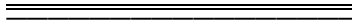
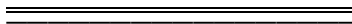


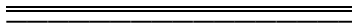
**The Bill Blackwood  
Law Enforcement Management Institute of Texas**



**Manpower Allocation for Criminal Investigations**



**An Administrative Research Paper  
Submitted in Partial Fulfillment  
Required for Graduation from the  
Leadership Command College**



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January 2007**

## **ABSTRACT**

Police departments have utilized manpower allocation charts for many years. These charts are used for determining the overall manpower requirements throughout a police agency. Numerous studies into patrol and traffic manpower distribution have been completed. However, there have been very few studies related to the staffing allocation in a criminal investigation section of a police agency. Police departments of all sizes have their own unique ways to distribute manpower. This is normally based on the amount of crime in their particular jurisdictions.

The research provided in this paper focuses on medium to larger sized police departments. One must be aware that these police departments are a part of an ever-growing population. Unfortunately, the budgets of these police departments do not match the growth rate of the community. For this reason, departments are searching for documented data on efficient manpower allocation. They are also concerned about the cost of adding additional personnel. The hypothesis suggests that most law enforcement agencies request additional staffing for criminal investigations without the mandatory documented justification for the increase. This research has demonstrated that most law enforcement agencies do not utilize any type of a manpower allocation method when staffing investigations. Moreover, most of these agencies request additional personnel based solely on what they believe they can get at the time.

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## INTRODUCTION

Individuals who enter law enforcement today have a perception that the area of criminal investigation is the ideal job. This can be attributed to television programs depicting CSI (Crime Scene Investigation) to be challenging, rewarding and exciting. However, across the nation only about twelve percent of law enforcement officers are actually assigned to the criminal investigation units. Since the criminal investigation division is a small portion of any law enforcement agency, the proper allocation of manpower is necessary. The challenges for police departments is determining the amount of personnel needed to effectively and efficiently investigate the offences occurring within its jurisdiction. For this reason, the researcher will investigate options regarding the distribution of manpower for criminal investigation divisions.

In today's fast paced society, police departments need to be adequately staffed in order to handle the caseload of its jurisdiction. At this time, there are numerous manpower allocation formulas and methodologies for police departments as a whole, with specific emphasis in the patrol division. However, there are no formal manpower allocation charts for the criminal investigations division. Suggestions can be found in several law enforcement management books for manpower distribution in a police agency. These books advocate that ten to twenty percent of the police force should be assigned to criminal investigations. Due to the population growth and economic decline of today's tax base, police departments have to manage resources in a more prudent manner than in previous years. The advice provided in law enforcement management books does not provide substantial evidence in order to justify the reallocation of sworn personnel from patrol into the criminal investigation division. Most management books

recommend a small percentage of the law enforcement agency be assigned to the investigation section. This does not provide an adequate staffing analysis for any law enforcement agency.

The purpose of this research is to investigate the process of staffing additional personnel in the criminal investigations division. To facilitate staffing needs, one must first research how to evaluate investigations. The next step is to develop an evaluation tool for individual investigators. Once the police department can accurately determine how to measure the efficiency and effectiveness of criminal investigations and each individual investigator, caseload assignments can then be reviewed. This will allow the department to begin to examine how to develop an accurate allocation methodology for criminal investigations. With this type of workload analysis, the law enforcement agency would ideally be able to provide scientific data to justify additional personnel.

This administrative research paper will contain multiple sources of information. One will be a review of the Denton Police Department's general orders regarding performance reviews and criminal investigations. Additionally, multiple surveys have been conducted to gather information regarding how Texas police agencies currently evaluate criminal investigators and staffing procedures. A review of additional materials will include: books, professional journals, internet findings, and interviews with professionals in this field.

This author intends to substantiate the need for effective instrumentation when allocating personnel as criminal investigators. Once this model is determined to be effective, the author hopes to relate the usefulness of individual investigators to the number of investigators needed to operate at the maximum efficiency and effectiveness.

Development of this type of model is necessary to provide law enforcement administrators with evidence of how to efficiently allocate personnel. The implementation of this model will allow an agency to utilize the existing personnel in a much more effective manner. Again, agencies will be able to validate their request with documentation as to why the additional manpower is needed.

## **REVIEW OF LITERATURE**

The ability to accurately assess the staff required to obtain optimal performance has plagued all industries, including law enforcement. Traditionally, the act of adding additional personnel to a police department has been more of an art than a science (Del Carmen Group 2004). In 1975 the Rand Corporation published a study of the Criminal Investigation Process. This study found the traditional approach to criminal investigation had little impact on whether a crime was solved or not. Instead, they believed if half of the investigative efforts were eliminated, or shifted, to more productive uses, a significant increase in criminal apprehension rates would be produced. One idea was to shift investigators back to preventative patrol units. This would allow patrol to improve citizen cooperation which in turn would increase criminal apprehension (The Criminal Investigation Process, 1975).

Unfortunately, the Rand Corporation theory of criminal investigation does not hold true with the computer age of today. Criminals are using more sophisticated methods to commit crimes. These crimes can be committed from anywhere no matter in what state or nation the perpetrator is located. It is imperative criminal investigators be better educated and skilled in technology. In addition to computer training, investigators need to be skilled in the significant technical and forensic specialization.

These are techniques that have to be learned and are more time consuming to complete than traditional methods of investigation. Patrol officers do not have adequate time to investigate these types of crimes. The more technologically advanced a society becomes the more training is required for catching the criminals. Because of these advances in techniques and methods criminal investigations, there is a need for additional investigators who are adequately trained.

With the increase of technology comes an increase of demands by the community. Society expects crimes to be resolved in a more timely manner. The community is less likely to tolerate being victimized and forgotten. Between January and December 2005 more than 685,000 people made claims alleging their identity had been stolen and used fraudulently. This resulted in more than 680 million dollars in lost fraudulent use of someone's identity (Federal Trade Commission Consumer Fraud and Identity Theft Complaint Data, 2005). Presently, state law allows a victim to file their complaint in the jurisdiction where they reside (Texas Code of Criminal Procedure) and citizens are demanding their local police find the culprit. This, in turn, increases the demand for additional criminal investigators. In addition to identity theft, criminals are taking advantage of the internet to commit other types of crimes such as the online solicitation of minors, online auctions and money scams with local and foreign moneys. This becomes important to the author since the Dallas/Fort Worth Metropolitan area is ranked in the top four per capita metropolitan areas for internet fraud in the United States. The Federal Trade Commission believes these types of crimes will increase.

In the past, a relatively small number of criminals commit a majority of crimes. These crimes still occur today and it still takes time and dedication to investigate these

cases. Future forecasters predict that further advances in computer technology will result in further increases in internet related crime. Internet crime has proven to be more profitable than most traditional property crime, which will contribute to a decrease in traditional property crime. Therefore, additional investigators will be needed for internet related crimes and managers will need valid methods to determine the number of investigators that should be added or deployed from other investigative areas.

The traditional approach has been to assign ten to twenty percent of an agency's authorized personnel to the criminal investigations division. However, this line of thinking maybe outdated. It is necessary for today's law enforcement agencies to reevaluate how they determine the number of criminal investigators needed for the demands of today as well as tomorrow. The public understands that criminal investigators must dedicate numerous hours on more serious crimes. However, they still expect some investigators to work on less serious crimes. They also expect investigators to quickly resolve crimes where the suspect is known, regardless of where the suspect resides.

One method of determining the number of investigators needed is through a workload analysis, including average investigators caseloads. The appropriate caseload is in part dependent on the type of crime specialization. The traditional thought has been that on average for the most serious cases you should only carry fifteen open cases per month. For crimes against a person, an investigator should have no more than 25 cases per month. For property crimes and less serious offenses, an investigator should have no more than 35 per month. Therefore when looking at the number of investigators necessary for a department, one must first examine the case



load of each investigator. A question that needs to be asked is “Are the case loads equitably distributed?” Second, one must review the severity of the crime committed and the time needed to investigate it. Finally, it is important to study the efficiency of the criminal investigative division in order to be able to determine the minimum number of investigators needed for optimal criminal investigation resolution. There are several models of case assignments being utilized today. One method is to look at the average time per month that an investigator is available for investigation by using the following formula:

$$40 \text{ hours/week} \times 52 \text{ weeks} \div 12 \text{ months} = 173.33 \text{ hours per month}$$

$$\frac{173.33[(.9tr) (.95p) (.9a) (.8pr)]}{xt} = nc$$

tr = Training @ 10%

p = Prosecution @ 5%

a = Administrative / other duties @ 10%

pr = processing @ 20%

xt = Time allotted per case

nc = Number of cases that can be investigated in a month

Even though this formula indicates the number of cases to be investigated in a month, it does not provide data to assist administrators in judging how many investigators are needed in a particular jurisdiction. The agencies surveyed for this project also did not have any system in place to determine how many investigators are needed. Several agencies selected investigators solely on their seniority within the department. Other agencies use an interview process. A few agencies use a written test to select investigators. Most agencies use nothing more than the performance evaluations of the officer while being assigned to patrol. This type of selection process can lead to an inefficient criminal investigation division.

The most common method of case assignment is to evaluate the case using what is called solvability factors. This is the most common way of assigning cases within most departments. The most common factors are that: the suspect can be named, the suspect can be identified, the address of the suspect is known, the suspect can be located, the vehicle license plate number used in the crime is known, the vehicle can be identified, there is traceable property, there are identifiable prints, a significant modus operandi can be developed, it is reasonably suspect that there was a limited opportunity to commit the crime (i.e. Employee, or suspect had limited access, ect.), an offense of great public interest or concern, seriousness of the offense (i.e. rape, homicide, robbery, aggravated assault, etc.).

In some police departments, cases are immediately assigned if any of the solvability factors are present. Other agencies assign values to the above list. Generally, if the file scored above five points then the case is assigned to a criminal investigator. The primary reason for adopting solvability factors is it gives the agency the ability to explain the reason to complainants why their particular case was or was not assigned to an investigator. The ability to clarify why the decision was made aids in the community/police relationship.

## **METHODOLOGY**

In order to build and maintain a highly professional criminal investigation unit, law enforcement agencies across the country must develop an accurate manpower allocation chart. Most agencies in Texas use no methodology as to how many investigators are needed to investigate the caseload of their jurisdiction. The purpose of this research paper is to review the way investigators are assigned at an Agency and to

see if there are deficiencies in this system. There is limited research into this area and future trends in law enforcement indicate that computer crimes are going to be the next epidemic. This is going to require additional highly trained investigators to keep up with the demands of the future. This author hypothesizes that this research will confirm there is a need to establish a methodology to manpower allocations within any agency. Additionally, the author contends that this study will also affirm that as a result of this study more information is going to be needed in this area in the future.

The research method used to complete this paper will include multiple sources of information. One is the use of books and literature on performance appraisals of criminal investigators. This will include professional journals, magazines, periodicals, and internet web sites. It will also include research completed by universities for police agencies.

Two surveys will be distributed to 21 different police agencies throughout the state of Texas. Survey participation will be requested of officers from agencies in varying size and geographic location within the state of Texas, and resulted in 100% response rate. The first survey will be regarding the evaluation process for criminal investigators and the second will examine how investigators were assigned. Analysis of this data will demonstrate that there are widely varying ways to evaluate employees and the way they are assigned.

## **FINDINGS**

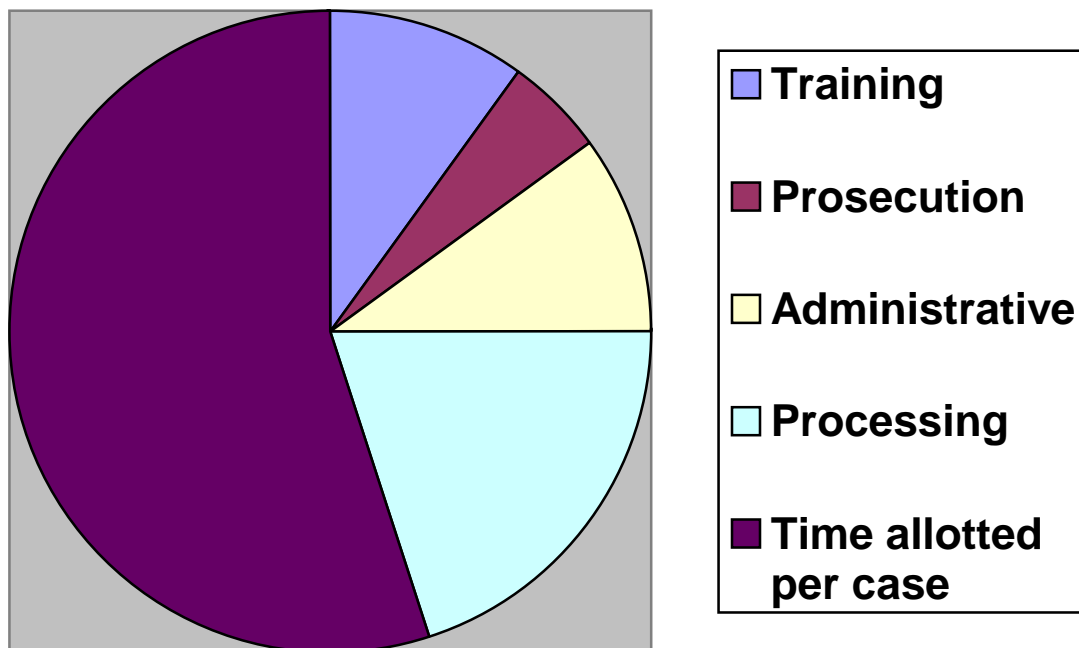
During the research of manpower allocation for criminal investigators, the author discovered there is limited information available concerning the amount of personnel needed to investigate crimes reported in a jurisdiction. With trends moving towards

internet crimes and fraud crimes, the patrol officer on the street will have less and less impact on these types of crimes. For example, pedophiles are now able to sit in the privacy of their homes and search the internet for child pornography as well as search for children to prey upon for sexual acts. Very few agencies in Texas are working on these types of crimes. When police agencies delve into this arena, they are quickly overwhelmed. Most of the investigators pretend to be juveniles, either male or female, in chat rooms. Investigators have had little trouble with these predators committing the offence of solicitation of a minor. It is more difficult for the investigators to arrange meeting with these pedophiles for a higher criminal charge. These are the types of cases patrol would have very little success in diverting since these crimes can be committed in ones home. The victims of these crimes are sometimes willing participants and therefore do not report them. For these reasons the patrol officer will have little effect in deterring these types of crimes no matter how they focus on patrol efforts.

Since 1997 internet crime and identity theft has grown steadily. Citizens are beginning to demand their cases be investigated and criminals brought to justice. In the year 2005 61% of the citizens who experience identity theft or computer fraud did not report it to their local police department. Out of the 39% of the people that did report the theft only 31% of the local departments took the report. This leaves 9% of identity theft or computer fraud without a crime report. This is currently costing the United States approximately \$680,000,000 per year and growing every year. The median average of loss per victim in the United States for 2005 was \$345. Citizens' attitudes towards this type of crime are beginning to change as more and more people are affected.

When the Del Carmen Study began looking into manpower allocations for criminal investigations, they found one must take in to account other activities the investigator participates in. These activities include; training, prosecution, administrative duties, and vacation/sick time. In most agencies, investigators are also active members of a tactical team, hostage negotiations team, and/or crime scene team. These additional responsibilities contribute significantly to the lack of time investigators have to adequately investigate crimes. This is why it is important to develop a formula to assist in manpower allocation.

In an examination of criminal investigation departments, the Del Carmen Study found that 10% of an investigators time is spent on training. The training includes the required TECLOSE (Texas Commission on Law Enforcement Officer Standards and Education) and any additional training offered. This model indicates a criminal investigator spends an estimated amount of 208 hours per year in training. This is significantly higher than the state average. The study also found that approximately 5% of the investigator time to be spent on prosecutions. This reflects the amount of time an investigator spends working with a district attorney to file a case, the time it takes for the case to go to grand jury, and the time needed for courtroom testimonies. At the same time approximately 10% of the investigators time is spent completing administrative duties. These duties range from shift briefings to vehicle maintenance. Finally, the criminal investigator is able to spend about 20% of their time actually investigating crimes.



$$\frac{173.33[(.9tr) (.95p) (.9a) (.8pr)]}{xt} = nc$$

tr = Training @ 10%  
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 pr = Processing @ 20%  
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 nc = Number of cases that can be investigated in a month

Utilizing the formula that Del Carmen provided you would be able to calculate the amount of time each case would take to investigate. The formula tries to take into account that cases are worked in a fragmented way rather than completing each investigation then moving to the next. This formula does have some areas of concern. The percentage of time given for training is higher than the average training time reported to TECLOSE. This percentage is significantly higher than the average training

hours across the state. This formula does not take into account vacation time or sick leave. The study states on average for the most serious cases you should only have fifteen open cases at any given time. For crimes against a person an investigator should have no more than 25 cases per month. For property crimes and less serious offenses an investigator should have no more than 35 per month.

It is very difficult to find any other information regarding allocation of resources to investigation. Several of the management theories state that 10 to 20% of the resources should be deployed as investigators. With the complexity of crime and the convenience of committing these crimes in your own home one is going to have to reevaluate this thought process and begin to make informed judgments regarding the adequate staffing issues in the future. Internet predators have a distinct advantage over regular criminals. The internet predators can hide in any state or country and attack you from that location without ever leaving their home. This makes these types of investigations very difficult and the investigator in the future is going to have to be better trained in this area to stay effective.

## **CONCLUSION**

Manpower allocations for criminal investigations is a tool that police department administrators can use to make more educated determinations for the deployment of resources within their agency. The purpose of this study is aimed towards medium sized and larger police departments to help determine the appropriate number of criminal investigators.

The hypothesis of this research suggested that there is an allocation chart for criminal investigators that could be used to accurately staff the criminal investigations

division. This is becoming more and more of a problem due to the population growth and shrinking budgets of departments today. Administrators must present factual reasons as to why more personnel are needed rather than relying on past management theories. Governing bodies of today have the daunting task of making hard line decisions as to budget requests of additional personnel in the face of ever shrinking budgets. During the interview process, research confirmed that very few agencies use any type of applicable determination for the allocation of resources to criminal investigation. Most agencies only ask for what they think they can get, rather than request and clarify what they need for a given position.

With the technological advances of today, criminals have the ability to strike from any where in the world. Internet crimes have steadily grown at an alarming rate. Citizens will no longer accept police departments only taking preliminary reports of these types of crimes. The victims of these crimes are beginning to demand these crimes to be investigated as thoroughly as other crimes being reported today. This demand on investigative services is going to require additional criminal investigators that are highly trained to combat this new crime arena.

The hypothesis was proven that there is a need for an allocation chart for criminal investigations. However, it is apparent from the research that this is a highly complex issue which has no easy answer. It would behoove an administration to develop a more accurate measure of criminal investigations for the purpose of asking for additional personnel.



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