Article

The Organizational and Practical Considerations of Starting a Crime Analysis Unit: A Case Study of a Midwestern Police Department

Colby Dolly* and Briana Shawver**

Abstract In recent years, the concept of evidence-based policing has become commonplace in academic and practitioner-minded literature. The law enforcement community acknowledges the benefits of using data to guide policing strategy, yet still takes the acceptance of data analysis for granted when integrating it into the daily operations of police departments. How can data analysis be implemented in a way that provides value to police department managers and patrol officers delivering service? This article examines the start-up of a crime analysis unit in a large, Midwest police department in 2015. Using a case study analysis, the article examines some of the early successes and the potential pitfalls of a new crime analysis unit. Specifically, the article will examine the importance of culture change, the recruitment and selection of crime analysts, and the ongoing effort to provide value to department customers, as well as the community. The case study will focus academically on how change occurs within police organizations, but moreover on practical considerations that will be of great benefit to practitioners wishing to start a crime analysis unit or to improve an existing one. The article will add to the field of crime analysis by combining the insights of practitioners and the perspective of academics.

Introduction

Scholars and practitioners alike have for decades viewed policing as more of a craft than a true profession with sanctioned prescriptions of behaviour (Bayley and Bittner, 1984). Attempts to change the profession by introducing principles and concepts from outside the craft can appear as irrelevant or even worse, as a lack of support (Wilson, 1968, p. 283). Starting with Sherman (1998), scholars have been calling for better use of empirical evidence

when researching crime problems or implementing policing practices. In recent years, research and analysis are becoming more common in policing. For example, the latest Law Enforcement Management and Administration Statistics (LEMAS) survey found that around 45% of local police departments had a staff member dedicated to crime analysis and research (Bureau of Justice Statistics, 2013). This trend benefits to not only police professionals, but the community as well.

*St. Louis County Police Department, Clayton, MO 63105, USA. E-mail: colbydol@gmail.com

Advance Access publication: 8 February 2018
Policing, Volume 12, Number 3, pp. 255–264
doi:10.1093/police/pay005
© The Author(s) 2018. Published by Oxford University Press. All rights reserved.
For permissions please e-mail: journals.permissions@oup.com

^{**}St. Louis County Police Department, Clayton, MO 63105, USA. E-mail: Shawver.briana@gmail.com

While more progressive and larger law enforcement agencies began using evidence-based policing decades ago to add value to its operations, some have only recently begun using the practice. The St. Louis County Police Department (STLCO) is one of the latter and is the focus of this study. This article examines the implementation of STLCO's Crime Analysis Unit to further knowledge about implementation issues for other practitioners. The article reviews the need for evidence-based policing, cultural change, the formation of the unit, and the constant work to add value to the organization, viewed through the experiences of STLCO.

Department background

The case study chose STLCO for several reasons. First, as mentioned, STLCO recently started a crime analysis unit under a strong mandate by the Chief of Police, Jon Belmar, to apply research and analytical techniques to police practices. Over 2 years have passed since the formation of the unit, providing some perspective on its creation. Furthermore, the authors were two of the four employees who started the unit and, therefore, had a critical role in creating the culture necessary for evidence-based policing. The authors received permission to use the department and chief of police's name when writing this article.

Located near the eastern border of Missouri, St. Louis County is unique; it consists of 90 individual municipalities, with approximately 55 police departments. The number of autonomous police departments presents analysis challenges due to segregated data and record systems. STLCO patrols unincorporated county areas as well as several municipalities who have chosen to contract with SLTCO for policing services in lieu of forming their own police department (Fig. 1). The close to 900 sworn officers of STLCO patrol approximately 400,000 of the 1.1 million residents in St. Louis County. In 2016, STLCO reported 25 Uniform

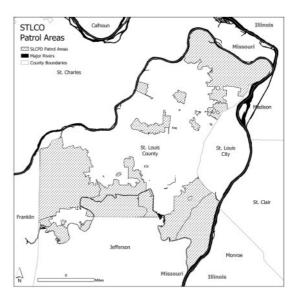


Figure 1: Location and patrol areas of STLCO.

Crime Reports (UCR) Part 1 crimes per 1,000 residents with approximately 82% of the Part 1 crimes being property crimes (St. Louis County Police Department, 2017).

In 2014, when new Police Chief, Jon Belmar, decided to create a crime analysis unit, he designed the unit to ensure that it would bring a fresh perspective to the operations of STLCO (J. Belmar, personal communication, 2015). For years, STLCO had an 'analysis' unit with analysts that would report crime counts to agency leaders; however, with the new unit, Belmar sought a stronger emphasis on analysis functions with a new approach.

Inspired by Malcolm Sparrow's book, *The Character of Harms: Operational Challenges in Control* (Sparrow, 2008), Belmar created the unit in early 2015. Sparrow's work focuses on harms and the prevention of them rather than only events defined as crimes. Sparrow (2008) emphasizes patterns of incidents over time rather than focusing on individuals or groups involved with crime events. He advocates looking at harms from a 'medium' level of analysis as he defines it where the 'problem is small enough to appear optional' and 'the problem is large enough to require organizational

systems and structures' (Sparrow, 2008). Middle-level harms could be anything from a series of burglaries to clusters of auto accidents at a specific intersection. The key is that the pattern or series of events has some common explorable temporal or spatial connection and requires more attention than a case-by-case look at the problem.

Sparrow's work parallels the concept of evidence-based policing. Rather than looking only at individual cases or anecdotal reports, police practitioners should focus on data, research, and analysis to find trends used to inform decisions (Lum and Koper, 2015). Evidence-based policing, defined by Sherman (1998), is 'The use of the best available research on outcomes of police work to implement guidelines and evaluate agencies, units, and officers' (p. 3). Sherman (1998) likens evidence-based policing to the medical field where most people would expect that when going to the doctor for an illness, the doctor would use the latest scientific knowledge to diagnose and treat the patient's illness. He acknowledges that even the medical field can fall short of achieving a completely evidence-based profession. Nevertheless, police agencies should strive to implement the best available practices to address community problems. Crime analysis is a critical part of effective policing strategies such as problem-oriented policing and hot spot policing (Santos, 2014). For STLCO, this meant decisionmaking changes; managers would not use traditions and habits, rather bar charts and data tables. Chief Belmar believed that STLCO lacked the ability to conduct the type of rigorous analysis needed for a modern police agency (J. Belmar, personal communication, 2015). In his view, St. Louis County needed a new way of viewing policing.

Cultural change

When implementing evidence-based policing and forming a crime analysis unit, the unstated assumption was that members of STLCO would accept the role of data in decision-making. Police agencies should recognize this assumption when implementing

evidence-based policing or forming an analysis unit. Police officers and the organizations they work for have strong occupational cultures (Crank, 1998; Paoline, 2003). Using data to make decisions and form opinions is not a patterned way of thinking found in police culture and officers can become engrained in habits of behaviour that have accomplished the mission in the past. As Lum and Koper (2017) point out, many institutional barriers exist to implementing evidence-based policing. Most importantly, the idea that experiences as a police officer holds the greatest merit for decision-making. In the case of STLCO, agency employees were in some cases hesitant to use data for decision-making, but quickly found the benefit of using it. Crank (1998) asserts that police officers' autonomy is a key feature of police culture. Anything that could infringe on that freedom will be viewed with scepticism. Using research-based evidence to inform management and thereby officers on patrolling patterns and tactics may unsettle current practices in police agencies. For STLCO, trust was established between the crime analysts and personnel when the information complimented the anecdotal experiences of officers. The analysts and officers were describing the same reality using different points of view.

According to Wilson (1989), organizational culture is a 'persistent and patterned way of thinking about the tasks and of human relationships within an organization' (p. 91). The issue with crime analysis units and the information they produce is how to create an organizational culture where using data and evidence is normative for decision-making. It does no good to produce the data if it is not used. The information from crime analysis is critical in implementing evidence-based policing. For those implementing these types of work elements, it is important to understand that employees are continuously making decisions about day-to-day operations. Some decisions may use limited data but are based on the shared experiences and traditions. Those shared experiences may be valid and informative but may also be misleading and biased if not checked in some objective

manner. Over time, situations and environments change; experiences forming culture quickly become outdated.

258

For the STLCO, the cultural change flourished with the Chief of Police originating and championing the idea of a crime analysis unit. Chief Belmar started this cultural change by placing the new unit within the Chief's Office in the organizational chart as well as physically locating the unit adjacent to the Chief's Office. The individual put in charge of organizing the unit was a commissioned sergeant who was formerly the Chief's Aide. The organizational and physical location of the unit combined with the status of the organizer sent a clear message on the importance of the unit.

Chief Belmar often asserted the value of the unit and the contribution to the organization in meetings. By declaring the value of the unit, he set the foundation for a cultural change within the agency (Taylor and Boba 2013). Schein (1992) in his seminal book on organizational culture, *Organizational Culture and Leadership*, asserts that 'leadership and culture are two sides of the same coin' and that leaders form organizational culture by imposing their values on a group. This is exactly what was happening in STLCO. Chief Belmar was making it clear what he valued and how he wanted employees to make decisions.

As stated earlier, some employees adopted the new evidence-based approach quickly while others were more reluctant. To foster the use of crime analysis and achieve results, the unit began by producing several custom reports for precinct commanders, sergeants, and officers. This resulted in many precinct commanders using the unit often for research to inform their operations. Many of these commanders would report the use of crime analysis products during the weekly 'CompStat' meetings to be discussed in detail later. The use of the group of analysts was important for establishing confidence in the crime analysis unit and support for an evidence-based approach to policing.

Aiding in the confidence of the crime analysis unit was the initiation of weekly CompStat meetings. CompStat has been described as a management system based on the principles of detailed and up-to-date information used to inform tactics for crime reductions (Willis et al., 2007). In the past, STLCO CompStat meetings were held monthly. Chief Belmar believed that weekly meetings would generate greater attention and accountability on crime and community issues opposed to the monthly meetings that were more of passive reviews of crime issues. The weekly meetings feature a report authored by the crime analysis unit with the supervisor of the unit giving a weekly presentation. The revised CompStat meetings included periodic in-depth reports on crime issues and regular reporting on a broad range of topics such as opioid overdoses and social media sentiment. After 2 years of weekly CompStat meetings using maps, charts, and tables of crimes, managers were fluent in the crime patterns and issues in their respective areas of responsibilities. While this does not add to the excitement and novelty of crime information, it does provide greater situational awareness. Possessing familiarity with crime patterns and trends is a requisite function of a police agency and using crime analysis allows department employees to improves this aspect of policing. In other words, agency leaders should have the most updated information about critical issues when making decisions. In that sense, crime analysis helps ensure that the police agencies are using taxpayer funding in the most prudent manner possible.

STLCO found that cultural change is a key component of moving towards evidence-based policing. Agencies considering implementing it or integrating analysis into their operations should not overlook this critical piece of change and be prepared to ensure that their respective department is forming the necessary culture is forming. Starting to use research evidence and data is not as easy as 'turning on' a new work element. A new paradigm and mindset must be adopted which should be fostered by leaders and the enthusiasm of the analysts.

Recruitment and selection of crime analysts

The recruitment and selection of crime analysts is a critical step when starting a crime analysis unit. As the last section discussed, at issue is a cultural change that does not thrive without someone championing change with a high rank in the agency. Users of data must also believe in the data and, therefore, believe in those producing it. The quality of the analysts has a tremendous impact on the success of the crime analysis unit and the value it creates. In the case of STLCO, three qualities were the main factors in hiring the crime analysts. Those factors were a professional experience outside of law enforcement, a strong aptitude for data analysis, and customer service experience. These broad categories are like the ones found in the Police Foundation's 2010 article, Selecting the Best Analyst for the Job (Amendola and Jones, 2010), where the authors emphasize the importance of software and data skills, research and statistics skills, and a customer service orientation.

As stated, when Police Chief Jon Belmar decided to create a crime analysis unit, he wanted to add a fresh perspective to the operations of STLCO. His belief was that individuals new to his agency's operations would be able to see its data in a more objective manner. Chief Belmar lauded current employees and their contributions but believed an original viewpoint would add more value for the agency. None of this is to say that current department employees were not eligible for a position in the unit; rather, they would have to demonstrate their ability to use data in a way to bring fresh and objective viewpoints to agency operations (J. Belmar, personal communication, 2015).

In the end, bringing in new employees proved to be effective, but risky. Suspicion is a powerful theme in police culture, and without proper consideration the organization could have rejected the new external employees and the change in status quo (Paoline, 2003). Part of Chief Belmar espousing the value of the crime analysis unit was to welcome the new employees and publicly support their efforts. By championing the skills the analysts brought to the organization, Chief Belmar was easing their acceptance into the agency. Police agencies looking to add analysts, or an entire unit of analysts should carefully consider this issue. The police chief and other high-ranking officials will need to publicly support the new employees, and those employees should possess the disposition and personality to gain the trust of the agency's employees. In the case of STLCO, all the newly hired analysts were very professional and affable making their acceptance almost effortless.

A subset of the experience from outside the agency was the educational requirement for the position. The crime analyst position at STLCO required a bachelor's degree with a graduate degree preferred. A third of the applicants in STLCO's hiring process had graduate degrees. The usefulness of graduate degree should not be understated for crime analysis positions (Santos, 2016). At most graduate programmes, students regularly write papers with research and analysis. Additionally, programmes expect students to cite research properly, write free of grammatical errors, and write complex enough to include some deliberation when planning the paper and its content. The experience of writing these papers transfers well to crime analysis projects because they require research and then a thoughtful analysis with practical suggestions. This type of research, analysis, and writing pattern is at the core of being a crime analyst. Of the three analysts hired, two possessed graduate degrees and the third completed a graduate degree soon after starting with STLCO. The discipline of the degree was not of great concern during the process if the applicant could show the requisite data aptitude discussed below. Nearly all applicants had a degree in social science.

The second quality STLCO was looking for when hiring crime analysts was an aptitude for data. An aptitude for data is somewhat of an amorphous 260 Policing Article C. Dolly and B. Shawver

phrase with many definitions. For the selection process, an aptitude for data translated to an individual who had taken statistics courses and had a working knowledge of inferential statistics. The supervisor of the unit believed that a higher level understanding of statistics would lend itself to more advanced analyses and a greater understanding of data structures found in agency databases.

To test for data aptitude, each applicant took a short test using Microsoft Excel. Excel is commonly used for data analysis, data cleaning and basic research. Datasets are often exported in a comma delimited format or another form that is easily read by Excel. The use of it is essential for most data analysis applications. The applicant would have to find averages, order columns, and create bar charts from the data. One example question had the applicant describe the difference between the mean and median in terms of the 'average' number of tickets written by the officers in a precinct. The test gave objective evidence of the applicant's ability to analyse data and then translate it into practical terms.

The final quality STLCO sought out in potential analysts was customer service. For crime analysts, the primary customers are the agency employees requesting and using the work products of the analysts. For example, crime analysts are often asked to consider a specific crime pattern noticed by field personnel. Many times, the analyst needs to explore this issue with the employee to better understand the problem definition. Agencies considering implementing a crime analysis unit should not overlook this important quality. The customer service focus is the key to the success of the crime analysis unit for STLCO. To select candidates with this outlook, the interviewers reviewed the work history of candidates and documented their respective dispositions during the interview process. Because of the subjective nature of the customer service, agencies should consider using a panel or board to evaluate the interviews to provide a broader view of the applicant's skills.

Providing value

Selecting qualified crime analysts lends to the value crime analysis brings to police agencies. For these types of units to survive, the agency must receive value from them. Value comes in many shapes and forms, defined as the accountability for the government to meet the ever-changing social outcomes through policy and services efficiently (Moore, 2013). Without it, the longevity of crime analysis within an agency drastically shortens.

The obvious value from crime analysis is the information provided to department managers and executives. Crime analysts digest department data and turn it into information for decision-making and policing strategy (IACA, 2014). The crime analysis unit at STLCO does that: provides valuable information for supervisors to make decisions about operations, for commanders to formulate patrol strategies, and for planners to write policies. The IACA (2014) describes four types of crime analysis: criminal intelligence, tactical, strategic, and administrative. Before 2015, STLCO had analysts performing criminal intelligence analysis to analyse offenders and link them to crimes. With the birth of the crime analysis unit, STLCO branched into the remaining three types provided by the IACA. This section reviews the four types of analysis and how they provide value to STLCO.

Tactical analysis

Tactical analysis concentrates on short-term, repetitive crime focusing on known or unknown offenders committing a specific crime (IACA, 2014). The crime analysis unit at STLCO is responsible for providing tactical analysis to work units upon request or discovery by the analyst of an emerging crime pattern. While the IACA definition describes tactical analysis as short term, for STLCO, the temporal factor is not as important as the repetitiveness of a single offender or same group of offenders committing the same crime; some trends could be as short as 1 day, and others STLCO considers tactical could be 1–2 months. Each analyst is

responsible for a geographical area for patrol operations as well as specialized work units for tactical analysis. Before the three analysts began working, the supervisor of the unit decided the areas of responsibility: one analyst was assigned the western three precincts, one analyst the southern two precincts, and one analyst the northern three precincts. Dividing the jurisdiction in this manner allows for an easier allocation of work assignments and responsibilities.

Examples of analyses produced are air condition unit thefts, rings of retail theft of Nike products, and a string of aggravated assaults in a single apartment complex. Tactical analysis reports give value to managers by informing them of related attributes of each crime or offender (IACA, 2014). By providing this information, unit commanders can deploy their limited resources more effectively to either capture offenders or reduce the likelihood that there will be another offence (Canter, 2000).

Tactical reports from the crime analysis unit at STLCO do not always include patrol strategies or solutions to problems; they provide information for commanders to make patrol strategy decisions or to formulate solutions to problems (Taylor and Boba, 2013). In STLCO, this has proven to be pivotal to increase trust between the analysts and commanders. Each party respects the role of the other. Without trust between analysts and commanders in STLCO, integrating data-driven policing into their daily operations would be difficult. Lastly, crime analysts report on all findings for tactical analysis at STLCO. The lack of a trend or pattern is as important as finding a trend or pattern when making decisions. When the result of the analysis is not finding a trend, it indicates that the problem is non-existent, or is sporadic, in which STLCO does not form a patrol strategy or formulate a solution. In some cases, monitoring an issue may be the best option.

Most importantly, when analysts at STLCO produce tactical reports, they include spatial analysis and provide maps of incidents or offender locations. The crime analysis unit at STLCO is the only work unit that can provide this type of analysis to department managers. With this information,

department managers can decide where to place resources or expect incidents (Canter, 2000). Spatial analysis and using geographical information systems (GIS) are integral parts of the work that STLCO's crime analysis unit does. GIS plays a role in all types of crime analysis; however, for STLCO, it is most useful in tactical analysis (Canter, 2000).

Strategic analysis

The second type of analysis that the crime analysis unit at STLCO provides is strategic analysis. In comparison, this type of analysis is more long term than the tactical type. STLCO defines long term as a trend or pattern that occurs quarterly, biannually, or yearly. Strategic analysis analyses trends, hotspots, and problems more in depth and focuses on how to better reduce crimes occurring and respond with more information to those crimes (IACA, 2014). Examples of the strategic analysis STLCO produces are monthly reports to precinct commanders describing the crime and call for service trends that occurred in the previous month, vacant housing data collection and analysis, and methods for reducing the number of intoxicated drivers throughout the county.

The most commonly known and largest report the crime analysis unit produces is the Weekly CompStat Report introduced earlier. CompStat is a strategic, control system used to gather and distribute information about crime problems and the response to them (Weisburd et al., 2003). With the data presented to commanders on these topics, commanders are held accountable for identifying target issues and coming up with solutions to these issues. Weekly meeting are held to review the crime and call statistics as well as for commanders to present their issues and solutions to department executives and other commanders with the hopes of information sharing and collaboration among themselves. For STLCO, the weekly CompStat report includes counts of crimes agencywide as well as hot spot maps of where crimes occur. The report then breaks down crimes by

each precinct (eight total) for a more in-depth look at what each precinct is facing: counts of UCR parts 1 and 2 crimes for the past 4 weeks, locations of crimes, as well as the types of calls for service received in the past week. The value received from the Weekly CompStat Report is uniform reporting for each precinct about up to date crime problems and trends. Additionally, by sharing the information agencywide, commanders can collaborate and share problems-solving strategies to combat new crime problems.

Administrative analysis

262

The last type of analysis that the crime analysis unit at STLCO performs is administrative analysis. This type has less to do with crime but rather focuses on running the agency itself regarding resource allocation, cost-benefit analysis, and staffing (IACA, 2014). STLCO conducts many administrative analyses. Some examples of administrative analysis include studies focusing on internal affairs investigations, data-focused portions of CALEA (Commission on Accreditation for Law Enforcement Agencies) accreditation reports for use of force policies, biased policing, crime reduction efforts, and workload allocation to ensure resources are allocated as efficiently as possible.

More recently, the crime analysis unit at STLCO has focused on a data-driven recruitment and retention plan. By using data, personnel staff can identify gaps in applicant's gender and race to work towards an agency more representative of the community. Additionally, personnel have used data for finding trends in the promotional process and attrition rates. Most of the administrative analysis is what Ferguson (2017) would describe as 'Blue Data', a relatively untapped source of data that can be used to improve police performance.

Community value

The culture change needed to successfully integrate evidence-based policing and a crime analysis unit into a police agency creates public trust and gives value to the community the department serves (Lum and Koper, 2015). Before discussing the value a crime analysis unit brings to the public, first, an understanding of public value is necessary. The public value of government agencies comes from the ability of the agency to effectively and efficiently achieve community goals (Moore, 2013). Police agencies not only need to be effective and efficient, they have an extra value that they must provide to the public: safety and crime reduction. STLCO is no different. Their mission states: 'The mission of the St. Louis County Police Department is to work cooperatively with the public, and within the framework of the Constitution to enforce the laws, preserve the peace, reduce fear and provide a safe environment in our neighborhoods' (St. Louis County Police Department, 2017). With that mission statement, STLCO commits itself to providing service and value to the public.

When discussing public value, it is important to make the distinction between whom the police serve. Moore (2013) makes the distinction that there are two cohorts within the public that the police serve: suspects/victims and the public. Each cohort has specific aspects of the mission statement and service goals that the department tries to meet. The crime analysis unit at STLCO helps meet the service goals and provide value to each cohort.

The first and most directly impacted cohort is the suspect and victims STLCO directly serves. Police agencies have contact with suspects and victims of crimes daily. In doing so, it is important to uphold their constitutional rights. The crime analysis unit at STLCO aids in analysing the behaviour of officer's interactions with suspects and victims. Analysts examine the aggregate use of force incidents as well as traffic stop reports to make sure that officers are following policy and constitutional laws. These analyses ensure that the public is getting law enforcement service with their rights protected. Additionally, victims receive value from the work the crime analysis unit does. Numerous social service providers throughout the county contact the

unit for crime data and analysis monthly to better provide their services to the community.

The second cohort of the public that STLCO's crime analysis unit provides value for is the general public. This cohort is anyone that could receive service from STLCO. The general public differs from suspects and victims because they expect STLCO to manage and reduce crime, not react to crimes that occur (Moore, 2013). The unit at STLCO spends most of its time providing patrol officers with information to meet the public's expectation of managing and reducing crime, which in turn provides value to the public (Canter, 2000; Taylor and Boba, 2013). Analyses to meet this demand for the public include analyses about specific crime trends (tactical and strategic analyses) to place officers in specific areas to deter crime from occurring. The analysts identify these trends before they become out of control to manage crime within the community. Additionally, these types of analyses provide extra value to the public because it allows for the better manage its resources, thus making the agency more efficient and effective at keeping the community safe.

A very specific example of how the crime analysis unit provides both types of value to the public is with analyses of crime and patrol operations on the public transit system in St. Louis County. Within the agency a unit dedicated to patrol the public light rail system. A perception exists with the public that the light rail system is dangerous to ride. The crime analysis unit helps allay the public's fear. Crime analysts regularly provide data and analyses not only for the unit commander but also for public consumption. Additionally, the unit provides analyses to deploy officers to ride the light rail system, increasing police visibility, making the public feel safer on the system and deterring criminals from committing crimes.

Crime analysis provides value to not only the agency itself but also to the public that the organization serves. When crime analysts author reports whether it be crime series reports or workload allocation studies, the community receives value.

Additionally, the crime analysis unit provides value to the public whether it be the suspects and victims officers encounter daily or by providing safety to the general public.

Article

Conclusion

Using data and evidence to aid decision-making in policing has clear benefits. In a world where data guides everything from diagnosing terminal illnesses to helping consumers choose what movie to watch online, it only follows that policing would benefit from the practice. Implementing evidence-based policing improves resource allocation, increases transparency, and promotes better relationships with the community. The change from using anecdotal and personal experience to form decisions to using empirical evidence does not always come easy. This case study of STLCO explored considerations of implementing evidence-based policing and forming a crime analysis unit.

Once police agency leaders identify the need for evidence-based policing and crime analysis, a cultural must occur to truly enact a shift in organizational behaviour. The change is aided by the leaders of the organization embracing the new view of data and evidence. For STLCO, Chief Jon Belmar championed the idea of creating a crime analysis unit and set the example for employees to use the new unit. Without this clear direction and guidance from the top of the organization, the initiative may have failed.

The analysts themselves were critical in moving towards evidence-based policing for STLCO. The crime analysts were able to see the vision of Chief Belmar and truly believed in using data to solve problems. Their enthusiasm for using data and evidence to solve problems was contagious, creating excitement to use their services for projects. In this regard, the analysts created the culture together with Chief Belmar.

As described earlier, hiring qualified analysts creates value for the agency and the public. If analysts have skills with research, analysis, and GIS, the only

learning curve will be agency-specific crime characteristics needed for tactical, strategic, and administrative analysis. Additionally, prior research and analysis experience before starting provides the knowledge to learn more complicated techniques, which will, in turn, add further value by digging deeper into data. With a propensity towards customer service, analysts will be able to work with agency personnel to efficiently meet their analysis needs. With the perspective that agency personnel are customers, analysts can work towards giving quality analysis to ensure that their department customers return.

Making the culture change to embrace evidence-based policing and crime analysis is essential for departments to see value in data analysis. The social conditions associated with crime and disorder are hard to alleviate and symptoms of larger macrolevel issues in society. This can make crime problems appear intractable. Regardless, police agencies using evidence-based policing will find it valuable for the organization and the community. For STLCO, the quest to implement evidence-based policing continues as the crime analysis unit refines its techniques and the agency changes its culture.

References

- Amendola, K. and Jones, G. (2010). Selecting the Best Analyst for the Job. Washington, DC: Police Foundation.
- Bayley, D. H. and Bittner, E. (1984). 'Learning the Skills of Policing'. Law and Contemporary Problems 47(4): 35–59.
- Canter, P. (2000), 'Using a Geographic Information System for Tactical Crime Analysis'. In Goldsmith, V., McGuire, P. G., Mollenkopf, J. H. and Ross, T. (eds), *Analyzing Crime Patterns: Frontiers of Practice*, Thousand Oaks, CA: Sage Publications, pp. 3–10.
- Crank, J. P. (1998). *Understanding Police Culture*. Cincinnati, OH: Anderson Publishing Company.
- Ferguson, A. G. (2017). The Rise of Big Data Policing: Surveillance, Race, and the Future of Law Enforcement. New York, NY: New York University Press.
- International Association of Crime Analysts (IACA). (2014). Definition and types of crime analysis. White Paper 2014-02. Overland Park, KS: Author.

- Lum, C. and Koper, C. (2015). 'Evidence-Based Policing'. In Dunham, R. G. and Alpert, G. P. (ed), *Critical Issues in Policing*, 7th edn. Longrove, IL: Waveland Press, pp. 1–15.
- Lum, C. and Koper, C. S. (2017). Evidence-Based Policing: Translating Research into Practice. Oxford: Oxford University Press.
- Moore, M. H. (2013). *Recognizing Public Value*. Cambridge: Harvard University Press.
- Paoline, E. A. (2003). 'Taking Stock: Toward a Richer Understanding of Police Culture'. *Journal of Criminal Justice* 31(3): 199–214.
- Santos, R. B. (2014). 'The Effectiveness of Crime Analysis for Crime Reduction: Cure or Diagnosis?'. *Journal of Contemporary Criminal Justice* 30(2): 147–168.
- Santos, R. B. (2016). *Crime Analysis with Crime Mapping*. Thousand Oaks, CA: Sage Publications.
- Schein, E. H. (1992). Organizational Culture and Leadership, 2nd edn. San Francisco: Jossey-Bass.
- Sherman, L. W. (1998). Evidence-Based Policing: Ideas in American Policing Lecture Series. Washington, DC: Police Foundation.
- Sparrow, M. K. (2008). *The Character of Harms: Operations Challenges in Control*. Cambridge: Cambridge University Press.
- St. Louis County Police Department. (2017). Values: Our Mission Statement and Codes of Ethics. 17 June 2017, http://www.stlouisco.com/LawandPublicSafety/Police Department/AboutUs/Values.
- Taylor, B. and Boba, R. (2013). The Integration of Crime Analysis into Patrol Work: A Guidebook. Washington,DC: Office of Community Oriented Policing Services.
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2013. ICPSR36164-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-09-22. https://doi.org/10.3886/ICPSR36164.v2.
- Weisburd, D., Mastrofski, S. D., McNally, A., Greenspan, R., and Willis, J. J. (2003). 'Reforming to Preserve: CompStat and Strategic Problem Solving in American Policing'. *Criminology & Public Policy* 2(3): 421–456.
- Willis, J. J., Mastrofski, S. D. and Weisburd, D. (2007). 'Making Sense of COMPSTAT: A Theory-Based Analysis of Organizational Change in Three Police Departments'. *Law & Society Review* **41**(1): 147–188.
- Wilson, J. Q. (1968). Varieties of Police Behavior: The Management of Law and Order in Eight Communities. Cambridge, MA: Harvard University Press.
- Wilson, J. Q. (1989). Bureaucracy: What Government Agencies Do and Why They Do It. New York: Basic Books.

Copyright of Policing: A Journal of Policy & Practice is the property of Oxford University Press / USA and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.