Making Smarter Decisions: Connecting Crime Analysis with City Officials

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Over the last 20 years, crime analysis, intelligence analysis, problem-oriented policing, and fusion centers have become core practices that have captured the attention of police chiefs, sheriffs, and other police managers across the United States. Despite the potential benefits and increased prevalence of these practices, many law enforcement managers have yet to grasp the full potential of these practices and how to apply them effectively and efficiently. City and county managers, who ultimately are responsible for public safety, are less likely to appreciate the benefits of these practices. Law enforcement executives should make greater use of their analysts and expand their understanding of the key benefits these staff members provide for their agencies, for civic leaders, and for the communities they serve.

Urban planning, problem-oriented policing, intelligence-led policing, and fusion centers have been identified as themes for improving communities and for addressing public safety issues. Partnerships, problem solving, and organizational transformation are basic building blocks for all the themes that this article highlights. Partnerships help local agencies build trust with the community and with each other, including colleagues at the federal, state, local, and tribal law enforcement levels. Problem-solving approaches through partnerships can enhance strategies by providing the systematic framework for gathering, assessing, and analyzing collected data. To fuse these practices into effective programs, leadership and organizational structures in law enforcement agencies must support and reward innovations across the spectrums of community partnership, problem solving, and intelligence-led policing.

Crime and Urban Development

Crime trends change with urban and community development patterns. Opportunities emerge, disappear, or move as changes take place across a community's geographic landscape. Analysts in law enforcement agencies can quantify, evaluate, and visualize these changes through crime analysis and mapping on a daily basis, ideally examining traditional crime in combination with social, economic, and demographic indicators that may foster or inhibit crime. Analysts fully realize that crime is more than an act of an individual offender or group of offenders. Crime can also be understood as the result of underlying economic and demographic factors in the context of geographic environments. Certain geographic environments and specific types of places are known to attract or repel crime. An analyst's job is to bring this information together and identify opportunities to both solve and prevent crime.

Law enforcement executives, city managers, and municipal planners also appreciate the fact that crime can be influenced by municipal expansion, brought on by housing construction and commercial development, by population declines due to local economic downturns, or by new immigration patterns. Rather than relying on hunches and biases, law enforcement executives

can rely on crime analysts for more objective analysis of these changes and their impact on crime and public safety, as well as pinpointing where changes are most likely to take place. By taking full advantage of crime analysis, law enforcement agencies can combine geographic data with a wealth of local crime and administrative data to paint a more comprehensive picture of *why* crime happens where it does (or does not), rather than simply noting where it does and does not happen.

Understanding that certain locations and conditions may repel or attract crime is only the first step. Reactionary law enforcement responses to crime such as crackdowns, intervention programs, or resource redeployments are common, but these are only temporary solutions. Law enforcement leaders can be only as effective as the policies and practices that they are empowered to enact or that they can convince civic leaders to enact. Solutions planned in partnership and undertaken cooperatively with other government officials will have a broader and longer-lasting impact.

With proper support crime analysts can be *the* indispensible individuals in metropolitan areas that have their fingers on the well-being of any given neighborhood. Crime analysts are most effective because they are on the front line of understanding the community changes, positive or negative, that have an effect on health, education, service provision, economic development, housing, physical upkeep, and infrastructure. To varying degrees, all of these factors have an influence on crime, and combating one can lead to progress with the others. Law enforcement agencies can play an important role in shaping these changes, but long-term solutions ultimately must engage the "rule changers," including the city and county administrators and the urban planners, who hold the authority to alter a broader range of factors that affect crime prevention and intervention.

Crime Analysts' Role

To enhance municipal planning and resource development, crime analysts can provide direct knowledge about which neighborhoods in an urban area are most likely to improve, decline, or remain unchanged as a result of changes in urban development, both planned and unplanned. Whether it is a rural county where a large food processing plant is about to open, a suburb considering a new residential subdivision, a city contemplating a new public transportation system, or a neighborhood voting on commercial rezoning, law enforcement executives and their crime analysts should be part of any planning process. Through combining traditional law enforcement data about crime incidents, arrests, calls for service, and other police-generated statistics with information about community demographics and data from other municipal agencies, analysts are in an ideal position to provide detailed information about numerous factors that can predispose a community to crime or protect it from crime.

Urban Issues

Education, poverty, housing, economic development, and crime are five core factors that often are cited as having dominant influence on urban development. These factors are highly interrelated and interdependent. To take one timely example, the current housing foreclosure

crisis has direct influence on each of these factors. Crime analysts have been at the forefront of recognizing a new geography of crime associated with these unprecedented foreclosure rates.

Foreclosures are not randomly scattered across a metropolitan area; they are clustered. In some instances, entire neighborhoods now seem virtually abandoned due to high rates of foreclosure. Theft, drugs, vandalism, vagrancy, prostitution, and arson have moved in. Residents still living in these declining neighborhoods face an increasing risk of burglary, robbery, or other violent crime. These crimes only represent the immediate impact. Without planned and concerted action, these neighborhoods can fall into disrepair and become destitute.

Foreclosures are occurring not only in the worst neighborhoods. Many U.S. residents purchased homes beyond their means in middle-class and upper-middle-class neighborhoods. Even when the foreclosed property is considered to be in a good neighborhood, the isolated foreclosed property may serve as a crime attractor. The property can become the target of thefts of copper plumbing and other fixtures, or it can become a haven for the homeless, underage drinking, vandalism, and graffiti.

Many neighborhoods that were described as revitalized just a few years ago are now experiencing a sharp reversal of fortune and find themselves in rapid decline. The long-term impact could undo the significant progress that many metropolitan areas have made in the last few decades, including improvements in the quality of life, economic progress, and lower crime rates. Changes across a metropolitan area such as gentrification can alter the demographic structure of the urban fabric and can push residents of poor, inner-city neighborhoods to move to other, poorer neighborhoods, which might happen to be those clusters of abandoned houses that have fallen into disrepair.

The specter raised by the current foreclosure crisis is that a new set of deviant places with concentrated poverty are instantly created and could dramatically change the urban landscape within a jurisdiction. Law enforcement executives need to identify resources to combat the problems that come from neighborhoods like these. As discussed, reliance on traditional reactive measures is insufficient. Proactive approaches guided by analysis and conducted in partnership with other civic leaders are critical.

Taking Action

City administrators are in positions to take action and prevent the degradation of neighborhoods endangered by foreclosure. They can enact policies that affect these neighborhoods and more effectively deploy municipal resources. In the resource arena, city administrators can redirect services to make sure that properties are kept up, and police can deploy officers to spend more time in these neighborhoods to deter criminal activity. In the public arena, volunteers or low-risk offenders sentenced to community service might be used to provide upkeep of foreclosed properties. Municipal codes can be enacted to prevent houses from being bought and split up to allow multiple occupancy and increased neighborhood density. The skills of crime analysts can be used to help determine where neighborhoods are changing or where they are likely to change and to evaluate the effectiveness of intervention strategies.

Law enforcement collaboration with other municipal or county agencies can enhance effectiveness, particularly if it combines rich data from different sources used to understand and to prevent crime. Crime analysts, based on their training and experience, are in an ideal position to guide this type of holistic problem solving and can be valuable assets not just to their chiefs or sheriffs but to other civil leaders as well.

Intelligence Gathering and Crime Analysis: Is There a Connection?

Community partnership is an important component of any intelligence-gathering effort. Both intelligence gathering and crime analysis should be part of the fabric of the decision-making process when responding to neighborhood crime trends and patterns. Intelligence gathering should not be contained solely in specialized units but should be woven into day-to-day operations. The Office of Community Oriented Policing Services (COPS), U.S. Department of Justice, in conjunction with the Police Foundation, developed the concept of integrating intelligence and crime analysis. A blended approach in responding to crime problems enables law enforcement executives to comprehend the crime picture more completely. Crime analysis answers questions about what is happening and where. For instance, how many convenience store robberies occurred in Precinct 1 on the south side of town on Friday evenings between 1 a.m. and 6 a.m? What happened in terms of crime and calls for service during after-school hours following the closing of a neighborhood recreation center due to lack of funding? Criminal intelligence can provide some deeper understanding of why crime is happening based on offender characteristics, neighborhood characteristics, and geographic features of the environment. Intelligence gathering—looking across factors in the profiles of likely offenders, such as their age, other demographic characteristics, gang affiliations, and residence—further complements crime analysis. Combined crime and intelligence analysis will also help answer if and how features of the geographic environment as well as human capital affect crime. What are the groups—civil organizations, neighborhood watch groups, or religious congregations on the one hand, or unruly teenagers or organized gangs on the other hand—that contribute positively or negatively to crime in a specific neighborhood? How do places like community centers, parks, or abandoned properties encourage or discourage the activities of these groups?

The causes of crime can be seen as double-sided, involving the persons committing the crime and the environment in which the crime is committed. To address any crime problem fully, both types of analysis (crime and intelligence analysis) must be addressed simultaneously. For this blended approach to work, executives must strive to understand intelligence-led policing and involve community input.

A growing number of agencies employ both crime and intelligence analysts. In these agencies, executives should work closely with both and must ensure cooperation and mutual respect. Many law enforcement executives use CompStat-like meetings to address their crime problems. Both CompStat and intelligence-led policing require organizational flexibility, consistent information input, and substantial analytic effort; each can benefit from integrated crime and intelligence analysis.

Information Silos

Unfortunately, information silos still exist throughout both police and sheriffs organizations. Investigators often do not want to share intelligence with crime analysts due to the divide between sworn and nonsworn personnel. Sworn personnel often hold intelligence close to the vest. Civilian crime analysts are often not given access to intelligence because they are not trusted, not viewed as equals to sworn officers and intelligence analysts, or not viewed as essential components to police operations. Missions for the crime analysis unit and the intelligence analysis unit are often different, even though they are trying to accomplish similar goals and provide similar end products. Common terminology is often defined differently by the two units. Intelligence analysts may express concern that they must cautiously protect information due to legal constraints of privacy issues.

Too often, sharp distinctions are drawn between intelligence analysts and crime analysts. Intelligence analysts usually are sworn officers who work in specialized units and focus their efforts on identifying organized criminal activity (such as gang members); and their intelligence is often not widely disseminated outside the inner circle. By contrast, crime analysts often are civilians who concentrate their efforts on reported crime using widely available calls-for-service and arrest reports and who share their analytical products with any individual in the agency who requests the information. Despite these differences, however, both crime and intelligence analysts conduct similar analyses and produce similar products. Each must master elements of tactical, strategic, and operational intelligence and analysis. The primary purpose of tactical analysis is to effect an arrest and gather adequate evidence for a conviction. Strategic analysis looks at more long-term goals such as crime reduction plans that might be implemented by an agency or in cooperation with municipal officials. Operational intelligence involves the creation and evaluation of products and processes that support crime reduction plans. All analysts attempt to understand the criminal environment through the use of these strategies in combination. A better integration of these approaches can provide a more complete understanding of how these puzzle pieces fit together.

Many agencies are trying to implement problem-solving approaches to understand crime and to address trends and patterns of criminal activity. Problem solving works best with an infusion of both crime analysis and intelligence gathering. The use of an integrated analysis model provides police chiefs with a more accurate picture of the criminal environment.

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There are some significant benefits to adopting an integrated analysis model:

- Understanding the big picture: Combining both intelligence analysis and crime analysis can help executives see all pieces of the puzzle.
- **Enhanced enforcement tactics:** To implement a broader range of tactics for responding to crime patterns and to respond with efficiency and effectiveness, police officers need to understand both the what *and* the why of criminal behavior.

• **Real-world analytic approaches:** Combining intelligence analysis and crime analysis avoids overly simplistic solutions. It allows for a more realistic and integrated analytical model, without unnecessary duplication of effort.²

Overcoming Challenges to Integrated Approaches

Even with the added benefits of integrating intelligence and crime analysis, barriers still exist to implementation. One of the most significant barriers is an incomplete understanding on the part of agency leadership on how to use both intelligence analysis and crime analysis more effectively. Training for both intelligence analysts and crime analysts is often inadequate and limited. However, development of an integrated analysis model is not out of reach, given the right leadership direction and proper resources and training. Training should not focus just on basic analysis; rather, police management should tailor the training to support the specific missions and products most needed by command staff members and line officers. Clear illustrations of how these products are used in the field can help to justify the training expenditures from a long-term cost-benefit perspective.

Turnover rates in crime analyst positions at local police departments and sheriffs' offices throughout the United States remain a problem. Contributing factors include the lack of investment in training as well as the limited pay and other job perks for this mainly civilian position. Specific programs focused on the retention of crime analysts are extremely rare. Relying on the model used for fusion centers, law enforcement executives must view nonsworn analysts as essential, indispensable professionals within their agencies, in much the same way as they view sworn personnel, such as patrol officers or detectives, and other critical civilian personnel, such as dispatchers. Changes will not occur overnight, but increasing the reliance on and prestige of crime analysts is a first step in improving retention and in obtaining sufficient resources to enhance their ability to serve their agencies, their communities, and their leaders.

Visualizing and Analyzing "Where"

Because policy solutions to crime are necessarily about where crime takes place, the ability to visualize and analyze geographic patterns becomes paramount. Advancements in crime mapping, geographic information system (GIS) software, and other spatial analysis software have greatly enhanced the field of crime analysis. GIS approaches are gaining acceptance and prominence by effectively combining criminological theory and geographic analysis principles to address practical law enforcement problems. Continuing improvements in GIS software have made it possible to better assemble, integrate, and create new ways of analyzing data. Not only can analysts, with the help of GIS software, assemble multiple and disparate sets of demographic, economic, and social data; they can also create new units of analysis that more accurately model human behavior.

This capability affords a more accurate understanding of the spatial interactions among offenders, victims, and environments. Techniques such as geographic profiling, which provides estimates of where serial offenders are likely to live (or work) based on the distribution of their offenses, are continually refined. Data sharing, across and within agencies, is helping to reduce geographic "stovepiping" and resulting in more accurate depictions of crime patterns across

boundaries, be they adjacent precincts in one department or contiguous areas of neighboring agencies.

Combining GIS technology with data sharing provides a more comprehensive and more realistic representation of criminal activity. Offenders seldom restrict themselves to administrative boundaries such as municipal jurisdictions, precincts, and particular neighborhoods or to certain land use area classifications. Now with more robust and complete data and better analytic tools, analysts can more easily model behavior from criminals' perspectives rather than from the limited perspective of a single jurisdiction or precinct. GIS technology has fundamentally changed the way location and context are examined analytically and has made more practical use of locational information found in abundance in law enforcement and other data.

Role of Fusion Centers: Integrating Intelligence, Analysis, and Urban Issues

Since the terrorist attacks of September 11, 2001, the U.S. federal government, state governments, and local police and sheriff's departments have spent significant time and considerable resources on developing fusion centers for the purpose of integrating disparate information and intelligence. Despite these developments, limited discussion and research have been focused on how crime analysts and intelligence analysts can best use the information collected at fusion centers to assist them in their understanding of crime patterns, whether within their agencies' jurisdictions or across jurisdictions. Many fusion centers are being developed with an all-crimes-all-hazards approach. Since crime and intelligence analysts are most effective when a multitude of resources are examined, this is a fortunate development.

Yet analysts will need to be more intimately involved in the fusion center process to collaborate effectively with the chiefs, sheriffs, district commanders, and probation and parole departments that contribute data and resources to fusion centers. Fusion centers must focus on collaborative approaches to better coordinate activity, manage resources, and capitalize on vast amounts of data from different sources.

Effective models based on collaborative intelligence approaches are emerging. For example, the Los Angeles Joint Regional Intelligence Center (JRIC) was successful at bringing together the local office of the U.S. Federal Bureau of Investigation and local officials in a collaborative, information-sharing environment. The Arizona Counter Terrorism Information Center (ACTIC) relies heavily on its analytical and research staff to undertake its mission. The staff consists of both tactical intelligence analysts, who are assigned to provide case-specific support, and strategic analysts, who look at the global picture of crime trends and patterns. A unique and important feature of this center is that personnel are assigned to the center for at least three years to ensure consistency in long-term investigations.

To its credit, the ACTIC maintains a Regional Advisory Council that includes representatives from area fire, law enforcement, tribal, emergency management, public safety, and public health agencies. Law enforcement agencies could benefit from similar advisory councils both in response to crime problems and to support fusion center participation. CompStat meetings have proved to be extremely effective, but analyst participation should not be limited just to these meetings. To ensure that crime analysts are as effective as possible and used to their full

potential, they should have wide access to all levels of government and participate in meetings with advisory councils and other civic organizations.

In addition, best practices from fusion centers can provide clear evidence of the benefits of crime and intelligence analyses. The most promising practices must be identified, promoted, and shared. Crime analysts are often required to develop deployment strategies and reports for special events. Fusion centers can be instrumental in these tasks, as recently was the case in Las Vegas. The Las Vegas Metropolitan Police Department designed a fusion center specifically around the 2007 National Basketball Association (NBA) All-Star Game weekend. Some of the special analytic products of this fusion center included hourly reports, private-sector partner reports (such as those given to hotel security managers and NBA organizers), and officer safety bulletins. The New York Statewide Intelligence Center (NYSIC) conducts intelligence analysis on a variety of crimes that local police departments and their analysts often do not have the time or the resources to effectively undertake.

The modern era of intelligence-led policing focuses on more than just street crime. It includes border intelligence, counterterrorism, gun clearinghouses, gang databases, information on narcotics trafficking, and data about financial crimes. Intelligence-led policing in the modern era requires unprecedented levels of data sharing and collaboration. Data compiled at fusion centers can provide much-needed assistance to crime analysts, who are often strapped for time and resources.

Making the Connection

Law enforcement leaders must connect with municipal and county administrators as well as officials at fusion centers to build critical partnerships for data sharing. Data collected for law enforcement purposes must be fused with data about demographics and evolving geographic patterns of urban and community development. Maps can become a highly effective language for both analysis and communication. If designed properly, maps highlight trends in clear and compelling terms that could not be seen in narrative summaries, tables, charts, or graphs. As law enforcement leaders and their counterparts in municipal or county administrations need to understand what changes should be made, one of the first steps is to know where incidents are happening. Otherwise, solutions will be inefficiently applied and resources wastefully directed. There are seldom sufficient resources to service the entire jurisdiction, but crime analysis helps pinpoint where resources are most needed and can have the biggest impact. A partnership between a local law enforcement leader and municipal or county administrators can lead to effective problem solving. When viewed in context with other problems that communities face health, education, services, economic development, physical upkeep, and infrastructure—crime analysis can be used to develop successful multipronged responses. Analysts provide insight and understanding by being on the front line of communication and defining the context in which any solution must be assessed and on which sound policy and practice are based. This understanding will become key to detecting changing and emerging trends.

Analysts benefit from a unique vantage point from which to detect opportunities for intervention and prevention. Law enforcement executives must assert their leadership roles by ensuring that

crime analysts are used as vital cogs in these endeavors. When agencies work to maintain lines of communication with municipal and county partners and draw further data from fusion centers, analysts will help the law enforcement community to operate substantially more efficiently and effectively than it can on its own. ■