

# TELEMASP BULLETIN

## TEXAS LAW ENFORCEMENT MANAGEMENT AND ADMINISTRATIVE STATISTICS PROGRAM

June/July 2000

Vol. 7, No. 2

### Deployment by Analysis

Deployment by analysis refers to the timely and effective deployment of people and resources to respond to crime, disorder and traffic problems and trends which are detected over a relatively short time period. The process requires accountability at all levels of the organization, necessary resource allocation and both immediate triage and long-term solution to problems.

Analytic deployment has been tested in many different models of policing over the past thirty years. One of the earliest computerized models was developed in the 1960s by IBM and called LEMRAS—Law Enforcement Manpower Resource Allocation System. (Data were input into the system about calls for service, reported crime and traffic accidents.) The system then analyzed data trends, examining them based on time, day, and dates. Based on this analysis, the system developed a deployment model. Thirty-five years ago this was clearly state-of-the-art, and very few police agencies could use the system because it required a costly mainframe computer and a great deal of labor costs to key punch the data on machine-readable cards to build the data files. Since the system used “batch processing”—like all computers of that era—information was not timely and could only be realistically processed no more frequently than once a week. Moreover, the system did not analyze officer-generated activity nor did it consider problem solving. This was, of course, pre-community policing.

The current technological state of low cost, yet powerful desktop computers with nearly limitless memory and amazing computational ability has changed the face of data analysis. Coupled with sophisticated, yet easy to use software, complicated analysis with multiple models or scenarios can be performed instantly. Integrated with crime mapping and micro-analysis of specific crimes or locales, changes in

computer technology have revolutionized the ability to deploy personnel by analysis.

The current model of analytic police deployment is perhaps most commonly referred to as COMPSTAT (COMPuterized STATistics) which is based on the model used in New York under former Commissioner William Bratton. Adopted by a wide range of police agencies around the U.S., COMPSTAT was credited as being the strategy which drastically reduced crime in New York.<sup>1</sup> Despite its name, the process is much more than performing a sophisticated data analysis. As an example of integrating technology with policing strategy, the COMPSTAT data simply provide the foundation for management action.

In an interview with *Government Technology* (August 1999:27), Bratton referred to COMPSTAT as the “Swiss Army Knife of police management—technology is the accessory that makes it work.” The computerized analysis of data and crime mapping served as a facilitator for the process, providing the types of information needed, in a readily consumable form, and a timely basis.

The strategic principles which make COMPSTAT work are multifold. Key administrators (in New York it was precinct commanders) were brought together in a meeting along with

**Special Bulletin**  
**Co-Sponsored by the**  
**Texas Regional Community**  
**Policing Institute,**  
**Funded by the**  
**Office of Community Oriented**  
**Policing Services**

*Bill Blackwood Law Enforcement Management Institute of Texas*  
*Texas Regional Community Policing Institute*



the top command personnel in the police department under the assumption that they were the ones who knew (or should have known) the crime and activity situation in their patrol areas. Ideally, the commander would discuss the crime issues, and the group would collectively brainstorm about problems and solutions. In some cases, the sessions became confrontational with the commander being placed on the defensive. In New York, it was felt this environment was productive to the process. As a result, it was encouraged. In other cities, it was felt that the process should be more collegial—the lesson appears to be that any agency using this process needs to tailor it to the culture of the agency. Strategically, the key to COMPSTAT, as per Bratton, is “sharing ideas, empowerment, and accountability.” In New York, commanders were given the “chance to perform and, if they didn’t, they were moved out.”

### Tools: Past Research

Deployment by analysis is the strategic product of a solid body of patrol-related research. Understanding key elements of this research provides a foundation for developing policy. That is, knowing “what works” helps facilitate the solutions to problems identified in the COMPSTAT process. As it relates specifically to deployment, there are some keystone research findings which should be considered.

**Preventive patrol.** Perhaps one of the most important—and controversial—police research projects occurred in 1972, early in law enforcement’s contemporary research history. The Kansas City (Missouri) Police Department’s (KCPD) Preventive Patrol Study was designed to question a sacred police strategy: Do marked, randomly patrolling police cars actually prevent crime? The concept of preventive patrol postulated the “self-evident truth” that the mere presence of the police (or reasonable potential for their presence) would deter criminals from committing offenses in the immediate geographic area of the patrol.

The Kansas City study found that preventive patrol was not only uncommitted time but it was also non-productive time. The findings do not argue that patrol officers are unnecessary, rather, they infer that traditional assumptions about the effect of random police patrol on crime and citizen’s attitudes may have been false. As such, the findings suggest that police agencies are wasting time and money by continuing or expanding traditional patrol procedures. The results suggested that police executives (1) needed to explore how police resources could better be used, and (2) examine what police processes may be more effective in dealing with crime problems and citizen concerns.

**Response time.** Another element initially examined in the KCPD Preventive Patrol Study addressed the issues associated with officer response time. Typically, response time

was broadly defined as the amount of time it takes a police officer to respond to a citizen’s call for assistance. Basically, it was assumed that the lower the response time the greater the chance of apprehending the criminal. It was further assumed that a faster response would indicate the police are more efficient and that this would also add to citizen satisfaction with police service. Of course, “speed of response” is a matter of perception that is interpreted differently by citizens and the police.

Using some general measures, the original Preventive Patrol Study found that response time and citizen attitudes did not vary among the three experimental districts. In fact, the findings stimulated more questions when it was learned that response time is a complex factor determined by distance, speed, geography, attitude of the officer, and behavior of the citizen who called the police. Further research was clearly warranted.

Overall, the research has shown that the difference between experienced and anticipated response time is a major determinant of citizen satisfaction. Once again, these findings flew in the face of the traditional wisdom and the results were hotly debated. As a result, PERF conducted a follow-up study on crime-reporting patterns of citizens in San Diego, Peoria, Rochester, and Jacksonville-Duval County (Florida). While the PERF study measured additional factors, the Kansas City findings were confirmed: Sophisticated technology and deployment strategies to shorten response time were well-intentioned, but misguided.

Since fast response time neither effectively dealt with serious crime nor directly increased citizen satisfaction, this research paved the way for an exploration of different police strategies. Another important element was now in place for the development of deployment by analysis.

**Differential police response.** The preventive patrol and response time findings provided the impetus for police managers and researchers to explore alternate patrol management strategies. Among these was a concept known as Differential Police Response (DPR). Traditionally, police calls have been dispatched in the order they were received with the exception of life-threatening situations which received immediate attention. DPR recognizes that different calls should be assigned different priorities based on the “immediacy of need” for a police officer’s presence. Recognizing—from the preventive patrol and response time studies—that greater flexibility can be used in call management, DPR also developed alternative methods for handling calls.

The National Institute of Justice (NIJ) conducted DPR field tests in Garden Grove (California), Greensboro (North Carolina), and Toledo (Ohio). DPR is a resource/time management plan that matches operational needs to available police



resources and expertise. It permits flexibility in handling calls while contributing to both increased responsiveness to community needs and efficiency in police operations. Furthermore, the research indicates that DPR allows patrol officers more time for crime-focused activities, such as investigation and prevention, as well as community service and administration.

In the NIJ field test of DPR, several key findings have important implications regarding community policing:

- Police departments can achieve a sizable reduction in the number of non-emergency calls for service handled by immediate mobile dispatch, without sacrificing citizen satisfaction.
- The results of the baseline citizen surveys showed an overall high public willingness to accept alternatives to immediate dispatch of a patrol unit for non-emergency calls.
- Three of four callers were willing to accept delays of up to an hour for non-emergency calls.
- As expected, there was a greater willingness to accept delays for calls that did not involve potential danger or threats.
- Citizen satisfaction with alternate services provided was high.
- Alternate responses are less costly than traditional mobile responses, and productivity levels are much higher for personnel using alternatives.

Since DPR is also a time-management strategy, it provides patrol officers more time for other community policing and problem-solving activities. Thus, DPR provides better responsiveness to citizen needs and demands, more efficient use of police resources, and greater levels of citizen satisfaction, all of which are important in the deployment by analysis concept.

**One- versus two-officer patrols.** An emotional issue for many patrol officers (and police labor organizations) is whether there should be one or two officers assigned to each patrol car. The most common issue in this debate is *officer safety*—it is assumed that cars with two officers will provide greater safety in hazardous situations. The counter argument is inefficiency: The two-officer cars are more expensive since many calls require only one officer to perform the job. Thus, the presence of the unneeded second officer is wasteful of resources.

The most comprehensive research on this issue was conducted in San Diego (California). The study found that based on factors such as cost, number of calls handled, arrests, response time, and handling administrative duties, one-officer units

are far more efficient and clearly as effective as two-officer patrols. On the emotionally-laden issue of officer safety, the San Diego study found

... both single and multiple ... units had approximately equal involvement in assaults on officers. However, two-officer units were shown to have been involved in resisting arrest situations (and consequently, in total critical incidents) more frequently than were one-officer units, despite the fact that the units had equivalent exposure to potentially hazardous situations overall, and to arrest situations in particular. The groups had equivalent involvement in police vehicle accidents and had experienced equivalent exposure in terms of miles driven ... two-officer units were found to be more frequently involved in assaults on officers, in resisting arrest situations, and in total critical incidents than were one-officer units. *The weight of evidence from this analysis supports the conclusion that one-officer patrol unit staffing was safer for officers* (emphasis added).

**Team policing.** The “buzz words” of patrol management in the 1970s and early 1980s were team policing. Rather than being a philosophy of policing, team policing was a patrol management strategy which attempted to group officers by geographic location with the purpose of working cooperatively together toward a common end. Much like a football team, the policing team would have various officers with different expertise and responsibilities working together to attain their goals.

The common feature linking most team policing programs was their reliance on the notions of decentralization and generalization. Thus, the hypothesis underlying team policing is that effective patrol and other services can be provided in an efficient manner via a decentralized (sometimes neighborhood-based) police department consisting of officers who are generalists in the law enforcement field.

The actual structure, assignment and operating philosophies varied significantly in the different cities which experimented with team policing. The effects of team policing projects were mixed. In many programs, the concept was well developed, but lacked clear policy direction. Furthermore, many evaluations were methodologically weak. In other cases, the concept simply was not given sufficient time to mature. One of the weaknesses of team policing may have been that it was a concept ahead of its time. With better-educated officers and more enlightened management throughout the chain of command, team policing may have been more successful. Despite its limitations, team policing established a conceptual foundation that was ultimately strengthened and redefined in community policing.

**Specialized patrol.** In an effort to make police patrol officers more effective, a variety of different patrol configurations have been tried. The underlying theme of the different models was to efficiently handle calls for service, control crime and make productive use of officers' "uncommitted" patrol time. Collectively, these experiments have been referred to as "specialized patrol." Different models of specialized patrol include split-force patrol (Wilmington, Delaware), directed patrol (Kansas City), low visibility patrol (New York, Boston, Nashville, Memphis, San Francisco, Miami), high visibility patrol (Alexandria, Cleveland, San Jose), and management of demand (Wilmington).

The evaluations of specialized patrol consistently showed that effectiveness (goal attainment) did not change, but efficiency (use of resources) generally improved with the different experiments. These successes spurred attempts to refine specialized patrol so that it would also be more effective. The Wilmington Management of Demand Project adopted alternate "response strategies" to address the unique demands placed on the police department by citizens. The result was that the police were better able to assess the demand for police services (both crime and non-crime) and respond more effectively to those demands. The concept is dynamic because the police response changes when demand changes. Both the process of experimentation and the lessons learned from the evaluations provide insight that helped frame different operational strategies which could be used in analytic deployment. Collectively, these research milestones provide evidence which supports the legitimacy of using activity analysis as the basis for deploying personnel.

**Tools: Management Trends**

Approaches to management are in constant change based on new ideas, research and changing demands of clientele. Generally, businesses are the first to adopt a new management philosophy and refining it in practice. In some cases, the public sector will adopt a new approach; in other cases, it will not. Not every new idea for enhancing the efficacy of management is fruitful. Moreover, what works well in business may have significant limitations in government. Keeping these perspectives in mind, there are a number of management trends which may prove useful for more effectively deploying personnel. These approaches are summarized in Table One, noting the approach and questions which may be asked in order to analyze data which can enhance effective personnel deployment.

**Tools: Organizational Culture**

Every organization develops its own culture based on tradition, management philosophy, interpersonal relationships, and similar factors which shape attitudes and behaviors. These cultural dynamics will have a significant influence on the way responsibilities are performed and the ability of the organization to respond to change. If contemporary deployment practices are used, their success will be dependent on these cultural factors. Thus, there is a need to understand these factors, not necessarily to change them, but to create initiatives that will take into account the cultural influences. Questions of organizational culture to be examined include:

**Table One**  
**Translating Management Approaches to Policing**

Current Management Approach	Police Operational Questions
<b>Continuous Quality Improvement:</b>	What is best way to reduce crime? What new practices may help deliver police services? What are the police department's weaknesses and how can they be remedied?
<b>Customer Service:</b>	Are the citizens' needs being met? Are the citizens satisfied with police performance? What is the public's perception of the police department's competence?
<b>Corporate Responsibility:</b>	Is the department accomplishing its responsibilities to the best of its capacity? Based on the department's analysis of crime and service data, are all needs being effectively addressed? Is the police agency working as a team member in the city/county/state government?
<b>Benchmarking:</b>	Is the police agency exemplifying state-of-the-art practices? Are departmental service measures being assessed to ensure that efforts are being made to always provide better service?
<b>e-Business:</b>	What electronic tools can we use to better understand police service demands? What electronic tools are available to provide better service to the community? What electronic tools may be used to maximize the efficacy of internal police operations?

- Is your department introspective? (e.g., will it seriously question itself; is it open?)
- Is the organizational culture... Professional? Blue Collar? Regressive? (the culture will be an important ingredient of innovation)
- Is the department willing to openly try new initiatives? (are new ideas met only with lip service?)
- What organizational legacy may impede a new deployment initiative? (e.g., personal conflicts; selfishness of units; elitism)

### Tools: People

The most important resource in any organization is people. One of the unstated facts in most law enforcement agencies is that nonsworn employees tend to have a second class citizen status. Yet, for the deployment by analysis model to be effective, a department needs professional and competent civilian personnel, particularly crime analysts and information technology (IT) specialists. The implications include a need to change the organizational culture to look at these people as practicing professionals who should be embraced as equals in the organization. In addition, the department must recruit the best possible people to do the job and train them with the specific intent to fulfill the needs of an analytic deployment program model. Finally, they must be included as part of the "police team" *in practice*, not just lip service.

There are important implications for sworn personnel as well. Participants in the deployment models must have the intellectual capacity to understand responsibilities and proactively do their work (a selection issue). They must also have the skills to perform necessary tasks (a training issue) and the social-psychological capacity to efficaciously perform their tasks (selection and occupational socialization issues). These include good judgment, reliability, responsibility, communications skills, the willingness to change/learn, and being a "team player."

### Tools: Technologies

A great deal has been said about the role of technology in deployment by analysis. There are three fundamental types of technologies most applicable to this process: Information management, computerized crime analysis and crime mapping. A computerized records management system (RMS) allows information to be easily and accessed in a wide range of forms. Thus, not only does the computerized RMS provide the database for crime analysis, it is an important tool for crime control and problem solving in that it permits search queries on specific incidents, people, locations, or any other variable in the data fields. Computerization of crime analysis permits complex or detailed analysis of large amounts of diverse data in a relatively short amount of time. A key

policy element, however, is the ability to get the necessary raw data input into the system on a timely basis in order for the results of the analysis to be most useful. If the data are dated, then any strategic response to a problem will be "off target."

There are four analytic targets of crime analysis:

<b>Crime:</b>	Who's doing what to whom?
<b>Intelligence:</b>	Who's doing what with whom?
<b>Operations:</b>	Where and how are crimes being committed?
<b>Administration:</b>	What is needed to catch offenders and/or prevent crime incidents/trends?

The results of analytic activity should produce a wide range of information useful for problem solving and crime control, such as: Crime pattern detection/analysis, crime suspect correlation, target profiling, forecasting crime potentials, forecasting crime trends, and resource needs.

While crime mapping is not "required" for deployment by analysis, it adds an important dimension to understanding and interpreting problems. The geographic visualization of crime afforded by mapping can provide perspectives in several different ways:

- Density of criminal incidents
- Locations of offenses and offender apprehensions
- Use of multiple data sources to compare crime trends with other factors such as population, poverty or public transportation data
- Identification of crime "hot spots"
- Proximity of offenses or offenders to a target, such as the proximity of sex offender residence to schools
- An aerial overlay wherein an aerial photograph is superimposed over a map

Mapping will be most effective when there is a wide range of data in the system and the software is user-friendly providing differing methods of presentation.

### Deployment by Analysis: Basic Principles of Operation

For deployment by analysis—or COMPSTAT—to work, there are some basic principles which appear to make the process most effective:

1. If commanders are going to be held accountable, they must be given the resources (money, people) to do the job. This translates to real administrative commitment.



2. Authority must be decentralized if there is to be real accountability (e.g., commanders must have the authority to expend money, reallocate personnel, etc.).

3. There must be sufficient patrol staffing to handle mandatory response calls as well as to have the flexibility for officer reassignment to work on responses to problems.

4. The accountability meeting *must* have probing questions and discussions—they do not have to be confrontational, but they can be critical.

5. Participants in the accountability meeting must be willing to ask questions about problems, the interpretation of problems, and solutions as well as to confront and be constructively critical.

6. Discussions of possible remedies or solutions must be as probing as the questions which are trying to discover needs and problems.

7. Recognize that implementation of this program is a major change process—the organization must be ready to accept and try change.

8. Find the “gate keepers” (formal and informal) in the department: those people who possess and control both resources and information and are typically unwilling to release them.

9. A department must have a records management system (RMS) that can produce reports which are timely (i.e., current and quick), accurate and comprehensive.

10. Crime mapping, while not essential, makes the process easier, faster and more intuitive.

11. The process is an effective self-evaluation tool; use this information to change departmental processes, resource distribution, training, staffing levels—whatever is indicated by the analysis.

12. The analytic/accountability process can be applied to any activity, not just crime; e.g., traffic, professional standards (i.e., internal affairs), etc.

13. If you are going to hold managers and support staff accountable, you need to clearly define their roles and responsibilities.

14. Consider including patrol officers and sergeants into the accountability meetings to praise their efforts before the chief and the command staff as a form of recognition and reward.

15. A key to success: “You are only as good as your information.”

16. If data are not input into the RMS or mapping system regularly, the output can be misleading.

17. Give all personnel appropriate training (e.g., use of software, intent of process, problem solving, etc.).

### Texas Models: Deployment by Analysis

Several Texas cities are using the deployment by analysis/COMPSTAT process. Each subscribes to the fundamental philosophy, but have attuned the process to the unique character of each department and community. By looking at

summary points of each program insights can be gained on how the program works.

**San Antonio: MAP—Management Accountability Program.** The San Antonio Police Department’s management accountability program meets every Friday morning. At each meeting, the chief of police begins by providing “City View”; a summary of overall notable crime and policing trends over the past week. This is followed by two patrol division commanders who are charged with presenting a summary of crime activities for a seven day and twenty-eight day period in their patrol division. At each meeting, all command personnel attend as do relevant supervisors, crime analysts, and other police personnel representing the week’s applicable patrol divisions. In addition, interested citizens may attend—community activists are urged to attend.

During presentations by the patrol commanders, questions are asked about the status of crime trends or individual cases. Patrol commanders are held accountable for crime and must discuss (and justify) their activities in dealing with crimes. If inadequate progress is being made on a problem, “someone must answer.”

There has been a notable crime drop in San Antonio which is correlated with the MAP process. While some people were slow to “buy in” to the process, many of these individuals are gradually accepting the process because (1) it appears to be working, (2) it is enhancing accountability, and (3) command officers have demonstrated the process is important and are committed to it (albeit in different degrees).

**Plano: MAP—Management Analysis Program.** The Plano Police Department’s deployment initiative is called the Management Analysis Program. The philosophy and process is similar to San Antonio’s on a smaller scale. The accountability meetings are held on a monthly basis wherein the operations commander discusses crime trends and crime control initiatives. Crime analysis indicates that in Plano crimes against property are the primary problems. The department’s philosophy is “results directed” in that “efforts and excuses are listened to, but results of those efforts are what counts.” As such, there is a high degree of accountability.

**Richardson: Results Directed Policing.** Just as in the case of Plano, the Richardson analytic deployment program is “results directed” using the accountability processes described above. The notable difference in Richardson is that the accountability processes and questions are at the lieutenant and sergeant levels, not the command level. Sergeants have been given the flexibility to direct officers to specific problems based on the process; thus, they have a significant amount of accountability and are given the authority to meet that responsibility.



**Arlington: Operations Bureau Staff Meeting.** In Arlington, the analytic process is inextricably related to the police department's geographic-based policing model wherein supervisors have a 24-hour responsibility for a geographic area. While not having a specific acronym or program name, the operations bureau staff meeting uses the same accountability processes. In Arlington, it is an underlying assumption that if the process is going to be successful, personnel must look beyond resource issues, to causal issues in an effort to solve problems. Thus, the "excuse" that resources are not available is "not an acceptable alternative."

**El Paso: SAC—Statistical Analysis of Crime.** In El Paso, the process is called SAC—Statistical Analysis of Crime. The focus is on data analysis at this point because El Paso does not currently have crime mapping. Despite the inability to visually identify crime problems and trends on maps, they can be effectively described through statistical outputs. Meetings are held on a monthly basis following the presentation and discussion processes. Importantly, the analytic focus in El Paso is on crime causes to eliminate, not displace crime.

**Abilene: COMPSTAT.** Abilene has adopted the COMPSTAT program name. The COMPSTAT meetings are held twice a month, once again following the general processes described above. The two-year-old program is credited for reducing crime and making police personnel at all levels more accountable. In Abilene, "beat integrity" is not an issue. Instead, officers are pulled out of beats as needed to address problems.

### Deployment by Analysis: Lessons Learned

The experience of agencies that have experimented with this analytic model is that database and mapping technologies give all police employees the intellectual capital to understand crime and service problems. With this capital, more accurate and timely decisions can be made for problem solving (at both micro and macro levels). Moreover, the data provide the currency for accountability at all levels of the organization.

As useful as the technologies are and as conceptually sound the process may be, one must be cautioned that the COMPSTAT process will not work in an agency unless there is true commitment to the process; that authority has been realistically decentralized in the department; that resources are devoted to solve problems (and not devoted to pet projects), and that there is accountability with consequences to those involved.

### References

- Boydston, John E., et al. (1977). *Patrol Staffing in San Diego*. Washington, D.C.: Police Foundation.
- Farmer, Michael (1981). *Differential Police Response Strategies*. Washington, D.C.: Police Executive Research Forum.
- Kansas City (Missouri) Police Department (1977). *Response Time Analysis: Executive Summary*. Kansas City, MO: Board of Police Commissioners.
- Kelling, George L., et al. (1974). *The Kansas City Preventive Patrol Experiment: Technical Report*. Washington, D.C.: Police Foundation.
- Larson, Richard C. and Michael Cahn (1985). *Synthesizing and Extending the Results of Police Patrol Studies*. Washington, D.C.: National Institute of Justice.
- Levine, Michael and J. Thomas McEwen (1985). *Patrol Deployment*. Washington, D.C.: National Institute of Justice.
- McEwen, Thomas, et al. (1969). *Evaluation of the Differential Police Response Field Test*. Washington, D.C.: National Institute of Justice.
- Spelman, William and Dale Brown (1984). *Calling the Police: Citizen Reporting of Serious Crime*. Washington, D.C.: National Institute of Justice.

### Notes

<sup>1</sup>Given the general reduction of crime across the U.S., it is unlikely that COMPSTAT was the sole reason for the crime reduction in New York City. However, evidence suggests that the process does play an important role in crime control. See the *TELEMASP* series "Why the Drop in Crime?" Vol. 5, No. 10, January 1999 through Vol. 6, No. 3, June 1999.



**BILL BLACKWOOD**

**L**aw  
**E**nforcement  
**M**anagement  
**I**nstitute of  
**T**exas

Randy Garner, Ph.D.  
Executive Director

Kay Billingsley  
Publications Manager

For information about LEMIT  
programs, call (800) 477-9248



*A Member of The Texas State University System*

TELEMASP Monthly Bulletins,  
ISSN 1075-3702, are produced  
under an agreement with the

**Police Research Center**  
Sam Houston State University  
Larry T. Hoover, Ph.D., Director  
Jamie L. Tillerson, Program Manager

© Sam Houston State University

For information about TELEMASP  
Bulletins, call (936) 294-1704

This Bulletin was authored by Dr. David Carter, professor in the School of Criminal Justice and director of the National Center for Community Policing at Michigan State University. Dr. Carter participates in LEMIT's LCC program and Executive Issues Seminars.

This project was co-sponsored by cooperative agreement #97-CK-WX-0020 awarded by the Office of Community Oriented Policing Services, U.S. Department of Justice. Points of view or opinions contained within this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

**Bill Blackwood Law Enforcement  
Management Institute of Texas**  
Criminal Justice Center  
Sam Houston State University  
Huntsville, TX 77341-2296

Non-Profit  
Organization  
U.S. POSTAGE  
PAID  
Permit No. 26  
Huntsville  
Texas