COPS

COMMUNITY ORIENTED POLICING SERVICES
U.S. DEPARTMENT OF JUSTICE

Robbery of Convenience Stores

by
Alicia Altizio
Diana York

Center for Problem-Oriented Policing

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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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The project team that developed the guide series comprised Herman Goldstein (University of Wisconsin Law School), Ronald V. Clarke (Rutgers University), John E. Eck (University of Cincinnati), Michael S. Scott (University of Wisconsin Law School), Rana Sampson (Police Consultant), and Deborah Lamm Weisel (North Carolina State University.)

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Cynthia E. Pappas oversaw the project for the COPS Office. Research for the guide was conducted at the Criminal Justice Library at Rutgers University under the direction of Phyllis Schultze. Suzanne Fregly edited this guide.

Contents

The Problem of Robbery of Convenience Stores

What This Guide Does and Does Not Cover

This guide begins by describing the problem of convenience store robbery and reviewing factors that increase its risk. It then identifies a series of questions to help you analyze your local convenience store robbery problem. Finally, it reviews responses to the problem and what is known about these from evaluative research and police practice.

Convenience store robbery is but one aspect of the larger set of problems related to robbery and to commercial establishments. Although all robbery types share some common features, convenience store robbery warrants special attention because convenience stores have special characteristics. Related problems not directly addressed in this guide, each requiring separate analysis, include:

- bank robbery
- burglary of retail establishments
- check and card fraud
- false burglar alarms
- gasoline drive-offs
- gun violence
- robbery at automated teller machines
- robbery of taxi drivers
- shoplifting
- street muggings
- theft by employees.

§ The Middle Atlantic States (New Jersey, New York, and Pennsylvania) led the increase in number of stores (9.8 percent from the previous year), although all U.S. regions experienced an increase within the past year (National Association of Convenience Stores 2005).

Some of these related problems are covered in other guides in this series, all of which are listed at the end of this guide. For the most up-to-date listing of current and future guides, see www.popcenter.org.

General Description of the Problem

About Convenience Stores

Convenience stores are "retail business[es] with primary emphasis placed on providing the public a convenient location to quickly purchase from a wide array of consumable products (predominantly food and gasoline) and services."[1] There are over 135,000 convenience stores operating in the United States, and the number continues to grow.§ An estimated 100 million Americans visit a convenience store on any given day; each convenience store might serve hundreds, even thousands, of customers daily.[2] Over 80 percent of all Americans, because of their busy schedules, prefer convenience stores to supermarkets.[3]

Extent of the Problem

Convenience store robberies account for approximately 6 percent of all robberies known to the police.[4] Although this comprises a relatively small percentage of total robberies, the problem is persistent. Over the last 30 years, there has been little change in the proportion of convenience store robberies. Nevertheless, convenience stores in particular locations can be vulnerable to repeat victimization, especially those types of retailers that have large amounts of cash, low security, and few staff and customers likely to resist.[5]

The numbers of U.S. convenience store robberies rose significantly in the 1980s and then declined just as significantly in the 1990s, a reduction that could be due in part to the development of better crime prevention measures in convenience stores,[6] many of which are discussed in the Responses section below.

Repeat Victimization§

Some stores are repeatedly victimized, either by the same offender or different offenders. Reasons for repeat victimization vary. A successful robber might return to rob the same store again or might tell other robbers about the store. Alternatively, a wide range of robbers might see the store as particularly attractive or vulnerable.§§ Media accounts may actually play up the vulnerability of the store by reporting successful robberies[7] and may glamorize the crime, giving would-be offenders the notion that those that "rob with style" don't get caught.[8]

Interviews with convicted robbers revealed that they often selected easy targets assuming that "victims [businesses] will not install preventative measures to stop them."[9] One study of convenience store robbery victims indicates that more than one-half of the respondents reported subsequent changes in store policy or practice after a robbery.[10] It was also found that a store was most vulnerable to revictimization within the first few weeks after the first robbery.[11]

§ See Problem-Solving Tools Guide No. 4, *Analyzing Repeat Victimization*.

§§ See the Problem-Solving Tools Guide on *Understanding Risky Facilities* for further discussion of why some places are more vulnerable to crime than other similar places.

Types of Convenience Store Robbery

Convenience store robberies are classified according to the offender's method of operation:[12]

- **Straight:** Demanding money immediately upon entering a store.
- **Customer:** Demanding money some time after entering a store and engaging in the act of making a purchase.

Another perhaps less common type is merchandise robbery,§ which involves the forcible taking of goods from a store. A higher number of employee injuries are reported in merchandise robberies, as active resistance and confrontation are more prevalent in these situations.[13]

Harms Resulting From Convenience Store Robbery

Physical

Convenience store employees suffer from high rates of workplace homicide, second only to taxicab drivers.[§§,14] Customers can also suffer injury from offender assaults. Injuries can result from an employee's active resistance or from the offender's misreading the employee's nervousness or hesitation as resistance.[15] When faced with an employee who chooses to actively resist and is in a face-to-face confrontation, robbers may resort to injuring the worker to avoid apprehension. Higher injury rates are consistently found to be correlated with measures employees take during the robbery.[16]

Economic

Convenience store robberies are not only costly to the workers victimized but also to the store itself. Costs include loss of customers who may be deterred from shopping at a store that has been robbed, leading to a loss of income from reduced customer sales. Stores can also experience an increase in workers' compensation costs and insurance premiums due to the robbery. Unfortunately, for those independently owned stores, losses may be unrecoverable, due to the inability of many small operations to afford insurance coverage.[17] Stores that do not have insurance coverage may be forced to increase prices or potentially close. Other less direct costs include the various criminal justice activities of state and local governments, including police investigations, prosecutions, and incarceration and supervision of offenders.[18]

The average cost to employers of a single episode of workplace violence can amount to $250,000 in lost work time and legal expenses.[19] Workplace victimizations reportedly contribute to a loss of 3.5 days per employee per crime. Victimization can further limit the ability of these stores to attract and maintain employees for the night shifts, particularly in stores that operate 24 hours a day[20] and those with a high volume of cash transactions, a characteristic of such stores. The combination of operational expenses and security challenges can be financially burdensome.[21]

Psychological

Victim employees can also suffer psychological harm.[22] "Secondary victimization" can occur when employers, managers, employees, or those responding to the robbery fail to acknowledge the victim's trauma.[23] This may result from not believing the victim's description of the attack, discounting the incident, and blaming or criticizing the victim. Psychological problems resulting from victimization may not only affect the employee's subsequent workplace performance, but also can affect the store's daily operations.§

Factors Contributing to Convenience Store Robbery

Understanding the factors that contribute to convenience store robbery will help you frame your own local analysis questions, determine good effectiveness measures, recognize key intervention points, and select appropriate responses.

Research has identified many factors that influence a robbery's likelihood or outcome. In some cases, the findings are inconsistent or contradictory. This may be because it can be difficult to interpret studies based on small numbers of stores or difficult to determine if certain store features influenced the robberies, or were changed in response to the robberies.[24] The factors generally found to contribute to the incidence of convenience store robberies follow.

Store Characteristics

Operation hours

Operation hours are by far the strongest factor contributing to convenience story robbery, particularly for stores open 24 hours a day.[25] Late evening to early morning hours carry a greater risk of being targeted, perhaps because fewer people—other customers, police, or passersby—who might intervene are about.

Interior store layout

Several characteristics of a store's interior layout can influence its vulnerability to a robbery. Common among these is visibility, from two perspectives. First, employees should be able to see their surroundings, and second, people outside the store, including police on patrol, should be able to see into the store.[26] Robbers are deterred by brightly lit stores in which employees and the store's cash registers are clearly visible from the street.[27] The height and placement of store displays and shelving also determine whether there are unobstructed views inside the store.

Exterior store environment

Visibility is also a factor outside the store. Poorly lit gasoline islands and parking lots increase the chances of a robber's selecting a particular store,[28] since employees cannot see what is occurring outside the store. There is also a relationship between parking lot size and store vulnerability in that a large parking area in front of the store reduces the ability of passersby to provide informal

surveillance of the store's interior and exterior.[29] The availability of viable escape routes is also a consideration in determining whether or not a store is a prime robbery target. For instance, poorly designed fencing or landscaping can facilitate a robber's quick flight from the store, thereby making the store a more attractive target.

Location

There may be a relationship between the location and surrounding environment of a convenience store and its risk of becoming a robbery target. For instance, one study found that stores located in shopping complexes or strip malls had fewer robberies than those not in more concentrated commercial settings.[30] A study of robberies at service stations and pharmacies produced similar findings.[31] According to another study, stores in neighborhoods with older buildings and structures, close to graffiti and subsidized housing, and not located in a shopping center showed an increased risk of robbery.[32]

Convenience store type

Convenience stores can be distinguished from other retail establishments by the hours they operate, store size, and products sold. Most are open every day until late in the evening, with some open 24 hours a day. Some are corporate franchises, others are independently owned. Single-store businesses that are owned and operated as a one-store business or franchise dominate the market.[33]

There are generally six convenience store formats. Each is categorized by the size of the store and the products it sells, as shown in Table 1.[34]

Table 1 Convenience Store Types

Type	Size	Typical Products	Parking
Kiosk	< 800 sq. ft.	Gasoline and "fast-moving" items (tobacco, beverages, snacks, and confectioneries)	Usually only at the pumps
Mini	800 to 1200 sq. ft.	Limited grocery selection (predominantly prepared sandwiches)	At the pumps and some with striped parking
Limited selection	1,500 to 2,200 sq. ft.	Broader product mix and added prepared foods (hot dogs, nachos, popcorn)	Striped parking (with extended hours)
Traditional	2,400 to 2,500 sq. ft.	Expanded product mix (including dairy, bakery, snack foods, and beverages)	Six to 12 parking spaces and pedestrian access
Expanded	2,800 to 3,600 sq. ft.	Traditional product mix	10 to 20 marked parking spaces
Hyper	4,000 to 5,000 sq. ft.	Can include a bakery, restaurant area, or a pharmacy	Multiple parking spaces (usually larger than the expanded store)

Risk of robbery based on a variety of administrative and environmental factors has been proposed. For instance, stores with gas pumps, sometimes referred to as convenience gas stations, are less likely to be robbed than stores without pumps.[35] Another study has found that independent stores less than two years old were at higher risk for robbery than older stores that are company owned and operated.[36]

Ownership

The security and crime prevention measures convenience store owners employ vary considerably with the type and structure of ownership. 7-Eleven, Inc. has its own security department, policies, and employee crime-prevention training program.[37] A "mom and pop" owned establishment would likely have very few resources and less access to current techniques.

Staff number

Several studies have evaluated the presence of two or more clerks to reduce the risk of robbery. The findings have been inconsistent, and are highly debated.[38] The 1986 Gainesville, Florida studies concluded that the number of clerks on duty was a strong predictor of robbery potential.[39] However, a review of convenience store robberies by the National Association of Convenience Stores in 1997 did not support this conclusion.[40]

Cash-control procedures

The handling and storage of cash has a significant influence on the targeting of stores for robbery. The Athena Research Corporation studies of armed robbers in 1985 and 1995 have shown that "80 percent of potential

robbers can be deterred if a convenience store limits the amount of money kept in its cash register."[41] There are a number of cash-control units available to retailers that have both a drop safe and money dispenser, with various access methods. Again, both the ability to purchase such units and the implementation of strict cash protocol depend on the ownership type and structure.

Nancy Leach

A strict cash control protocol can significantly reduce the chances a store will be targeted by potential robbers.

Incident response policies

Employers' policies, particularly about firearms in the workplace,§ and various administrative and environmental measures§§ have an impact on workplace violence and homicide rates.[42] Furthermore, the combination of inexperienced employees and inadequate training procedures can contribute to higher victimization rates.[43] One multistate study found that clerks' behavior might be the most significant factor in determining the extent of injuries during a robbery.[44] For instance, injury can be caused by two different offender assaults: the *blitz attack*, which catches the victim by surprise and is unprovoked by the victim or another, and the *response to perceived resistance*, which can result from either misreading the employee's nervousness as resistance, or wanting to get in and out of the store as quickly as possible.[45] Employees can, in turn,

§ One study found that there was approximately a "sevenfold increase in the risk of a worker being killed in workplaces that allowed guns," implying that workplaces that respond to a prior experience with crime by allowing firearms may actually be creating a greater risk for workplace homicide by allowing weapons on the premises (Loomis, Marshall, and Ta 2005).

§§ Although some researchers believe that limiting cash on hand to less than $100 could reduce robbery risk and injury rates, other research has found that limiting cash and escape routes can force a robber to take greater risks, thereby potentially increasing employee injury rates. Other suggestions include installing a visible drop safe to allow for natural surveillance throughout the store (Faulkner, Landsittel, and Hendricks 2001).

employ certain behavior to keep themselves safe. This includes following the offender's instructions, staying calm and quiet, avoiding eye contact, not making any sudden movements, remaining inside the workplace, not attacking the offender, while making mental notes to provide to the police regarding the offender's physical description.[46]

Offender Characteristics

Like robbers in general, most convenience store robbers are male (95 percent) with about two-thirds of them under the age of 25.[47] They are often impulsive and opportunistic, and do limited planning before attempting the actual robbery. Most are seeking quick cash, often to buy drugs. A high proportion report that they were under the influence of alcohol and/or drugs while committing the robbery.[48]

Serial robbers, particularly those that victimize the same location on more than one occasion, appear to be more professional, even determined, in their approach. They are significantly more likely to carry a gun, to have been in prison before, to wear a disguise, and to choose a specific time for the robbery. They are also more likely to be violent and cause a higher rate of employee injury.[49] Their robberies display distinct geographical patterns over time.[50]

Since it has been found that certain stores are more vulnerable to repeat victimization, we can conclude that robbers are selecting those stores because of the opportunities they offer for successful completion of a robbery.[51] Offenders prefer areas in or near their neighborhoods, thus increasing the risk for those stores

in areas where many offenders live.[52] However, many factors may affect offender decisions. For example, since offenders commonly use guns in convenience store robberies, some offenders looking for quick cash may think that a weapon overcomes any other obstacles to carrying out the crime. Novice offenders might be less likely to differentiate between low-risk and high-risk targets.[53] Robbers commonly consider escape routes an important factor in selecting a target.[54]

Time Patterns

To limit the risk of apprehension, robbery offenders generally operate at night, when concealment is more likely. Convenience store robberies have been found to be consistent with this time pattern. One study of robberies in 30 Leon County, Florida convenience stores over a four-year period found significant correlations not only to time but also to day of the week, and month. Fifty percent occurred between 10 PM and 12 AM, generally times when business traffic is minimal. Three days (Friday, Saturday, and Sunday) accounted for 60 percent of the robberies. More than 50 percent occurred between November and February, consistent with findings that property crimes occur more frequently during winter months.[55]

Understanding Your Local Problem

The information provided above is only a generalized description of convenience store 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.

Your analysis should examine the different risks evident in the stores, and be particularly focused on repeat victimization. Gathering information is labor-intensive and detailed. The more standardized your department's information-gathering process, the more opportunity you have to understand your robbery problem and reach conclusions.

Stakeholders

In addition to criminal justice agencies, the following groups have an interest in the convenience-store robbery problem and should be considered for the contribution they might make to gathering information about the problem and responding to it:

- local business associations (e.g., chambers of commerce)
- convenience store associations
- state and federal workplace safety agencies
- worker's compensation agencies
- insurance companies
- convenience store corporation loss-prevention departments
- private security firms.

Asking the Right Questions

The following are some critical questions you should ask in analyzing your particular problem of convenience store 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.

Since environmental details are particularly relevant to this type of crime, it is important to listen carefully to victims' description of the robbery. You can collect pertinent information by asking victims incisive questions about the setting and circumstances of the crime.

It is also crucial to interview as many apprehended offenders as possible to find out how they make their decisions. See *Problem-Solving Tools Guide No. 3, Using Offender Interviews to Inform Police Problem-Solving*, for further guidance on gathering information from offenders.

Offenses
- How many convenience store robberies have occurred?
- What is the ratio of attempted robberies to completed robberies?
- What proportion of robberies (and attempts) is reported to police? If some robberies are not reported to police, why?
- What proportion of robberies have been repeat robberies (occurring at the same convenience store) within the past year?
- What is the typical length of time between repeat robberies?
- How long do robbers take to complete the robbery? Do they use a "straight" or "customer" approach (as described above)?

- How do employees react to robberies?
- What types of weapons are used, if any? Have any injuries resulted?
- How many employees and customers are typically present in the store during robberies?
- What are the usual escape routes or methods?
- How much money or merchandise is typically stolen?
- What other financial costs do convenience stores incur from robberies (e.g., repair costs, lost business, insurance premium increases)?

Offenders
- Are there many different offenders involved in the robberies, or is a small group of prolific offenders responsible?
- How many of the prolific offenders have records for committing store robberies? How many have recently been released from prison?
- How much planning do offenders do?
- Do offenders work in gangs? How many offenders are in the gangs?
- Do offenders belong to any particular ethnic, occupational, or other group?
- What proportion of offenders are juveniles?
- Are offenders under the influence of drugs or alcohol while committing robberies?
- What proportion of offenders commits robberies primarily to support a drug or alcohol habit?
- Do offenders appear to be familiar with the premises robbed? If so, how do they get the information (e.g., from complicit employees, by careful casing of the store, by prior visits as a customer, by prior robberies at that store)?
- Do employees recognize offenders as familiar to the location?

§ For more information on crime mapping tools, see www.iaca.net/software.asp.

- How do offenders get to the stores? On foot? In vehicles?
- Are offenders drawn to the area by robbery opportunities or for some other reason (e.g., illegal drug markets)?

Targets
- Which types of convenience stores are most at risk of robbery? What types are at least risk?
- Which stores are being robbed repeatedly? What do high-risk stores have in common with one another? How do they differ from low-risk stores?
- How long have high-risk stores been in business?
- How big are the stores? Are they part of a larger chain? If so, how does the robbery experience vary among stores in the chain? How does it compare with that of similar stores in other chains?
- What time do the stores close?
- Is the property isolated? Is lack of natural surveillance a contributory factor?
- What proportion of stores has gas pumps?
- What site features facilitate robbery? Corner location? Rear access?
- Is there evidence of collusion between staff and robbers?

Locations/Times
- When do robberies usually occur (time of day, day of week, month or season of year)?
- What is the nature of the surrounding neighborhood?
- Where do events concentrate? Are they clustered near major roads? Near known drug markets? (Computerized crime mapping can facilitate robbery analysis.[56],§)

Current Responses
- What is the clearance rate for convenience store robberies?
- What security measures have the stores taken to prevent robbery?
- Do store employees follow correct cash-handling and other robbery prevention procedures?
- What robbery prevention measures, if any, are mandated by law? To what extent are those mandates inspected and enforced?
- What training or robbery prevention information is provided to store owners, managers, and employees?

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 Problem-Solving Tools Guide, *Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers.*

The following outcome measures can be useful in assessing whether your responses have impacted the convenience store robbery problem:

- fewer reported convenience store robberies and related calls for service
- fewer repeat victims and offenders

- fewer robbery-related financial losses and insurance claims
- fewer business closures resulting from robberies
- fewer or less-severe injuries of employees and customers resulting from robberies
- greater perception of safety among store owners, employees, customers, and the community at large.

In addition, the following *process* measures might provide some indication of the degree to which selected responses are being properly implemented:

- higher proportion of stores following standard security practices, installing security devices, and/or using guard services
- higher proportion of store personnel formally trained in crime prevention.

Responses to the Problem of Robbery of Convenience Stores

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 then 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. The responsibility of responding, in some cases, may need to be shifted toward those who have the capacity to implement more effective responses. (For more detailed information on shifting and sharing responsibility, see Response Guide No. 3, *Shifting and Sharing Responsibility for Public Safety Problems*).

§ See Problem-Solving Tools Guide No. 5, *Partnering with Businesses to Address Public Safety Problems* and such Problem-Specific Guides as *Shoplifting* and *Robbery of ATMs* for further information on police-private security collaboration.

General Considerations for an Effective Response Strategy

1. Understanding the ownership, management structure, and operations of local convenience stores. To build and sustain a working relationship with the stores in your locality, you must have this understanding. Chain stores may have in-house security departments and specific protocols for crime prevention. This may enhance a cooperative effort to prevent robberies, but individual store managers may not have the authority to directly implement certain measures. Single-owner establishments will be generally unrestricted in their potential responses or partnership with the police, but will have fewer resources to devote to security and crime prevention. The convenience store industry as a whole may not support all police recommendations for security measures.

Understanding the operations, community context, and interpersonal dynamics of these businesses allows you to more effectively implement the specific responses below. For example, a sole owner who has used a weapon to scare a would-be robber may require a different approach and response than the store that employs 18-year-olds with little experience for late-night shifts.

2. Collaborating with private security. Creating structures and programs that encourage routine collaboration between police and private security can facilitate convenience store robbery prevention.[57,§] Police might coordinate or facilitate convenience stores' adoption of specialized robbery prevention concepts and programs. For example, police might promote the application of the principles and methods of crime prevention through environmental design, which aims to reduce crime by controlling the retail business environment through natural

surveillance, access control, and boundary definition.[58,§] Although implementing the specific measures would primarily be the retailer's responsibility (see retailer responses below), models such as this can be integrated into a local police or private security crime prevention strategy.

3. Targeting repeat victims. Certain convenience stores in your locality are more likely to be robbed than others.[§§] When the concentration of crimes at a few places is relatively stable over time, it is likely that something about those few places facilitates crimes and something about most places that prevents crimes.[59] A study of police responses to armed robbery by the U.K. Home Office found that there is a period of time after an incident (up to three months) when the target is most vulnerable to a repeat attack. Swift analysis and follow-up to robberies is important to limit or minimize the chance of repeat robberies, and responding to repeat victimization is effective in a number of ways. These include identifying the vulnerabilities of a given target, thereby assisting in the protection of likely targets from future robberies.[60,§§§]

4. Reevaluating responses consistently. Responses to convenience store robberies may not always withstand changing times and circumstances. One study of convenience store robberies in Tallahassee was reexamined to identify changes, if any, in a number of environmental and other factors that influenced their robberies. The follow-up study found that several high robbery-risk stores had experienced declines, and some low-risk stores had considerable increases. The researchers concluded that "robbery prevention strategies lose their effectiveness over time and must be constantly upgraded."[61] You should review robbery prevention strategies periodically, modifying them as appropriate to respond to offenders who consistently test the limits of measures in place.

§ See the Problem-Solving Tools guide on *Using Crime Prevention Through Environmental Design in Problem-Solving* for further information.

§§ This is the so-called "80/20" rule: that crime tends to be heavily concentrated in a relatively small percentage of places, against a relatively small percentage of victims, and by a relatively small percentage of offenders. See *Crime Analysis for Problem-Solvers* (Clarke and Eck 2005).

§§§ A given store's vulnerability can unfortunately result from media accounts of a successful robbery, absent any publicity of increased security measures. Incarcerated robbers believe that a victimized business will not install preventive measures (Gill and Pease 1998).

Specific Responses To Reduce Convenience Store Robbery

Retailer Responses

The following responses are rooted in situational crime prevention.[62],§ These responses are voluntary in some jurisdictions and mandated by law in others. Legislation requiring the implementation of security measures may affect the likelihood of convenience store robberies.§§ 7-Eleven, Inc. implemented many of these measures, maintaining that their implementation contributed to a 70 percent reduction in robberies over 20 years.[63] Local governments should ensure that their licensing and permitting regulations and procedures do not discourage sensible crime prevention measures.§§§

5. Maximizing natural surveillance. Employees should have an optimal view of the entrance and interior of the store. This involves having adequate interior and exterior lighting, unobstructed views into the store, and strategic placement of the cash register. Sandwich boards or unobtrusive banners are preferable to window signage if local regulation permits such.[64] Low-profile display units allow clearer customer observation. Natural surveillance of safes is also desirable.§§§§ This measure increases the risk of apprehending the offender.

§ For further information on situational crime prevention techniques, see www.popcenter.org/25techniques.htm.

§§ In April 1998, OSHA issued its *Recommendations for Workplace Violence Prevention Programs in Late-Night Retail Establishments*, marking the first time it explicitly sanctioned specific retail crime prevention measures. For additional information on OSHA recommendations, see www.osha.gov/Publications/osha3153.pdf.

§§§ In a study of convenience stores in Austin, Texas, it was found that the process of installing brighter or additional lighting in store lots could be burdensome. It involves hiring an electrical technician, preparing estimates, and obtaining a permit (LaVigne 1994).

§§§§ The Starbucks chain implemented a security model that includes moving the store safe to the street-front sales area, taking advantage of natural surveillance from the glass windows (D'Addario 2001).

Nancy Leach

An unobstructed view of the entrance and interior of the store provides natural surveillance that increases the risk of apprehension for the offender.

§ A state industry association has appealed the regulations, maintaining that they may be too expensive for businesses (Neary 2004).

6. Having multiple employees on duty during high-risk periods. The state of Florida, in its *Convenience Business Security Act* of 1992, has mandated businesses that remain open between 11 PM and 5AM to use at least one of the following security measures: two or more employees, bullet-resistant safety enclosures, a security guard, or a pass-through window to conduct business. Since implementation, convenience store robbery rates in Florida have dropped significantly.[65] New Mexico's Environmental Improvement Board also passed regulations for stores open between 5 PM and 5 AM. These include either keeping two employees on duty, or using alternative precautions (like bullet-resistant glass) to protect the employee.§ Aside from expense, such a measure's effectiveness has been questioned in a number of studies. For instance, environmental changes may have influenced the studies with a positive finding.[66] Also debated is the concern that multiple clerks could put more staff in danger in the event of a robbery. Mandating additional staffing is controversial, and careful consideration by public policymakers, as well as business leaders, must be made to weigh its potential for robbery deterrence against its financial impact.

§ Offender interviews have found that their decisions on choosing a target are strongly influenced by the proximity of the store to major and minor roads, and the proximity to a police station, among others (Wellford, MacDonald, and Weiss 1997).

§§ Some convenience stores offer free coffee or food to police officers to encourage them to stop in more often, but many police departments prohibit officers from accepting such offers.

7. Controlling access. This element accounts for the number of entrances, the door type(s) and placement(s), and the internal environment's design. A consistent finding of studies that interview convenience store robbers is that escape routes are a key factor to their target selection. Eliminating or at least limiting potential escape routes by using fencing or landscaping is highly recommended. 7-Eleven, Inc. found that it could effectively use fences to block alleys that would lead to crowded neighborhoods, and bushes to limit other footpaths that might provide an easy getaway.[67] Avoiding the use of concealed access or escape routes is also recommended. This measure increases the potential offenders' effort.

8. Establishing territoriality. The store's location within the community, area traffic flow, signs and advertisements, and design elements that empower the employee (such as bulletproof barriers) are components of this element. Although a retailer is not likely to change the store location, being aware of the neighborhood's patterns and characteristics allows the store to tailor its controllable environment.§ For instance, stores in high-crime areas should discourage loitering by the lighting and design of the exterior and parking area.

9. Promoting legitimate activity. Activities designed to increase the presence of legitimate customers and encourage good customer behavior also increase the risk to offenders by essentially extending guardianship of the location. Offering free coffee, for instance, could be used to invite legitimate late-night traffic.[68],§§ This is chiefly important for convenience stores that do not have the increased traffic and visibility of those with gas pumps. Conversely, discouraging stores from attracting disreputable customers—for example, by selling products commonly used in the illegal drug trade—can reduce the routine presence of potential offenders in the store.

10. Training employees. Small operations may benefit greatly from training and advice offered by the police. Management of larger stores should offer training programs for new employees.§ Training should include how to behave during a robbery and how to avoid violence. By encouraging simple practices in demeanor— greeting customers and establishing eye contact—clerks can learn to "put robbers on stage."[69] One comprehensive study of convenience store robberies concludes that "the behavior of clerks may be the most significant factor in determining the extent of injury that results during these robberies."[70]

11. Maintaining store appearance. The general appearance of a store indicates the employees' vigilance. A clean and well-kept store usually means clerks spend time away from the cash registers; a store appearing dirty and disorganized is more likely to be robbed.[71]

12. Using cash-control procedures. Cashless transactions are becoming more common throughout society, including at convenience stores.[72] Even limiting cash acceptance for certain purchases or at certain times of day might affect a target's attractiveness. One 10-year study of convenience store robbers found that "80 percent of potential robbers can be deterred if a convenience store limits the amount of money kept in its cash register."[73] There are a number of methods to limit the amount of cash in a store subject to robbery.§§ One is to limit the amount kept in a register and communicate this policy by posting signs. Keep in mind, however, that a potential offender looking for drug or fast money at the first opportunity may not be dissuaded by signs that state cash on hand is limited.

§ 7-Eleven's training is offered to all employees in a two-day session incorporating presentations, a handbook, and role-playing exercises. Issues covered include robbery deterrence, violence avoidance, loitering, physical assault, gang activity, and general emergency procedures (Lins and Erickson 1998).

§§ As mentioned previously, some offenders are not dissuaded by the prospect of small amounts of cash. With the popularity of crack cocaine, a cheap drug of choice, offenders are willing to take risks for even small sums (Bellamy 1996).

In addition, the use of cash-control units (also known as drop safes) can allow secure management of the cash on hand. The units have a safe for clerks to deposit cash periodically, with access controlled by keys and/or personal identification numbers (PINS). The unit opens or dispenses cash on a delay, which is likely to deter an anxious robber.[74] It is possible that the lack of availability of cash might result in robbers' shifting their focus to the taking of merchandise, but if robbers are looking for quick cash such displacement would be unlikely.

13. Installing cameras and alarms. This response has received mixed reviews in studies of its effectiveness as a crime prevention technique.§ Examples of devices include CCTV or still cameras, and alarm systems with both fixed and remote activator devices. The presence of CCTV monitors, clearly visible near cash registers, as well as signs that state that surveillance equipment is in use, have been found to have some deterrent effect by increasing the robber's risk of identification.[75] Some stores have taken this a step further by using interactive surveillance with central monitoring. New developments in CCTV in the 1990s have resulted in a second generation of systems that is not only superior in technology, but also eliminates deficiencies in surveillance's human element. For example, digital systems can be programmed to recognize in finite detail any movements that can alert the worker to a potential robbery situation, without the need for human monitoring.[76] Both fixed and remote alarm activators have been effective for this workplace environment. 7-Eleven's alarm system uses telephone lines to transmit signals to a remote monitoring station. Store employees carry alarm activators on their belts or in pockets.[77] Although the preventive effect of CCTV is questionable, there is no question that quality images are useful in the identification and apprehension of offenders. This measure can be of significant value, particularly if a gun is used, since

nervous clerks may not be able to provide an accurate offender description.[§]

Nancy Leach

The presence of video monitors has been found to have some deterrent affect by increasing the robber's risk of identification.

Police Responses

14. Providing robbery prevention and awareness training. Police are in a prime position to guide businesses in crime prevention. They are typically the first point of contact after a robbery, and can be particularly helpful to small businesses that may have limited access to other programs and that rely more heavily on police to guide their response. Police can be particularly helpful in training employees to be smart observers and, if necessary, effective witnesses. Suggestions on protocol such as maintaining eye contact with customers (robbers do not want to be identified) and moving away from the sales counter when no one is waiting (robbers will perceive that it will take them longer to demand money from the register) are examples of training tips offered.[§§] Tools such as a height strip can be distributed to mount to the door, giving the employee a means to estimate the height of a fleeing robber.[§§§]

[§] Reports from the Hillsborough County (Florida) Sheriff's Office indicated an almost 90 percent clearance rate for stores equipped with hidden 35 mm cameras (Bellamy 1996).

[§§] A police department in Edmonton, Alberta developed a Robbery Awareness Education Kit to introduce training to retailers (Alberta Minister's Committee to Promote Health and Safety 2000).

[§§§] The San Bernardino, California police offer a four-hour training class to businesses on crime prevention. In addition to distributing tools like the height strip, the class also identifies other information retailers should collect during a crime (Berry 2004).

§ Scored categories include such items as visibility into the store, adequate entrance lighting, prominent "No Loitering" signs, and low shelf height.

15. Inspecting convenience stores for compliance with robbery prevention measures. Obviously, robbery prevention recommendations are effective only if properly implemented. Police might assume responsibility for regularly inspecting convenience stores to determine whether they have adopted either mandatory or voluntary robbery prevention measures. In response to an increased trend in robberies, the San Bernardino Police Department implemented the Crime-Free Business Program in 2004. Police community service officers perform periodic inspections of convenience stores and other businesses and evaluate the businesses for their use of crime prevention measures in 28 categories.§ Although this particular program and compliance with the inspections are voluntary, the city has seen a reduction in commercial robberies.[78]

16. Enforcing prohibitions on loitering outside convenience stores. Where local law enables police to do so, enforcing prohibitions against loitering outside convenience stores reduces opportunities for potential robbers to plan a robbery by watching the routines of store clerks and customers. Police might enforce loitering or trespassing statutes or ordinances. Laws that prohibit loitering (and panhandling) near ATMs, for instance, give police authority to keep opportunistic offenders away from potential victims.[79]

Nancy Leach

Enforcing prohibitions against loitering outside convenience stores reduces opportunities for potential robbers to watch the routines of store clerks and customers.

Responses With Limited Effectiveness

17. Conducting robbery stakeouts. Robbery stakeouts have police lie in wait to trap an offender, hiding in a convenience store's back room or closet. Police departments would need to have considerable resources to be able to sustain the number of officers needed to await possible robberies in various locations over a long time. Moreover, the resultant armed confrontations would heighten risks for police officers and store employees.

18. Increasing police patrols. Because it takes a relatively short time to complete a convenience store robbery, the chances of thwarting one by increased patrols is not likely. In fact, a number of studies have concluded that increased police patrols are not particularly effective at preventing crime.[80] The same is true for apprehending an offender once a robbery is reported; the quick nature of the crime makes immediate response and apprehension unlikely.[81]

19. Maintaining a consistent police presence. Although a reliable police presence likely deters any potential crime, it is difficult for most police agencies to ensure a consistent police presence around any particular store, given competing police responsibilities. If a police agency is willing and able to provide a consistent presence in and around convenience stores, there is research evidence that doing so can be effective. Offenders interviewed in one study consistently ranked "people are present" factors, particularly referring to police, higher than certain environmental factors in their target selection.§ Crow and Bull's study of 7-Eleven stores in 1975 encouraged "visits from police" as one prevention strategy to significantly reduce robberies.[82] A multistate study of such robberies concluded that improving police

§ "People are present" factors include perceived police presence in the area and the proximity (of the store location) to a police station. These ranked as moderately important by the offenders, while window locations, time, lighting, and cashier locations ranked at the bottom of the scale (Petrosino and Brensilber 2003).

presence and response is more critical than the store's environmental factors.[83] In addition, offender interviews have revealed that police presence is the most influential factor in their decision to pick a target.[84]

20. Establishing satellite facilities. This takes police presence a step further by making police a more permanent fixture inside convenience stores. This response is more resource-sensitive than most and may not be financially feasible for some police agencies or otherwise justifiable given competing demands for police presence elsewhere in communities.

7-Eleven, Inc. has established a particular program for its stores called the Police Community Network Centers (PCNCs). They work with local police departments to install either a workstation inside the stores or an office or trailer adjacent to it. It is clearly identified, and includes a dedicated telephone, workspace and storage, and display areas for crime prevention literature.[85,§]

Appendix: Summary of Responses to Robbery of Convenience Stores

The table below summarizes the responses to robbery of convenience stores, the mechanisms by which they are intended to work, the conditions under which they ought to work best, and some factors that should be considered before a particular response is implemented. It is critical that you tailor responses to local circumstances and that you can justify each response based on reliable analysis. Remember, in most cases an effective strategy will involve implementing several different responses because law enforcement alone is seldom effective in reducing or solving the problem.

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
General Considerations for an Effective Response Strategy					
1.	22	Understanding the ownership, management structure, and operations of local convenience stores	Tailors the responses to the stores' particular needs and resources	…the management structure is clearly defined and information is available to police	Independent stores, not tied to rigid commercial guidelines, may not have the financial backing to implement security changes; industry associations may oppose recommendations
2.	22	Collaborating with private security	Enhances likelihood that effective responses will be implemented	…police and private security recognize their respective legitimate interests	Well suited for municipalities with large number of retailers

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
3.	23	Targeting repeat victims	Focuses attention on highest-risk locations, increasing likelihood of improving protection of those stores	…analysis of repeat victimization is timely and accurate	Media reports may contribute to repeat victimization by spotlighting a store's vulnerability
4.	23	Reevaluating responses consistently	Refines understanding of past responses and improves future responses	…decisionmakers are constantly researching new strategies and are willing to reconsider past responses	Stakeholders will advocate a variety of changes based on their respective interests
Specific Responses to Reduce Convenience Store Robbery					
Retailer Responses					
5.	24	Maximizing natural surveillance	Increases robbers' risk of detection by optimizing visibility of key areas	…views into and within the store are unobstructed by signs, displays, etc.	Placement of safes and cash register can enhance ability for observation
6.	25	Having multiple employees on duty during high-risk periods	Deters potential offenders because they would have more difficulty controlling more than one victim	…local robbery patterns clearly identify high-risk periods	Increases costs to stores; likely to require legislation due to industry opposition; effectiveness debated
7.	26	Controlling access	Limits offenders' opportunity to escape quickly, which may deter offenders altogether	…number of entrances/exits are limited, and exterior environment provides some obstacles to a quick escape	Difficult for stores to balance easy access for customers with obstructed access for potential robbers

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
8.	26	Establishing territoriality	Controlling certain store characteristics empowers the employees over would-be robbers by providing a logistical advantage	…stores are not located near major roads or high-crime areas; stores are near a police station	Not all territorial elements are readily altered
9.	26	Promoting legitimate activity	Increases risk of detection by encouraging steady activity among patrons and others	…stores operate gas pumps that attract traffic at all hours	Free coffee or other promotions can invite late-night traffic; refusing to sell illicit products can reduce presence of potential offenders
10.	27	Training employees	A well-trained staff reduces the vulnerability of a business by emphasizing methods of robbery deterrence and violence avoidance	…it is required for all employees, with refresher training as needed	Costly in time and possibly dollars; attracting workers to convenience stores for any length of time is challenging in itself
11.	27	Maintaining store appearance	Deters potential offenders by suggesting that employees are vigilant against robbery	…employees spend time away from registers to maintain appearance, thereby hindering a quick robbery	Convenience store robbers may not make this rational inference
12.	27	Using cash-control procedures	Limiting cash available to clerks can dissuade offenders as well as minimize losses	…cash policy is clearly posted	Some offenders either don't trust the posted signs or don't care if the take is limited

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
13.	28	Installing cameras and alarms	Surveillance and security equipment that are in plain sight to customers may provide deterrence and increase risk of detection	…cameras actually record activity, and employees have fixed and remote activator devices to sound alarms	Costly; quality of images is key for best value; may aid identification process if eyewitnesses are panicked
Police Responses					
14.	29	Providing robbery prevention and awareness training	Improves stores' capacity to prevent and respond appropriately to robberies	…training is based on reliable knowledge and made available to stores that otherwise have limited access to training	Compliance ensures effectiveness; small- operation staff may not have time to attend; gives police familiarity with business and ownership
15.	30	Inspecting convenience stores for compliance with robbery prevention measures	Increases likelihood that known effective measures will be implemented	…there are meaningful consequences for failure to implement effective measures	Standards might be either mandated by law or voluntarily agreed to by the convenience store industry
16.	30	Enforcing prohibitions on loitering outside convenience stores	Minimizes opportunities for potential offenders to plan a robbery	…stores cooperate with police in enforcement and prosecution	Valid laws must be in place
Responses with Limited Effectiveness					
17.	31	Conducting robbery stakeouts	Increases likelihood of apprehension of offenders in the act	…police have specific reliable information about a robbery attempt and safety of store employees can be assured	Resource- intensive due to unpredictability of robbery attempts; armed confrontations are risky to police officers and employees

Response No.	Page No.	Response	How It Works	Works Best If...	Considerations
18.	31	Increasing police patrols	Periodic observation by police will either deter a robbery situation or result in apprehending an offender	...police can target repeat victims or vulnerable days/ times	Quick nature of convenience store robberies makes the chance of apprehension unlikely
19.	31	Maintaining a consistent police presence	Deters potential offenders from attempting a robbery	...presence is reliable and well-known to potential offenders	Difficult for police to ensure reliable presence, given competing responsibilities
20.	32	Establishing satellite facilities	Deters potential offenders through enhanced likelihood of police presence	...location/ workspace is clearly identified as police space	Depends on resource availability; requires cooperation with store management

Endnotes

[1] National Association of Convenience Stores (2006).

[2] Calvin (n.d.).

[3] Hunter (1999).

[4] U.S. Department of Justice, Federal Bureau of Investigation (2002).

[5] Catalano, Hill, and Long (2001).

[6] Hunter (1999).

[7] Gill and Pease (1998).

[8] Matthews (2002).

[9] Gill and Pease (1998).

[10] Petrosino and Brensilber (1997).

[11] Gill and Pease (1998).

[12] Faulkner, Landsittel, and Hendricks (2001).

[13] Faulkner, Landsittel, and Hendricks (2001).

[14] Welford, MacDonald, and Weiss (1997).

[15] Petrosino and Brensilber (1997).

[16] Faulkner, Landsittel, and Hendricks (2001).

[17] Petrosino and Brensilber (1997).

[18] Bellamy (1996).

[19] National Center for Victims of Crime (2000).

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[21] Lins and Erickson (1998).

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[24] Eck (1998).

[25] Taylor (2002).

[26] U.S. Department of Labor, Occupational Safety and Health Administration (1998).

[27] Lins and Erickson (1998).

[28] Lins and Erickson (1998).

[29] D'Allessio and Stolzenberg (1990).

[30] Hunter (1999).

[31] Taylor (2002).

[32] Hendricks et al. (1999).

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[38] Eck (1998).
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[42] Faulkner, Landsittel, and Hendricks (2001).
[43] Runyan et. al. (2005).
[44] Wellford, MacDonald, and Weiss (1997).
[45] Petrosino and Brensilber (1997).
[46] WorkCover New South Wales (2002).
[47] Correctional Service of Canada (1995).
[48] Petrosino and Brensilber (2003).
[49] Gill and Pease (1998).
[50] Catalano, Hill, and Long (2001).
[51] Bellamy (1996).
[52] Gabor (1989).
[53] Hunter (1999).
[54] Lins and Erickson (1998).
[55] D'Allessio and Stolzenberg (1990).
[56] Catalano, Hill, and Long (2001).
[57] Casteel et al. (2003).
[58] Casteel and Peek-Asa (2000); Mayhew (2000).
[59] Eck (1998).
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[61] Hunter (1999).
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Alicia completed her M.A. degree in the Criminal Justice Program at the State University of New York at Albany in August 2005. She earned her B.S. degree in Criminal Justice with a minor in Psychology at Russell Sage College, Troy, New York. She has previously interned on research projects providing curriculum for practitioners dealing with persons with co-occurring disorders (substance abuse and mental illness) who are justice-involved. She is currently employed as a caseworker in the Child Protective Services (CPS) unit of Washington County in upstate New York, and is responsible for investigating reports of child abuse and neglect as received through the State Central Registry (SCR).

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Diana is a graduate of the Criminal Justice Program at the State University of New York at Albany, earning an M.A. degree in December, 2006. She earned her B.S. degree at the University in 1984, as a Business Administration major with a minor in Criminal Justice. During that time she interned at the Albany County Probation Department. She was most recently a Director at MBIA Insurance Corporation in Armonk, NY, with 18 years of service through May 2003 in the Business Analysis and Finance divisions.

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.

- **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**, by Herman Goldstein (McGraw-Hill, 1990, and Temple University Press, 1990). Explains the principles and methods of problem-oriented policing, provides examples of it in practice, and discusses how a police agency can implement the concept.

• **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.

• **Problem-Solving: Problem-Oriented Policing in Newport News**, by John E. Eck and William Spelman (Police Executive Research Forum, 1987). Explains the rationale behind problem-oriented policing and the problem-solving process, and provides examples of effective problem-solving in one agency.

- **Problem-Solving Tips: A Guide to Reducing Crime and Disorder Through Problem-Solving Partnerships** by Karin Schmerler, Matt Perkins, Scott Phillips, Tammy Rinehart and Meg Townsend. (U.S. Department of Justice, Office of Community Oriented Policing Services, 1998) (also available at www.cops.usdoj.gov). Provides a brief introduction to problem-solving, basic information on the SARA model and detailed suggestions about the problem-solving process.

- **Situational Crime Prevention: Successful Case Studies**, Second Edition, edited by Ronald V. Clarke (Harrow and Heston, 1997). Explains the principles and methods of situational crime prevention, and presents over 20 case studies of effective crime prevention initiatives.

- **Tackling Crime and Other Public-Safety Problems: Case Studies in Problem-Solving**, by Rana Sampson and Michael S. Scott (U.S. Department of Justice, Office of Community Oriented Policing Services, 2000) (also available at www.cops.usdoj.gov). Presents case studies of effective police problem-solving on 18 types of crime and disorder problems.

- **Using Analysis for Problem-Solving: A Guidebook for Law Enforcement**, by Timothy S. Bynum (U.S. Department of Justice, Office of Community Oriented Policing Services, 2001). Provides an introduction for police to analyzing problems within the context of problem-oriented policing.

- **Using Research: A Primer for Law Enforcement Managers**, Second Edition, by John E. Eck and Nancy G. LaVigne (Police Executive Research Forum, 1994). Explains many of the basics of research as it applies to police management and problem-solving.

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