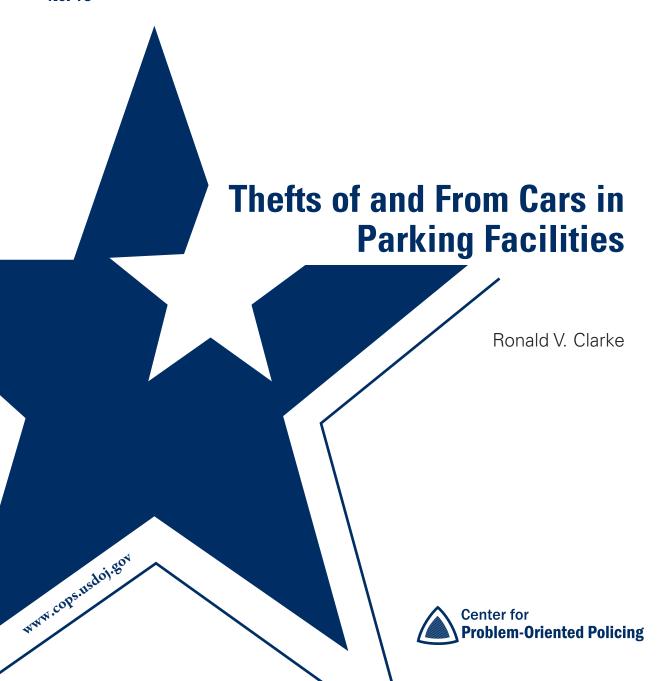


Problem-Oriented Guides for Police Problem-Specific Guides Series No. 10





Problem-Oriented Guides for Police Problem-Specific Guides Series Guide No. 10

Thefts of and From Cars in Parking Facilities

Ronald V. Clarke

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The Internet references cited in this publication were valid as of April 2010. Given that URLs and web sites are in constant flux, neither the author nor the COPS Office can vouch for their current validity.

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About the Problem-Specific Guide 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, nongovernmental 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 philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem-solving techniques, to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime." 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 each guide is anonymously peer-reviewed by a line police officer, a police executive and a researcher prior to publication. The review process is independently managed by the COPS Office, which solicits the reviews.



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
- Special publications on crime analysis and on policing terrorism
- Instructional information about problem-oriented policing and related topics
- An interactive problem-oriented policing training exercise
- An interactive Problem Analysis Module
- Online access to important police research and practices
- Information about problem-oriented policing conferences and award programs.



Acknowledgments

The *Problem-Oriented Guides for* Police are very much a collaborative effort. While each guide has a primary author, other project team members, COPS Office staff and anonymous peer reviewers contributed to each guide by proposing text, recommending research and offering suggestions on matters of format and style.

The principal project team developing the guide series comprised Herman Goldstein, professor emeritus, University of Wisconsin Law School; Ronald V. Clarke, professor of criminal justice, Rutgers University; John E. Eck, associate professor of criminal justice, University of Cincinnati; Michael S. Scott, clinical assistant professor, University of Wisconsin Law School; Rana Sampson, police consultant, San Diego; and Deborah Lamm Weisel, director of police research, North Carolina State University.

Karin Schmerler, Rita Varano and Nancy Leach oversaw the project for the COPS Office. Suzanne Fregly edited the guides. Research for the guides was conducted at the Criminal Justice Library at Rutgers University under the direction of Phyllis Schultze.

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Contents

About the Problem-Specific Guide Series	i
Acknowledgments	V
The Problem of Thefts of and From Cars in Parking Facilities Related Problems Factors Contributing to Thefts of and From Cars in Parking Facilities Car Security Regional Location Car Make and Model Parking Facility Size and Location Principal Parking Facility Users Parking Decks vs. Lots Parking Lot Design and Management	233445
Understanding Your Local Problem Asking the Right Questions Nature of the Thefts Conditions Facilitating Theft Measuring Your Effectiveness	8 8 9
Responses to the Problem of Thefts of and From Cars in Parking Facilities Recommended Responses Responses with Limited Effectiveness	15
Appendix: Summary of Responses to Thefts of and From Cars in Parking Facilities	25
Endnotes	29
References	31
About the Author	35
Other Problem-Oriented Guides for Police	37



The Problem of Thefts of and From Cars in Parking Facilities

Car-related thefts are among the most common offenses calling for a police response. This guide summarizes information on risk factors and evaluates published literature on dealing with such thefts in parking facilities. It also identifies information police should collect to understand and respond effectively to their local problem.

The guide covers both thefts *of* and thefts *from* cars in parking facilities. Each category of theft covers a wide range of offenses, committed by different groups of offenders with different motivations.

- Thefts of cars include thefts for joyriding, thefts for prolonged car use, and thefts for export or "chopping" (disassembling cars for spare parts). Youth joyriding is the largest group of these offenses. Police often quickly recover cars used for joyriding.
- Thefts from cars include thefts of items left in cars, thefts of
 interior components such as radios or batteries, and thefts of
 external parts such as wheels.

Thefts of cars are much more often reported to the police due to insurance requirements, the potentially greater loss and the fact that police might help find stolen cars that are later abandoned. However, theft from cars is the larger category, constituting about 85 percent of all car-related thefts.§

Most thefts occur when cars are parked on the street or on the owner's property, because this is where cars usually are, but the risk of theft, per hour parked, is greater when cars are in parking facilities. §§ These are often poorly secured, particularly in the case of lots, many of which have poor lighting, and blind spots and nooks where cars cannot easily be seen. There is seldom much surveillance by passersby or attendants in such lots. Many attendants' booths are badly positioned or have small windows and poor visibility. Many lots have ill-tended shrubbery providing cover for thieves, and are open to pedestrians, which makes it easy for offenders to enter.²

§This figure is based on victimization data and includes crimes not reported to the police (Clarke and Harris 1992).

§§ A British study (no comparable U.S. data exist) found that cars parked in lots were four times more likely to be stolen than cars parked on the street outside the driver's home or workplace, and were 40 percent more likely to be stolen than cars parked on any other street. They were more than 200 times as likely to be stolen than cars parked at home in the owner's garage (Mirlees-Black, Mayhew and Percy 1996).



§Twenty-five percent of vehicle thefts reported to U.S. police do not involve cars, but rather trucks, motorcycles and other vehicles.

The parking facilities covered in this guide include lots and decks (and underground garages) that serve office and factory workers, students, shoppers, entertainment-seekers, train and bus commuters, and airline travelers.

While it is important for police officers to understand the specific nature of their local problem, particularly who is committing the offenses, and why, this guide deals only briefly with enforcement. While arresting car thieves might have some immediate benefits, it is likely that new offenders will take their place if the conditions facilitating theft are not addressed. For this reason, the principal focus of this review is the lots and decks themselves, and measures to make them more secure. It will be clear that solutions to the problem require collaboration between police, the public, business owners, city officials, prosecutors, and parking facility owners and operators.

Related Problems

Offenders target all kinds of vehicles for theft,§ and car-related thefts occur in places other than parking facilities. In addition, many crimes other than thefts of and from cars plague parking facilities. Related problems requiring their own analysis and responses include:

- thefts of and from cars parked on streets or on private property,
- thefts of and from cars in public housing and apartment complexes,
- vandalism of parked cars,
- · thefts of and from commercial vehicles,
- thefts of motorcycles,
- insurance frauds relating to car thefts,
- thefts of cars from rental agencies,
- thefts of cars from dealerships,
- thefts of cash from parking lot pay-boxes or pay-and-display systems, and
- sexual attacks, muggings and drug dealing in parking facilities.



Factors Contributing to Thefts of and From Cars in Parking Facilities

Understanding the factors that contribute to your problem will help you frame your own local analysis questions, determine good measures of effectiveness, recognize key intervention points, and select appropriate responses. Because thefts of and from cars cover many different offenses, it is difficult to summarize briefly all the factors that have been found to contribute to theft. In fact, more research exists on risk factors related to theft of cars than theft from cars. The factors listed below are the main ones the published literature consistently identifies.

§U.S. cities near the Mexican border experience higher theft rates for makes and models sold in both Mexico and America (Field, Clarke and Harris 1991).

Car Security

Most car security is inadequate. Thieves report being able to break into and drive away with most makes and models in a matter of minutes, if not seconds. The best approach to prevention relies on persuading manufacturers to make more secure cars, and much has been accomplished along these lines in recent years.³ However, this response is not practical for police having to deal with a local problem of theft in parking facilities. Instead, they must seek to understand the specific combination of risk factors contributing to high levels of theft in local facilities.

Regional Location

Considerable variation in car theft rates exists across the United States, and a local problem of theft from parking facilities might be part of a wider regional problem. Car theft rates are generally much higher in urban than rural areas, because thieves have more cars to target. There is also considerable variation between cities. The reasons for this are not well understood, though cities with large ports or near the Mexican border have especially high theft rates due to theft for export.§



Based on insurance claims, the 10 cars most at risk of theft in the United States in 1999 were the 1989 Toyota Camry, 1990 Toyota Camry, 1991 Toyota Camry, 1988 Toyota Camry, 1997 Ford F 150 4x2, 1994 Honda Accord EX, 1995 Honda Accord EX, 1996 Honda Accord EX, 1990 Honda Accord EX, and 1994 Honda Accord LX (CCI Information Services publishes these data annually). Among cars less than three years old, the 10 with the largest insurance payouts for theft were all foreign imports, including four luxury sportutility vehicles (the Highway Loss Data Institute publishes these data annually).

Car Make and Model

Some of the variation in car theft rates between cities is due to the population of cars at risk, as some makes and models that thieves find attractive are more common in certain parts of the country. § Research has also shown that particular kinds of thieves favor certain models. Thus, joyriders favor cars that are fun to drive, with good acceleration, while professional thieves generally steal expensive cars that may be exported or older cars that are "chopped."

Parking Facility Size and Location

Even within a particular region or city, some parking facilities have higher car theft rates than others. For example, downtown facilities seem particularly at risk. This may be due to the concentration of downtown parking facilities, making it easier for thieves to find attractive targets. The same reason may explain why larger facilities generally have higher theft rates than smaller facilities do.

Principal Parking Facility Users

Park-and-ride commuter lots have particularly high theft rates.⁶ They tend to be large and hold many cars left unattended by their owners for most of the day. Where there are attendants, they may be present only at the beginning and end of the day. Thieves can often operate in these lots with little chance of detection.

Parking facilities catering to young people, such as college campus lots, may also be at greater risk. Thieves may be other users of the lots, or attracted to the kinds of cars parked there. Finally, parking facilities used around the clock tend to have higher theft rates, if for no other reason than thieves can always find targets there.





Park-and-ride commuter lots tend to have high theft rates.

§According to British research, the difference between lots and decks is greater for theft of cars, because drivers exiting decks usually have to surrender the ticket obtained on entering. On the other hand, thieves can legitimately enter a deck in a car and break into other cars parked on the upper levels, where attendants rarely go.

Parking Decks vs. Lots

Parking decks have lower theft rates than lots. A Charlotte, N.C., study found that the risk of theft from cars was about six times greater in center city lots than in decks. Similar results have been found in Britain. The greater security of decks is explained by two factors. First, many more decks and garages are staffed by attendants, whose primary function is to collect parking fees, but who also exercise some surveillance. Second, deck and garage design makes it harder for thieves to gain access to parked cars. Vehicle access is often limited to a single entrance which also serves as an exit and fee-collection point. Pedestrian movement in and out of decks and garages is generally restricted to elevators and stairwells so that a thief carrying stolen items may come into contact with others coming and going. Thieves in lots can make a quicker getaway through a route of their own choosing with greater certainty that they, and the items they are carrying, will not be seen. §



Parking Lot Design and Management

The lack of access controls and/or supervision contributes to high theft rates in some parking lots. These deficiencies are principally due to economics, as parking lots are often built on land awaiting development. In the meantime, lot operators seek to provide parking at minimum cost. Thus they are reluctant to install high-quality lighting, which improves natural surveillance, or to hire attendants to collect fees.

As with decks, the presence of attendants in lots reduces risks of theft. In lots without attendants, fees may be charged monthly or collected through meters, pay-boxes or (mainly in Europe) pay-and-display systems. The availability of cash in meters, pay-boxes and pay-and-display ticket machines also attracts thieves.

Due to the expense, operators are generally reluctant to fence lots or install automatic barriers at entrances and exits. Thieves can wander through the lots at will, looking for cars to break into or steal. British research found that lots with pedestrian throughways experienced higher theft rates. The same study found that lots located within sight of nearby shops had lower theft rates, a fact the researchers attributed to the natural surveillance provided by shoppers and shop employees.⁹



Understanding Your Local Problem

The information provided above is only a generalized description of the problem of thefts of and from cars in parking facilities. You must combine the basic facts with a more specific understanding of your local problem. Analyzing your problem is essential for designing an effective response strategy.

You may be dealing with a single parking facility—either a deck or a lot—or with a group of facilities—perhaps a combination of decks and lots. Whatever the case, you will need to identify the specific nature of the problem, whether this is theft of cars, theft from cars, or both.

In most cases, the main problem will be theft *from* cars, and you should try to determine the kind of offenders involved (e.g., transients, drug addicts or juveniles). On the other hand, if the problem is mainly theft *of* cars, you will need to determine the purpose, whether for joyriding, for transport or for profit. The principal indicators of this are recovery rates, so though the model stolen will also help determine the purpose because, as mentioned, certain kinds of thieves favor certain models. 10

Knowing who is committing the offenses, and why, helps you decide how difficult they will be to stop. You will also need to understand how they commit the offenses. This will require a careful study of facility security.

Comparing facilities can greatly assist in understanding the conditions that facilitate theft. Calculating theft rates per parking space will make your comparisons precise, though counting spaces can be very time-consuming if the parking lot operators or city does not keep records of the number of spaces per facility.

You may need to respecify the problem in light of this information. You may find that you need to focus on the largest component of theft, or on the facilities most at risk. For example, as mentioned, a detailed study of theft from downtown Charlotte parking facilities found that the problem was concentrated in lots, not decks. ¹¹ This meant that prevention could similarly be focused on lots.

§Police recover about 65 percent of stolen cars. This figure is even higher in jurisdictions where juvenile joyriding is the predominant type of car theft.

§§See Association of Chief Police Officers in England and Wales (n.d.) for guidelines for assessing security.



Alternatively, you may decide that theft from parking facilities is part of a wider problem in your jurisdiction. In that case, the wider problem may need to be tackled, using remedies such as crackdowns on chop shops and pawnshops, or tightened controls at ports and border crossings.

Asking the Right Questions

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

Nature of the Thefts

For all thefts:

- Is the problem confined to parking facilities, or is it part of a more general problem of car theft affecting the wider area or jurisdiction?
- When do thefts mainly occur (time of day, day of week, month)?
- What proportion of offenses result in an arrest?
- What kinds of offenders are involved? Addicts? Juveniles? Transients/homeless? Professional criminals?
- What is the ratio of theft of cars to theft from cars?

For thefts of cars:

- Which models are stolen?
- What proportion of stolen cars are recovered?
- Which models are less likely to be recovered?
- How soon are they recovered?
- Where are they recovered?
- · Are they damaged?
- Have items been stolen?



For thefts from cars:

- Are there favored methods of gaining entry to cars?
- What is stolen? Where and how is it fenced?

Conditions Facilitating Theft

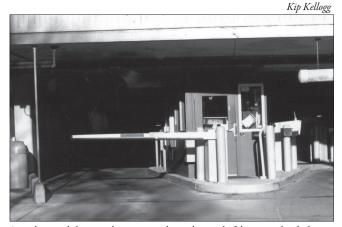
For all parking facilities:

- How many other parking facilities are near the one(s) where the thefts occur?
- How do theft rates compare between facilities?
- Which groups are the principal users of the facilities?
 Commuters? Shoppers? Young people?
- Is parking free? If not, how are fees collected?
- Are parking attendants present?
- Are they full-time, or there for only part of the day?
- Do they have an active security function?
- Do they have telephones to summon assistance?
- How regularly do the police or security guards patrol the facility?
- Is closed-circuit television (CCTV) in use? Does it cover the whole facility? Is it effective at night? Who is monitoring it?
- Is the facility used at night? If so, is poor lighting a factor in theft?
- Do drivers frequently come and go during the day?
- Is lack of natural surveillance a factor?
- Is victim carelessness a contributory factor?
- Which places within the facility are at greatest risk?



For decks (and underground garages), specifically:

- How are fees collected?
- Do exiting drivers need an electronic pass or valid ticket?
- Can exit tickets be obtained other than by entering in a vehicle?
- Can pedestrians access the deck without passing attendants?
- Are pedestrian doors inaccessible from outside the deck?
- Do thefts disproportionately occur on the upper levels?

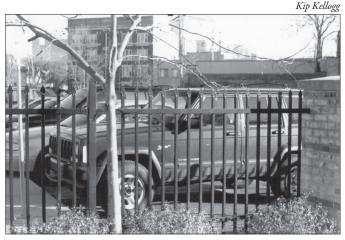


Attendants and electronic barriers provide good control of the exit at this deck.

For lots, specifically:

- Are entrances and exits staffed?
- What proportion of the perimeter is fenced?
- Do the fences prevent people from wandering through the lot?
- Do the fences present an effective barrier to determined thieves?
- Do the fences or foliage screen the lot from the view of passersby?
- Do passing motorists and pedestrians provide natural surveillance of the lot?
- Can the lot be viewed from nearby buildings?
- Are parts of the lot screened from any natural surveillance?





Fencing around parking lots should allow for visibility into the lot.

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.)

The following are potentially useful measures of the effectiveness of responses to thefts of and from cars in parking facilities:

- reduced theft reports to the police
- reduced theft reports to lot operators
- reduced theft reports to car insurance companies
- increased calls for service (reflecting more witnesses to theft)
- increased apprehensions of suspects
- less evidence of glass from broken windows or windshields



- less evidence of poorly secured cars or items left in view
- reduced vacancy rates for monthly slots
- increased monthly lot income
- · higher proportion of spaces occupied, and
- greater perception of security among those using the facilities.



Responses to the Problem of Thefts of and From Cars in Parking Facilities

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 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.

Many evaluated initiatives to prevent car theft have focused on vehicle design. While important, this work is of little immediate relevance to police officers dealing with a local problem of theft in parking facilities. Similarly, programs to deal with a regional problem of theft, such as tightening up border crossings, cracking down on chop shops or establishing "Vehicle Watch," might have only a small impact on a local problem of theft from parking facilities. Consequently, initiatives to deal with car theft at a national or regional level are not reviewed here. Instead, the focus is largely on ways to improve security, specifically in parking facilities. Unfortunately, there is little research to draw upon, and most of this has been undertaken in countries other than the United States. However, the research reviewed above on contributory factors suggests that any measures that (1) improve surveillance and (2) reduce illegal access are likely to reduce thefts. These measures can often be quite simple, such as pruning bushes or blocking gaps

§"Vehicle Watch" is a program (of unknown effectiveness) in which people give the police permission to stop their cars at night. Program participation is signaled by a vehicle decal. For a description of the program, see <u>www.ncjrs.gov/pdffiles1/</u> bja/fs000261.pdf.



in fencing. Identifying them is often a matter of common sense or basic security practice. In other cases, a survey undertaken by officers trained in crime prevention through environmental design (CPTED) may be needed.¹²

Your analysis of the problem is also likely to identify the need for security measures that could be expensive. In most cases, the cost of these measures will have to be borne by the facility owners or operators, who can be expected to resist the suggestions. In making your case for such measures, you may have to spend considerable time explaining why the police and the courts alone cannot solve the problem. You may also need to do the following:

- Calculate the likely cost of measures, such as improving fencing or hiring attendants, relative to facility profits.
- Convince facility owners that they can recover the cost of increased security through raised parking fees.
- Enlist the support of local business organizations to persuade facility owners to improve security.
- Enlist the help of city government to (1) secure tax breaks for parking operators who make improvements, or (2) pass ordinances that define security standards to be met by parking operators.
- Consider using abatement procedures to require change.
- Brief the local media on the problem, and seek their support for the proposed solutions.



Recommended Responses

1. **Hiring parking attendants.** The largest study of theft in parking facilities concluded that the most important preventive factor was the presence of attendants. 13 The study covered more than 50 large parking facilities in London. Whether surface lots, parking decks or underground garages, facilities with attendants had the lowest theft rates. The lowest rates of all were in garages where the attendants parked the cars. The presence of attendants had a smaller effect on theft *from* cars, probably because their main function is to collect parking fees, and they may not often leave their booths.

Two studies—one at a hospital in Northern Ireland, and one at a park-and-ride lot in England—found large reductions in theft after attendants began working in parking lots. The latter study found that the reductions were much larger in theft of cars than theft *from* cars. Unfortunately, it is expensive to hire attendants, and in every case where this is proposed, it will be necessary to undertake a detailed cost study.

- Improving surveillance at deck and lot entrances/exits. Surveillance of entrances and exits can be improved in ways other than hiring attendants. A successful effort to reduce thefts from a parking deck in Dover, England, involved leasing a vacant office at the entrance to a 24-hour taxi service, and improving the entrance lighting.¹⁴ Both measures increased natural surveillance at the entrance.
- 3. Hiring dedicated security patrols. It is difficult for police to patrol parking facilities at the level needed to provide a credible deterrent to theft.¹⁵ Consequently, many large facilities hire their own security patrols. Unfortunately, very little research has been done on the value of dedicated patrols, though two studies support their value:
- A well-publicized bike patrol provided by a private security company in a large park-and-ride lot in suburban Vancouver, British Columbia, led to a substantial drop in theft of cars. 16

§In both cases, other security improvements were made at the same time.



The security officers were instructed to expand their patrol beyond the facilities for which they were hired, to provide surveillance of neighboring lots and decks. They were provided with radios to communicate with police, and were trained in recognizing and dealing with car thieves. Finally, a bike unit was added to expand patrol. The unit was trained to patrol in unpredictable patterns, and to make social contact with people using the parking facilities (see Clarke and Goldstein 2001).

- In the Lloyd district of Portland, Ore., a concerted effort to reduce thefts from cars resulted in a drop from about 900 per year to about 300 per year. The centerpiece of this effort was to coordinate the patrols conducted by the diverse security firms hired by individual lots and decks.§
- **Installing and monitoring CCTV.** CCTV systems are widely used in lots and decks. Evaluations of their effectiveness are scarce, though the following study results in England support their value:
- A six-city survey of parking facilities, many of which had new CCTV systems, concluded CCTV was effective in reducing theft, though its impact was difficult to separate from that of other measures in place.¹⁷
- Following the introduction of CCTV, theft from cars (but not of cars) was reduced dramatically in four parking lots at a southern England university campus. The cameras covered only three of the lots, but thefts dropped equally in the fourth, suggesting that potential offenders were unaware of the extent of the cameras' surveillance.18
- The introduction of CCTV in parking facilities in a southern England town led to a drop in car-related thefts, but this may have been equally due to the improved lighting and overnight locking of facilities introduced at the same time.¹⁹







CCTV monitors cars entering and leaving this garage.

CCTV systems vary greatly in their specifications, coverage and quality. They may or may not be linked to public address systems, and the amount of attention guards or attendants give them varies. If new CCTV systems are to be effective, they must be carefully designed to suit the particular facilities and their use. They should be advertised to increase their deterrent effect, but dummy cameras should not be used. These can give facility users a false sense of security, and they open the way to crime-victim lawsuits against facility operators.

5. Improving the lighting. Poor lighting has been identified as a risk factor in thefts from parking facilities, and many improvement schemes include better lighting. Improved lighting has been found to reduce crime in other settings,²⁰ and though there is a lack of research, there is little doubt it can help to do the same in parking facilities—particularly in decks and underground garages, and in lots with evening or night use.21





Tall lights provide uniform coverage of a lot and are difficult to vandalize.

- 6. Securing the perimeter. Lack of secure fencing is an important risk factor identified in research, though no published evaluations exist of the results of installing fences around a lot. Even when fences and walls exist, perimeter security might be incomplete. Three small studies have found positive results from improved perimeter security—in two cases, to prevent cars from being removed without passing through manned exits, and in one case, to prevent unauthorized pedestrian access.
- In Port Newark, N.J., offenders stole new cars parked in a storage facility by driving one through the cyclone fence, and then driving others through the hole created. A two-foot-high concrete barrier erected around the fence stopped these thefts.²²



- At Newark International Airport, juvenile offenders were stealing subcompact cars from a lot by driving them through a small gap between two steel posts. A sand-and-concrete trash basket sealed the gap. Further checks revealed numerous other large gaps, which were then filled with steel posts or concrete barriers. These measures helped to reduce thefts from 100 one year to 37 the next.²³
- One measure taken to reduce theft from a Dover, England, parking deck was to install wire mesh in the gaps above the wall surrounding the deck. This prevented youths from climbing into the deck.24



Use of mesh or grilles to block gaps between decks helps to reduce unauthorized access.

7. **Installing entrance barriers and electronic access**. To deter thieves from cruising parking lots in cars, facility operators in Portland's Lloyd district agreed to install barriers at the entrance and exit of each lot. Though hard evidence is not available, these barriers are believed to have reduced theft.²⁵



No evaluations of electronic access systems to public parking facilities have been published, but such systems have been found effective in preventing theft from parking areas in housing complexes.²⁶

8. Adopting rating systems for security features. Studies suggest that a combination of factors put some parking facilities at greater risk for theft. When security is improved, it is more common to introduce several measures, rather than just one. This was the case in Portland's Lloyd district, and also at a Northern Ireland hospital where parking lot thefts greatly declined following adoption of a security package. This included placing manned booths at entry and exit points, conducting mobile patrols, installing CCTV cameras, improving the lighting, providing better training to security guards, and informing medical staff about security measures.²⁷

"Secured Car Parks"²⁸ is a popular British program premised on a package of security measures. It consists of a standard rating instrument for parking facilities, covering access controls, lighting, natural surveillance, and so forth. Facility operators can apply for the police to grade their facilities, using the instrument. Depending on the assessment made, parking facilities may then carry a "Secured by Design" notice. No controlled evaluations of this program have been reported, though many reports exist of reduced theft resulting from the upgrading of parking facilities to meet the "Secured by Design" standard.²⁹ The program has considerable potential in helping to improve security and reduce thefts in parking facilities jurisdiction-wide.

9. Arresting and prosecuting persistent offenders. Systematic interviews conducted by researchers find that car thieves claim to be largely immune from the risks of detection, apprehension and conviction. For example, in one study of 100 thieves, 80 percent suggested they would never be caught.³⁰ Arrest data seem to confirm these predictions. Only about 14 percent of



motor vehicle thefts known to police were cleared by arrest in 1998, whereas the average for index offenses was about 21 percent. (An even smaller proportion of thefts from cars result in arrest.) Even if more offenders were detected, it could be difficult to persuade courts to award more severe sentences, due to the nature of the offenses.§

However, one important study found that the arrest of a handful of persistent offenders led to a marked drop in thefts in a shipyard parking lot in Newport News, Va. 31 Similar results might be achieved elsewhere, especially in jurisdictions with a community prosecution unit and where judges are alert to business owners' concerns about the economic impact of these crimes.

Responses with Limited Effectiveness

10. Conducting lock-your-car campaigns. Victims often contribute to their plight by leaving valuables in view or placing items in known hiding spots, such as under the front seat or in the glove box. They sometimes leave spare keys in magnetic containers placed in the wheel well. They may leave doors unlocked, leave windows open and even leave keys in the ignition.

These habits help explain the popularity of lock-your-car campaigns, but evaluations of such campaigns, some targeted on parking facilities, have failed to identify any clear crime prevention benefits. Checks made of cars before and after publicity campaigns show little change in the number of cars properly secured.³² Results may be better when campaigns are part of a wider program of security improvements. Thus, a combination of a publicity campaign with mounted patrols and environmental changes to improve natural surveillance achieved a significant reduction in thefts from cars in parking lots in Stockholm, Sweden.³³ Campaigns may also be useful in raising consciousness about the problem, making it easier to introduce more costly measures.

Even the "knee-capping" (i.e., shooting in the leg) meted out by the IRA to juvenile car thieves in Northern Ireland failed to have any impact on the volume of car thefts (reported in Clarke and Harris 1992).



- Some jurisdictions have made it an offense to leave parked cars unlocked. Prosecutions are extremely rare, and this measure probably has no more than symbolic value.
- 11. Warning offenders. A publicity campaign warning potential offenders about intensified police patrols had no effect on theft of and from cars parked in the streets of Jersey City, N.J.³⁴ No studies of similar campaigns for parking facilities have been published, but there is no reason to think they would be any more effective.
- 12. Promoting car alarms and other "bolt-on" security devices.

It is sometimes suggested that regular patrons of a parking facility might be persuaded to install car alarms or other "bolton" security devices, such as the "The Club" or ignition kill switches. Interviews with offenders indicate they avoid cars fitted with alarms, but this depends on their experience and the type of alarm—some are considered easy to deactivate and do not deter experienced thieves. Offenders generally look for the flashing light to see if there is an alarm, and then test the system by kicking or hitting the car. Highly motivated offenders, such as professional thieves stealing particular cars to order, are likely to invest more effort in overcoming an alarm system. Interviews with offenders, including joyriders, show a fairly quick learning curve regarding how to deactivate alarm systems.

It would be difficult to persuade enough patrons of a particular facility to install alarms and other bolt-on devices. If only a minority installs them, they might protect themselves from theft, but at the cost of displacing thefts to the unprotected cars in the facility—with no net reduction in theft and no overall benefit for the police. On the other hand, if thieves target only a restricted number of models, protecting these could be beneficial.



13. Using decoy vehicles. Police occasionally use decoy vehicles (sometimes also known as "bait cars" or "gotcha cars") to catch car thieves. These are sometimes fitted with immobilizers and devices to trap the thieves inside the car.³⁵ Their use greatly appeals to the police and the public.

Decoy vehicles can be used in parking facilities. They must be kept under constant surveillance, and it is unclear whether they yield more arrests than surveillance alone.

14. Redirecting joyriders' interest in cars. Many British probation services run "motor projects" for juvenile car thieves, designed to challenge their attitudes and give them opportunities to engage in more positive car-related activities, such as vehicle maintenance and racing. Evaluations of these projects have not found them effective in reducing joyriding.³⁶



Appendix: Summary of Responses to Thefts of and From Cars in Parking **Facilities**

The table below summarizes the responses to thefts of and from cars in parking facilities, the mechanisms 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 measures. Law enforcement responses alone are seldom effective in reducing or solving the problem.

Response No.	Page No.	Response	How It Works	Works Best If	Considerations		
General C	General Considerations for an Effective Response Strategy						
1	15	Hiring parking attendants	Improves surveillance of facilities, especially at entrances and exits	the facility's perimeter is secure, so those who enter and exit must pass the attendant, and the attendant booth is designed to facilitate surveillance	Expensive; usually justified only in large facilities; effective in reducing theft of cars—less so for theft from cars		
2	15	Improving surveillance at deck and lot entrances/exit	Increases thieves' risk of detection entering and leaving	the facility's perimeter is secure	Methods include improving the lighting, removing signs and other obstructions, and encouraging vendors to set up shop near entrances and exits		
3	15	Hiring dedicated security patrols	Increases thieves' risk of getting caught in the act	patrols are frequent but random, and guards are trained to deal with thieves and can communicate by radio with police	Expensive; may be feasible only for a large facility or group of facilities; bike patrols seem especially useful		

Response No.	Page No.	Response	How It Works	Works Best If	Considerations
4	16	Installing and monitoring CCTV	Increases thieves' risk of getting caught in the act; filmed incidents can aid investigators; reduces fear among facility users	the CCTV system is tailored to the facility; the monitors are constantly watched; the system includes public address capability; and the lighting is adequate	Even quite sophisticated CCTV systems are becoming inexpensive; many specialist vendors exist; dummy cameras should <i>not</i> be used
5	17	Improving the lighting	Improves natural surveillance and reduces fear	many thefts occur at night or in poorly lit parts of the facility	All parking facilities should be well lit; relatively high running costs
6	18	Securing the perimeter	Stops thieves from entering lots on foot; prevents thieves from driving cars off lots	exits and entrances are manned, and fences cannot be easily scaled or breached	Installation costs can be high, but maintenance costs are generally low; in many cases, existing fences have gaps that should be blocked
7	19	Installing entrance barriers and electronic access	Prevents thieves from entering by car or leaving with a stolen car	the facility's perimeter is secure	Most effective when combined with improved surveillance of entrances/ exits
8	20	Adopting rating systems for security features	Comprehensive package serves to control access and improve surveillance	a group of facilities is to be upgraded	Requires police to inspect facilities and issue certificates of compliance; may require local ordinances to enforce
9	20	Arresting and prosecuting persistent offenders	Intended to deter thieves	a small group of offenders is responsible for a large share of the problem; the jurisdiction has a community prosecution unit; and judges are alert to business owners' concerns about the crimes' economic impact	Few car thieves worry about punishment, but one important study found some benefits in arresting persistent offenders



Response No.	Page No.	Response	How It Works	Works Best If	Considerations		
Responses u	Responses with Limited Effectiveness						
10	21	Conducting lock-your-car campaigns	Intended to reduce theft opportunities		Such campaigns have public relations benefits, but evaluations have found little discernible impact on the problem		
11	22	Warning offenders	Intended to raise thieves' fear of apprehension		Such campaigns have public relations benefits, but evaluations have found little discernible impact on the problem		
12	22	Promoting car alarms and other "bolt-on" security devices	Intended to increase thieves' risk of getting caught and the difficulty of committing theft		The main result of this measure may be to displace thefts to unprotected cars in the facility; consequently, there is little overall benefit for police		
13	23	Using decoy vehicles	Intended to entice offenders and assist in their arrest	arrestees are interviewed to gain knowledge of motivations for and methods of theft	Popular with police and the public, but may be of no more value than conventional stakeouts		
14	23	Redirecting joyriders' interest in cars	Intended to challenge attitudes and provide offenders with opportunities to engage in more constructive activities		Evaluations of these schemes have found little success in reducing joyriding		



Endnotes

- ¹ Clarke and Harris (1992).
- ² Sandby-Thomas (1992); Clarke and Goldstein (In Press).
- ³ Hazelbaker (1997).
- ⁴ Clarke and Harris (1992).
- ⁵ Clarke and Goldstein (In Press).
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- ³⁰Light, Nee and Ingham (1993).
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Proble i l'i

Thefts of and from Cars in Parking Facilities provides an overview of the problem and the factors that increase the risks of thefts of and from cars in parking facilities. The guide also provides questions for consideration when conducting an analysis of your problem and reviews responses and what is known about them from evaluative research and police practice.

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