thefts that were suspected of being fraudulent.
- Working with car park owners to evaluate the risk level of different car park designs and different management practices.
- Analysing the relationship between the availability of after hours public transport services and the location of thefts and recoveries.
- Analysis of recidivism rates of vehicle theft offenders.

Information Dissemination

The third and equally important role of the CARS project is to disseminate the knowledge gathered through the project. It is important that both the statistical information and the research findings are made readily available to anybody with an interest in reducing vehicle theft, thus eliminating the need for others to 're-invent the wheel'.

Currently the project publishes an annual statistical report along with quarterly statistical updates. The first annual report was released in June 1996 and received positive feedback both nationally as well as from a number of North American and European organisations. The second annual statistical report is expected to be released in May this year.

Summary

In summary the CARS project is about sharing of information for the benefit of all. While the project is still relatively young, we have been able to successfully establish a statistical database and research tool that is providing us with many more pieces to the puzzle than were previously available. Thus South Australia is now in a position where we can more efficiently utilise a much wider pool of data and work with others to develop and evaluate effective prevention strategies.

Clearly, I am not suggesting the CARS project can claim any credit for the State's 47.5% reduction in motor vehicle thefts during the past five and a half years. I am, however, suggesting that by ensuring the fourth E – Evaluation – is included into the system, the CARS project will assist South Australian policy makers to continue to make well educated and fully informed decisions in the future.

References:

- Australian Bureau of Statistics (1995) *Crime and Safety in South Australia, April 1995*. Catalogue No. 4509.4
- Biles, David (1987) *Some questions that need answers*. Australian Automobile Association Car Theft Symposium, Canberra 17 November.
- NRMA (1996) *Car theft in Eastern Australia 1995*. NRMA Insurance Limited, Sydney

Appendix 1. Police data recorded on the CARS database – CARS specific extracts from VOI & PIMS systems*Identifiers and key fields*

- Registration number and state of registration
- Date of theft
- Incident Report Number (PIR)
- Stolen Serial Number
- Incident type
- Clearup Status

Incident details

- Time and date of theft
- Street, suburb, state and postcode of theft
- Collector district of theft
- location type (eg. street, driveway shopping centre)
- Police station where theft was reported
- Time and date reported to police
- Street, suburb, state and postcode of vehicle's owner

Vehicle details

- Type of registration - personalised, hire car, government etc.
- Body type - sedan, station wagon, ute, etc.
- Year of manufacture
- Make
- Model
- Colour (2 colours can be recorded)
- Type of fuel used
- Type of transmission
- VIN/Chassis/Engine numbers
- Number of cylinders
- Estimated value
- Financially encumbered (Y/N)
- Insured (Y/N)
- Insurance policy and claim numbers

Recovery details

- time and date of recovery
- patrol and station that recovery the vehicle
- Street, suburb, state and postcode of recovery
- Collector district of recovery
- location type (eg. street, driveway, shopping centre etc.)
- method of entry
- reason for theft (joyriding, reselling, to commit of crimes)
- anti-theft device fitted
- burnt
- damaged
- undriveable
- stripped
- ignition damaged
- steering damaged
- engine missing
- panels missing
- parts missing
- plates missing
- sound equipment missing
- trim missing
- wheel(s) missing
- accessories missing
- VIN/ Engine No. / Chassis No damaged or tampered or missing
- personal effects missing

Appendix 2. Police data recorded on the CARS database – Standard Office of Crime Statistics extracts from the PIMS systems

Victim and Incident data

- Incident Report Number (PIR)
- Offence Code, Law Id, Modifying Law id
- Report Category, Report type
- Offence date and time
- Number of counts
- Clear-up date and clear-up type
- Value of goods stolen
- Value of goods damaged
- Value of goods recovered
- Victim's PIN
- Age, date of birth and sex of victim
- Person or corporation
- Collector district of offence
- Collector district where offender resides
- Weapon flag
- Location type
- Victim/Offender Relationship

Apprehension data

- Apprehension Report No. (AP)
- Report date and report type
- Offence code, Law id, Law Part No, Modifying Law id
- No. of counts
- Alleged offender's PIN
- person or corporation flag
- Age, date of birth and sex of alleged offender
- Victim's age
- Marital status
- Employment status
- Ethnicity and country of birth
- Collector district of offence
- Collector district where offender resides
- Location type of offence
- Blood test indicator and analysis

Additional data items for Juvenile Offenders (10-17 year olds)

- Type of Action (formal caution, family conference, youth court)
- Action date
- Sanction
- Compensation, Community Service Amount, Apology and Undertaking

Criminal history data

- Court identifier
- Hearing date and offence date
- Event type and outcome type
- penalty
- Defendant's PIN and date of birth
- Report number and Report Code
- Counts
- Law id and law part

Appendix 3. Registration data recorded on the CARS database

- plate type and registration number
- make and model
- year of manufacture
- colour
- body type
- fuel type
- transmission
- number of cylinders
- engine capacity
- mass
- seating capacity
- VIN , chassis and engine numbers
- date wrecked
- date rebuilt
- date of acquisition
- registration dates - “to” and “from”
- Date stolen, date recovered

Appendix 4. Insurance data recorded on the CARS database

Form 1

- Company id, claim reference details
- Registration number
- State registered, state insured
- date reported to insurer
- policyholder in the motor trade - Y/N
- agreed/market value/sum insured
- comprehensive/fire & theft only
- inception date and expiry date of policy
- date indemnity accepted
- amount of excess applied to the claim
- amount paid to policyholder
- value of parts damaged/stolen
- insurers total outgoing costs
- Fraud indicators
- age & sex of last person to drive the vehicle
- vehicle use prior to theft
- did the vehicle suffer accident damage
- arson - actual or attempted
- vehicle returned to owner or salvaged

Form 2

- date of salvage
- amount obtained from salvage
- insurer's salvage costs
- reason for salvage - structural wreck, economic wreck etc.

Appendix 5. Court data recorded on the CARS database

- Court identifier
- Court file number
- Defendants PIN
- Apprehension number
- Hearing dates
- Offence dates
- Offences - law id
- Number of co-defendants
- Type of legal representation
- Bail Status
- Arrest/summons
- Number of court appearances (for this case)
- Non appearances
- Defendant's date of birth
- Plea
- Outcome
- Penalty details

Appendix 6. Data from prevention programs recorded on the CARS database

RAA's 'Marked for Life' (for all vehicles etched)

- Registration number
- Date etched
- Make
- VIN or chassis number

'Stop Auto Theft' (for stolen and recovered vehicles)

- Registration Number
- Date stolen
- Police Incident Report Number
- Stop Auto Theft Membership status
- Police station where membership was completed
- Date membership commenced
- Date membership cancelled (if applicable)
- Reason membership cancelled (if applicable)