Beyond Arrest: Using Crime Analysis to Prevent Crime

By Tom Casady, Chief of Police, Lincoln, Nebraska, Police Department

n the past few years, the developments in crime analysis, especially geographic analysis, have been stunning. Just 10 years ago, the job of making a map and table depicting residential burglaries in a given locality over the course of a month was a task that easily would have consumed a crime analyst's entire morning. Moreover, doing so required a fair knowledge of structured query language, one of the best PCs money could buy, and a few thousand dollars' worth of software. Learning to use the software was daunting, and the proficiency curve was steep. All of these factors dramatically limited the availability and utility of these tools. Today, this same task can be completed by staff with little or no training in a matter of minutes by clicking a few times on an Internet crime mapping application.

The combination of geographic information systems and modern police records management systems is one demonstration of the dramatic improvement in the analytic capabilities available to law enforcement agencies. But what has been done with these rather incredible technological advancements? In many respects, despite technical acumen, personnel are still doing the same things their predecessors did a century ago. Police officers have been sticking pins in maps as long as there have been police officers and maps. In many respects, high-tech wizardry only serves to accomplish the same task faster—identifying geographic crime patterns. Certainly there is nothing wrong with increased productivity, but what agencies do with this information has not changed much. Many law enforcement agencies might not be using crime analysis technology to its full potential.

Worth the Effort?

Consider this hypothetical situation. Using data-mining software and techniques, analysts have identified a crime trend that would otherwise have been submerged in stacks of green-striped paper from a line printer. There have been several of these offenses, but since each was investigated by a different officer, on different shifts, in different districts, no one was aware that these crimes were all part of a pattern. The modus operandi is now obvious: women's handbags are being stolen from lockers in fitness centers. While victims work out, thieves have been prying open the flimsy doors and taking their purses—which usually contain cash, credit cards, and perhaps some jewelry.

Considering this crime pattern at the department's CompStat meeting, the discussion among the attendees turns to an appropriate response. A surveillance project is immediately suggested, using a newly acquired wireless video system, a decoy locker, and a detail of officers to stake out one of the locker rooms. Thus, the stage is set: a tiny camera concealed in a clock records the

scene, a purse strap dangles enticingly from a locker door, and undercover officers in athletic attire try to look unobtrusive.

Many law enforcement agencies might not be using crime analysis technology to its full potential. Analysts can help formulate and evaluate the strategies used to intervene in crime patterns, and they can be advocates for responses that move beyond merely responding to crime after the fact and instead work to prevent crime.

Unfortunately, these projects rarely work—and even when they do, the cost is high in time and personnel. Any veteran police officer can recall a surveillance detail that ended empty-handed the day before the next crime in the series took place. Even if the project succeeds, what is the result? The thief is caught, and the effort is deemed a success. Catching thieves is one of the major activities of police forces, and the number of arrests made is one of the ways agencies judge their effectiveness. The problem with thief-catching, however, is that there is always another thief. Catching one will not likely solve the problem.

If the apprehended criminal is a serial killer, a bank robber, or a repeat rapist, there can be little argument that the arrest is a major accomplishment. But the common street criminals—burglars, auto thieves, shoplifters, muggers, and the like—are just so numerous that arrest efforts often seem to have little impact. Many of these criminals reoffend as reliably as they awake, and their patterns are scarcely broken by the short jail terms and fines they typically receive at sentencing. In some ways, an arrest simply increases their cost of doing business, making it necessary to steal even more goods in order to pay the fines and keep their attorneys' bills from going to collection agencies.

Think for a moment about this crime series from the vantage point of one of the victims. Her gym bag was rummaged through, and someone stole her purse. She waited 35 minutes for an officer to arrive to take a report, making her late to pick up her child at the sitter. She spent two hours dealing with automated calling systems at three credit card companies. She had a sleepless night worrying about her bank card and several restless nights thinking about the house keys. She lost the keepsake photo of her father and her wedding ring. But, through the investigating agency's efforts, a suspect has been arrested committing another theft at another club, and he has this victim's Visa card in his pocket.

Has the arrest of the offender made things better for this victim? Is she likely to receive restitution? Can she relax now, knowing that the criminal will be locked away for years? Obviously not. On the contrary, she will probably need to take off work to attend a couple of court appearances before the thief eventually elects to accept a plea bargain resulting in a 30-day jail sentence—for which he gets credit for time served and walks free out of the court. How much more effective would it have been if the agency could have prevented the theft from occurring in the first place? This should be the object of crime analysis: finding crime patterns, then helping to craft effective preventive strategies.

Rethinking Cause and Effect

Routine activities theory holds that crime takes place when a motivated offender and a suitable target rub shoulders in time and space in the absence of a committed guardian. Most police efforts seem to revolve around the first of these three prerequisites: the offender. Agencies engage primarily in strategies aimed at reducing the supply of motivated offenders. Aside from the fact that the law enforcement community is not very good at achieving this goal (the clearance rate for Uniform Crime Report Part I crimes hovers at 20 percent), crook-catching strategies are based on the questionable premise that arrest deters future crime, if not for the public at large, surely at least for the nabbed offender. Experienced police officers can tick off the names of regular, repeat customers—a fact that ought to give anyone pause to reconsider this premise.

Does an increasing number of arrests result in a corresponding decrease in crime? Perhaps the reverse is true. What is cause and what is effect remain murky even at the individual level; the proverbial chicken-or-egg question looms. If crook-catching activities are expensive, labor-intensive, and not particularly effective, why are agencies so invested in this approach? The effectiveness of police crime analysis and the interventions it supports can be dramatically improved by focusing more efforts on hardening the targets and on increasing guardianship. This need not be to the exclusion of efforts to reduce the number of motivated offenders (or their motivation level), but it should be a much more prominent part of the law enforcement crime control strategy.

Preventive Measures

Two simple examples demonstrate how crime analysis supports this approach. The first is a burglary trend in which entry is gained through an open overhead garage door. This is a consistent problem in Lincoln, Nebraska. In many neighborhoods, citizens have little sense of their vulnerability and are less than diligent about checking their residence at bedtime. Even though residents can leave their garage doors open and still find their golf clubs, tool chest, and bicycle untouched in the morning 9 times out of 10, this type of theft is nevertheless one of the most common crimes in Lincoln. In 2006, there were 259 of these burglaries, with a loss of nearly \$200,000.

This crime lends itself easily to a prevention strategy. By simply publicizing the series, police can appeal to citizens to redouble their efforts to keep their garage doors closed during the evening hours, when these thefts have been happening. Indeed, that is exactly what Lincoln police did. But this was not a typical public-awareness campaign involving simply a news release or fliers distributed by the crime prevention unit. Rather, the officers assigned to the graveyard shift in the southeast district, where most of these burglaries were taking place, decided to try a more personal approach.

Lincoln police stopped and introduced themselves to citizens whenever they found a garage door left open on their shift. The impact of the project was dramatic. Open-garage burglaries in southeast Lincoln fell by 38 percent in 2007. The night shift officers in southeast Lincoln talked to 332 residents last year, and during the first six months of 2008, they have awakened another 122 people to let them know their doors were open. (Open garage doors are getting quite a bit harder to find.) The public response has been entirely positive.

What these officers discovered is simply the best way to spread this kind of prevention message: in person. A crime prevention tip in the neighborhood association's newsletter is one thing, but police officers introducing themselves to residents on their front steps at 3:00 a.m. is something else entirely. The impression lasts a long time, and the habit of double-checking the garage door is hopefully passed on to the next several generations.

A second example concerns another type of burglary, breaking and entering storage units. There are about 20 storage garage complexes in Lincoln. A few years ago, police were investigating quite a few overnight burglaries in these facilities. Burglars would climb the fence, cut the padlocks with bolt cutters, and then load up the owners' property.

The usual kinds of police strategies had been employed with limited success—spotlighting storage complexes at night more frequently, conducting some surveillance, and so forth. One Wednesday night at a regular crime analysis meeting, a Lincoln detective made an observation. She said that she rented one of these units personally, and the management had provided her with a large round padlock, about the size of a hockey puck. She noted that she had never seen a burglary of a storage unit where one of these disc locks was used properly. The prevention strategy was apparent. The police could both encourage citizens to use these kinds of locks and also visit the offices of these facilities during the day to encourage management to convert entirely to these more secure locks.

Once again, the impact of the strategy was dramatic. Storage unit burglaries, which had peaked at 129 cases in 1999, fell to 45 in 2007 despite a population growth of more than 30,000 residents in the same time period. A current project seeks to promote the same kind of locks on contractors' trailers at construction sites. There is little doubt that similar results will be achieved.

Need for Proactive Analysis

These problem-oriented policing projects were aimed at common crime patterns that could be implemented by patrol officers with minimal resources. They both relied primarily on some face-to-face communication by police officers during their uncommitted time. They were enabled by basic crime analysis that both revealed the trend and helped to evaluate the results. These are simple examples of how good crime analysis can be used to prevent crime. This approach can work with many of the most common crime patterns—and those that cause some of the largest losses. The problem-solving guides available from the Problem-Oriented Policing Center (www.popcenter.org) are filled with research-based strategies to attack many of the most frequent and pernicious crime problems agencies face using prevention strategies, rather than simply a law enforcement approach.

Crime analysts (and their supervisors) need to recognize that crime prevention efforts can be much more effective than investigative strategies. They also need to understand the important role they play as analysts in supporting crime prevention efforts. They can identify patterns that would ordinarily be overlooked in the sheer volume of events that transpire in cities every day. Analysts can help formulate and evaluate the strategies used to intervene in these patterns, and they can be advocates for responses that move beyond merely responding to crime after the fact and instead work to prevent crime