CHAPTER 10

Identifying Meaningful and Useful Patterns

The purpose of this chapter is to illustrate how crime analysts identify meaningful patterns that are useful for police. In order to do this, it will first discuss the difference between how persons crime and property crime patterns are identified and second, how police can use the results of pattern analysis to implement problem-solving responses. The remainder of the chapter will discuss specific types of crime commonly examined in tactical crime analysis, key characteristics used to identify patterns for these crimes, and potential responses used by police for these patterns. The discussion is illustrated with examples of real crime patterns provided by working crime analysts.

To prepare for pattern identification, crime analysts should become familiar with the research related to the crimes they are examining. Although they do not focus specifically on short-term pattern analysis, the Problem Guide series at the Center for Problem-Oriented Policing (www.popcenter.org) provides analysts with a wealth of knowledge about types of offenders, victims, and places for the crime types discussed in this chapter.

**Persons Crime and Property Crime**

Pattern identification in tactical crime analysis is guided by the distinction between persons crime and property crime patterns. That is, persons and property crimes are normally examined separately because the characteristics that link persons crimes to one another are inherently different from those that link property crimes. **Persons crimes** are those crimes in which people are the targets of an offender. The crimes commonly examined for persons crime pattern analysis are robbery, stranger sexual assault, indecent exposure, and public sexual indecency. Other persons crimes may be examined in pattern analysis by some analysts (e.g., aggravated assaults and shootings between strangers), but the discussion here will focus on robbery, stranger sexual assault, indecent exposure, and public sexual indecency since they are the most common.

In most persons crimes, the victims are also witnesses, so these types of crimes provide analysts with abundant detail about the actions of the suspect, the suspect’s description, and any vehicles involved. The types of patterns typically found for persons crimes are series or sprees because the wealth of information about each crime is used to link incidents by offender. Less often, analysts identify patterns involving hot spots, hot prey, or hot settings. These types of patterns do not have common suspects but share...
other characteristics such as proximity, type of victim, and type of place. The following are examples of some specific persons crime patterns:

- **Series, indecent exposure**: A suspect on a mountain bike approaches female pedestrians and exposes himself. Four incidents have occurred over a 1-month period, and the suspect’s description, bicycle description, and actions are very similar in all four incidents.

- **Spree, carjacking**: Three carjackings have occurred within the city in a period of 3 hours. Two suspects use a car to cut the victim off in traffic and force the victim to stop; then one suspect approaches the victim's car and orders the victim out of the car at gunpoint. That suspect drives away in the victim's car, and the other drives away in the suspect car.

- **Hot place, mall parking lot**: Several incidents of robbery of pedestrians and indecent exposure have occurred in a mall parking lot near the movie theaters over a 1-month period. The crimes appear to have been committed by different people, based on various suspect descriptions by witnesses.

- **Hot prey, female pedestrians**: Several types of vehicles have been observed driving through a residential area during evening hours. On several occasions, the driver of each vehicle is alone and exposes himself to a female pedestrian. Because the incidents have all occurred at night, officers have not been able to obtain detailed suspect and vehicle descriptions, but the targeted victims have all been women walking on the street.

- **Hot setting, convenience stores**: Several incidents of strong-arm robbery have occurred in the past week at a particular chain of convenience stores throughout the city, yet different MOs and suspect descriptions indicate that multiple suspects are responsible for the crimes.

**Property crimes** are those crimes in which property is the target of an offender. The crimes commonly examined for property crime pattern analysis are theft from vehicle, auto theft, residential burglary, and commercial burglary. Incidents of theft from buildings, criminal trespass, grand theft, and criminal damage are also examined as they relate to these other crimes or as they indicate overt vandalism and theft of property (e.g., graffiti, mailbox destruction, theft of construction materials). Because witnesses are often not present during the commission of property crimes, crime analysts usually have little or no suspect information available to use for identifying patterns. Typically, analysts link property crimes together by examining information on types of crimes (e.g., residential vs. commercial burglary), types of settings
(e.g., office buildings, apartments, single-family homes), and proximity of the incidents. Modus operandi (MO) and temporal characteristics are also used but to a somewhat lesser degree. The patterns most often identified in the analysis of property crimes are hot spots, hot settings, hot products, and sprees. Here are some examples:

- **Micro-time hot spot, residential burglaries**: Three residential burglaries have occurred in a specific neighborhood within a 0.15-mile radius of one another. In all of the burglaries, suspects gained entry to the homes by breaking or prying open a rear window. Various types of property have been taken, from small electronics to jewelry and cash. Suspect information is not available, as there have been no witnesses to any of the incidents.

- **Hot place, apartment community**: Ten incidents of theft from vehicle have occurred at the same 100-unit apartment community over 14 days. All incidents have occurred overnight, with several nights having multiple cars hit. Property taken varies from cash and electronics to parts of the vehicles (e.g., emblems, car covers). In some cases, no force was used, and in all cases, no suspect information is available.

- **Hot setting, new home construction sites**: Seven burglaries have occurred in the past 6 days at new home construction sites at a new 500-home development. Suspects break into or enter unlocked houses in their final stages of construction to steal appliances or on-site construction equipment. The incidents have all taken place at night, and no suspect information has been obtained. Different tire marks have been found at the scenes, indicating the use of several different types of vehicles.

- **Hot product, pool equipment**: Fifteen thefts from residential backyard pools have occurred over a 4-week period during the day and night. Portable pool equipment is the only property taken in each incident.

- **Spree, vandalism of vehicles**: Thirteen vehicles along the same street were damaged over 1 night. It seems as though the same suspect(s) committed the crimes because the cars were next to one another and damaged in the same way—taillights broken, mirrors damaged—with what seems to be a baseball bat.

Even though persons crime and property crime warrant the examination of different characteristics, crime analysts sometimes examine the two kinds of crimes together. Some examples of such patterns include the following:
• **Series, burglary and robbery:** Two “cat” burglaries (when the suspect enters the house at night while the residents are home) and two robberies of residents walking down the street have occurred in the same neighborhood. Suspect information is available and similar for all of these incidents.

• **Spree, burglary and carjacking:** A young man burglarizes a business suite late at night and leaves the scene by carjacking a vehicle. The man then crashes the vehicle into a different retail store’s front window, enters the store, and steals additional property. All of these incidents take place within a 1-hour period.

• **Hot place, water park:** Over the past 2 weeks, a water park had 10 thefts from vehicle and four robberies of customers in its parking lot, as well as five public sexual indecency incidents inside the park itself. There are a range of suspect descriptions, and there have been no crimes at the park in the 2 months previous while it has been open.

• **Hot product, video games and consoles:** During the past 2 months, nine houses across the city have been burglarized, and video game consoles and games have been the only property taken. In addition, two robberies have occurred in which video games have been taken from individuals in a gaming store’s parking lot, and there was one commercial burglary from a large box store in which 50 gaming consoles were taken.

**Potential Responses to Patterns by Police**

It is important for crime analysts to understand how police use the results of pattern analysis for crime reduction responses in order for them to identify meaningful and useful patterns. A pattern represents both the scanning and analysis steps of the problem-solving process, or SARA (scanning, analysis, response, assessment), so the response is tailored based on the specific pattern information provided in the analysis results. For example, if a pattern is daytime residential burglary in a particular neighborhood, successful resolution of that pattern would be stopping residential burglaries during the day in that area. If subsequent burglaries occur at night, in a different neighborhood, or to businesses within that area, this is not seen as a failure of the response since the response to the pattern would not address burglaries with these characteristics (e.g., at night, to businesses, or in a different area). Just as with repeat incidents, the idea is to identify specific activity and respond appropriately to these smaller-scale, short-term problems so they do not develop into larger-scale, long-term problems.
The types of responses that police employ for patterns are fairly straightforward and focus on arresting and deterring offenders, as well as on crime prevention (Boba & Santos, 2011; Bruce, 2008b). More specifically, the following explains the strategies typically used by police for patterns. Notably, the directed patrol, field contacts, surveillance, and sting operations are implemented during the times and in the places of the crimes within the pattern, which could be any day of the week and any hour of the day. In contrast, investigating the pattern and clearing cases, contacting potential victims directly, and providing pattern information to the public are conducted during normal business hours (i.e., weekdays from 8 a.m. to 5 p.m.) and/or normal waking hours any day of the week.

- **Directed patrol**: This strategy focuses on police patrol in the areas and at the times in which a pattern is occurring. Police patrol in cars, on bikes, or on foot. The objective of the directed patrol is for the police to arrest offenders committing a crime or to deter offenders by increasing guardianship and the offenders' perceived risk of being caught.

- **Field contacts**: While conducting directed patrol, police officers make contact with individuals in the pattern area and, in some cases, at the time when the pattern is occurring (i.e., daylight hours for residential burglary). They contact individuals who appear to be suspicious and/or who might have information about the crime pattern. This strategy can deter potential offenders from committing crime by talking to them specifically, as well as provide potential investigative leads or intelligence that can help solve the individual crimes or the entire pattern. (For more information on both directed patrol and field contacts, see the Center for Problem-Oriented Policing [POP Center] response guide *The Benefits and Consequences of Police Crackdowns* [Scott, 2004] at www.popcenter.org.)

- **Surveillance**: This response involves the police to watch and wait in a particular area at a particular time for a crime to happen in order to make an arrest. This is different than directed patrol in which officers drive around the entire area because surveillance is often static and focused on one street block or location. When officers conduct surveillance, this response is used only in the most specific patterns (e.g., robberies of one movie theater's employees when they leave work at the end of the night). This is because personnel costs are very high (e.g., officer overtime). However, with modern technology, static or movable surveillance cameras can be used to observe
and record the activity around a particular location or street block. (For more information, see the POP Center response guide *Sting Operations* [Newman, 2007] and *Video Surveillance of Public Places* [Ratcliffe, 2006].)

- **“Sting” or “bait” operations**: This response requires a situation in which people or property that have been targeted in a particular pattern are put out as “bait” for offenders. Police then directly observe the bait or have electronic monitoring that allows them to arrest the offender or record (on video) offenders committing the crimes when the bait is taken. Some examples include a “bait car” for theft from vehicle or vehicle theft, or an undercover police officer for a robbery (For more information, see the POP Center response guide *Sting Operations* [Newman, 2007].)

- **Investigating the pattern and clearing cases**: Because a pattern becomes a unit of response for the police department, in addition to being assigned individual crimes, detectives can be assigned a pattern to investigate. The detective would then investigate all the crimes in the pattern together, looking at how, for example, fingerprints and evidence might cross over cases, which allows them to piece together information about the suspect, victims, and related information from the group of related cases (instead of one case at a time). Notably, not all crime reports taken by patrol officers in the field are actually assigned to detectives to investigate. This might be because of lack of evidence or just because the police department prioritizes based on its resources. Thus, in any given pattern, there might be cases that are not otherwise being investigated, so doing this gives the detectives the opportunity to clear more cases. That is, if an arrest is made related to one or more crimes in that pattern, the pattern can be used to clear the other related cases.

- **Contacting potential victims directly**: Crime prevention education works best when it is targeted at specific victims, times, and areas. This response can include either volunteers or police officers contacting specific groups of citizens, residents, or businesses that are most relevant to a particular pattern. The contact can be made in person, over the phone (e.g., reverse 911), through a letter via postal mail, through flyers left at homes or businesses, or through the Internet, e-mail, or social media. The information would include details of the pattern, crime prevention advice, and contact information for the police. Crime prevention
advice would include suggestions with immediate results (e.g., lock doors and windows) and those with more long-term results (e.g., installing video surveillance equipment or alarms). (For more information about crime prevention publicity campaigns, see the POP Center response guide *Crime Prevention Publicity Campaigns* [Barthe, 2006].)

- **Providing pattern information to the public:** By disseminating patterns to the general public, police encourage the public to provide additional information (“tips”) on known crimes as well as to report crimes that have not yet been reported. Also, when offenders see that the police know about their activities, they might be deterred from continuing their offending. Information about patterns also would provide specific crime prevention advice and would encourage individuals to protect themselves. Media such as newspapers, radio, television, and the Internet are used to provide this information. (For more information about crime prevention publicity campaigns, see the POP Center response guide *Crime Prevention Publicity Campaigns* [Barthe, 2006].)

What follows is a brief discussion of how these responses can be employed by police for persons crimes and property crimes, separately.

**Persons Crime**

As discussed earlier, persons crime patterns are typically series or sprees, which means that the analyst thinks the crimes have all been committed by the same person or group of people. Because the pattern will contain suspect descriptions and specific MO information, police responses focus on enhancing the investigation and facilitating the arrest of the offender(s). Persons crime patterns can increase the likelihood of arrest of suspects because when multiple crimes are linked together, all of the information is combined to create a more complete picture of the suspect and his behavior. For example, the victim of a rape may provide a general description of the suspect with specific information about the suspect's actions. In a second rape incident that has been linked through the suspect's behavior, the victim may have provided a more detailed description of the suspect. By combining the information from both crimes, the investigators have more complete information that could increase the likelihood of arrest.

Police also respond to persons crime patterns with surveillance and directed patrol. Crime analysts can use crime pattern information to assist in this process by attempting to anticipate when and where the offender may hit again. Offenders often repeat their behavior when it is successful and may choose similar situations to commit their crimes based on their own routine activities and activity space. Linking similar crimes together is the only way to discern whether an offender is repeating his behavior. For example, if the offender
has been robbing people at bank ATMs around malls on weekends during the evening, patrol officers can focus their uncommitted patrol time in these areas, stopping suspicious people, and detectives can conduct surveillance on locations where it seems likely that people might be robbed.

Police also respond to persons crime patterns with crime prevention education for specific place managers and potential victims. For example, police may provide pamphlets with crime prevention advice based on situational crime prevention (discussed in Chapter 2) to convenience store managers at a time when there is a series of convenience store robberies. They may also provide information to bar owners, managers, and patrons about crime prevention at a time when there is a series of stranger rapes at bars in which the suspect is slipping his victims a “date rape” drug.

Finally, police typically provide information to the public on persons crime patterns. The most common method of disseminating persons crime pattern information to the public is through the media (e.g., newspapers, TV, Internet, social media, radio). The public is typically informed of robbery series, stranger rape series, and the like. Although individual cases are often reported in the media, series of persons crime are much more serious and get more attention since the suspect is repeating his behavior. Once the public is provided this information, many different things can happen. Crimes that have already been committed but have not been reported to the police may be reported. Another result of media exposure is that witnesses of crimes already included in a pattern may come forward with more information when they realize the crimes are part of a larger series. Lastly, providing pattern information to the public allows them to protect themselves. In the case of the Washington, DC, sniper, when 10 people were seemingly shot at random in public places in 2002, the media’s attention to this crime series encouraged people in the DC area to stay in their own homes and go outside only when necessary since the shooters were targeting people in public places.

**Property Crime**

Because the likelihood of arresting suspects for property crime is much lower than for persons crime, police responses to property crime patterns focus more on deterring offenders and encouraging victims to protect their property, and less on arresting offenders. Most importantly, police respond to property crime patterns by informing potential victims to protect themselves. As previously noted, people are much more likely to employ crime prevention methods if they feel an immediate threat. The police use property crime patterns to target specific people in pattern areas. Methods such as reverse 911 (i.e., leaving an automated phone message for a group of citizens living in a particular area), going door-to-door, and sending letters to citizens or businesses to inform them about the pattern and recommend relevant crime prevention techniques are all different ways police can inform potential victims. Other methods include, but are not limited to, posting patterns on the Internet or through social media and
meeting with specific neighborhood or business groups. The goal is to provide information about the crime pattern as well as specific things that people can do to protect their property (e.g., lock their car doors), change their behavior that contributes to the crime (e.g., remove valuables from their cars), or increase awareness (e.g., look out for suspicious people in their neighborhoods).

Because property crime often is linked by proximity (i.e., hot spots), police use directed patrol to deter offenders and, less often, catch offenders in the act. As discussed in Chapter 3, hot spots policing does work for reducing crime, especially for short-term issues like patterns. Directed patrol can be conducted in police cars, on bikes, or on foot with the goal of increasing the visibility of police and increasing the offenders’ perception of risk of being caught. Additionally, while doing this type of patrol, police can also make field contacts with suspicious people and vehicles. This can help to deter offenders from committing crime through increasing police contact and can also provide potential investigative leads for individual crimes and patterns.

Although property crime patterns do help with arresting suspects in some situations, they are likely to assist in clearing cases once a suspect is arrested for one crime. For example, when a detective arrests a suspect for breaking into cars in a particular area, the crime analyst can produce a pattern of vehicle burglaries that are in the same area during the same time period. The detective could then use that information to interview the suspect or review the evidence to see if he committed any of these crimes.

Finally, for very focused and specific patterns of property crime, police employ responses with the goal of arresting offenders in the act, such as surveillance and bait operations, but these patterns are less common. Some examples include a pattern of auto theft in which a specific type of vehicle (such as a Honda Civic) has been modified for racing; a pattern of theft from vehicle in which a specific type of property is taken from a vehicle, such as smartphones or high-end stereo speakers or expensive wheels; or a commercial burglary pattern in which the offenders drive a car through the glass window of a particular electronics store. For these patterns, police often use bait vehicles containing the targeted property, or they may use surveillance by either individuals (e.g., undercover detectives) or video surveillance equipment (either permanent or movable) to observe locations that are similar to those in the pattern in hopes of catching the offender in the act.

**Identifying Meaningful Patterns**

In most cases, tactical crime patterns are made up of multiple events of one type of crime. However, there are instances, as discussed earlier, in which similar types of crimes make up a single pattern. For example, unsuccessful burglaries can be classified as criminal damage and examined along with successful burglaries. Also, public sexual indecency, indecent exposure, and
rape can make up a pattern if an offender is escalating in violence or performs different behaviors depending on the circumstances. An important point is that police officers classify similar crimes differently based on specific legal criteria; however, the crime acts with different legal codes may be similar in nature and can be part of the same crime pattern. A crime analyst needs to take both the classification and the nature of the activity into account in order to identify patterns.

Because modus operandi (MO) characteristics can be very specific (e.g., a robber who forces the victim to remove clothing), they can provide obvious links among cases that are months or even years apart. However, there is no way to establish a pattern entirely by MO. In other words, unless the suspect is arrested and confesses, there is no way to be sure that a particular suspect has committed all crimes with similar MO characteristics. In most cases, patterns are linked in other ways as well (e.g., suspect description, type of place). It is unlikely that an offender would deliberately or coincidentally copy another offender’s vehicle or physical description, but it is easy to copy general MO characteristics; for example, a suspect enters a bank and demands money from a clerk using a gun and a note.

Another factor that can confuse the examination of MO characteristics is that situational circumstances may result in an offender’s altering his or her MO. For example, depending on how a victim reacts, an offender may use less or more violence within the same crime pattern. Or depending on the environment, a burglar may not kick the door open—his usual MO—because the side window is open and much easier to enter. Also, characteristics that are based on witness descriptions are often problematic. Factors such as lighting, amount of time the victim and offender were together, and fear can influence the accuracy of information provided by witnesses. An important thing to remember is that linking crimes in a pattern for police response is not building a case for a prosecution of an offender in court. Thus, the patterns are really a “best guess” that the analyst has to direct police to particular responses. If and when a suspect is arrested, probable cause and the rules of evidence are paramount and the pattern is much less important.

**Persons Crime Pattern Key Characteristics and Examples**

When identifying any pattern, crime analysts must think of the potential police responses and make sure their patterns are focused, relevant, and helpful for implementing the appropriate responses. The main focus of persons crime pattern responses is arresting the suspect(s). Therefore, examination of persons crimes would focus on linking crimes through suspect actions and description to develop series and spree patterns. To assist in the pattern finalization process, the following sections are a discussion of the key characteristics and examples of robbery and sex crimes patterns, the two types of persons crimes most commonly examined.
Robbery Patterns  Key characteristics of robbery patterns are the actions of the suspect(s) during the crime and the type of victim or place. Although the same robbery offender may commit crimes in different ways, those crimes are more difficult to link as patterns. Research shows that offenders who commit commercial robbery are different than those who commit street robbery (Wright & Decker, 1997), so using type of place to distinguish robbery patterns is logical. Suspect descriptions are important in persons pattern analysis, but because a witness can be unreliable, as discussed earlier, the suspect descriptions are considered secondary in importance to the suspect's behavior. For example, if a robbery is similar to another in terms of the suspect's actions (e.g., using a gun and striking the victims after robbing them) but the suspect of one crime is described as an Arabic man with wavy hair and the other is described as a Hispanic man with curly hair, the analyst may include both in the pattern because the victims may not have described the suspects accurately, but the behavior is very similar.

Although robberies at commercial locations are not as likely to be identified through proximity of the incidents because the businesses themselves are typically spread throughout a community (e.g., two Best Buy stores are not likely to be located right next to one another), proximity is relevant in street robbery patterns where offenders may be targeting people in areas familiar to them (i.e., crime pattern theory). So even within one type of crime, the key characteristics might be somewhat different. Finally, the use of a vehicle in a robbery makes proximity less important because of the offender's ability to travel and get away after committing the crime. This is why some robbery patterns overlap jurisdiction boundaries and the finalization of a robbery pattern should typically include soliciting information from a neighboring agency.

Example: Hot prey, street robberies, Seattle, Washington. This robbery pattern consisted of six strong-arm robberies (i.e., victims threatened with physical force) and one armed robbery (i.e., victim threatened with a handgun) of teenagers (juveniles under 18) walking on their way to or from high school over a 14-day period throughout the city. There were different descriptions of suspects in the crimes (e.g., black males and white males), so the pattern is not a series. It is a “hot prey” pattern because the victims were similar in that they were either male or female students walking alone to or from school. In each crime, the suspect asked to use the victim's phone, and when the phone was produced, the suspect threatened the victims and/or assaulted them and forcibly took the phone. In one of the crimes, the suspect approached the victim pointing a gun and demanded the cell phone. In all crimes, the suspect typically fled on foot. A backpack and money were taken in separate incidents. Figure 10.1 shows two maps for all six incidents in which the crimes are in blue and the high school locations are in red.

Based on the nature of the pattern, response by detectives could include investigating the similar crimes together (e.g., the armed robberies vs. the
strong-arm robberies) to identify potential suspects. The pattern could be released to the media to provide parents crime prevention information and to solicit additional information from citizens to assist with identifying and apprehending the offenders. Police could contact school officials directly so they could educate their students and their parents of the threat and provide ways to protect themselves. Lastly, police officers could conduct directed patrols within a walking distance from the high schools before and after the school day to deter offenders.

**Example: Series, commercial robberies, Salisbury, Maryland.** This commercial robbery pattern (see Figure 10.2) appears to be a series, as the suspect description is similar in each crime (i.e., white male around 6’ tall). It is also both a hot setting and a hot product since it consists of robberies at one type of location (i.e., retail pharmacies) in which a specific product is targeted (i.e., oxycontin). Within the city of Salisbury, between November and February in the early afternoon, three separate and locally owned (i.e., nonfranchised) pharmacies were targeted by a white male wearing a mask and gloves who displayed a handgun to the pharmacy clerk and asked for “oxy.” The suspect brought his own bag to carry out the stolen items. The suspect took over 20 bottles of pills with strengths of between 5 mg and 30 mg—thousands of dollars’ worth—from each store. Cash was also taken in each robbery, but no video evidence was collected. Fingerprints were lifted in one of the cases.

Based on the nature of the pattern, responses by detectives could include investigating the three crimes together (e.g., examining video evidence and reinterviewing victims and witnesses with the other crimes in mind), working with detectives from neighboring agencies that had similar robberies,
contacting local pharmacies directly, and releasing the pattern to the media for citizens to provide additional tips to catch the offenders. Directed patrol is not likely an appropriate response for this pattern since the crimes are not proximate to one another in terms of geography or time. They are also not easily anticipated to direct patrol toward certain times, days, or specific pharmacy locations.

**Example: Series and hot prey, cell phone robberies, Fairfax County, Virginia.** This robbery pattern (see Figure 10.3) is a series of six robberies that occurred over 2 months. The victims were all individuals who sought to either buy or sell an iPhone through Craigslist or Facebook. Based on the similarity of the MO, this is a series, and based on the similarity of the victims and how they are victimized, this is also a hot prey pattern. In all
the crimes, the suspect and victims connected through social media. Once they met in person, the suspect threatened the victim and took the cash or iPhone by force. In two incidents, the suspect used a firearm to threaten the victim, but no shots were fired. Also, in two cases, a brown or green older-model four-door vehicle was driven by the suspect. The incidents occurred throughout the county in public parking lots at various times of the day and evenings.

Based on the nature of the pattern, responses by detectives could include investigating all crimes together (e.g., examining evidence, reinterviewing victims, and looking at social media correspondence with all related crimes in mind). More importantly, the police could release the pattern to the media to warn citizens about selling and buying cell phones to strangers through the Internet and provide crime prevention advice for conducting that type of transaction. For example, some police departments suggest citizens make these transactions at the police department itself. The media release could also solicit information from citizens who might have been victims but did not report the crimes to the police, which would provide the police more information that could be coalesced to identify the offender(s) and stop the crimes. Directed patrol would not be an appropriate response for this pattern since the locations of the crimes depend on the discussion between the victim and offender and could be anywhere, but setting up a sting operation to identify and catch this offender would be appropriate.

**Figure 10.3 Series, Cell Phone Robbery Map**

Source: Fairfax County (Virginia) Police Department, Jessica LeBlanc.
Example: Series and hot spot, home invasion robberies, Salisbury, Maryland. This robbery pattern consists of two incidents in which two black males wearing ski masks forced entry into two-story single family homes around 10:00 p.m. while the residents were at home. Once inside the homes, the offenders threatened the victims with handguns and demanded money. The crimes occurred within 5 days of one another and within a 0.13-mile radius. Because the suspects appear to be the same in each crime, this is a series, but because the crimes are close to one another in the same neighborhood, this could also be a hot spot. In the first robbery, around $400 in cash was taken. In the second robbery, the victim told the suspects his money was in his car behind one of the speakers. The offenders went to the car and took the speaker but no money. Note that these crimes are robberies not burglaries since the offenders threatened the victims before taking property, which is why it is called a “home invasion.” Had the offenders entered the home and taken the property without threatening the residents, the crimes would be considered burglaries, even though the residents were at home when the crimes happened.

Based on the nature of the pattern, responses by detectives could include investigating these two crimes together (e.g., examining evidence, reinterviewing victims with both related crimes in mind). Because these crimes occurred in a close proximity and in the same residential neighborhood, the police could conduct directed patrol, stop suspicious individuals matching the suspect descriptions, and contact residents in the area who might be potential victims. A media release could

Figure 10.4 Home Invasion Robberies Map

Source: Salisbury (Maryland) Police Department, Kendahl Hearn.
also be done to solicit information (i.e., intelligence) from citizens who might have seen something and/or who might have been victims of similar crimes but did not report them so that more information can be brought together to identify the offenders and stop the series. Note that in Figure 10.4, the circles with numbers in them (i.e., 1 and 2) represent the crimes, the dark gray boxes represent locations of field interview cards for suspicious persons in the area around the time of the pattern, and the light gray boxes are the home addresses of known gun offenders that detectives might contact as part of their response as well.

**Sexual Crime–Related Patterns.** Sex crimes patterns are identified least often in tactical crime analysis because the crimes themselves are not as frequent as robbery and property crimes. Rapes are typically committed by acquaintances, so there are very few stranger rape patterns. Incidents of public sexual indecency and indecent exposure occur more often than stranger rapes but are still fairly rare. For all sex crimes, identifying patterns can be simpler than with other crimes because of their rarity and uniqueness of the offenders' MO.

Key characteristics of sex crime patterns are the actions of the suspect(s) during the crime (i.e., series) and/or the type of victim (i.e., hot prey). Similar to those in robbery patterns, suspect descriptions are important but are less reliable than actions of the suspect. In these cases in particular, the victims are surprised and shocked by the behavior and may not be able to identify the suspect easily (e.g., a flasher stepping out from behind a tree or a rapist attacking them from behind). However, unlike robbery, cases within a sex crime pattern may be more proximate to one another. A person who is exposing himself to people on the street may be doing this in an area he is familiar with and that has a significant number of pedestrians with minimal guardianship, such as a park. A rapist attacking college students would have to go to a college area to find his victims. Informing the public and specific groups of potential victims about sex crime patterns is particularly important because many of these crimes go unreported. If victims know others have been victimized and the offender is committing multiple offenses, they may be more likely to report the crime. These unreported incidents can provide additional information to a pattern that can assist in the investigation and apprehension of the offender.

**Example: Series, indecent exposure, Gainesville, Florida.** This pattern consisted of four separate incidents that occurred over several weeks in which a Hispanic male was seen masturbating in a silver compact-sized four-door vehicle. In the first incident, two Gainesville High School female students saw a Hispanic man, mid- to late 40s, masturbating in a silver vehicle near a Citgo station in the afternoon. Two weeks later in the morning before school, the same two female students saw a similar silver car at a gas pump at the same Citgo station. The male driver was wearing long, dark shorts and was masturbating while pumping gas. The suspect looked at the victims while masturbating, but when one victim attempted to photograph him for evidence, he got inside his car and drove away. Figure 10.5 is the picture she took of the vehicle. In a third incident, a different female high school student saw a man in
a silver vehicle in the Gainesville High School parking lot after school. When she walked by the car, the subject was not wearing pants and was masturbating. Finally, a fourth incident was reported after these crimes, but it occurred a month previously; in the afternoon, a young woman saw a Hispanic man in khaki shorts masturbating while sitting in what looked to her like a gold four-door vehicle. The victim noted it was rainy that day so the description of the vehicle color might not be accurate.

Based on the nature of the pattern, detectives might investigate these crimes as a pattern, looking in particular at video evidence obtained from the businesses and school, if available. In addition, they might also conduct surveillance at specific locations in an attempt to apprehend the offender. That is, if the offender appears to be following a pattern of being at particular businesses around the high school and in the school parking lot at similar times, the police may conduct surveillance at those times and areas. Also, patrol officers could look out for the vehicle and suspect as described while conducting directed patrol around the high school before and after school since the offender likely wants to be where young women are walking around. The police could contact school officials so that students are warned about the pattern, and information of additional sightings of the man can be reported immediately to the police to further develop a pattern of behavior, as he is likely doing this much more than is being reported. Lastly, the police may choose not to publish this pattern in the media as it might alert the suspect to change or stop his behavior for a time to avoid being caught.

**Example: Series, stranger rape.** During my tenure as a crime analyst in the 1990s, we identified a pattern in which a white male suspect approached Asian students around a college campus and asked them for directions to a
location, speaking in either Chinese or Japanese. If they answered and did not speak English, he would ask them to get in his car. If they complied, he would subsequently rape them. The crimes occurred in a variety of areas, but the women were initially contacted by the suspect in a small area near campus where foreign students resided. However, it was the specific actions of the suspect that linked the crimes together.

Based on the nature of the pattern, a response by officers included releasing the information to the public through the media, after which we received additional reports of women who were not Asian but had dark hair and eyes who had been approached but not raped. Even though these women had not been victimized, they provided additional information about the suspect’s car and his physical description. Detectives were able to arrest the suspect after piecing together information about the suspect’s vehicle (e.g., partial license plate and description) from the various victims and witnesses.

**Property Crime Pattern Key Characteristics and Examples**

Because the main focus of property crime pattern responses by police is having victims protect their property and deterring offenders, crime analysts focus on linking these crimes primarily through the type of crime, type of place, and proximity in location and time. The types of patterns typically found are sprees, hot spots, hot settings, and hot products. As noted earlier, the MO of a property crime often depends on the opportunities left by the managers or guardians of the property (e.g., unlocked doors, valuables in view, windows in a home with faulty locks). These factors, such as method of entry, point of entry, and type of property taken, are used for linking crimes only when they are very specific, which usually indicates a crime series or sprees (same suspect). For example, when working as an analyst, I identified a crime series of homes being burglarized by drilling a hole in the garage door, using a hanger to release the door lock cable, and entering the house through the unlocked internal garage door. An example of a spree is a group of vehicles in the same parking lot being burglarized in a 3-hour time period. The MOs may be different for each car, but the likelihood of multiple offenders committing these crimes in such a short time period and centralized place is unlikely, making the pattern a spree and a series, even though there is no suspect information.

**Theft From Vehicle Patterns** Theft from vehicle is the most frequently occurring type of crime examined in tactical crime analysis and is the topic of the highest number of patterns in police agencies. Often, there is little to no suspect information and minimal MO information since many of these thefts occur with no witnesses and when car doors have been left unlocked. Consequently, the key characteristics of theft from vehicle patterns are primarily based on type of place where the cars are located (e.g., businesses vs. residences), proximity of the thefts, and time of occurrence. Even though one offender may be committing these crimes across the entire city, the crime...
analyst typically does not have any suspect information and must distinguish patterns primarily by proximity (hot spots).

Importantly, micro-time hot spot patterns are helpful for police responses since the primary goal is not to arrest but to protect victims and deter offenders from committing the crimes in a particular area. Specific patterns may be identified by MO (e.g., use of a spark plug or window puncher to break a window) and type of property taken (e.g., hot product—cell phones, GPS equipment) or type of place (e.g., hot setting—day care centers, gyms). However, proximity is still an important factor in the final determination of most of these patterns.

**Example: Micro-time hot spot, thefts from vehicles, Port St. Lucie, Florida.**

Unknown suspects targeted six unlocked vehicles that were parked in the driveway or along the street in a residential neighborhood. The incidents occurred over 8 days in the late evening or early morning within a 0.41-mile radius of one another (see Figure 10.6). Property taken included loose change and other items left in the vehicles, but nothing of high value.

**Figure 10.6 Theft From Vehicle Hot Spot Map**

![Theft From Vehicle Hot Spot Map](image)

Sources: Port St. Lucie (Florida) Police Department, Cheryl Davis.

Based on the nature of the pattern, responses by detectives could be to investigate these crimes together as well as contact known theft-from-vehicle offenders who live in the pattern area since this is occurring in a residential neighborhood. Responses by officers could include conducting directed patrol in the pattern area, making field contacts while on directed patrol, and contacting residents in the pattern area through flyers, door-to-door visits, social media, or reverse 911, warning them about the pattern and providing specific crime prevention advice.
Example: Spree and hot setting thefts from vehicles at retail parking lots, Port St. Lucie, Florida. On a Sunday, between 4:00 p.m. and 10:00 p.m., three vehicles were burglarized at public parking lots (hot setting) at a retail store, restaurant, and movie theatre within several miles of one another (see Figure 10.7). In two of the incidents, the driver’s door lock was “popped” (i.e., removed from the door with a drill or other tool). In the other incident, there was no sign of force to the vehicle. A cell phone was taken from one vehicle, a purse with a wallet and credit cards from another, and nothing from the third. The credit cards were used at a gas station and two restaurants within several hours of the initial theft and within 50 miles of when and where the crimes occurred.

Based on the nature of the pattern, detective responses could include investigating these crimes together, as they were likely committed by the same individual(s) based on the times, locations, and MO (popping the door lock). Responses also could include crime prevention officers contacting specific businesses in the pattern area to provide crime prevention advice for their employees and customers, as well as encouraging them to watch for suspicious people in the parking lots. Directed patrol and in-person surveillance by police would not be realistic here because the crimes happen so quickly, and it is not clear whether offenders will hit the location again. However, installing video surveillance might assist with identifying offenders after the fact to catch and prosecute them.
Example: Hot setting, thefts from vehicles, Gainesville, Florida. Over a 4-week period, unknown suspects targeted seven unlocked cars at apartment communities (hot setting; see Figure 10.8) within about a 0.5-mile radius, occurring throughout the week, primarily in the early afternoon and evening, with one occurring at 10:00 a.m. Property taken included various items left in the vehicle. In one incident, a gun was stolen that was later used in a shooting. In another incident, nothing was taken.

Based on the nature of the pattern, detectives could investigate these crimes as one pattern and contact known theft-from-vehicle offenders living in these apartment communities or nearby. Police may also conduct directed patrol and make field contacts in and around these communities, as well as contact the managers and residents in each apartment community about locking their vehicles and removing valuables. Lastly, two of the communities were victimized twice, so police may also implement a bait vehicle operation at either of these locations, as offenders seem to be returning to commit more crimes.

Example: Hot place, thefts from vehicles at the YMCA, Gainesville, Florida. From February to June, there were 10 thefts from vehicles that occurred on three different days in the YMCA parking lot (see Figure 10.9). On February 24, six vehicles were victimized between 5:45 p.m. and 7:30 p.m. while parked in the first row of the parking lot. On March 6, two vehicles were victimized between 5:00 p.m. and 8:00 p.m., and on June 10, two vehicles were victimized between 9:50 a.m. and 11:00 a.m. Property taken from the vehicles varied, and all of the vehicles were unlocked. Note that vehicles in the parking lots that were not hit were those that were locked. Based on the nature of this pattern and the repeat activity at this one

Figure 10.8 Theft From Vehicle at Apartment Communities Map

Source: Gainesville (Florida) Police Department, Ericka Jackson.
location over many months, police could work with the managers of the YMCA to encourage their employees and members to lock their vehicles and remove valuables, as well as install video surveillance cameras and restrict access to the parking lot. Because the offenders hit several cars at a time, making employees and visitors aware of this and encouraging them to report anything suspicious right away could also be done.

Vehicle Theft Patterns. Vehicle theft is similar to theft from vehicle except there is even less information to examine for pattern analysis because the entire vehicle is missing. Information about how and why vehicles are stolen can later be deduced from its condition when recovered (e.g., no items taken and the vehicle is out of gas might indicate joyriding), but vehicles are typically recovered days and weeks after the initial crime or sometimes not at all, which is not helpful for identifying immediate crime patterns. As a result, there is limited information to link these crimes, so the key characteristics for vehicle theft are simply proximity (hot spot), time, type of place (hot setting), and type of vehicle (hot product).

Example: Hot product, moped thefts, Roanoke, Virginia. Over a 19-day period, four newer-model (2009–2015) mopeds were stolen while in plain sight in front of a residence (see Figure 10.10) during daylight hours on various days of the week. None of the mopeds was secured to a structure, but each had the handle bars or front wheel locked. This meant that the offender could not push or drive the moped from the property. A white, male juvenile between 15 and 18 years old was seen in one of the incidents before the theft. Two known offenders matching the suspect's description live in the pattern area. One has a history of moped thefts and the other a history of vandalism and motor vehicle (e.g., car) theft. Based on the information provided by this pattern, responses by officers are likely to include disseminating the pattern in this neighborhood as well as publishing the pattern in the media to alert moped owners in the city. Detectives would contact the known offenders living in the area, and officers might conduct directed patrol in the neighborhood during the day.

Figure 10.9 Theft From Vehicle Hot Place

Source: Gainesville (Florida) Police Department, Ericka Jackson.
Example: Hot product, auto theft of pickup trucks, Arlington, Texas.

Between August 1 and September 13 in Sector Z, there were 23 motor vehicle thefts and attempted thefts of full-sized pickup trucks. All of these thefts occurred in the overnight hours. Only seven vehicles were recovered, and five of those were recovered by a neighboring jurisdiction. Additionally, almost all vehicles were taken from the victims’ driveways rather than from the street (see Figure 10.11). The most common method of entry was to pry or punch the door lock. The suspects then damaged the steering column or defeated the ignition in order to steal the vehicle. Only one vehicle had a broken window, and in that case, the suspects damaged the door locks as well.

Based on the information provided by this pattern, responses by officers are likely to include publishing the pattern in the media since it would be hard to identify specific potential victims (i.e., individuals who own these types of vehicles and park them in their driveway). A bait operation might be conducted in one of the areas where several of the most recent incidents occurred. However, implementing this latter response would depend on whether the police had access to a vehicle matching the descriptions of those that had been targeted.

Residential Burglary Patterns. Burglaries occur at both businesses and residential environments, and although one offender may target both types of places over a period of several weeks, the lack of suspect information makes it difficult to link such crimes together. This, and the fact that there are different opportunities for burglary at commercial and residential locations, is why residential and commercial burglary crimes are normally examined separately.

Key characteristics for identifying residential burglary patterns are the type of residence and proximity. Again, the goal of responding to property
crime patterns is to educate potential victims and deter offenders. Because opportunities for burglary vary by types of residences, patterns are often distinguished by single-family, multifamily, mobile home communities, and the like. Proximity (hot spots) is important because often residences in close proximity to one another share characteristics, so crime prevention recommendations will be the same. In addition, directed patrol by police officers is done most effectively in a focused area. Commonalities in time of day and day of week can be important for residential burglary patterns when they are very specific; however, crimes occurring on different days and times would not necessarily be eliminated from a pattern when they occurred at the same type of residence in the same area. Lastly, MO is important in residential burglary patterns mostly when it is very specific. The fact that suspects entered one home through the sliding glass door and another in the same area through an open window would not prevent a crime analyst from linking these together.

**Example: Micro-time hot spot, residential burglaries, Port St. Lucie, Florida.**

Over a 4-day period, unknown suspects burglarized three homes within a 0.35-mile radius during the daytime and early evening hours. Property taken included household cleaning electronics, cash, and a video game console. In two incidents, no forced entry was used, as the screen door was unlocked in one incident and no evidence of force was found in the second. The third burglary was an attempt as no property was taken, but the front door lock was damaged from being kicked in.

Based on the nature of the pattern, responses by officers are likely to include directed patrol and field contacts in the pattern area (.35-mile radius) as
well as direct contact with residents (potential victims) in the pattern area to provide crime prevention advice. The police could also contact the neighborhood association of that area to alert them to the pattern. Detectives may investigate the crimes together and contact known residential-burglary offenders who live in the pattern area as potential leads. Figure 10.12 shows the crimes in gray with known burglary/larceny/drug offenders’ home addresses represented as white boxes.

**Example: Hot setting, burglaries of sheds at apartment complexes, Frederick, Maryland.** At four separate apartment communities (see Figure 10.13), multiple sheds within each apartment community were burglarized. Technically, these are not residential burglaries, but are burglaries at residential locations of “other buildings” because the sheds are not used as residences. The burglaries occurred over 4 weeks in the overnight hours. In most cases, the suspects either cut the padlocks off the sheds or removed the hinge locks. Property stolen included various tools, large kitchen/laundry appliances, lawn and snow equipment, compressors, and ladders. A possible suspect is described as a black male, approximately 50 years of age, driving a gray van.
Based on the nature of the pattern, detectives could investigate these crimes together, focusing on the suspect description and possible video surveillance and fingerprint evidence as well as contacting known offenders living in or around the apartment complexes. Response by patrol officers could include direct contact with the apartment managers, who can then contact and warn their residents as well as help improve the security of the sheds on their properties. Police may also conduct directed patrols in the overnight hours and make field contacts of suspicious persons in and around the apartment communities as well as look out for the suspect.

Commercial Burglary Patterns Key characteristics for identifying commercial burglary patterns are similar to those for residential burglary patterns—proximity and type of business. Patterns will include crimes of different types of businesses being burglarized in the same area near one another—hot spots. However, oftentimes commercial burglaries are linked by type of business (e.g., electronics stores, medical offices) and/or by a specific MO (e.g., entering through air conditioning vent on roof or cutting through the wall of the next business in a plaza) across a larger area within a city or even across jurisdictional boundaries. Residential burglaries are rarely identified across neighborhoods or jurisdictional boundaries unless the MO is very specific and indicates a series. Crime analysts might examine burglar alarm calls for service to identify additional burglaries at neighboring businesses. Although there may be little to no information beyond the date, time, and location of the alarm, the call could indicate other places that offenders may have targeted unsuccessfully and would provide more information to develop responses and
enhance the investigation of the pattern. This can also be done for residential burglar alarms in pattern areas.

**Example: Series and hot setting, Radio Shack burglaries, Fairfax County, Virginia.** From January to June, there were over 12 burglaries with a similar MO throughout Fairfax County and in the state of Maryland at Radio Shack locations. Based on the MO and surveillance photos (see Figure 10.14), these crimes are believed to be committed by the same suspect (i.e., series). Also, because they all occurred at Radio Shack stores, this pattern is also a “hot setting.” Note it is not a hot place since multiple locations were victimized (i.e., a hot place is only one location). The suspect is a tall, thin black male wearing a light-colored hoodie who uses a rock or brick to smash the front door. The surveillance video shows that once inside, the suspect immediately goes to the stock area in the rear and targets the “cage” where high-dollar items are stored. The suspect brings a bag, screwdriver, a crow bar, and other tools to facilitate accessing the cage, as well as takes easily accessible items.

Based on the nature of the pattern, the crimes in the pattern would be investigated together to identify and apprehend the suspect. It is likely that the suspect is a current or former employee of Radio Shack, as this would give him the knowledge of the layout of Radio Shack stores and their practices (i.e., how and where they secure items). In addition, the police would work with Radio Shack store managers and particularly corporate executives on how to change the store design, security practices, and employee policies to prevent these crimes from happening in the long term. Directed patrol at Radio Shack stores would not be a realistic response since the crimes are widespread in both dates and geographic area. It would really be up to the Radio Shack stores and company executives to put in place preventative measures and protect their own property.

*Figure 10.14  Radio Shack Surveillance Photos*

Source: Fairfax County (Virginia) Police Department, Jessica LeBlanc.
Example: Hot spot and hot product, commercial burglaries, Fairfax County, Virginia. Over a 5-month period, there were six commercial burglaries along Richmond Highway (see Figure 10.15) in which cell phones and electronic tablets were taken. The businesses included a grocery store, a check-cashing store, and a “dollar” store. One location was hit three times, another two times, and the third only one time. In all incidents, the suspect(s) use a rock obtained nearby to smash the front glass door. The suspect(s), observed through surveillance cameras, seem to be either one or two black males who enter the store and take only cell phones and electronic tablets. The burglaries occurred on the weekdays only, between 1:00 a.m. and 3:00 a.m. Because the locations are close in proximity within the same commercial district, the pattern is a hot spot. However, this activity also represents a hot product since the same type of property was taken in each crime. In addition, this pattern might also be considered a series if the analyst decides from surveillance video that the same one or two offenders committed all the crimes.

Based on the nature of the pattern, detectives could investigate these crimes together. However, they would not necessarily contact known offenders living in the area because this is a commercial area, thus it is the “activity space” of a wide range of people who may or may not live nearby. Responses would also include working with the individual stores that were victimized to improve their security, especially since two locations were victimized more than once. Police may also contact other businesses in the commercial district highway that sell cell phones and tablets to alert them to the activity and provide them crime prevention and security information. Lastly, patrol officers may conduct directed patrol around these and other similar stores after midnight during the weekdays since the offenders are returning to the locations over several months—having been successful, they are likely to continue until they are arrested.

Source: Fairfax County (Virginia) Police Department, Jessica LeBlanc.
Hot Product Patterns  Some property crime patterns are not characterized by one type of crime, one suspect, or where they occur, but by a common type of property that is taken across different types of crimes and/or locations. A hot product is a type of property that is repeatedly targeted—or, as Clarke (1999) puts it, “those consumer items that are most attractive to thieves” (p. 23). In order for an item to be a hot product, it typically fits the following criteria: It must be “concealable, removable, available, valuable, enjoyable, and disposable” (p. 25). Examples include precious metal (e.g., gold, copper, platinum from catalytic converters), smartphones, tablets, laptop computers, and handguns. In tactical crime analysis, patterns focus on those items that are recently taken, but typically, these are also items that are taken over a longer term, such as jewelry and electronics. Identifying long-term trends of specific types of property being taken is important as well, but is considered strategic crime analysis and is covered in Chapter 13 and Chapter 14 as “problem property.”

The key characteristics for identifying a hot product pattern are the characteristics of the product that is taken. Products can be taken in the same type of crime (e.g., theft) or in a variety of crimes (e.g., theft, robbery, and burglary). Importantly, to identify hot product pattern, the crime analyst looks for very specific characteristics. For example, cash is the “hottest” product, but a crime analyst would not identify a hot product pattern in which cash was taken in theft from vehicles, robberies, and burglaries since it is so common. However, a crime analyst might link cash for a hot product pattern if in each of the crimes (e.g., robbery, burglary, and theft from vehicle) the cash was thousands of dollars in $100 bills kept in a bank deposit zip bag. This would make the pattern and the property taken unique even if the offenders were not necessarily the same.

Example: Hot product and hot setting, burglaries of tractor trailer tires and wheels, Greensboro, North Carolina. Over a 3-month period from February to May, eight burglaries at truck and trailer dealerships (see Figure 10.16) occurred in which 10 to 50 tractor trailer wheels and/or tires were taken in each incident. In most of the incidents, suspects either cut the fence or locks to the gates to the storage yard and removed tires and wheels from existing trailers. That is, the tires and wheels were not stacked up but were actually installed on the trailers. In some cases, the suspects brought “blocks” with them to support the trailers so the tires could be removed. The crimes occurred in the overnight when the businesses were closed, and five occurred over the weekend. This pattern is likely also a series because of the specific nature, knowledge, and equipment necessary to remove the tires and transport them from the crime scene.

Based on the nature of the pattern, it is likely that the suspects are using large trucks or flatbed trailers to haul the property away from the crime scenes, so a response could be patrol officers conducting directed patrol
and conducting vehicle stops of large vehicles driving near the victimized and similar locations in the overnight hours and on the weekend. Detectives could investigate these crimes as one pattern to collate any evidence obtained. They would not contact offenders living in the area, but might look for individuals or at businesses in which trailer tires and wheels are sold either new or secondhand in other jurisdictions. Police may also contact all similar types of dealerships (i.e., potential victims) to provide information about the pattern and solicit information about possible suspects and intelligence about the nature of the trailer tire and wheel business.

Example: Hot product, packages left on residential doorsteps, Fullerton, California. In October and November, four thefts of packages occurred throughout the city (see Figure 10.17). In each case, a mail delivery truck left the package near the front door and in view of the street, and the package was stolen before the resident was able to retrieve it. The crimes occurred between the time of the drop-off, which typically occurred in the late morning and early afternoon, and the time when the victim arrived home and/or discovered the package was missing, which was sometimes a day or two later. There is no suspect information in any of the crimes, and the property taken varied from small electronics to clothing.
Based on the nature of the pattern, there are a limited number of responses. For example, it is unlikely that the crimes are committed by the same person, as the time period and area in which the crimes occurred are widely spread. Because the timing of these crimes is the time before Christmas, the best response is likely a media release to remind citizens to have their packages delivered in more secure locations or request a “signature only” delivery. Police may also alert the delivery companies to the pattern, who can also tell their employees to leave packages in more secure settings.

**Conclusion**

The goal of this chapter is to show how to identify meaningful patterns that police can use to develop effective crime prevention and crime reduction responses. Crime analysts must understand what responses police employ for the various types of patterns in order to provide information helpful for their efforts. The goal for all tactical crime analysis is to create “actionable” products that prompt and require a police response. The examples here cover only a snapshot of all the possible patterns that can be identified during the crime analysis process. The most important point of this chapter is that analysts must think critically about the purpose of the information they are providing and use their knowledge of the crime type, the community, and their own department's responses to identify meaningful and actionable patterns.
SUMMARY POINTS

This chapter illustrates how crime analysts identify meaningful patterns that are useful for police. The following are the key points addressed in this chapter:

- Pattern identification in tactical crime analysis is guided by the distinction between persons crime and property crime patterns.

- Persons crimes are those crimes in which people are the targets of the offenders. The crimes commonly examined for persons crime pattern analysis are robbery, stranger sexual assault, indecent exposure, and public sexual indecency.

- Property crimes are those crimes in which property is the target of the offenders. The crimes commonly examined for property crime pattern analysis are theft from vehicle, auto theft, residential burglary, and commercial burglary. Incidents of theft from buildings, criminal trespass, grand theft, and criminal damage are also examined as they relate to these other crimes or as they indicate overt vandalism and theft of property.

- The types of responses police employ for patterns are fairly straightforward and focus on arresting and deterring offenders as well as on crime prevention. They include directed patrol, field contacts, surveillance, bait operations, clearing cases, contacting potential victims directly, reverse 911, and contacting the general public.

- Directed patrol is focusing police patrol in the areas and times in which a pattern is occurring.

- Field contacts are when officers make direct contact with people in the pattern area while conducting directed patrol.

- Surveillance requires police to watch and wait in a particular area at a particular time for a crime to happen in order to make an arrest.

- Bait operations use people or property that have been targeted in a particular pattern as “bait” for offenders. Police then directly observe the bait or have electronic monitoring that allows them to arrest the offender or record offenders committing the crimes when the bait is taken.

- Police contact potential victims directly and provide information about details of the pattern, crime prevention advice, and contact information for the police.

- Reverse 911 is technology that allows the police to call residents and businesses in a pattern area and leave a recorded message about the crime pattern and crime prevention advice.

- Police provide pattern information to the public to encourage the public to provide additional information (“tips”) on known crimes, to report crimes that have not yet
been reported, and to protect themselves. Offenders might also be deterred from committing further crimes after seeing this information.

- Police responses to persons crimes focus on enhancing the investigation and facilitating the arrest of the suspect(s) because the pattern will contain suspect descriptions and specific MO information.

- Police responses to property crime patterns are focused on deterring offenders and encouraging victims to protect their property because the likelihood of arresting suspects for property crime is much lower than for persons crime.

- Unless the offender is arrested and confesses, there is no way to be sure that a particular offender has committed all crimes with the same MO characteristics. The examination of MO characteristics and physical descriptions is not always clear. The analyst must be aware that situational circumstances may result in offenders altering their MO and that characteristics based on witness descriptions are often problematic.

- Examination of persons crimes focuses on linking crimes through suspect actions and descriptions to develop series and spree patterns.

- Key characteristics of robbery patterns are the actions of the suspect(s) during the crime and the type of victim or place.

- Key characteristics of sex crime patterns are the actions of the suspect(s) during the crime and the type of victim.

- Examination of property crimes focuses on linking crimes primarily through the types of crime, type of place, and proximity in location and time. The types of patterns typically found are sprees, hot spots, hot settings, and hot products.

- Key characteristics of theft from vehicle patterns are primarily based on the type of place where the cars are located (businesses vs. residence), proximity of the thefts, and time of occurrence.

- Key characteristics for vehicle theft are proximity (hot spot), time, and type of place (e.g., residences vs. commercial plaza).

- Key characteristics for identifying residential burglary patterns are the type of residence and proximity.

- Key characteristics for identifying commercial burglary patterns are similar to those for residential burglary patterns—type of business and proximity.

- Some property crime patterns are not characterized by one type of crime, one suspect, or where they occur, but by a common type of property that is taken. The key characteristic for identifying a hot product pattern is the type of product that is taken, whether it is taken as part of one type or several types of crimes.
DISCUSSION EXERCISES*

Exercise 1
Describe how you would go about identifying a convenience store robbery pattern both inductively and deductively. Be specific about which characteristics of the crime are most important and how you would search a database to identify cases within the pattern. Do the same for a commercial burglary pattern.

Exercise 2
First, classify each of the following patterns by pattern type (e.g., hot product, hot spot, series) and crime type (e.g., residential burglary, robbery, theft from vehicle). Second, discuss the combination of police responses you would employ for each pattern and why, focusing on only those discussed in this chapter.

- Four commercial arsons occurring throughout the city in which a man was observed leaving the stores with jewelry immediately after the fire alarm was triggered
- Seven thefts from vehicles in an apartment complex parking lot over the course of 3 hours
- Four home invasion robberies of Asian immigrant families in a particular neighborhood by the same suspects
- Theft of belongings from rental cars in hotel parking lots throughout the city
- Eight daytime burglaries over the past 4 weeks in a suburban residential subdivision with no notable similarities in method of entry or known suspects in the cases
- Fifteen thefts from vehicles, several incidents of graffiti, and two robberies of customers over 3 weeks in the parking lot of a retail area around a college campus
- Late-night robberies of 24-hour convenience stores by different suspects