

Trends & issues

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Foreword | *Cash in transit (CIT) armed robbery is an offence that can cause serious stress and danger to individuals who become victims while doing their job. To compound the emotional, psychological and physical damage CIT armed robbery can cause victims, it often causes considerable financial loss to the companies targeted. CIT armed robberies have been increasing in recent years and the AIC's National Armed Robbery Monitoring Program, along with some of Australia's leading CIT companies, determined that the dynamics of this type of robbery needed to be more closely examined. Understanding the type of offender who commits CIT armed robbery will help with the development of crime prevention strategies for the CIT industry. The types of offenders who typically commit CIT armed robbery are professional offenders who have a tendency to plan the offence, study their target and carry high-powered weaponry. Considering CIT armed robbery and related crime prevention strategies from overseas is also recommended, as countries such as South Africa and the United Kingdom have had more experience in preventing this type of crime.*

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Cash in transit armed robbery in Australia

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Cash in transit (CIT) can best be described as the transport, delivery and receipt of valuables such as cash, securities, jewels, bullion and other financial instruments using escort services in armoured or 'soft skin' (non-armoured) vehicles (Comcare 2009). CIT-type armed robberies are generally considered to be the work of professional armed robbers (Gill 2000) and there is anecdotal evidence of a recent rise in these types of incidents. Researchers have long recognised that successful armed robbers are those who take risks, however, there is little research into how those risks are managed (Gill 2000). This paper, employing research from the Australian Institute of Criminology's (AIC) National Armed Robbery Monitoring Program (NARMP), examines CIT armed robberies, the offenders who commit them and their perceived level of professionalism. Consideration is also given to the nature of CIT attacks overseas and the types of crime prevention strategies used in those countries.

There are currently three main typologies of armed robbery offenders. These are *amateurs*, *intermediates* and *professional* offenders. The categories are determined by the risk-to-yield ratio of the armed robbery, the criminal history of the offender and the amount of planning that has gone into the robbery. Amateurs tend to be opportunistic offenders, with short-sighted intentions and little understanding of what to expect from the robbery experience or the amount of money they are likely to receive (Mathews 2002; Smith & Louis 2009). Intermediate armed robbers are generally more organised and experienced than amateurs but not as dedicated to armed robbery as professionals (Mathews 2002; Smith & Louis 2009). These offenders are likely to engage in a reasonable amount of planning and are prepared to use weapons if necessary. Professional armed robbers have a higher level of motivation, are involved in rigorously planning robberies, are more likely to use firearms as their weapon of choice, are more willing to engage in violence and are more likely to persistently commit armed robberies as a means of making a living (Gill 2001; Katz 1988).

Professional offenders are considered high-risk, violent offenders; while they make up only a small percentage of the offending population, they cause the greatest concern to the community (Farrington 1997).

Cash in transit armed robbers

CIT armed robberies generally involve planning by multiple offenders, armed with firearms, who are seeking substantial gains. In line with this profile, it is likely that most CIT offenders will be professional armed robbers. This is supported by Gill (2001) in one of the few studies undertaken in this area. Gill (2001) studied 341 robbers who targeted a variety of locations

and noted that a consistent pattern emerged; CIT robbers were the most organised and made the most effort to manage possible risks. Other studies have also noted that CIT offenders collect information and gather intelligence about companies they want to target and that they also research when and where movement of cash takes place (Pillay 2008).

Although CIT robbers are generally perceived as professionals, an increase in the number of incidents may affect the perception of the standard of professionalism (assuming the increase is a result of greater numbers of offenders and not simply the current number of offenders committing more robberies). Specifically, a perceived increase in CIT offenders may be the result of an increased number of professional offenders, or more amateur and intermediate offenders beginning to undertake CIT armed robberies. Assessing any changes to the levels of professionalism of these types of offenders is important as it may impact on the effectiveness of crime prevention strategies implemented by the industry and on CIT offenders' ability to adapt to new strategies.

Cash in transit incidents overseas

As no nationally-consolidated data exist in Australia on CIT armed robbery (the data used in this study was made available to the AIC by some of the major CIT operators in Australia), countries with similar, if not more substantial, problems with CIT armed robbery will be examined. Comparisons will be made with South Africa and the United Kingdom, both of which have considerable experience with CIT armed robbery incidents.

Annual figures on the number of attacks on CIT operators in the United Kingdom from 2003 (n=697) to 2004 (n=763) showed a nine percent increase in offending (British Security Industry Association & British General Union 2006). In 2005, the number of attacks on CIT operators rose by a further 10 percent (n=836).

In South Africa (as in the United Kingdom), CIT armed robbery incidents are much more frequent than in Australia. In 2007, the South African Banking Risk Information Centre reported a total of 509 CIT incidents in South Africa (Pillay 2008). Analysis of

South African incidents indicated that there were two main types of CIT armed robberies occurring, the latter of which is not common in Australia. The first type are 'cross-pavement' attacks, which is where the incident takes place outside the vehicle and targets the guard carrying the cashbox either from, or to, the client. Alternatively, guards may be targeted while they are in the process of restocking automatic teller machines (ATMs; Pillay 2008). The second type are 'heist' offences which involve an attack on a security vehicle while it is in motion, forcing it off the road by means of a collision (also known as a 'tap tap') or by the use of excessive violence (eg drive-by shooting; Pillay 2008).

Australia can potentially use South Africa's experience as a template for innovative crime prevention initiatives. Despite differences between the countries, similarities in CIT modus operandi are such that useful lessons can be drawn.

It is considered that greater levels of professionalism are required to commit a 'heist' CIT robbery, as opposed to a 'cross pavement' type of attack (Gill 2001). Although there is some merit to this view, it should be reiterated that armed guards are still present, regardless of the type of attack and there are still higher levels of security present than for most other armed robbery targets (Gill 2001). Therefore, although greater professionalism may be required to commit a heist, all CIT armed robberies generally require a high level of professionalism, which is why this type of armed robbery commonly attracts the most skilled offenders (Gill 2001).

Aims of the current study

This paper aims to:

- examine the extent of CIT armed robberies in Australia and whether they have changed over time;
- examine patterns of CIT armed robbery and assess what issues this might raise for the CIT profession; and
- explore possible effective crime prevention strategies, including those used overseas.

Due to the minimal amount of research literature on CIT armed robberies in both Australia and overseas, it should be noted that there are few studies with which to compare the results of this study.

Methodology

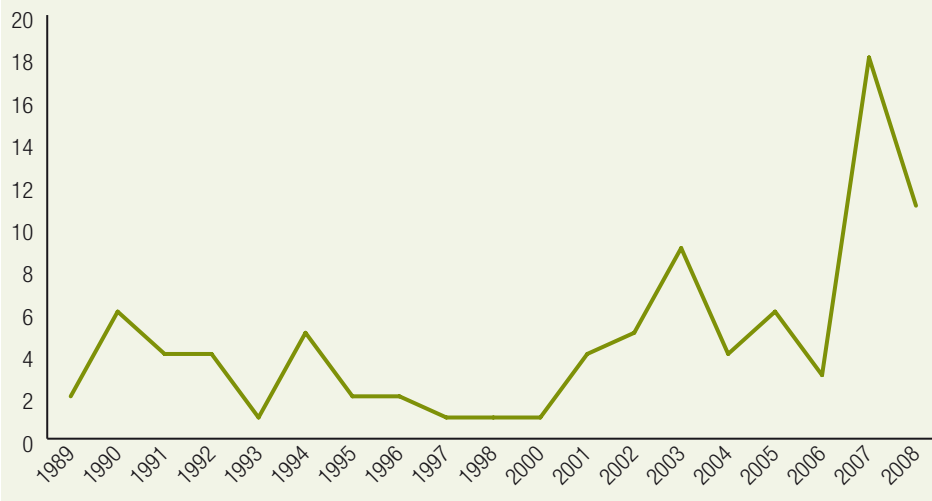
Data covering CIT robberies in Australia over a 20 year period (1989–2008) was provided by some of Australia's leading CIT companies (who have asked to remain anonymous, therefore, no further identifying features can be provided). These data differed slightly to the AIC's NARMP data, which examines armed robberies for broader financial and banking locations, although CIT victims are included in this overarching category. However, NARMP data was not specifically used for this analysis as it cannot distinguish CIT victims from other victims contained in the broader financial and banking victim category.

A total of 89 CIT armed robbery incidents were recorded by CIT companies over the 20 year period. However, much of the analysis in this paper focuses only on the 61 incidents that occurred from 2000–2008 because of a lack of critical detail gathered in earlier years. Although not representative of every incident in Australia over this time period, the data cover all incidents experienced by some of the major CIT companies in Australia and can be considered a strong representation of general patterns in CIT armed robbery in Australia.

Offender data was obtained in 59 of the 61 incidents of CIT armed robbery from 2000 onwards. In total, data was gathered on 126 CIT armed robbery offenders.

As with most data sets, there are some particular caveats present with the chosen data set. The data is ultimately limited, in that it can only provide descriptives of an offender and not in-depth detail for other areas such as motive. These descriptive details are the best available guide to determine whether an offender can be considered a professional or an opportunist. There are also limitations with some descriptive categories, such as age of offender, which remain mostly incomplete. It should be noted that while Gill's (2001) study was able to use qualitative information concerning risk management by CIT armed robbers, as well as descriptive characteristics, the current study has only descriptive details to assist in developing an offender typology. Despite there being some limitations in the data used for this paper, it remains some of the most detailed data available in Australia on this type of armed robbery.

Figure 1 Number of cash in transit armed robberies 1989–2008



Source: AIC; Australian CIT companies 2008 [computer file]

Trends in Australian cash in transit armed robberies

In the period 1989–2006, CIT companies had few CIT robbery incidents (see Figure 1). However, in recent years (particularly 2007 and 2008), considerably higher numbers of CIT armed robbery incidents were recorded, signifying a possible shift in offending patterns. This is evident in the mean number of robberies committed annually. From 1989 to 2006, there was an average of only 3.56 CIT armed robberies annually, compared with 18 incidents in 2007 and 11 incidents in 2008.

Offender profiles

Despite some offender characteristics not being available for this analysis, it is still possible to provide some useful indicators of CIT armed robbery offenders. The vast majority of offenders involved in CIT incidents from 2000 onwards were males. Of the 61 CIT armed robbery incidents, gender information was available for 31 incidents. Sixty-five offenders were involved in those 31 incidents and all were male. There is a reasonable chance that nearly all of the offenders listed in this study were male but this cannot be conclusively demonstrated due to missing data. Despite this, the lack of female offenders is not surprising, as results from NARMP show that females are substantially less likely to be involved in armed robberies of this nature. In 2006, males constituted 95 percent of offenders involved in armed robbery incidents at 'banking and financial locations' (including CIT armed robberies; Smith & Louis 2009).

The age of CIT offenders was not consistently recorded, but there were indications that while CIT robbery offenders varied slightly in age, they were generally older than the average offender detailed in NARMP's latest report. For instance, in 2006, NARMP data indicated that the average age of 'banking and financial' location offenders was 29 years. This was one of the oldest average ages for offenders in all recorded location groups (see Smith & Louis 2009). For the small number of cases for which offender age information was recorded in this CIT data, there were six offenders aged 20–29 years and two aged 30 years and over.

CIT armed robbers commonly wear disguises. This is to be expected considering CIT armed robbery offenders sit at the professional end of the offender spectrum and offenders could be expected to take greater precautions in protecting their identity. In total, 69 percent of CIT armed robbery offenders were described as wearing some type of disguise. The type of disguises described were mostly balaclavas, although some offenders chose to wear wigs, sunglasses, or stocking masks and some offenders merely wrapped material around their faces.

On average, there were 2.3 offenders involved in every CIT armed robbery incident. In 44 percent of incidents, two offenders were recorded, while lone offenders accounted for 23 percent of incidents. Incidents with three offenders constituted 16 percent of CIT armed robberies, while incidents with four offenders represented a slightly smaller proportion (11%).

Tools used by cash in transit offenders

There are two main 'tools' utilised by most CIT armed robbers—their weapons and their 'getaway' vehicle. The choice of weapon is usually a heavy firearm, most likely obtained illegally. The intimidation and control instilled by some of these firearms is one possible reason for their selection (Matthews 2002), although there is also evidence that offenders carry firearms because they know guards or police will also be armed (Gill 2000; Matthews 2002). Firearms were used in all robberies where weapons could be identified (3 incidents were missing weapon information). Specifically, offenders examined in this study were likely to use handguns, with 62 percent of robberies involving this weapon type. Ten percent of robberies involved offenders using shotguns and one incident involved military-type weapons. Sixteen percent of incidents involved offenders using combinations of handguns, shotguns and other firearms such as rifles.

Where the type of handgun was described, the most common types used were revolvers (often .38s), although pistols were occasionally used. Overall, the type of weapon used by CIT offenders was more serious when compared with armed robberies in general, where most offenders use knives (53% percent of incidents; Smith & Louis 2009).

The type of vehicle used by CIT offenders may also suggest the level of professionalism of the offender. Often, vehicles used in CIT robberies are stolen and later found burned out. There also appears to be a pattern in recent years with offenders selecting luxury-type cars as getaway vehicles. For example, industry data shows that Mercedes Benz vehicles were used in 10 percent of getaways. This could suggest a link between the CIT offenders and the professional luxury car theft industry in places like Melbourne and Sydney. Historically though, CIT offenders have been more likely to select high performance sports cars (17%) as their getaway vehicles. For example, industry data shows that Subaru WRXs and Mitsubishi Evolutions were used in approximately 18 percent of getaways. However, the recent tendency to select luxury cars (15%) may also be a result of these cars being less conspicuous and less likely to draw negative attention from law enforcement.

Location of cash in transit armed robbery

A substantial number of the incidents recorded in the data occurred in Sydney. It is possible that CIT armed robberies, compared with other types of armed robbery, occur proportionately more in Sydney than in other locations in Australia.

Recorded CIT armed robberies in Sydney were most likely to occur in western Sydney (43% of Sydney-based incidents), which represents the largest geographical area and the main population centre of all Sydney regions. Western Sydney contains a highly-dispersed, low-density population requiring more CIT deliveries to transfer cash between more distant commercial centres. Any new crime prevention technique that might be employed by CIT companies should take into account the physical and commercial aspects of those regions of Sydney prone to CIT armed robbery incidents.

Understanding location enables the type of service the CIT vehicle was conducting at the time of the incident to be analysed. Fifty-two percent of CIT armed robbery incidents involved the CIT vehicle delivering funds to an ATM either at a bank, commercial premises or shopping mall. Thirty-six percent of incidents involved CIT vehicles making collections from either commercial premises or banks. The remaining incidents (11%) involved transactions at banks or commercial premises, but did not specify whether it was a collection or delivery. Overall, there does not appear to be a pattern where offenders are targeting CIT vehicles dependent on the type of service they provide (such as cash delivery and receipt for ATMs, or for financial and commercial premises). What is apparent though is that most incidents have been cross-pavement attacks and that the vehicle heists observed in South Africa are yet to become common practice in Australia. There is anecdotal evidence to suggest this will not change, due to Australia having a high (money) footpath limit for CIT operations (ie the amount of money that can be carried by guards from the van to the customer/ATM), making cross-pavement robberies the most attractive option for offenders.

Time of cash in transit armed robbery

Typically, other types of armed robberies tend to occur at night or in the early hours of the morning, regardless of their location and target (see Smith & Louis 2009). However, CIT armed robbery is different (see Figure 2). Analysis indicates that most CIT armed robberies occur in the morning; 22 percent between 6 am and 9 am and 34 percent between 9 am and 11.59 am. However, this is dependent on when CIT deliveries occur to some extent. If CIT deliveries/pickups changed to night-time, there may also be a corresponding shift in the temporal features of CIT armed robbery. Despite this caveat, understanding the temporal aspects of armed robbery is just as important as weapons and transport because it can indicate the times that offenders are most likely to target CIT vehicles. It also indicates the risks offenders are prepared to take to make a profit. Offenders must consider the risk associated with undertaking a robbery during daylight hours, at times where there may be people in the target area and when traffic may be more of a hazard, especially when fleeing the scene. This risk is also transferred to members of the public who may inadvertently get caught up in an incident. A CIT armed robber's ability to assess risk further reinforces the viewpoint of Gill (2001) who asserts that although the majority of armed robbers are amateurs, professionals are the ones who most frequently attack CIT targets.

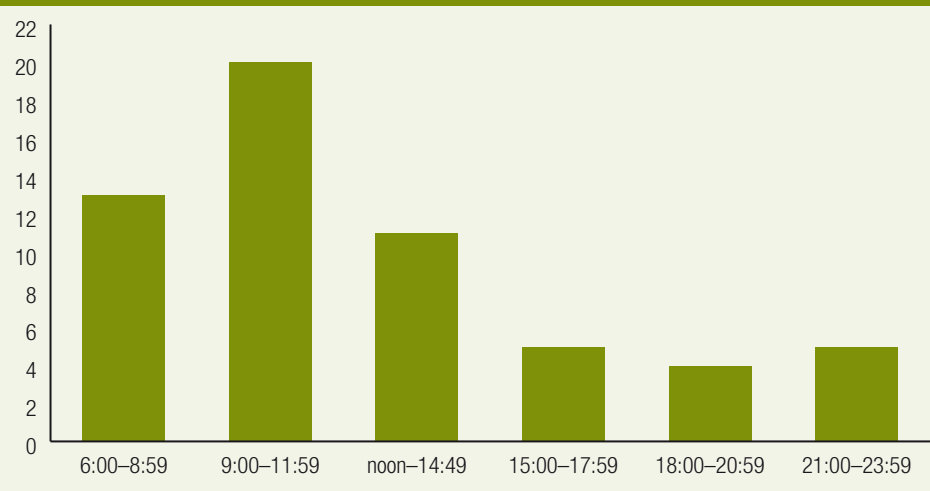
General overview of the target

The CIT industry is not easily victimised as there are a range of effective, existing preventative measures employed by the industry. Measures such as trained armed guards and cash degradation systems (eg dye bombs), although not infallible, make the CIT industry one of the more difficult industries to target for armed robbery. However, it has become clear that this industry is becoming more of a regular target for professional armed robbers. As a result, a general overview of this type of target is useful in understanding the phenomenon, so that any prevention strategies developed can be relevant, efficient and effective.

Although armed robbers often target guards moving to and from the vehicle, the vehicle itself should be considered. Two different vehicle types were recorded in the data; armoured and non-armoured (also known as 'soft skin' vehicles). Analysis revealed that offenders target armoured vehicles 90 percent of the time. This may be a result of major CIT fleets consisting mostly of armoured vehicles and may be why heists or 'tap taps' are not common in Australia.

The data revealed that the number of offenders working together in a CIT armed robbery varies, however, in 97 percent of robberies, multiple guards operated the vehicle. Fifty-nine percent of incidents involved attacks with three guards in operation and 15 percent occurred when four guards were present. Offenders' apparent lack of concern for guard numbers tends to suggest that this factor has little

Figure 2 Time of cash in transit armed robbery (n)



Source: AIC; Australian CIT companies 2008 [computer file]

bearing on the selection of CIT targets. It also suggests that offenders are professional, not deterred by multiple guards and feel capable of controlling the situation.

One of the key aspects of categorising an offender as 'professional' is their success rate. In 85 percent of incidents, cash was successfully stolen from the CIT vehicle. However, this is only slightly higher than the national average of successful robberies where 83 percent of incidents were successful in yielding money or property from the armed robbery (Smith & Louis 2009).

Firearms were stolen from the guards in 74 percent of CIT armed robberies. In 41 percent of cases, two firearms were stolen, in 18 percent of cases three firearms were stolen and in 15 percent of incidents one firearm was stolen. It is thought that weapon theft in these cases is about opportunism rather than any lack of availability of firearms for this group of offenders. There is anecdotal evidence to suggest that these stolen weapons also provide the offender with additional weapons for future robberies and/or another opportunity to earn money through the on-selling of these weapons.

Evidence shows that CIT targets are highly attractive to robbers because they are profitable (Gill 2001). However, risk is also high due to the potential visibility of the target, the likelihood of armed guards and, if caught, offenders are likely to receive a lengthy term of imprisonment—especially if there are aggravating factors such as injury to a victim or general trauma (Gill 2001). Nonetheless, to a professional armed robber, these risks appear worthwhile. It is highly possible that offenders are aware of the following:

- many conventional crime prevention measures, such as closed circuit television (CCTV), are difficult to employ to counter CIT robberies;
- similar gains to robbing a financial institution are available from robbing CIT vehicles;
- the target may already be on the road or sidewalk and therefore closer to potential getaway vehicles due to the mobility of the cash. This may increase offender confidence; and
- exit opportunities are also increased and not limited to one entry/exit point, as is the situation within a financial institution.

Routine activity theory asserts that for a crime to take place there needs to be a motivated offender and a suitable target

without a capable guardian (Clarke & Felson 1993). However, despite armed guards and protected vehicles, CIT armed robbery appears to have become a more attractive target for professional offenders compared with other commercial targets. Situational crime prevention methods may still provide good options for crime prevention strategies for CIT armed robbery.

Crime prevention strategies

Armed robbery prevention measures usually follow a situational crime prevention approach, focusing on reducing the physical opportunities for crime and enhancing opportunities to arrest the offender (Clarke 1980; Clarke 1997; Maree 1999). This approach focuses on ways to reduce the opportunity for crime to occur, rather than on the offenders.

This study has indicated that CIT armed robbery offenders are generally professional. Professionalism can be established using a checklist and previous studies, using such checklists, have confirmed the professional status of CIT armed robbers (Gill 2001). For example, older offenders, wearing disguises and carrying serious weapons (such as firearms; Gill 2001), along with high success rates, tend to suggest that Australian CIT armed robbers are relatively professional, despite no detailed qualitative data being available.

Increasing the number of changes to CIT vehicle routes and delivery schedules is one method likely to reduce or disrupt the opportunity for the offence to occur. This measure may also be effective in Western Sydney (a high-incident area) where CIT vehicles are travelling greater distances between servicing commercial premises. Further, there is a tendency for CIT armed robberies to occur in the morning hours (6 am–midday). This may be a result of CIT vehicles having a 'morning heavy' workload or as a result of offenders having a preference for committing robberies at this time of day (possibly because busy streets may improve the chance of escape). Again, introducing greater diversity in work patterns and schedules may disrupt opportunities to commit a CIT robbery. However, the ability to diversify CIT deliveries is limited by the need to meet clients' needs for cash pickups/drop-offs to be conducted at specific times.

As industry responses to armed robbery threats evolve, would-be offenders must also adapt their techniques for committing

these offences. As such, there is a need for ongoing guard training and security procedures. This is the experience of the banking industry (Maree 1999) with regard to ATM robberies, where processes have had to be adapted as offenders have changed their modus operandi, now using volatile gas to explode ATMs.

To be most effective, a coordinated strategy that includes procedures and training programs should be informed by a range of stakeholders, including CIT companies (security personnel and other staff), police, criminologists and suppliers of security products. By continually updating security procedures and training, CIT professionals can best meet changing trends in CIT armed robbery patterns. For example, if the 'tap tap' type of attacks common in South Africa became more common in Australia, this would require additional training for personnel and new procedures for CIT security guards.

It is recommended that CIT vehicles be modified to make them less visible targets. Currently, the high visibility of CIT vehicles makes them easy targets to track, locate and attack. This is an issue in South Africa and Pillay (2008) indicates that guards are exposed to increased risk of attack because of the high visibility of their vehicles. However, altering visibility in Australia would require some compromise between CIT companies and state/territory governments as state/territory legislation requires CIT vehicles to be identifiable and carry permanent company signage or markings (eg *Security Industry Act 1997* (NSW); *Security Industry Regulation 2007* (NSW s 38)). In 1997, Justice Peterson (Industrial Relations Commission of New South Wales), recommended that CIT vehicles be made more discreet as this could assist in making CIT targets more difficult to track, locate and attack.

Finally, although the financial cost of implementation may make adoption throughout the industry unlikely, there are a range of new technologies available to reduce the risk of attack on the CIT industry. One of these is DNA tagging using SmartWater, a proprietary technology (www.smartwater.com). SmartWater, an alternative to dye bombs, involves placing a device

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containing invisible spray at strategic points in a shop or store, or in cash boxes for cross pavement CIT operations. As is the case with dye bombs, when the box is disturbed, offenders are sprayed with SmartWater, which tags the offender with a unique forensic code linked with that cash box. SmartWater is invisible and remains on skin and clothes for an extended period of time, unbeknownst to the offender, thereby allowing subsequent connection to the crime scene.

Conclusion

The incidence of CIT armed robbery in Australia has increased in the last two years and it is clear that the CIT industry has become more of a target for offenders. It remains to be seen if this trend will continue and if target hardening can reduce offending.

Despite recent increases in numbers of CIT armed robberies, Australia still experiences fewer incidents compared with countries like the United Kingdom and South Africa. Australia is also yet to experience high numbers of CIT heists, ramming or explosive attacks which occur more commonly in South Africa. According to some CIT industry members in Australia, this is likely to remain the trend as Australia predominantly suffers cross-pavement attacks as a result of high footpath limits (for money). The United Kingdom and South Africa are often at the forefront of implementing the latest technologies to combat this type of armed robbery. This allows Australia to adopt any new technology implemented in these countries (if worthwhile) to help combat CIT armed robbery.

The other key results confirmed in this study are that CIT armed robberies are typically carried out by professional offenders. Such offenders have a greater tendency to plan the offence, study the target, carry high-

powered weaponry and most importantly, have a high success rate. The professionalism of the offender must be accounted for when considering the development of new crime prevention strategies, not only to make any crime prevention strategies more effective but because of the need to anticipate potential target displacement which may occur more readily.

In conclusion, no single crime prevention strategy will be a perfect solution. Although the crime prevention strategies suggested may be difficult to fully implement in practice, even partial implementation should assist in reducing the rate of CIT armed robbery in Australia. Clearly, given the likelihood of professional offenders adopting new strategies to undertake CIT armed robberies, there is a need for the countermeasures already implemented to be re-evaluated regularly to ensure they are still effective and to modify them to meet the changing nature of offending.

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References

All URLs correct at 26 March 2010

British Security Industry Association & British General Union 2006. *Security staff injured in one in five of the 2,300 attacks in the last three years*. <http://www.gmb.org.uk/home.aspx>

Clarke RVG 1980. Situational crime prevention: Theory and practice. *British Journal of Criminology* 20(2): 541–552

Clarke RV & Felson M (eds) 1993. *Routine activity and rational choice: Advances in criminological theory volume 5*. New Brunswick, NJ: Transaction Books

Clarke RVG 1997. Introduction, in Clarke RVG (ed), *Situational crime prevention: Successful case studies*, 2nd ed. New York: Harrow and Heston

Comcare 2009. *Cash in transit*. http://www.comcare.gov.au/forms_and_publications/fact_sheets/cash_in_transit

Farrington D 1997. Human development and criminal careers, in Maguire M & Morgan R (eds), *The Oxford handbook of criminology*, 2nd ed. Oxford: Clarendon

Gill M 2001. The craft of robbers of cash in transit vans: Crime facilitators and the entrepreneurial approach. *International Journal of the Sociology of Law* 29: 277–291

Gill M 2000. *Commercial robbery: Offenders' perspectives on security and crime prevention*. London: Blackstone

Katz J 1988. *Seductions in crime: Moral and sensual attractions of doing evil*. New York: Basic Books

Maree A 1999. Bank robbery in South Africa: The crime and the criminal. *Security Journal* 2: 53–61

Matthews R 2002. *Armed robbery*. Devon: Willan Publishing

Industrial Relations Commission of New South Wales 1997. *The transport and delivery of cash and other valuables industry: Report to the Minister*. Sydney: The Commission

Pillay K 2008. The impact of stress and trauma on the occupational environment of CIT security officers—an exploratory perspective. International Society for Criminology XV World Congress, Barcelona 20–25 July 2008

Smith L & Louis E 2009. *Armed robbery in Australia: 2006 National Armed Robbery Monitoring Program annual report*. Monitoring Report no. 4. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/mr/1-20/04.aspx>