Robbery at Automated Teller Machines

by

Michael S. Scott
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About the Problem-Specific Guides Series

The Problem-Specific Guides summarize knowledge about how police can reduce the harm caused by specific crime and disorder problems. They are guides to prevention and to improving the overall response to incidents, not to investigating offenses or handling specific incidents. Neither do they cover all of the technical details about how to implement specific responses. The guides are written for police—of whatever rank or assignment—who must address the specific problem the guides cover. The guides will be most useful to officers who:

- **Understand basic problem-oriented policing principles and methods.** The guides are not primers in problem-oriented policing. They deal only briefly with the initial decision to focus on a particular problem, methods to analyze the problem, and means to assess the results of a problem-oriented policing project. They are designed to help police decide how best to analyze and address a problem they have already identified. (A companion series of Problem-Solving Tools guides has been produced to aid in various aspects of problem analysis and assessment.)

- **Can look at a problem in depth.** Depending on the complexity of the problem, you should be prepared to spend perhaps weeks, or even months, analyzing and responding to it. Carefully studying a problem before responding helps you design the right strategy, one that is most likely to work in your community. You should not blindly adopt the responses others have used; you must decide whether they are appropriate to your local situation. What is true in one place may not be true elsewhere; what works in one place may not work everywhere.
• **Are willing to consider new ways of doing police business.** The guides describe responses that other police departments have used or that researchers have tested. While not all of these responses will be appropriate to your particular problem, they should help give a broader view of the kinds of things you could do. You may think you cannot implement some of these responses in your jurisdiction, but perhaps you can. In many places, when police have discovered a more effective response, they have succeeded in having laws and policies changed, improving the response to the problem. (A companion series of *Response Guides* has been produced to help you understand how commonly-used police responses work on a variety of problems.)

• **Understand the value and the limits of research knowledge.** For some types of problems, a lot of useful research is available to the police; for other problems, little is available. Accordingly, some guides in this series summarize existing research whereas other guides illustrate the need for more research on that particular problem. Regardless, research has not provided definitive answers to all the questions you might have about the problem. The research may help get you started in designing your own responses, but it cannot tell you exactly what to do. This will depend greatly on the particular nature of your local problem. In the interest of keeping the guides readable, not every piece of relevant research has been cited, nor has every point been attributed to its sources. To have done so would have overwhelmed and distracted the reader. The references listed at the end of each guide are those drawn on most heavily; they are not a complete bibliography of research on the subject.

• **Are willing to work with others to find effective solutions to the problem.** The police alone cannot implement many of the responses discussed in the guides.
They must frequently implement them in partnership with other responsible private and public bodies including other government agencies, non-governmental organizations, private businesses, public utilities, community groups, and individual citizens. An effective problem-solver must know how to forge genuine partnerships with others and be prepared to invest considerable effort in making these partnerships work. Each guide identifies particular individuals or groups in the community with whom police might work to improve the overall response to that problem. Thorough analysis of problems often reveals that individuals and groups other than the police are in a stronger position to address problems and that police ought to shift some greater responsibility to them to do so. Response Guide No. 3, *Shifting and Sharing Responsibility for Public Safety Problems*, provides further discussion of this topic.

The COPS Office defines community policing as “a policing philosophy that promotes and supports organizational strategies to address the causes and reduce the fear of crime and social disorder through problem-solving tactics and police-community partnerships.” These guides emphasize problem-solving and police-community partnerships in the context of addressing specific public safety problems. For the most part, the organizational strategies that can facilitate *problem-solving* and *police-community partnerships* vary considerably and discussion of them is beyond the scope of these guides.

These guides have drawn on research findings and police practices in the United States, the United Kingdom, Canada, Australia, New Zealand, the Netherlands, and Scandinavia. Even though laws, customs and police practices vary from country to country, it is apparent that the police everywhere experience common problems. In a world that is becoming increasingly interconnected, it is important that police be
aware of research and successful practices beyond the borders of their own countries.

Each guide is informed by a thorough review of the research literature and reported police practice and is anonymously peer-reviewed by line police officers, police executives and researchers prior to publication.

The COPS Office and the authors encourage you to provide feedback on this guide and to report on your own agency’s experiences dealing with a similar problem. Your agency may have effectively addressed a problem using responses not considered in these guides and your experiences and knowledge could benefit others. This information will be used to update the guides. If you wish to provide feedback and share your experiences it should be sent via e-mail to cops_pubs@usdoj.gov.

For more information about problem-oriented policing, visit the Center for Problem-Oriented Policing online at www.popcenter.org. This website offers free online access to:

- the Problem-Specific Guides series
- the companion Response Guides and Problem-Solving Tools series
- instructional information about problem-oriented policing and related topics
- an interactive problem-oriented policing training exercise
- an interactive Problem Analysis Module
- a manual for crime analysts
- online access to important police research and practices
- information about problem-oriented policing conferences and award programs.
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Contents

About the Guide Series .......................................................... i

Acknowledgments ................................................................. v

The Problem of Robbery at Automated Teller Machines .................... 1

  Related Problems .............................................................. 3
  Factors Contributing to Robbery at Automated Teller Machines ........ 3

Understanding Your Local Problem ........................................... 7

  Asking the Right Questions .................................................. 7
  Incidents ................................................................. 7
  Victims ................................................................. 8
  Offenders .............................................................. 9
  Locations/Times ............................................................ 9
  Current Responses .......................................................... 10
  Measuring Your Effectiveness ............................................... 11

Responses to Robbery at Automated Teller Machines ....................... 13

  General Considerations for an Effective Response Strategy ............ 13
  Imposing Mandatory Minimum Security Standards ...................... 13
  Using Civil Liability ....................................................... 14

Specific Responses to Reduce ATM Robbery ............................... 15

  Altering Lighting, Landscaping and Location ............................ 15
  Implementing Public Awareness and Education Initiatives ............ 19
  Using Surveillance ......................................................... 20
  Targeting Offenders ....................................................... 22
  Hardening Targets and Denying Benefits ................................ 23
Appendix: Summary of Responses to Robbery at Automated Teller Machines . . . .25

Endnotes .................................................................31

References ...............................................................33

About the Author .........................................................37

Recommended Readings ..............................................39

Other Guides in This Series .........................................43
The Problem of Robbery at Automated Teller Machines

This guide addresses the problem of robbery of people using automated teller machines (ATMs) and night cash depositories. The guide begins by describing the problem and reviewing factors that increase the risks of ATM robbery. It then identifies a series of questions that might assist you in analyzing your local ATM robbery problem. Finally, it reviews responses to the problem and what is known about these from evaluative research and police practice.

ATMs were first introduced in the mid-1960s in the United Kingdom, and in the late 1960s in the United States. The number of ATMs has increased dramatically since. ATM users now annually conduct billions of financial transactions, mostly cash withdrawals. Where once one would find ATMs only on bank premises, today one finds them almost everywhere – along sidewalks and in airports, grocery stores, shopping malls, nightclubs, and casinos. There are even mobile ATMs that can be set up at disaster sites or temporary entertainment venues like fairgrounds. Bank customers have come to expect that they can access their funds virtually any time and any place. To some extent, they have traded safety for convenience.

Robberies at night cash depositories, at which cash can only be deposited, not withdrawn, are sufficiently similar to ATM robberies to make most of the responses similar. Hereafter, reference will be made only to ATMs, but unless otherwise noted, all information applies equally to night cash depositories.

Bob Heimberger

ATMs have been installed in many locations such as this shopping mall and nightclub.
ATM services are highly profitable for banks, and banks aggressively market the use of ATM cards. ATMs that are off bank premises are usually more profitable for banks because they attract a higher volume of non-bank customers, who must pay service fees. Unfortunately, customers using off-premise ATMs are more vulnerable to robbery.

As yet, there are no routinely collected national figures on the incidence of U.S. ATM robberies. Estimates are derived from periodic surveys of banks conducted by banking associations. According to those surveys, there was an estimated one ATM crime (including robbery) per 3.5 million transactions. Statewide surveys conducted in California indicated there was one ATM crime per 1.9 million transactions in 1986, one per 1.2 million in 1992, and one per 2.5 million in 1995. Thus, the California figures suggest that the rate of ATM crime declined by about 50 percent during that brief period, although we do not know how well the bank survey data reflect the actual incidence of ATM crime. Moreover, the surveys covered all ATM-related crimes, not just robbery, so the figures overstate robbery rates (see below for related crimes).

The survey figures and findings are still cited as if they reflect current conditions, even though it is doubtful that they do. The best one can conclude is that the overall rate of ATM-related crime is somewhere between one per 1 million and one per 3.5 million transactions, suggesting that such crime is relatively rare. But the figures, without further analysis and some comparative context, do not tell us much about the risks of ATM robbery. Local analysis of ATM robberies will be necessary to determine how significant the problem is in your jurisdiction.

§ It has been estimated that in 1993, banks earned $2.55 billion in revenue from ATMs, saved $2.34 billion in wages for tellers and netted a profit of $2 billion (Deitch 1994; DeYoung 1995).

§§ With a little effort, most local police agencies could compile data on ATM robberies, but until the FBI’s National Incident-Based Reporting System becomes standard, the Uniform Crime Reports will not provide national data on the problem.

§§§ Most of the figures cited in the literature on ATM crime are from two surveys, conducted by the Bank Administration Institute and the American Bankers Association in 1987 and 1989, respectively.

§§§§ This figure is routinely cited in the Bank Administration Institute and American Bankers Association surveys.
Related Problems

Robbery at ATMs is only one of several related problems the police must address. Other problems that call for separate analysis and responses, but which are not addressed in this guide, include:

- robbery of couriers who fill ATMs with cash
- theft of personal identification numbers (PINs) (including theft by "shoulder surfing")
- theft by electronic data interception
- theft by fraudulent electronic transactions
- theft of money from ATMs by bank/ATM service employees
- burglary of ATMs (including theft of entire ATMs)
- presence of homeless people sleeping in ATM vestibules
- vandalism of ATMs
- fraudulent use of ATM cards obtained from customers through dummy ATMs that keep their cards.

Factors Contributing to Robbery at Automated Teller Machines

Understanding the factors that contribute to your problem will help you frame your own local analysis questions, determine good effectiveness measures, recognize key intervention points, and select appropriate responses.
A few studies, although they are becoming dated, have provided some data on common ATM robbery patterns. The general conclusions are as follows:

- Most robberies are committed by a lone offender—using some type of weapon—against a lone victim.
- Most occur at night, with the highest risk between midnight and 4 a.m.
- Most involve robbing people of cash after they have made a withdrawal.
- Robberies are somewhat more likely to occur at walk-up ATMs than at drive-through ATMs.
- About 15 percent of victims are injured.
- The average loss is between $100 and $200.

High rates of all types of street robbery, including ATM robbery, are likely to coincide with crack cocaine markets, as street robbery is a quick way for addicts to get the cash they need to buy crack, and it does not require a lot of planning or skill.

ATM robbery attracts a lot of media attention and public concern, most likely because the general public perceives that it can happen to almost anyone. Legislation regarding ATM customer safety has been introduced immediately after a prominent person, a legislator or someone close to a legislator has been robbed at an ATM.\(^5\)

There are several additional and distinct ATM robbery patterns, each of which presents unique challenges in responding. As noted above, the most common pattern is
for the offender to rob the ATM user immediately after the victim makes a withdrawal. Other patterns include the following:

• the offender forces the victim to go to an ATM to withdraw cash
• the offender robs the victim of his or her ATM card, forces the victim to reveal the PIN, and then uses the card
• the offender robs a victim standing at an ATM of other valuables (wallet, watch, jewelry)
• the offender follows someone who has just withdrawn cash from an ATM and robs him or her away from the ATM.

There is some evidence that offenders who commit street robbery (including ATM robbery) are different from those who commit commercial robbery. We do not know the extent to which ATM robbers commit other types of street robberies, like purse snatchings and muggings. Street robbers are notoriously difficult to deter. They require relatively small amounts of cash to justify their risk, they have a lot of crime opportunities, they want cash immediately, and street robbery does not require much skill or planning. Some robbers will adapt to technological prevention measures, finding ways to circumvent them. For example, surveillance equipment might lead robbers to disguise themselves.
Understanding Your Local Problem

The information provided above is only a generalized description of ATM robbery. You must combine the basic facts with a more specific understanding of your local problem. Analyzing the local problem carefully will help you design a more effective response strategy.

Asking the Right Questions

The following are some critical questions you should ask in analyzing your particular problem of ATM robbery, even if the answers are not always readily available. Your answers to these and other questions will help you choose the most appropriate set of responses later on.

Incidents

- How many robberies are related to ATMs? (When counting incidents, remember that a few ATM robbery victims will also have been assaulted, raped, kidnapped, or murdered, and the incident will be classified by the more serious offense. These more serious offenses may not significantly alter the statistical picture of the problem, but they may well have a significant effect on the public’s fear of ATM robbery.) Mapping techniques alone will not reveal the relationship between robberies and ATMs—some robberies occur away from ATMs after offenders follow ATM customers, while some robberies only coincidentally occur near ATMs. You will need to review the entire police reports to determine how robberies and ATMs are related.
- What percentage of all robberies in your jurisdiction are ATM robberies? What percentage of street robberies are ATM robberies?
• What percentage of ATM robberies and attempted robberies do you estimate are reported to police?
• Is the current incidence of ATM robberies increasing or decreasing?
• Which pattern of ATM robbery is most common? Robbery near ATMs after withdrawals? Robbery away from ATMs after withdrawals? Forced withdrawals? Offenders use stolen ATM cards? Other valuables stolen at ATMs?
• Have any civil suits resulting from ATM robberies been filed against ATM operators in your jurisdiction? If so, what can you learn about the problem from these civil suits? (For example, what were the specific claims against the vendors? Did they relate to inadequate security measures or ATM locations? Who prevailed in the suits, and on what grounds?)

Victims

• Who are the victims? Are there any noticeable demographic patterns among them? Age? Gender? Occupation?
• Are there repeat robbery victims?
• What percentage of victims are injured during robberies? How serious are the injuries?
• How do victims typically react to demands for their money? Do they resist or comply? If they resist, how do they do so? How do offenders respond to victims' actions?
• What percentage of attempted robberies are thwarted by the victim? By others intervening?
• How much money do victims typically lose?
• Do victims follow the standard safety precautions? (See response 7 in the following section for examples of standard safety precautions for ATM users.) If not, which ones are not followed? Why do victims say they fail to follow certain safety precautions?
• Are victims usually alone when robbed?

**Offenders**

• Do the offenders specialize in ATM robbery, or do they commit other types of crime as well?
• What percentage of ATM robberies are committed by repeat offenders? How prolific are the worst offenders? Are there any common characteristics of repeat ATM robbers? How do ATM-robber characteristics compare with those of other robbers?
• Do offenders usually work alone?
• What types of weapons do offenders use or threaten to use?
• What percentage of offenders commit robbery for money to buy drugs? What percentage are intoxicated by drugs or alcohol during the robbery? What drugs are most commonly associated with ATM robbery? (Local data on arrestees' drug usage, if available, may provide partial answers to these questions.)

**Locations/Times**

• When do the ATM robberies occur? During the day, or at night? Time? Day of week? Time of month? Time of year?
• In what area do the ATM robberies occur?
• Are robberies more likely to occur at walk-up or drive-through ATMs? At indoor or outdoor sites? On bank premises or at off-premise sites?
• What percentage of ATM robberies occur at repeat locations?
• Are some banks’ ATMs the site of robbery more than others? Are some banks’ ATMs much less likely to be the site of robbery? Are there any obvious factors that distinguish high-robbery ATMs from low-robbery ATMs?
• Are the ATMs where robberies occur most frequently in areas otherwise considered to be at high risk for crime and disorder? Near street drug markets?
• What security features and environmental conditions are present at high-robbery ATMs and low-robbery ATMs (e.g., proper lighting, clear visibility, locked vestibules, surveillance cameras, rearview mirrors, natural surveillance)?
• What paths do offenders take entering and escaping from the crime scene around ATMs?
• Why do ATM operators locate high-robbery ATMs at the particular sites (i.e., why do they believe those particular sites will attract customers)? Do the same factors that make ATM locations attractive for ATM operators also make them attractive for ATM robbers? Are high-robbery sites more or less profitable for ATM operators than the average ATM sites?

Current Responses

• Do police and ATM operators have an effective working relationship? Is information about ATM crime shared freely? Are police apprised of all ATM sites within the jurisdiction?
• Do ATM operators analyze robbery trends and respond appropriately?
• Do police routinely review site plans and/or business permit applications for ATMs?

• Does the law applying to your jurisdiction mandate minimum ATM security standards? (See the "Imposing Mandatory Minimum Security Standards" section below.) Are the applicable standards adequate? Do ATMs in your jurisdiction comply with those standards? Who is responsible for monitoring and enforcing compliance? Is it being done adequately?

• Regardless of whether there are mandatory security standards, do ATMs in your jurisdiction meet all or most of the security standards discussed in this guide? If not, which security standards are most commonly lacking?

• Do police and other criminal justice agencies operate repeat offender programs?

• What is the clearance rate for ATM robberies? Is this figure higher or lower than the overall norm for robberies?

• Do ATM cameras effectively identify offenders?

**Measuring Your Effectiveness**

Measurement allows you to determine to what degree your efforts have succeeded, and suggests how you might modify your responses if they are not producing the intended results. You should take measures of your problem before you implement responses, to determine how serious the problem is, and after you implement them, to determine whether they have been effective. All measures should be taken in both the target area and the surrounding area. (For more detailed guidance on measuring effectiveness, see the companion guide to this series, *Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers.*)
Robbery at Automated Teller Machines

The following are potentially useful measures of the effectiveness of ATM robbery responses:

- number of ATM robberies and attempted robberies reported to police
- percentage of ATMs that are robbery-free
- number and severity of victim injuries during ATM robberies
- total and average cash losses incurred by victims
- degree to which ATM robbery is displaced geographically or to other types of crime
- degree to which other crimes decrease in the areas around ATMs (otherwise known as a diffusion of benefits).
Responses to Robbery at Automated Teller Machines

Your analysis of your local problem should give you a better understanding of the factors contributing to it. Once you have analyzed your local problem and established a baseline for measuring effectiveness, you should consider possible responses to address the problem.

The following response strategies provide a foundation of ideas for addressing your particular problem. These strategies are drawn from a variety of research studies and police reports. Several of these strategies may apply to your community's problem. It is critical that you tailor responses to local circumstances, and that you can justify each response based on reliable analysis. In most cases, an effective strategy will involve implementing several different responses. Law enforcement responses alone are seldom effective in reducing or solving the problem. Do not limit yourself to considering what police can do; give careful consideration to who else in your community shares responsibility for the problem and can help police better respond to it.

General Considerations for an Effective Response Strategy

1. Imposing mandatory minimum security standards. Banks and other institutions that operate ATMs must comply with applicable U.S. federal laws, principally the Federal Electronic Funds Transfer Act (Regulation E) and the Bank Protection Act (Regulation P) (12 CFR § 216.1). These federal laws, however, primarily address matters related to the security of the ATMs themselves and to fraudulent transactions, rather than matters related to ATM users' safety.
No federal law prohibits minimum security standards to protect ATM users; several states and a few cities have passed their own laws mandating minimum security standards for ATMs. Most of these laws set minimum standards for lighting, landscaping, visibility, security reviews, and customer safety tips. The state of New York’s law requires, in addition, surveillance cameras and locked vestibule doors that require an ATM card to access. Some laws provide for fines against ATM operators for violations of the standards. Some require annual compliance certifications for each ATM. If security-standard laws are enacted, adequate resources must be dedicated to inspection and compliance enforcement.

Under some state laws, ATM operators who comply with the security standards are statutorily protected from civil liability. Some laws apply retroactively to all ATMs; others, only to new ATMs.

There are both positive and negative implications for specific security standards. Highly specific standards leave little room for debate about compliance, but they also inhibit technological innovations that could provide more security than mandated by the minimum standards.

2. Using civil liability. Although police do not play a direct role in civil lawsuits resulting from ATM robberies, you should understand that ATM operators and premise owners carefully consider their civil liability when deciding where to place ATMs and what security measures to adopt. Much of the published literature addresses ATM security from a legal-liability perspective. Statutory and case law on liability for injuries sustained during ATM transactions varies across jurisdictions, so you should consult local legal counsel if you wish to know how the law applies in your jurisdiction. As a general proposition in the United States, courts take into
Responses to Robbery at Automated Teller Machines

account the knowledge that ATM operators had, or should have had, about the risk of robbery at particular ATMs when determining their liability for victims' injuries. Consequently, ATM operators are advised to consult frequently with local police about reports of crime around ATMs. Courts will usually hold ATM operators to the industry standards for basic crime prevention measures, although establishing liability also turns on other legal issues. §

Specific Responses to Reduce ATM Robbery

Altering Lighting, Landscaping and Location

ATM operators should consider security as well as marketing in deciding where to install ATMs. The most commonly mentioned ATM robbery prevention measures in the literature are those that will be familiar to crime prevention through environmental design practitioners – lighting, landscaping and location. §§ ATM sites should be inspected regularly to ensure that safety features have not become compromised. ATM operators, police and bank regulators all should share responsibility for monitoring compliance.

3. Ensuring adequate lighting at and around ATMs.

Adequate lighting at and around ATMs allows users to see any suspicious people near the ATM, and allows potential witnesses, including police, to see a crime in progress and get a good look at the offender. Good lighting can deter people from robbing ATM users in the first place. There should be adequate light around all building corners adjacent to the ATM, as well as for nearby parking places.

Most ATM lighting standards, including some mandated by law, call for minimum light levels at and around ATMs. §§§
According to lighting designers, however, most minimum lighting standards do not address all the factors that affect visibility. Shadows, light types, light colors, light-source direction, light uniformity, glare, and obstructions all affect visibility for the observer. A qualified lighting designer should plan ATM lighting.

Lights should turn on automatically via photo sensors rather than by manual or timer switches. Light levels, once set properly, should be monitored regularly to ensure they do not fall below acceptable levels. Long-lasting light bulbs should be used. Automated light-detection monitors can alert the ATM operator if light levels drop. Light fixtures must be adequately protected so that offenders cannot disable them.

4. Ensuring the landscaping around ATMs allows for good visibility. Trees and shrubbery should be trimmed routinely to remove potential hiding places for offenders and ensure the ATM is visible to passersby. Slow-growing shrubbery that does not need trimming as often is preferable. Obstacles such as dumpsters, benches or walls that obstruct clear views of the ATM should be removed.

Bob Heimberger

This ATM, located in a poorly lit alley and next to a wall that obstructs the user's side view, does not allow for good visibility.
5. Installing mirrors on ATMs. Rearview mirrors on ATMs and adjacent building corners allow ATM users to detect suspicious people and behavior.

6. Installing ATMs where there is a lot of natural surveillance. ATMs should be placed in areas where there is a lot of routine vehicle and pedestrian traffic.\(^9\) The potential for witnesses deters offenders, and heavy traffic increases the probability of victim assistance when a robbery occurs. ATMs are increasingly being placed inside businesses such as grocery and convenience stores, where there is a lot of natural surveillance; this should help prevent ATM robberies. Some security experts recommend that ATMs have high visibility and activity on all three adjacent sides—ideally, with high-speed traffic on one side, slow-speed traffic on another, and relatively permanent observers (e.g., residents) on the third.\(^{10}\) Indoor ATMs should be free of sight obstructions like plants and blinds, and should be visible from the street through transparent windows and doors. Tinted glass should not be used.

*Bob Heimberger*

ATMs should be installed in locations where there is a lot of natural surveillance as is the case for this drive-through ATM in a parking lot adjacent to a road.
7. **Installing ATMs in police stations.** Some jurisdictions have installed publicly accessible ATMs in police stations to attract ATM users to a safe place to conduct their business. Anne Arundel County (Maryland) installed ATMs in all its police stations in response to a rash of ATM robberies (Morgan 1997). While the idea has merit, many police stations might not be able to accommodate the added vehicle and pedestrian traffic generated by an ATM. Where this is a problem, ATM use might be limited to nighttime hours when the risk of robbery is greatest, and when the police business being conducted at the station is at a minimum. ATMs might also be installed in or near other government buildings such as post offices or fire stations, where there is at least some natural surveillance.

8. **Relocating, closing or limiting the hours of operation of ATMs at high-risk sites.** ATM operators should assess crime rates and other measures that suggest the overall risk level of the area in which they are considering installing an ATM. ATMs should not be placed in areas known for drug trafficking and sites near abandoned property or crime-prone liquor establishments. While ATM operators should not avoid placing ATMs in all low-income areas with higher crime rates, it might be reasonable to restrict ATM operation to daylight hours in such areas. ATM operators should consult with local police when choosing sites and notify police of all ATM locations. Local laws should require such consultation as part of the routine site planning and business licensing processes.
Implementing Public Awareness and Education Initiatives

9. Providing ATM users with safety tips. ATM users should be advised about what steps they can take to reduce their risk of getting robbed. While it is unlikely that providing safety tips will prevent any particular robbery, the larger purpose is to change ATM users' habits. Safety tips can be provided through mailings to cardholders, signs posted at ATMs, messages printed on ATM receipts, messages displayed on ATM screens, safety presentations, and public awareness campaigns. Listed below are some standard safety tips for ATM users:

- Be aware of your surroundings, especially between dusk and dawn. If you notice anything suspicious—a security light out, someone loitering nearby—consider coming back later or using a supermarket or convenience store ATM.
- If using the ATM at night, take someone with you.
- Park in a well-lit area as close as possible to the ATM.
- At a drive-through ATM, be sure the doors are locked and the passenger windows are rolled up.
- If you withdraw cash, put it away promptly; count it later, in private.
- Put your ATM card and receipt away promptly; never leave your receipt at the ATM.
- Keep your PIN secret—don't write it down, and don't share it with anyone you don't trust absolutely. Your PIN provides access to your account.
- Shield the keypad when entering your PIN to keep it from being observed.
- Avoid being too regular in your ATM use—don't repeatedly visit the same machine at the same time, the same day of the week, for instance.
ATM users should further be advised to close any vestibule doors securely and not to open doors for others. In addition, signs at ATMs should state that the site is being surveilled by cameras.

Some victims resist during robberies either to protect their valuables or because they believe the offender is about to get violent. Some succeed in preventing the robbery through resistance, while others get injured or killed. Offenders want to get the crime over with quickly so they can escape. Any delay increases their nervousness and, therefore, the likelihood they will become violent. Robbers are usually highly agitated and easily perceive the victim's actions as threatening. Drug and alcohol use will obviously influence their emotional state. Some use violence immediately to preempt any resistance. In cases with multiple offenders, the risk of violence increases because each offender is also concerned about appearing tough and in control to the other(s).

As with other violent crimes, victims should assess the particular situation, taking account of nearby assistance, weapons they are threatened with, offenders' behavior and emotional state, their own defensive abilities, and their own psychological need to resist. Given an imperfect understanding of why robbers become violent, compliance is usually the safer course of action for victims, and the best advice for police to offer. Widespread victim compliance, however, undoubtedly leads some offenders to perceive lower risk and, therefore, increases their ATM robbery rates.

**Using Surveillance**

10. **Installing and monitoring surveillance cameras at and around ATMs.** Surveillance cameras at and around ATMs serve two main purposes—to deter robbery and fraud, and to facilitate offender identification. If the experience
with surveillance cameras inside banks is any guide, they serve the latter purpose better. There are two basic types of surveillance cameras—those that capture live images (such as CCTV), and those that merely record images that can be viewed later. Surveillance cameras should record both close-up images of the ATM user and the view immediately behind the user. A camera placed on or inside the ATM that is activated when a transaction is initiated serves this purpose. Such cameras should have wide-angle lenses not exposed to direct sunlight and should be mounted high off the ground to prevent vandalism. Plainly visible cameras are more effective deterrents to robbers, but are more vulnerable to vandalism. Older technology uses videocassette recording; newer technology, which costs less to maintain, provides digital color images that are transmitted via Internet networks to remote sites, where they can be viewed online or stored and retrieved later. Dummy surveillance cameras should not be used unless there are also working cameras at the site, because they create a false sense of security among ATM users. At least one ATM operator has installed heat sensors around the ATM that detect the presence of people out of view of surveillance cameras. The sensors can activate either a recorded voice message warning the person to move away from the ATM, or a silent alarm.

11. Installing devices to allow victims to summon police during a robbery. There are several mechanisms by which ATM users can summon police quickly:

• Panic buttons installed on the ATM. Some security consultants and police, however, worry that panic buttons will just exacerbate the false-alarm problem that is already burdening police resources.
• Telephones next to the ATM.
• Live microphones in the ATM. A security company can monitor such microphones.
• Door alarms. Door alarms can be set so that they are automatically activated if a door to an enclosed vestibule is left open too long.

• Reverse PIN technology. An ATM user can activate a silent alarm by entering his or her PIN in reverse order or by entering an additional digit after the PIN. This so-called "reverse PIN" technology has been patented, but is not known to be in use yet anywhere. A study of its feasibility conducted for the state of Illinois concluded it was cost-prohibitive and unlikely to be effective because robbery victims are under such extreme stress.

12. Deploying private security guards at ATMs. Security guards can either be assigned just to high-risk ATMs or be assigned to randomly patrol many ATMs. This response is considered the least attractive to ATM operators due to the high cost.

Targeting Offenders

13. Controlling street drug markets. High rates of street robbery usually coincide with high levels of street drug trafficking, particularly in crack cocaine. Crack addicts have frequent and immediate cravings for the drug; street robbery, especially around ATMs, is one of the fastest ways for them to get cash to buy the drug. Therefore, whatever you can do to control the volume of street-level drug trafficking will also likely reduce the street robbery rate, including ATM robbery.

14. Targeting repeat offenders. Where it can be established that a few offenders are likely responsible for many local ATM robberies, the offenders should be targeted by repeat offender programs. Detectives and patrol officers should cultivate informants to identify and apprehend active offenders. Offering rewards for information is also good practice. Interviewing offenders after they have
been convicted is useful both for clearing other cases and for improving intelligence about the rate of ATM robbery committed by a few repeat offenders.30

There are limits, however, to what arresting, prosecuting and incarcerating ATM robbers can do to prevent ATM robbery. Most street robbers are so highly motivated to get quick cash that they discount the likelihood of getting caught and sent to jail.31

15. Prohibiting loitering and panhandling near ATMs. Some ATM robbers loiter around ATMs waiting for a suitable victim, and some ATM robberies are extreme cases of aggressive panhandling. Laws that prohibit loitering and panhandling near ATMs give police authority to keep opportunistic offenders away from potential victims.32

Hardening Targets and Denying Benefits

16. Requiring that ATMs be located in enclosed vestibules with doors that lock. The state of New York requires that ATMs be in enclosed vestibules with doors that lock. Door locks can be programmed to admit only bank customers, but given the profits to be earned from noncustomer service fees, most banks dislike this added security measure. Some security consultants believe that enclosed vestibules create more problems than they prevent.33 Door locks are frequently vandalized. Moreover, ATM users habitually open locked doors as a courtesy to others, or allow others to follow them into the vestibule.34 An offender who gets into an enclosed vestibule with a victim can more easily trap the victim. Enclosed vestibules also attract homeless people looking for a warm, dry place to sleep.
17. **Setting daily cash-withdrawal limits.** Bank regulations that limit the amount of cash a customer may withdraw each day from an ATM reduce the potential financial loss from a robbery, and potentially discourage some robbers who decide that the benefits of the robbery are not worth the risk of apprehension. However, most street robbers do not expect much cash from a robbery, while concluding it is worth the risk. It is not known what effect raising or lowering cash withdrawal limits would have on ATM robbery rates, but in general, cash withdrawal limits make sound crime prevention sense.
Appendix: Summary of Responses to Robbery at Automated Teller Machines

The table below summarizes the responses to robbery at automated teller machines, the mechanism by which they are intended to work, the conditions under which they ought to work best, and some factors you should consider before implementing a particular response. It is critical that you tailor responses to local circumstances, and that you can justify each response based on reliable analysis. In most cases, an effective strategy will involve implementing several different responses. Law enforcement responses alone are seldom effective in reducing or solving the problem.

<table>
<thead>
<tr>
<th>Response No.</th>
<th>Page No.</th>
<th>Response</th>
<th>How It Works</th>
<th>Works Best If…</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Considerations for an Effective Strategy</td>
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<td></td>
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<tr>
<td>1.</td>
<td>13</td>
<td>Imposing mandatory minimum security standards</td>
<td>Requires financial institutions to adopt certain measures to prevent ATM robbery</td>
<td>…there are adequate resources to inspect ATMs for compliance and sanctions to enforce regulations</td>
<td>Must be sure local regulations are not preempted by state law; regulations should be specific enough to be effective without stifling potentially more effective innovations</td>
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<td>2.</td>
<td>14</td>
<td>Using civil liability</td>
<td>Concerns for civil liability encourage financial institutions to adopt measures to prevent ATM robbery</td>
<td>…state law governing civil liability is reasonably favorable to plaintiffs</td>
<td>Police typically play little role in civil actions</td>
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<td>Altering Lighting, Landscaping and Location</td>
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<td>3.</td>
<td>15</td>
<td>Ensuring adequate lighting at and around ATMs</td>
<td>Enables ATM users to see suspicious people, and potentially deters offenders</td>
<td>…a qualified lighting designer plans the lighting</td>
<td>Some jurisdictions have mandated minimum lighting standards, but most minimum standards do not address the full range of lighting factors that affect visibility</td>
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<td>Response No.</td>
<td>Page No.</td>
<td>Response</td>
<td>How It Works</td>
<td>Works Best If...</td>
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<td>4.</td>
<td>16</td>
<td>Ensuring the landscaping around ATMs allows for good visibility</td>
<td>Removes potential hiding places for offenders, enables ATM users to see suspicious people, and enables passersby to observe crimes in progress</td>
<td>...slow-growing shrubbery is planted and landscaping is regularly monitored and maintained</td>
<td>ATM operators must balance the desire to make ATM sites attractive through landscaping against security considerations</td>
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<td>5.</td>
<td>17</td>
<td>Installing mirrors on ATMs</td>
<td>Allows users to see suspicious people and behavior behind them</td>
<td>...mirrors are properly maintained and ATM users become accustomed to using them</td>
<td>Vulnerable to vandalism; robberies may occur too suddenly to allow victims to take any preventive action</td>
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<td>6.</td>
<td>17</td>
<td>Installing ATMs where there is a lot of natural surveillance</td>
<td>Increases the probability that witnesses will observe crimes in progress and assist victims, summon assistance or identify offenders; and deters offenders</td>
<td>...there is high traffic volume during times when the risk of robbery is high, and witnesses are willing and able to assist victims</td>
<td>Some locations with high traffic, such as street drug markets, do not provide reliable witnesses</td>
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<td>7.</td>
<td>18</td>
<td>Installing ATMs in police stations</td>
<td>Enables ATM users to obtain cash in a protected environment</td>
<td>...police stations can accommodate the increase in foot and vehicle traffic</td>
<td>May be feasible to operate ATMs in police stations only during nighttime hours, when other demands on the police are lower</td>
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<td>8.</td>
<td>18</td>
<td>Relocating, closing or limiting the hours of operation of ATMs at high-risk sites</td>
<td>Removes the opportunity for robbery in areas where or at times when the risk is high</td>
<td>...ATM operators can reliably establish area risk levels through close consultation with local police</td>
<td>A simple review of an area’s total crime rate is inadequate to determine ATM robbery risks; viable alternatives for accessing ATMs should be available for people in high-risk areas</td>
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<td>Page No.</td>
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<td>How It Works</td>
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<td>9.</td>
<td>19</td>
<td>Providing ATM users with safety tips</td>
<td>Increases the likelihood that ATM users will avoid risky behavior that can lead to robbery</td>
<td>…safety tips are simple to understand, and communicated often and through various means to become part of ATM users' basic safety consciousness</td>
<td>ATM operators may be hesitant to call too much attention to robbery risks for fear of discouraging customers from using ATMs</td>
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<td>10.</td>
<td>20</td>
<td>Installing and monitoring surveillance cameras at and around ATMs</td>
<td>Enhances the ability of police to identify offenders, and potentially deters offenders</td>
<td>…cameras surveil both the area immediately in front of the ATM screen and the area around the ATM, camera lenses are not exposed to direct sunlight, and cameras and recording mechanisms are routinely monitored and maintained</td>
<td>Dummy cameras should not be used except as a decoy to active cameras; cameras should be mounted high enough to discourage vandalism and be sturdy enough to withstand attempts to vandalize them</td>
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<td>11.</td>
<td>21</td>
<td>Installing devices to allow victims to summon police during a robbery</td>
<td>Enables robbery victims to summon assistance</td>
<td>…police have the resources to quickly respond to panic alarms</td>
<td>Some devices are vulnerable to vandalism; will likely increase the volume of false alarms to which police must respond; victims often lack the opportunity or ability to activate alarms during a robbery</td>
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<td>Response No.</td>
<td>Page No.</td>
<td>Response</td>
<td>How It Works</td>
<td>Works Best If…</td>
<td>Considerations</td>
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<td>12.</td>
<td>22</td>
<td>Deploying private security guards at ATMs</td>
<td>Deters offenders and increases the likelihood that robberies will be observed and interrupted, or offenders will be identified</td>
<td>…security guards are stationed at high-risk locations</td>
<td>Costly for ATM operators</td>
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<td>13.</td>
<td>22</td>
<td>Controlling street drug markets</td>
<td>Potentially reduces the demand for drugs and, in turn, the demand for cash to purchase them; and incapacitates drug users who are likely to commit ATM robberies</td>
<td>…the link between local street drug markets and ATM robberies can be established</td>
<td>Requires a substantial commitment of police and other resources</td>
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<td>14.</td>
<td>22</td>
<td>Targeting repeat offenders</td>
<td>Incapacitates offenders who commit or are likely to commit the most ATM robberies</td>
<td>…the contribution of repeat offenders to local ATM robberies can be established, and established principles and methods of repeat offender programs are applied</td>
<td>Requires a substantial commitment of police and other criminal justice system resources; requires accurate and timely intelligence</td>
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<td>15.</td>
<td>23</td>
<td>Prohibiting loitering and panhandling near ATMs</td>
<td>Provides police authority to remove potential offenders from potential victims</td>
<td>…legislation is enacted, and police are willing and able to enforce the laws</td>
<td>Legislation must be carefully drafted to meet constitutional challenges; police are unlikely to be present just before a robbery</td>
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<td>Response No.</td>
<td>Page No.</td>
<td>Response</td>
<td>How It Works</td>
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<td><strong>Hardening Targets and Denying Benefits</strong></td>
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<td>16.</td>
<td>23</td>
<td>Requiring that ATMs be located in enclosed vestibules with doors that locks</td>
<td>Makes it more difficult for offenders to surprise ATM users</td>
<td>…objects do not obstruct visibility into and out of vestibules, and door locks are regularly monitored and maintained</td>
<td>Added cost to ATM operators; ATM users habitually allow others to enter vestibules with them; door locks are often vandalized; some door locks can be opened with any magnetized plastic card; victims can become trapped with an offender in a vestibule; homeless people may use vestibules for shelter</td>
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<td>17.</td>
<td>24</td>
<td>Setting daily cash-withdrawal limits</td>
<td>Reduces the benefit to offenders, potentially reducing the likelihood they will incur the risk to obtain small amounts of cash</td>
<td>…offenders expect to get a lot of cash from a robbery, justifying the risk of apprehension</td>
<td>Especially around street drug markets where the demand for small amounts of cash is strong and immediate, offenders are unlikely to be deterred by small expected gains from robbery; ATM users must be willing to accept the cash withdrawal limits</td>
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</table>
Endnotes

34 Lewis (1992).
References


About the Author

*Michael S. Scott*

Michael S. Scott is the director of the Center for Problem-Oriented Policing, Inc. and clinical assistant professor at the University of Wisconsin-Madison Law School. He was formerly chief of police in Lauderhill (Florida); served in various civilian administrative positions in the St. Louis Metropolitan, Ft. Pierce (Florida), and New York City police departments; and was a police officer in the Madison (Wisconsin) Police Department. Scott developed training programs in problem-oriented policing at the Police Executive Research Forum (PERF). He was the 1996 recipient of the Gary P. Hayes Award for innovation and leadership in policing. He is a judge for the Herman Goldstein Award for Excellence in Problem-Oriented Policing. Scott holds a law degree from Harvard Law School and a bachelor's degree from the University of Wisconsin-Madison.
Recommended Readings

• **A Police Guide to Surveying Citizens and Their Environments**, Bureau of Justice Assistance, 1993. This guide offers a practical introduction for police practitioners to two types of surveys that police find useful: surveying public opinion and surveying the physical environment. It provides guidance on whether and how to conduct cost-effective surveys.

• **Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers**, by John E. Eck (U.S. Department of Justice, Office of Community Oriented Policing Services, 2001). This guide is a companion to the *Problem-Oriented Guides for Police* series. It provides basic guidance to measuring and assessing problem-oriented policing efforts.

• **Conducting Community Surveys**, by Deborah Weisel (Bureau of Justice Statistics and Office of Community Oriented Policing Services, 1999). This guide, along with accompanying computer software, provides practical, basic pointers for police in conducting community surveys. The document is also available at www.ojp.usdoj.gov/bjs.

• **Crime Prevention Studies**, edited by Ronald V. Clarke (Criminal Justice Press, 1993, et seq.). This is a series of volumes of applied and theoretical research on reducing opportunities for crime. Many chapters are evaluations of initiatives to reduce specific crime and disorder problems.
• **Excellence in Problem-Oriented Policing: The 1999 Herman Goldstein Award Winners.** This document produced by the National Institute of Justice in collaboration with the Office of Community-Oriented Policing Services and the Police Executive Research Forum provides detailed reports of the best submissions to the annual award program that recognizes exemplary problem-oriented responses to various community problems. A similar publication is available for the award winners from subsequent years. The documents are also available at [www.ojp.usdoj.gov/nij](http://www.ojp.usdoj.gov/nij).

• **Not Rocket Science? Problem-Solving and Crime Reduction**, by Tim Read and Nick Tilley (Home Office Crime Reduction Research Series, 2000). Identifies and describes the factors that make problem-solving effective or ineffective as it is being practiced in police forces in England and Wales.

• **Opportunity Makes the Thief: Practical Theory for Crime Prevention**, by Marcus Felson and Ronald V. Clarke (Home Office Police Research Series, Paper No. 98, 1998). Explains how crime theories such as routine activity theory, rational choice theory and crime pattern theory have practical implications for the police in their efforts to prevent crime.

• **Problem Analysis in Policing**, by Rachel Boba (Police Foundation, 2003). Introduces and defines problem analysis and provides guidance on how problem analysis can be integrated and institutionalized into modern policing practices.

• **Problem-Oriented Policing and Crime Prevention**, by Anthony A. Braga (Criminal Justice Press, 2003). Provides a thorough review of significant policing research about problem places, high-activity offenders, and repeat victims, with a focus on the applicability of those findings to problem-oriented policing. Explains how police departments can facilitate problem-oriented policing by improving crime analysis, measuring performance, and securing productive partnerships.

• **Problem-Oriented Policing: Reflections on the First 20 Years**, by Michael S. Scott (U.S. Department of Justice, Office of Community Oriented Policing Services, 2000). Describes how the most critical elements of Herman Goldstein’s problem-oriented policing model have developed in practice over its 20-year history, and proposes future directions for problem-oriented policing. The report is also available at [www.cops.usdoj.gov](http://www.cops.usdoj.gov).


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