

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

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**Telecommuting in a  
Public Safety Organization**

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

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## **ABSTRACT**

Telecommuting in the public sector is relevant to contemporary law enforcement because police departments are often asked to provide an exceptional level of service to the community while relying on limited resources. As the needs of the community continue to change and the demands of officers rise, it will become more challenging to find innovative ways to garner resources. Other challenges, such as rising energy costs, environmental concerns, and difficulty in retaining institutional knowledge, are impacting the decisions of city managers, council members, and department heads.

The purpose of this research will be to examine the concept of telecommuting and its feasibility in the public sector to redirect existing funds and resources. While telecommuting is often used in private corporations, the varied differences from the public sector may influence the decision to support this concept. Since there are a variety of positions within a public safety organization, the scope of this project will focus on non-emergency related activities. Topics to be reviewed include data security and productivity software that monitors the workflow process. Lastly, to address the differing needs of prospective employees, the concept of telecommuting will be related to its applicability to women in the workforce, with a focus on flexible scheduling.

The method of inquiry used by the researcher included: reviews of books, periodicals, journals, Internet sources, and a survey distributed to 22 Texas law enforcement agency representatives. Contributing research to this assessment will be evaluated to present a factual representation of the issue and will ultimately offer an implementation strategy for law enforcement agencies. Because of the vast implications of this theme, a variety of resource materials within the study of business, sociology,

psychology, and criminal justice will be considered. The research obtained will serve as a catalyst to aid decision-making for departments regarding telecommuting and will focus on non-emergency public safety employees.

The researcher discovered that while telecommuting is possible, there are many factors that must be addressed in order for successful implementation. Considerations for applicability include size of the organization, eligible positions and personnel, and funding and management support. In conclusion, agencies that are interested in telecommuting must support the initiative and ensure that multiple considerations are given to determine whether or not it is feasible within an organization.

# TABLE OF CONTENTS

	Page
Abstract	
Introduction. ....	1
Review of Literature . . . . .	3
Methodology . . . . .	8
Findings . . . . .	9
Discussions/Conclusions . . . . .	12
References . . . . .	16
Appendix	

## INTRODUCTION

The issue to be examined considers whether or not the concept of telecommuting can be feasible in the public safety environment. While the idea most often conforms to a private organization, public officials have been slow to incorporate the concept into public safety organizations despite the increase in operating expenses for law enforcement agencies. As the needs of the community continue to change and the demands of officers rise, it will become more challenging to find innovative ways to gather resources. Rising energy costs, environmental pressures, and retention of institutional knowledge are impacting the decisions of city managers, council members, and department heads and dictate the evaluation of innovating, cost-saving measures. The relevance of telecommuting in law enforcement agencies is critical to manage a changing environment with limited resources. With the increased internal and external demands and expectations placed on police officers and the law enforcement agency, resources continue to be a pivotal point in decision-making and initiatives. The limitations of resources dictate innovative planning by public safety leaders.

The purpose of this research will be to examine the concept of telecommuting and its feasibility in law enforcement agencies to redirect existing funds and resources. The study will also propose implementation strategies for telecommuting. While telecommuting is often provided as an incentive in the private industry, police departments within the public sector could benefit from offering it to current and recruited employees. Police patrol operations occur at all times, and many non-patrol positions exist in police organizations. The scope of this project will focus on non-emergency related activities since police patrol functions are not suitable for

telecommuting. Research will also focus on the ability to use telecommuting as an incentive for women in the workforce. Specifically, flexible scheduling will be discussed in this light. The research question to be examined focuses on whether or not the concept of telecommuting would be feasible in the law enforcement arena. Areas of concern related to the topic will be identified and potential solutions will be recommended to proceed with the concept at a level that is manageable by the individual agency. Agency characteristics that would more easily incorporate the concept into the organization will also be identified.

The intended method of inquiry used by the researcher included: reviews of books, periodicals, journals, Internet sources, and a survey distributed to 22 Texas law enforcement agency representatives. Existing research will be evaluated to factually represent the issues of telecommuting. The researcher will present findings and offer a recommendation for implementing telecommuting in police departments. Academic areas of business, sociology, psychology, and criminal justice will provide the basis of research and form conclusions from these areas. The research will provide police department heads with findings that will help in making decisions about implementing telecommuting. The intended outcome or anticipated findings of the research will demonstrate that telecommuting in the public sector will be possible; however, many agencies will hesitate to support such change because of the varied responses within the organization and the adjustments necessary to facilitate the concept. The idea of data security will provide the greatest liability to an organization that supports telecommuting. To help mitigate this, pre-selected criteria should be used to identify positions within an organization that would lend to the concept of telecommuting. The

researcher also predicts that the results will support the economic and environmental reasons for telecommuting. This job benefit will also increase the organization's ability to attract new employees and offer an incentive to retain those with institutional knowledge.

The field of law enforcement will benefit from the research or be influenced by the conclusions because operational costs are increasing while annual budgets are diminishing. Organizations are being challenged to identify innovative ways to operate more efficiently while adhering to the highest service levels. Analysis of telecommuting in law enforcement agencies will benefit prospective employees and help retain institutional knowledge for an organization. It will also help the public sector operate more efficiently and be better aligned with private organizations. Telecommuting in the public sector provides an avenue to help reduce costs, increase efficiency, and provide a more appealing work environment. The expected benefits of researching telecommuting in the public sector can extend beyond the area of law enforcement and can be used as a model for other city departments.

## **REVIEW OF LITERATURE**

Current research in the area of telecommuting has primarily focused on the private sector with increasing attention within the federal government. The research unequivocally indicated that telecommuting is a viable option for virtually any organization; however, there are many issues that must be addressed to introduce the concept within a law enforcement agency. There are also varied social, legal, and political influences within law enforcement agencies, which may be the greatest issue to overcome.

Despite the passage of Public Law 106-346, a federal law requiring all executive agencies to establish policies on telecommuting, merely 9.5% of the more than 1.2 million federal employees participated in the program at least once a month by 2005, according to the Office of Personnel Management (Bednarz, 2008). While there has been an increased interest in more federal participation in the program, the current legislation allows for the participating agency to determine eligibility requirements within each agency. The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) was ordered by an arbitration panel in early 2008 to allow its legal instrument examiners to telework as part of a pilot project. The primary resistance centered on document security, despite a recent survey of federal Chief Information Security Officers (CISO) who noted that requirements to meet the Federal Information Security Management Act are still possible within a telecommuting environment. Additionally, CISOs said that 94% of teleworkers do not pose a security threat.

To gain further compliance on the concept, a Telework Improvements Act was passed in June 2008 by the House of Representatives that further expanded the concept by requiring agencies to develop a program that would allow eligible employees to telework at least 20% of their hours (Walker, 2008). Not only does the bill require agencies to designate a senior-level teleworking manager to oversee the agency participation, it requires that the Government Accountability Office submit an annual participation report to congress. This added bill gives proponents of telecommuting optimism that the idea could become law in the near future. Political environments and changing demographics, not legislation, may be the catalyst in the adoption of



telecommuting in the federal system, which could then pave the way for state and local governmental agencies.

While the daily commute could be dramatically shortened, from an average 20-mile trip to a few seconds of key strokes, the primary resistance toward the concept of telecommuting has come from data security measures. With the introduction of Virtual Private Network (VPN) technology in the mid-1990s, security sensitive positions have been slow to evolve into its acceptance. A VPN is primarily a software conduit to connect the remote user to a local area network (LAN), generally through the Internet (Davis, 2006). Without compromising privacy, the VPN allows for the remote user to log into their LAN, essentially tricking their home computer to think as if it is at work. The user would then have access to files normally kept on the work's private network at home or, in most cases, from anywhere Internet is accessed. For example, VPN technology is readily available in some law enforcement agencies. Access to this system depends greatly on the assignment of the officer and is often used for employees that are on call and require access to computer files and systems that are normally at the office computer. VPN technology allows for timely responses and enhanced service, provides similar security as a LAN, and costs much less than the alternative leased data lines.

Recent rapid increases in fuel costs may also increase an employee's demands for telecommuting in the workplace. The Energy Information Administration reported that in August 2008, the national average price for a gallon of gasoline was \$3.78. In order to estimate the potential savings to an employee, take the example of an employee who commutes a roundtrip average of 40 miles per day to work. The

employee's vehicle averages 20 miles per gallon. The monthly gasoline cost to the employee, while commuting daily, will be \$151.20. If the employee was allowed to telecommute only one day each week, commuting cost would decrease by 20% to the employee, easily saving over \$350 per year on fuel costs alone. With decreased operating budgets and limited resources to compensate employees, telecommuting offers a convenient and affordable way to provide incentives to employees while reducing additional costs to the organization associated with staffing a building.

In addition to cost savings by the organization and employee, proponents of flexible time are also leading the way to help incorporate telecommuting. As organizations continue to seek diversified candidates to fill an increasingly aging workforce, it is critical that innovative recruiting and compensation packages are introduced to maintain the service levels of the organization. To illustrate this, more than 90% of the women surveyed by the American Society of Training and Development have used some form of flexible work arrangements during their careers, with over 85% of those remaining in full time employment ("Women Taking Advantage of Flex Benefits," 2007). To further demonstrate the support for telecommuting, in 2007, each of the companies listed in the "Working Mother's" magazine's list of the best 100 companies noted telecommuting as a benefit to the employee.

According to Ellison (2004), new evaluation techniques or strategies must shift from a behavior-based to result-based evaluation program, which differs from the traditional sense of supervision. As a result, Ellison (2004) posited that there must be an increased level of trust within the teleworking environment. Additionally, there is a sense of isolation of teleworkers as it relates to office synergy, which has resulted in some

resistance to progress on the concept. Ellison (2004) also listed that the institutional knowledge within the organization can be hindered by telecommuting. With reduced presence at a single location, succession planning is slowed by the inability to clearly mentor employees within an organization. Lastly, there must be a commitment by the organization to fund the increased needs of the teleworking community, which will result in increased resource investments, including computers and Internet services.

Primary criticisms of telecommuting within the public sector continue to arise from the federal government, as explained by Gross (2006). Gross (2006) contended that governmental agencies fail to see the value of telecommuting because of concerns related to data security, productivity, and supervision of participants. Telecommuting advocates, on the other hand, contend that an organizational attitude change is necessary to ensure successful implementation of the concept, which would benefit organizations in times of relocation or terrorist attacks since employees could easily work from remote locations.

Taskin and Edwards (2007) studied the possibilities and limits of telecommuting in public organizations. The focus of the study was on full-time home working as opposed to sporadic instances of telecommuting. The study identified factors that influence the understanding of implementing telecommuting within an organization. Taskin and Edwards (2007) first listed structural factors, such as organization size, job descriptions, and management style as influential in the decision to use this concept. Secondly, management of the telecommuting process, such as support and transparency, is integral in adoption. Thirdly, the oversight of the project is crucial in ensuring success and cohesion within the organization.

Jerving (2007) stated that telecommuting, based on interviews with various chief executive officers, requires employees to have a variety of qualities that lend them to telecommuting. Characteristics of eligible employees include self-motivation and disciplined workers that can independently operate outside the confines of an office building. One additional disadvantage listed includes distractions within participants' home life that can affect the employee's performance.

## **METHODOLOGY**

The research question to be examined considers whether or not telecommuting is possible within a public safety organization. While federal government workers have the ability to telecommute, most do not participate in the program. Reasons for the lack of interest are often not due to the employee, but lack of support from employers. Many cite lack of productivity and operational oversight as primary reasons to not support the initiative. The researcher hypothesizes that telecommuting within the public safety sector is possible, barring organizational change to consistently support the initiative. Furthermore, the researcher hypothesizes that not all positions within a public safety organization would be eligible for the project. Careful consideration to select personnel is integral to implementing telecommuting successfully.

The method of inquiry will include: reviews of books, periodicals, journals, Internet sources, and a survey distributed to 22 Texas law enforcement agency representatives. The research findings, compiled with the results of the surveys, will be evaluated and used to offer recommendations for implementing telecommuting. A variety of social services field of studies will be used for research. Findings and

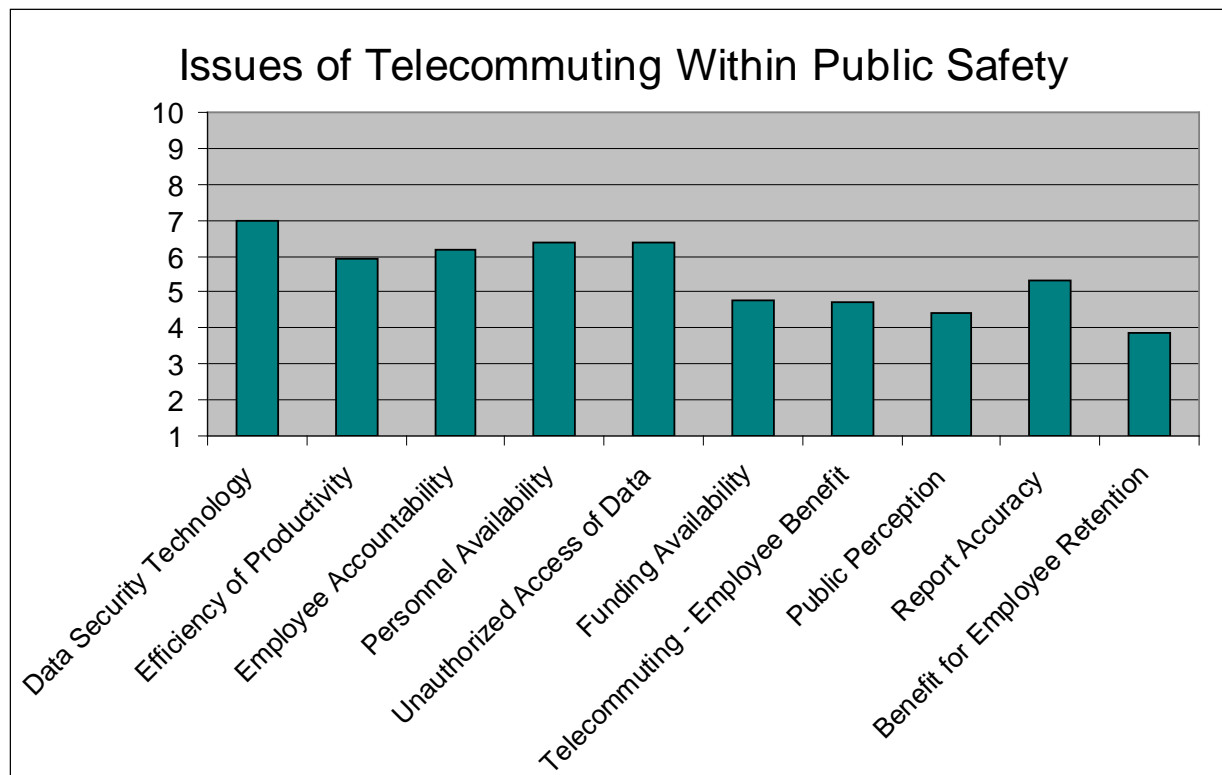
recommendations will aid police departments in making sound judgments on implementing the practice of telecommuting.

The instrument that will be used to measure the researcher's findings regarding the subject of telecommuting in the public sector will include a survey. The size of the survey will consist of a rank order scale, five yes/no questions, and a Likert scale on eight separate questions. The survey will be distributed to 22 survey participants from police agencies across the state of Texas. The agencies represented in the study range in population sizes of 2,000 to 278,000, with 55% of the representing populations being over 75,000 residents. The average number of sworn personnel for participating agencies is 93 officers.

The response rate to the survey instrument resulted in all surveys distributed being returned to the researcher for data analysis. The information obtained from the survey will be analyzed by the researcher to determine issues that existing agencies will face and to poll local law enforcement agencies on their comments regarding telecommuting within the public sector.

## **FINDINGS**

The researcher conducted independent research on the topic of telecommuting within a public safety organization. The initial question posed was a rated scale that allowed users to list the order of importance on a variety of telecommuting issues that impact its implementation within a public safety agency. An average rate was derived by compiling each of the participant's responses, and the average for each section is listed below in Figure 1.



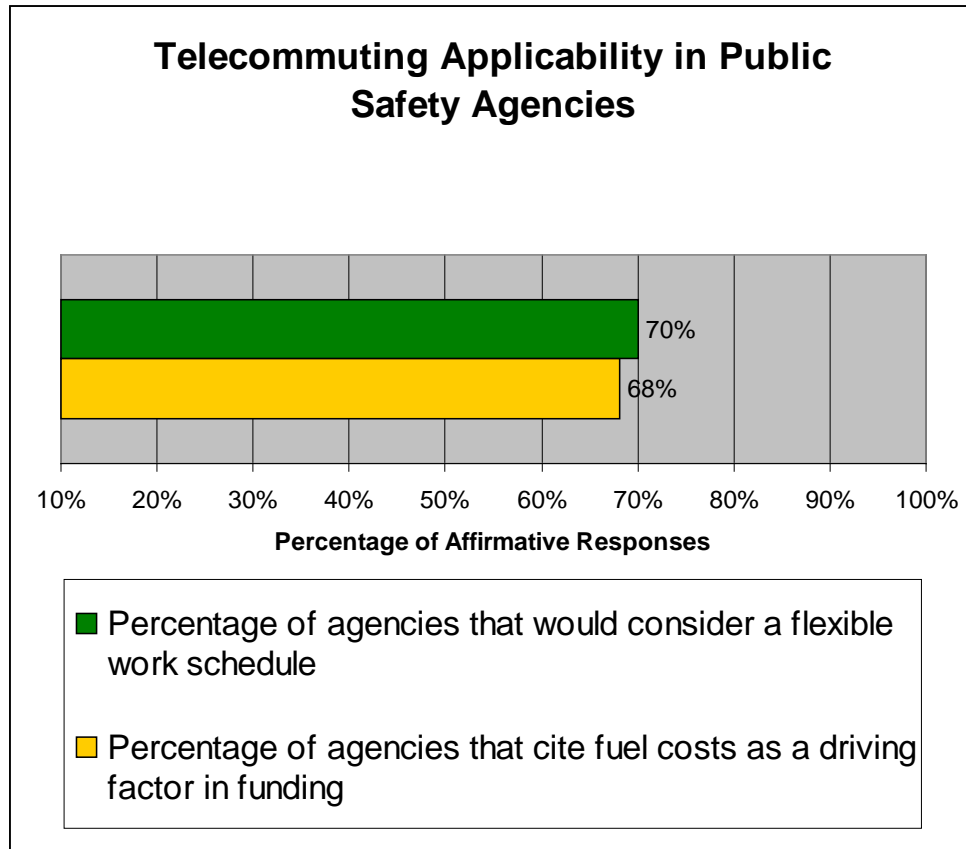
**Figure 1.** Represents the order of importance (1 – least important to 10 – most important) of the topics on the impact to telecommuting.

The most important issue that participants believed to contribute most to the notion of telecommuting was data security technology. The primary point of concern raised through open-ended questions in the survey was whether or not the data being transmitted to and from the offsite location would be secure and if it could be intercepted.

The influence of secondary importance listed included personnel availability and unauthorized access of data. Noting personnel availability as a contributing factor, while primarily impacting smaller agencies, can greatly influence the delivery of service. Smaller agencies that decide to participate in a form of telecommuting may find themselves unable to respond to a critical incident because of the lack of available

personnel. Larger agencies may be able to absorb the cost of telecommuting in terms of personnel availability. Unauthorized access to data was of equal concern, as respondents noted the lack of thorough background checks and clearances for those that might access the work computer. An example noted during the development of the survey was of an employee who participates in the program but shares an apartment with another person. Currently, no criminal background check is conducted on other members of the household who could have access to confidential data.

Additional data was derived from the survey regarding consideration of flexible schedules within an organization and whether fuel costs have been cited as limiting funding availability within organization. Of the survey respondents, 70% of the responses showed agency consideration for a flexible work schedule to include alternate work hours. Law enforcement communities are beginning to see the need, as depicted by the response to this question, of the value for added incentives for its workforce. Secondly, 68% of the responses have noted that fuel costs continue to be a driving factor in the availability of funding for the organization. This indicates that there is an increasing need to evaluate alternatives to the traditional work hours and is, in part, being driven by rising fuel costs. Figure 2 depicts both survey results.



**Figure 2.** Represents the percentage of affirmative responses to questions posed by the researcher related to telecommuting within a public safety agency.

## DISCUSSIONS/CONCLUSIONS

The problem or issue examined by the researcher considered whether or not telecommuting is feasible within the public sector, specifically within a public safety organization. Telecommuting has long since been embraced by the private sector as an employee incentive and as a measure to reduce overhead costs. Interest in telecommuting has begun to increase within the federal government but has been slow to adopt a standard that mirrors that of private corporations. This hesitancy is even more prevalent within local governments and public safety organizations.



The purpose of this research was to examine the concept of telecommuting and its feasibility in the public sector to redirect existing funds and resources. Consequently, agency characteristics that lend itself to the concept of telecommuting were identified during the study. Through the research, it was determined that telecommuting is possible within a public safety organization; however, several factors must be integrated into the organization before it is implemented. Understanding that larger agencies have greater resources to implement the strategy, management must also fully support the concept to ensure its success. Positions that lend themselves to telecommuting must be identified prior to participation. The characteristics of these positions require personnel that are self-motivating and can operate with little supervision. The job functions of the position can vary in scope; however, the position would require assignments that do not require much collaboration with others. Information contained and transferred from telework computers must be secure. With that, software that accounts for an employee's work from home should also be considered. Lastly, funding must be secured to purchase computers and equipment for participants of telecommuting.

The research question that was examined focused primarily on telecommuting within the public sector, specifically the public safety organization. The researcher hypothesized that telecommuting is possible within all public safety organizations. The researcher concluded, from the findings, that while telecommuting is possible, there are many factors that must be addressed in order for successful initiation. Considerations for applicability include size of the organization, eligible positions and personnel, and funding and management support. A threshold related to organizational size was not identified within the study.

The findings of the research did support the hypothesis. The reasons why the findings did support the hypothesis are probably due to a variety of factors. First, the research proved that the technology currently provides a method to incorporate telecommuting within an organization. Second, the research proved that while funding constraints continue and resources are becoming scarcer, law enforcement agencies have historically resisted the concept of telecommuting. However, findings indicate that the window of opportunity is approaching. As limited resources continue to be integral in effectively operating an organization, police agencies do show some openness to alternate work schedules. Most agencies polled would not support telecommuting; however, they would allow forms of alternate shift schedules. Organizations' interests in evaluating telecommuting practices have increased throughout the years.

Limitations that might have hindered this study resulted because of a reduced number of surveys distributed for evaluation. The primary audience for the survey included a variety of different sized agencies. While the sample size is limited, police agencies represent a cross section of police departments in the United States. Respondents were candid about telecommuting and how it would affect their specific department. While conclusions could be drawn from the responses, a larger sample size of respondents could make stronger conclusions applicable to police agencies throughout the United States.

The study of telecommuting in the public sector is relevant to contemporary law enforcement because departments are increasingly dealt reduced budgets and increased service level expectations. Employees, city management, and the community serves to benefit from the results of this research because it is a timely issue in today's

economy. Organizations will also stand to benefit from this concept because telecommuting is often viewed as an incentive and can enhance the ability to recruit new personnel and maintain employees who might otherwise be eligible to retire.

## REFERENCES

- Bednarz, A. (2008). More federal workers telecommuting. *Network World*, 25(5), 12-39.
- Davis, J. P. (2006, August). Telecommute Safely. *Journal of Accountancy* 202(2), 39-40.
- Ellison, N. (2004). *Telework and social change: how technology is reshaping the boundaries between home and work*. Westport, CT: Praeger.
- Jerving, J. (2007, February). Telecommuting Gains Favor. *Executive Suite*, 26-27.
- Taskin, L. & Edwards, P. (2007). The possibilities and limits of telework in a bureaucratic environment: lessons from the public sector. *New Technology, Work and Employment*, 22 (3), 195-207.
- Walker, R. (2008, June). House telework bill advances. Retrieved October 11, 2008, from <http://www.fcw.com/online/news/152757-1.html>
- Women Taking Advantage of Flex Benefits. (2007, March). *Training &Development*, 15.

## APPENDIX/APPENDICES



# Telecommuting Survey Form

October 2008

In conjunction with the Leadership Command College of the Law Enforcement Management Institute of Texas, the researcher is evaluating the feasibility and implications of telecommuting for non-emergency public safety personnel in law enforcement agencies. For the purposes of this study, non emergency public safety personnel will be defined as an employee of a public safety organization, either sworn or professional staff, that is not subject to emergency calls (i.e. patrol operations). Furthermore, telecommuting is defined as “working at home by using a computer terminal electronically linked to one's place of employment.”

Identifying respondent information and individual survey responses will remain confidential. Your participation in this voluntary survey is greatly appreciated and it may be returned to Sgt. Os Flores.

## INSTRUCTIONS:

Rate the following in order of importance (1 - least important, 10 - most important) in terms of the potential impact of telecommuting within public safety organizations.

Data security technology (computer hardware, network, etc)	_____
Efficiency of productivity	_____
Accountability of employee time	_____
Personnel availability	_____
Security of data from non-employed individuals within employee's household	_____
Funding availability for equipment allocation for home use	_____
Telecommuting as an incentive program to recruit employees (both sworn and professional staff)	_____
Public perception	_____
Report accuracy	_____
Telecommuting as an incentive program to retain current employees (both sworn and professional staff)	_____

1. Does your agency participate in telecommuting for any segment of the organization?

Yes

No

a. If you answered yes,

i. Approximately what percentage of the workforce participates in the program

- 0-24 %  
 25-49 %  
 50-74 %  
 75-100 %

ii. What unit or division do participants represent?

- Administrative – Professional Staff or Sworn (Circle One)  
 Investigative – Professional Staff or Sworn (Circle One)  
 Other (please explain): -
- 

2. Does your agency regularly discuss budget processes?

- Yes  
 No

a. If you answered yes,

i. Has rising fuel costs been discussed as a driving factor in funding availability?

- Yes  
 No

3. Has your agency, city or county governments discussed telecommuting as potential options to mitigate rising fuel costs?

- Yes  
 No Why not?
- 

a. If you answered yes,

i. What is the primary reason for the interest?

- Cost  
 Environmental Impact  
 Other (please

explain): \_\_\_\_\_

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4. Would your agency consider a flexible work schedule to include alternate work hours or flextime hours?

- Yes  
 No

5. Do you think that your agency would be able to participate in some form of telecommuting for your workforce? Why or why not?

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Rating Scale

Using the scale below, rate each of the following trends or events to assess the impact of telecommuting for police employees.

1 – Very Important 2 – Important 3 – Average 4 – Slightly Important 5 – Not Important

A. Change in technology:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
B. Traffic congestion:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
C. Concerns for security of police files:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
D. Conservation of resources:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
E. Pollution:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
F. Cost of fuel:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
G. Incentives for workforce:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
H. Telecommuting training mandate and implementation strategy:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Agency Information:

Agency Name: \_\_\_\_\_

Respondent's Name and Contact Phone: \_\_\_\_\_

Number of sworn personnel: \_\_\_\_\_

Number of professional staff: \_\_\_\_\_

Approximate population of jurisdiction: \_\_\_\_\_

Jurisdictional description: City County  
State Federal

COMMENTS:

Add any observations or opinions related to the concept of telecommuting here.

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THANK YOU