

# TELEMASP BULLETIN

## TEXAS LAW ENFORCEMENT MANAGEMENT AND ADMINISTRATIVE STATISTICS PROGRAM

July/August 2003

Volume 10, No. 4

### Investigative Caseloads

#### Introduction

Criminal investigation emerged early in European criminological history when Frederick the Great employed "agents" to provide him with crime information. Its management has been grappled with ever since (Ward, 1975). An investigation is defined as the "collection of information and evidence for identifying, apprehending, and convicting suspected offenders" (Osterburg & Ward, 1992, p. 41), and an investigator's (agent) job is to study and analyze factual information to solve problems (Palmiotto, 1988).

This *TELEMASP Bulletin* examines caseload management among Texas investigative units. Thirty-six agencies responded to a survey that included questions on investigative staffing, case screening, caseloads, and extent of follow-up.

#### Background

More offenses occur than are resources to investigate them. Hence, case screening is a critical element of managing the investigative function. Brown (1998) describes this process as a *scart*, or the combination of science and art. Outcomes are scientifically predictable, but in art, results are uncertain until the product is complete.

This screening process facilitates "making a decision concerning the continuation of an investigation based upon the existence of sufficient elements of information obtained at the initial investigation" (Crawley, 1977, p. 37). Those elements of information in determining the likelihood of solving a crime are known as "solvability factors" (Palmiotto, 1998).

Using solvability factors, case screening is an attempt to streamline the investigative workload in order to identify those cases that have the greatest chance of being solved. Factors such as evidentiary articles, witnesses, and seriousness of the offense (Garmire, 1982) become known when a patrol officer makes an initial investigation. Upon review by the officer's supervisor, these factors could be assessed to close certain cases prior to being forwarded to the Criminal Investigative Division (CID) (Garmire, 1982).

In a two year study (1980-1982), the Atlanta Police Department identified their patrol officers' role as the number one component needing change. Because patrol officers are often no more than report takers at a crime scene, the Atlanta project proposed that if they were trained to properly identify solvability factors at the line level, they could greatly assist in managing investigations. This would appropriately close some

cases in a more timely fashion, thus freeing the CID supervisor and investigator from needlessly involving themselves in a case having a very low probability of being solved (Garmire, 1982). Two primary goals and objectives emerged:

1. To expand a patrol officer's role to include the detection of solvability factors in the initial investigation; and
2. To develop a system for documenting the presence or absence of solvability factors during the initial investigation.

In 1971, the Rochester, New York, Police Department initiated the Management of Criminal Investigations (MCI) project. In the initial phase, 500 previous cases were reviewed to determine the common factors associated with their solution. Key elements were identified and labeled as solvability factors (Neally, 1979). Osterburg and Ward (1992) deemed the following factors as significant:

- √ Is there a witnesses to the crime?;
- √ knowledge of a suspect's name;
- √ knowledge of where a suspect can be located;
- √ description of a suspect;
- √ identification of a suspect;
- √ property with identifiable characteristics, marks, or numbers so it can be traced;
- √ existence of a significant MO;
- √ presence of significant physical evidence;
- √ presence of a description which identifies the automobile used by the suspect;
- √ positive results from a crime scene evidence search;
- √ belief that a crime may be solved with publicity and/or reasonable additional investigative effort; and
- √ an opportunity for but one person to have committed the crime.

If these factors are present, their quality and number must be evaluated; therefore, there must also be a weighting system in place (Osterburg & Ward, 1992). The more serious the offense, the heavier it is weighted. Usually, aggravated crimes (those involving serious injury or the use of a weapon) are much more likely to receive investigative attention.

**Management of the continuing investigation.** Traditionally, a detective "caught" cases by chance (Osterburg & Ward, 1992), or "the individual on duty was responsible for all cases that came in and for deciding which to pursue and which to 'can,' that is, keep in a personal file, off the official record as warranting no further effort" (Osterburg & Ward, 1992, p. 437). Obviously, these practices created serious problems. Caseloads became uneven because they were dependent upon the day of the week that the tour of duty happened to fall. MCI's goal, however, eliminated the shortcomings of the traditional way by establishing administrative controls and organizing investigative resources more effectively (Osterburg & Ward, 1992).

**Staffing.** Staffing an investigative unit is also an important element of managing investigations. Although no universally accepted formula exists, the United States Department of Justice found that in 1975, the percentage of a department's personnel assigned to investigations varied, from 8 percent in Freemont, California, to 22 percent in Rochester, New York, and Cincinnati (Block & Weidman, 1975).

More recently, Justex Systems Inc., (2002) prepared a document for the Fort Worth, Texas, Police Department's investigative divisions aimed at addressing their staffing needs. Three specific recommendations were made:

1. Recognizing that investigative units vary in the manner in which they operate, staffing models likewise need to differ. Unlike patrol, there is no universal mathematical model that can be constructed.
2. Historical data should be used to determine baseline staffing. Future staffing levels should be determined from variance in workload demands from this baseline.
3. Except for the Discovery Enforcement Units, caseload should be calculated as the number of new cases per month. Primary vs. secondary caseload responsibilities should be considered in determining the appropriate number of new cases per month, but it is only the latter figure that should be employed. Using the number of pending or open cases generates "phony

numbers” or “fuzzy math” and should be avoided. This recommendation is premised upon research that uniformly indicates that cases open for longer than 30 days are almost never solved anyway (Justex, 2002). It should be noted, in relation to this report, a primary caseload includes all newly assigned cases and currently assigned cases with pending investigative leads. Secondary caseloads include filed cases that are awaiting court action as well as cases where an offender has been identified but has yet to be located. If an arrest is made, the case will move from primary to secondary status (Justex, 2002).

In September 2001, the State of Arizona Office of the Auditor General made four recommendations to the Arizona Department of Public Safety Criminal Investigations Division:

1. The division should develop specific criteria for accepting cases to help it balance the requests of local jurisdictions with statewide enforcement needs and priorities.
2. The division should ensure adequate case oversight and appropriate documentation.
3. The division should improve its case management information regardless of whether it purchases a new system or continues with the current one.
4. Once critical case information for the entire division is available, the division should assess its activities and outcomes to ensure its priorities are being met (Dav-enport, 2001).

The report noted that the first recommendation might be achieved through proper implementation of the solvability factors. Recommendations two through four could all be realized through implementing a modern MIS.

## Survey Results

**Percentage of new crimes assigned for follow-up.** Respondents to the TELEMASP survey were first asked what percentage of cases among the Part I

crime categories were assigned for follow-up. Figure 1 provides percentages of new cases assigned to an investigator. Not surprisingly, the percentage of new murder and manslaughter cases assigned to an investigator was reported as 100%. New aggravated assault cases were reported as 92%, while the percentage of new forcible rapes was reported as 100%. New robbery cases were assigned 92.8% of the time, followed by 70% of new burglary cases. Finally, new auto theft cases were assigned to an investigator 80% of the time, while new theft cases were assigned 60% of the time.

**Extent of follow-up.** To assess the extent to which investigated cases are followed up, respondents rated the degree of follow-up as either cursory, nominal or extensive (see Figure 2). Because of the seriousness of the Part I types of crimes measured, most received extensive follow-up. However, only 40% of auto theft cases received nominal follow-up, theft cases received cursory follow-up 27.5% of the time, and burglary cases received only nominal follow-up at 34.7%.

**Solvability factors.** Thirty-two, or nearly 90%, of the surveyed respondents indicated that their agency utilizes solvability factors that are important in maximizing investigative efficiency. They were asked to rate each of the following solvability factors on the basis of perceived relevance.

Each solvability factor was rated from one to five with 1 = no relevance, 2 = little relevance, 3 = moderate relevance, 4 = very relevant, and 5 considered extremely relevant. Knowledge of a suspect’s name received the highest average of 4.5, followed by the presence of significant physical evidence receiving an average rating of 4.1. The belief that a crime may be solved with publicity and/or reasonable additional investigative effort was reported to be least relevant with a score of 3.3 (see Table 1).

**Amount of time before a disposition must be rendered.** As shown in Figure 3, once a case has been assigned to an investigator, 30 days was the most common response to the amount of time before a disposition must be rendered. The lowest number of days was three, while the highest was reported to be 90. Interestingly, 18 respondents indicated no time limit was applicable in relation to their particular agency.

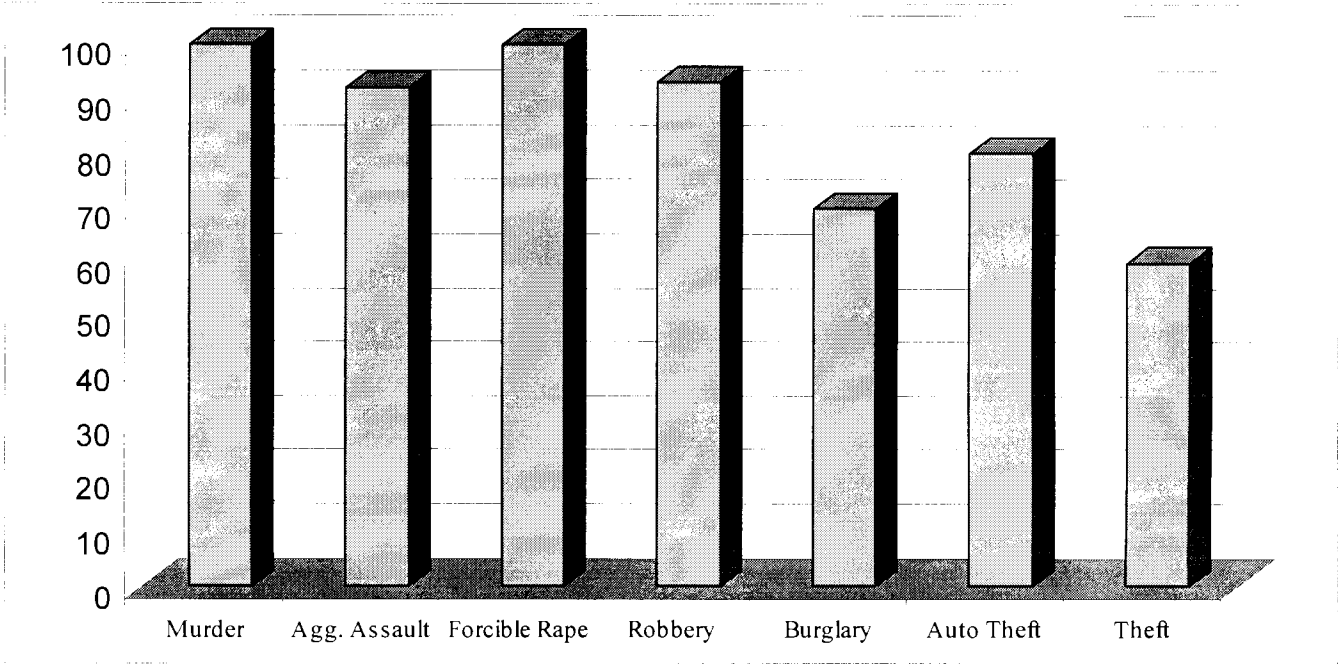


Figure 1. Percentage of New Cases Assigned to an Investigator

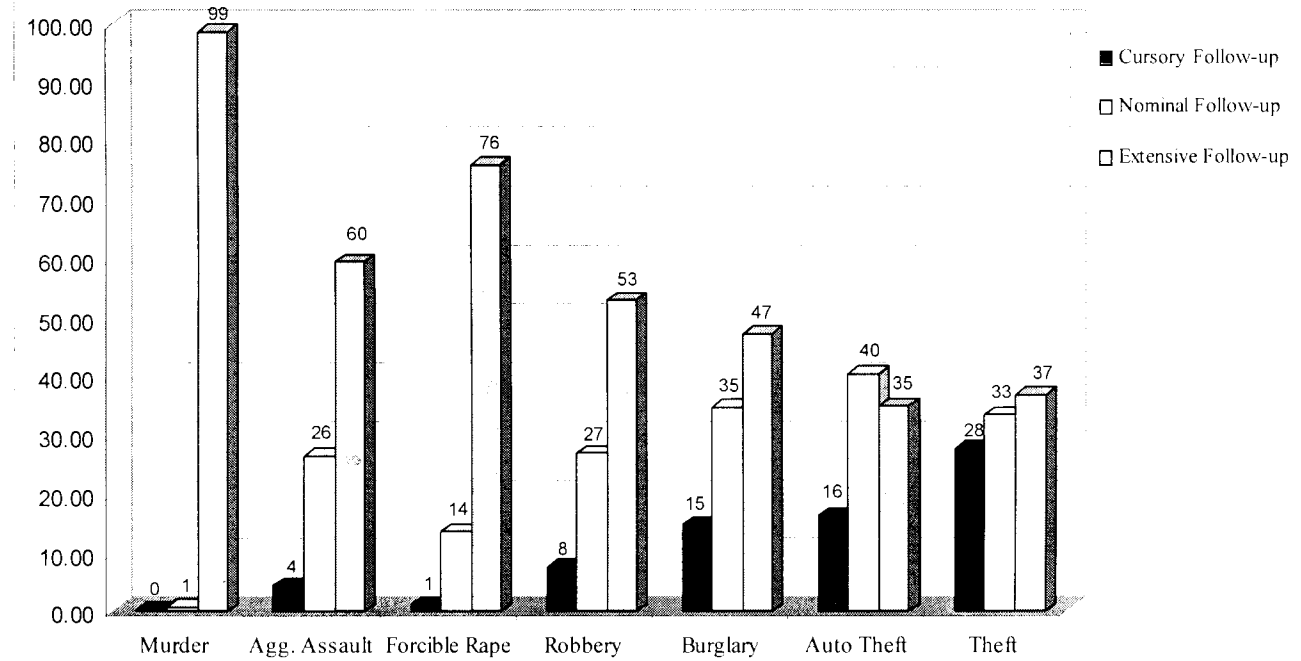
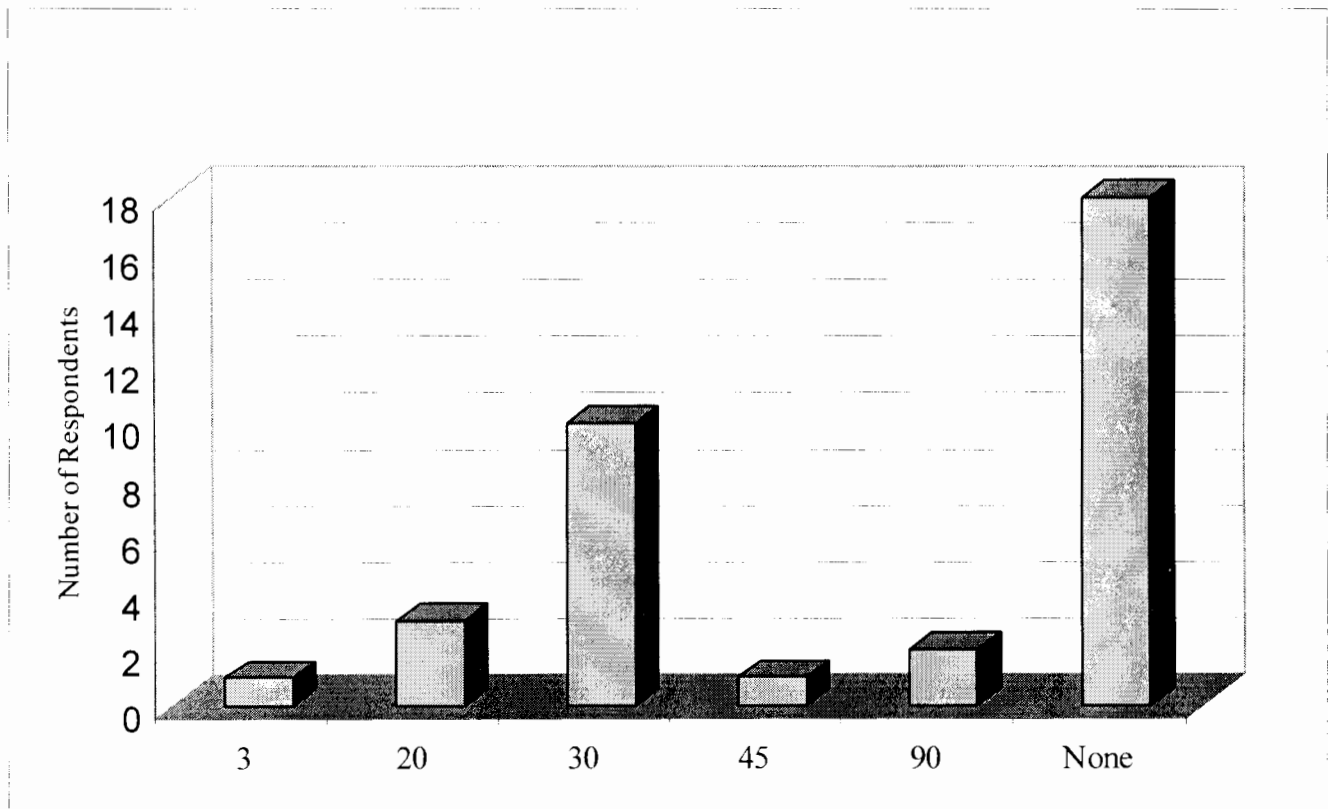


Figure 2. Percentage of Cases Receiving Follow-up

**Table 1**  
**Rating of Solvability Factors**

Factor	Mean	SD
Knowledge of a suspect's name	4.5	.71
Presence of significant physical evidence	4.1	.80
Is there a witnesses to the crime?	4.0	.85
Identifiable property with traceable characteristics, marks, or numbers	3.9	.89
Description of a suspect	3.8	.73
Aggravating circumstances such as the use of a weapon	3.8	.94
Description identifying an automobile used by the suspect	3.6	.87
Existence of a significant MO	3.4	.71
An opportunity for but one person to have committed the crime	3.4	1.20
Belief that a crime may be solved with publicity and/or reasonable additional investigative effort.	3.3	1.00



**Figure 3. Number of Days Before a Case Disposition Must be Rendered**



## Management Information System (MIS)

Twenty-six respondents indicated that their department is currently utilizing a computerized MIS, while only one respondent indicated having a paper-based system. The respondents were then asked to designate which of the following items their MIS is capable of measuring (see Table 2).

**Table 2**  
**MIS Investigative Features**

Feature	Percent Possessing
Number of cases assigned	72
Number of arrests recorded	64
Daily activities in relation to a case	25
Productivity ratio in relation to each individual detective (based on number of cases assigned, time spent on each case, amount of time each case is held, and final disposition.)	25
Total time spent on complaints	14
Average time spent on complaints	14

The most common element captured by all of the agencies was the number of cases assigned to a particular detective at any given time, followed by the number of arrests recorded by individual detectives, with 23 agencies securing this data. The positive affirmations then drop sharply, with only a small number of agencies reporting the ability to capture the remaining data. Respondents indicated that the most important variables captured by their MIS are the ability to track the number of cases assigned to an investigator, the date a case is assigned and clearance rates.

### New Cases Per Detective

Optimum caseload has long been a topic of much discussion. Supervisors are often tasked with trying to evenly disperse the number of cases that need to be assigned with the available human resources. Table 3 provides the average number of new cases assigned to individual detectives per month. There was, however, ambiguity in the phrasing of the question aimed at

capturing these data. Additionally, many agencies did not generate a full caseload of each crime category, and hence aggregated all crimes against persons, for example. Table 3 should be interpreted carefully. New cases per month varied widely. For example, the mean number of new robbery cases assigned was 9, but the standard deviation had a wide variance of 11.3. The only research conclusion that should be drawn from Table 3 is that there is wide variance.

**Table 3**  
**Number of New Cases Assigned Per Month**

New Cases	Mean	SD
Domestic Violence	29.6	18.8
Theft	22.9	14.4
Auto Theft	22.9	18.1
Burglary	20.6	13.8
Crimes by Children	20.5	17.8
Crimes Against Children	16.5	16.2
Robbery	9.0	11.3
Aggravated Assault	8.9	7.3
Sexual Assault	6.5	7.2
Murder	.6	1.0

### Geographic Responsibility

Sixty-four percent of the agencies do not assign cases geographically. Some respondents did indicate, however, that their agencies use partial geographic responsibility with the most common delineations being for robbery, burglary and theft. The agencies that do use geographical responsibility were all moderate to large municipal ones.

### Conclusion

Most agencies operate consistently with the major suggestions drawn from the literature. The majority implement solvability factors and are in possession of a computerized MIS. Some respondents did indicate, however, that their MIS was in need of significant modifications. Still, all other factors considered, a modern MIS is arguably a supervisor's greatest asset in effectively managing caseloads.



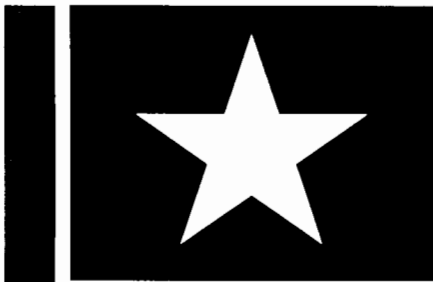
## References

- Becker, R.F. (2000). *Criminal investigation*. Gaithersburg, MD: Aspen Publications.
- Bennett, W.W., Hess, K.M., (1991). *Criminal investigation (3<sup>rd</sup> Ed.)*. New York: West Publishing Co.
- Block, P.B., & Weidman, D.R. (1975). *Managing criminal investigations: Prescriptive package*. Washington DC: U.S. Government Printing Office.
- Brown, M.F. (1998). *Criminal investigation: Law and practice*. Boston: Butterworth-Heinemann.
- Crawley, D. (1977). *Managing criminal investigators manual*. Washington DC: US Government Printing Office.
- Davenport, D.K. (2001). *State of Arizona office of the auditor general, performance audit*. Arizona: Office of the Auditor General.
- Garmire, B.L. (1982). *Local government police management (2<sup>nd</sup> Ed.)*. Washington, DC: The International City Management Association.
- Greenwood, P.W., & Petersilia, J. (1975). *The criminal investigation process (vol. 1): Summary and policy implications*. Santa Monica, CA: The Rand Corporation.
- Greenwood, P.W., Chaiken, J.M., & Petersilia, J. (1977). *The criminal investigation process*. Santa Monica, CA: The Rand Corporation.
- Independent Commission Against Corruption. (1993). *A high risk area: The management of criminal investigations*. A paper presented to the Independent Commission Against Corruption.
- International Association of Chiefs of Police. (DATE). *Managing the criminal investigation function*. Gaithersburg, MD: International Association of Chiefs of Police.
- Justex Systems, Inc. (2002). *Staffing of the Fort Worth police department investigative function*. Huntsville, Texas: Justex Systems.
- Neally, P.G. (1979). *Managing criminal investigations in Rochester, New York: A case study*. Cincinnati: Anderson.
- Osterburg, J.W., & Ward, R.H. (1992). *Criminal investigation: A method for reconstructing the past*. Cincinnati: Anderson.
- Palmiotto, M.J. (1998). *Critical issues in criminal investigation (2<sup>nd</sup> Ed.)*. Cincinnati: Anderson.
- Palmiotto, M.J. (1998). *Criminal investigations (2<sup>nd</sup> Ed.)*. United States: Austin and Winfield Publishing.
- Sullivan, M.J. (1998). Managing major case investigations: Suggestions for supervisors. *FBI Law Enforcement Bulletin* 67 (1), 1-5.
- Urlacher, G.F., & Duffy, R.J. (1987). The preliminary investigation process. *FBI Law Enforcement Bulletin* 59(93), 1-6.
- Ward, R.H. (1975). *Introduction to criminal investigation*. Reading, MA: Addison-Wesley.

*This is the last of a three-part series on the investigative function.*

*Thank you to the following agencies for their participating in this issue of the TELEMASP Bulletin.*

Abilene Police Department  
 Amarillo Police Department  
 Austin Police Department  
 Baytown Police Department  
 Brownsville Police Department  
 Carrollton Police Department  
 College Station Police Department  
 Corpus Christi Police Department  
 Dallas County Sheriff's Office  
 Deer Park Police Department  
 Duncanville Police Department  
 El Paso Police Department  
 Euless Police Department  
 Fort Worth Police Department  
 Galveston Police Department  
 Garland Police Department  
 Grapevine Police Department  
 Greenville Police Department  
 Harlingen Police Department  
 Harris County Sheriff's Department  
 Houston Police Department  
 Irving Police Department  
 Longview Police Department  
 Lubbock Police Department  
 Lufkin Police Department  
 North Richland Hills Police Department  
 Pasadena Police Department  
 Plano Police Department  
 Randall County Sheriff's Office  
 Richardson Police Department  
 Round Rock Police Department  
 San Angelo Police Department  
 San Antonio Police Department  
 Temple Police Department  
 Trophy Club Police Department  
 Tyler Police Department  
 Victoria Police Department



**BILL BLACKWOOD**

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

Rita Watkins, Ed.D.  
Executive Director

Kay Billingsley  
Publications Manager

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

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 or  
email: [jtillerson@shsu.edu](mailto:jtillerson@shsu.edu)

This bulletin was authored by Scott Mire,  
a doctoral student at Sam Houston State  
University. Mr. Mire has worked as a  
police officer in Louisiana and a border  
patrol agent.



*A Member of The Texas State University System*

**Bill Blackwood Law Enforcement  
Management Institute of Texas**  
Criminal Justice Center  
Sam Houston State University  
Huntsville, TX 77341-2417

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