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**A Twelve-hour Compressed Work Schedule for Police Patrol:
A Case Study**

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**An Administrative Research Paper
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ABSTRACT

Common to all law enforcement agencies today is the concept that governmental agencies must provide a greater amount of service with less tax dollars. Effective scheduling is one way of doing more with less. The purpose of this study is to determine if implementing a twelve-hour shift will provide a viable option to the traditional eight-hour work schedule.

Literature was reviewed and surveys conducted to determine if a conversion from eight to twelve-hour shifts would: increase manpower, decrease usage of sick and vacation time, increase a department's ability to conduct proactive police activities other than calls for service, and reduce the overtime budget. Officer satisfaction and perceptions of the administration and rank and file were also considered.

After conducting the survey and reviewing the available literature, the twelve hour shift seems to be an excellent replacement for the traditional 8-hour shift. The scheduling of the shifts can be done in a rather simple manner and the shifts seem to be universally liked by officers that were polled.

Indicators in the literature and survey seem to point to a real probability of reducing the cost of overtime and sick time under this system. Morale stands a very good chance of increasing under the 12-hour shift due to greater job satisfaction. Fatigue initially can be a safety concern but all indicators are that officers will become acclimated to the hours in a rather short period of time. Overall, the 12-hour shift seems to be a very good project to implement on a trial basis to determine if it will work in a real setting.

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INTRODUCTION

Common to all law enforcement agencies today is the concept that governmental agencies must provide a greater amount of service with less tax dollars. One of the primary concerns to all law enforcement agencies is the ability to provide enough patrol officers at any given time to provide the services that are needed. Most police departments and sheriff's departments provide services to the public with a minimum amount of staffing, which affects officer safety, response times, and the ability to conduct other proactive types of police work.

The purpose of this study is to determine if implementing a twelve-hour shift will provide a viable option to the traditional eight-hour work schedule. The focus of the research will be to determine if the department will benefit by increased manpower, decreased usage of sick and vacation time, the ability to conduct proactive police activities other than calls for service, and a reduction in overtime budget. Officer satisfaction and perceptions of the administration and rank and file will also be considered.

The method of inquiry consists of the research of available empirical data including: books, articles, and research papers related to the subject, and surveys of both supervisory and rank and file personnel from ten Texas police departments. Surveys were conducted by telephone and/or questionnaire.

The researcher believes that the twelve-hour shift will meet with some resistance from both the rank and file and supervisory personnel. The researcher predicts that some officers, especially those with seniority, will be against a change because they are already satisfied with their work schedules. Younger officers will probably be more accepting of the change because this system will allow them to have some weekends off. Supervisory personnel will initially be split regarding their ideas of the system due to factors concerning how sick time and vacation

time are administered, and FLSA (Fair Labor Standards Act) ramifications. The researchers initial prediction of the twelve-hour shift system is that sick time and vacation usage will decrease. The researcher also predicts that available manpower will, allowing for other types of proactive policing.

Research in this area can be extremely valuable to law enforcement agencies everywhere. With decreasing budgets and the expectation of doing more with less all departments must consider every available options when it comes to allocating resources including personnel. Twelve-hour shifts may create an environment in which more officers are available at any given time, sick time and vacation time are reduced, officers are more satisfied with their work schedules, and overtime dollars are reduced. It is my opinion that in our current era of policing the twelve-hour shift must be considered as an alternative to the traditional eight-hour shift.

REVIEW OF LITERATURE

The review of available literature was conducted which includes articles from law enforcement journals, prior LEMIT research papers , law enforcement bulletins and papers from outside the law enforcement community which relate to shift work and more specifically 12-hour shifts.

The research indicates that there are several key subject areas that have been central to the issue of utilizing 12-hour shifts in the law enforcement community. The include scheduling, primary comparative subject areas, implementation of the 12-hour shift, and evaluation criteria for the 12 hour shift.

Scheduling

An in depth review of scheduling actually uncovers a myriad of issues that must be

addressed when agencies decide to change to a different shift format. Some of the issues that are highlighted in the literature include: motivation for change, days off rotation, shift rotation, number of shifts, and what days off will be utilized. Another area of scheduling that was consistently dealt with in the literature is calculating cost under a 12-hour system.

Motivation for changing schedules will vary from agency to agency and most notably include doing “more with less.” However, another motivation for changing traditional scheduling is characterized very well by Davis and Tracy (1980):

The rationale in implementing such an unusual schedule was simple. The many constraints placed on police administrators – pension laws, civil service rules, working agreements, and personnel ordinances – leave little room for innovation. Police administrators, therefore, must be constantly alert for methods of maximizing effectiveness, regardless of how unusual those methods may be. (p. 7)

The days off rotation is not complicated, however an agency that is accustomed to fixed or rotating eight hour shifts will find them foreign. The predominant days off schedules presented in the literature are the 12-4 plan; the 4 On 4 Off plan; and a variation of these plans which, in this paper will be referred to as the 2-2-3 plan. All of these plans, in their simplest form, consist of four platoons; two platoons work day shift and two platoons work night shift in some form or fashion. Each set of shift platoons alternate days off.

12-4 Plan

A description of the 12-4 plan is characterized below according to the TELEMASP bulletin. (July 1995)

The 12-4 plan basically divides the patrol division into four platoons. One-half of the division is working while the other half are on days off. This plan gives the officers three

to four days off depending on how the agency sets up their schedule. In some cases the officers will work three 12-hour days and one 4-hour day (“Kelly Day”) in order to work a 40-hour week. (p. 5)

4 On 4 Off Plan

According to Davis and Tracy (1980) “The Everett, Wash., Police Department has implemented a large-scale schedule change in its patrol division, consisting of a 12-hour shift, 4 days on and 4 days.” (p. 7)

2-2-3 Plan

The 2-2-3 plan divides the patrol division into four platoons. One-half of the division is working while the other half are on days off. This plan gives officers four days off during the first week and three days off in the second week however, the four days are split by two work days so an officer does not have to work more than three 12 hour shifts in a row as found in the 4-3 plan. This plan is a two week cycle and a Friday, Saturday, Sunday weekend is rotated between the platoons every other week;

According to Officer Bob Lausten, “...The deployment plan is based on a two-week (14 day) pay period. For example, the officers on shift I work Monday and Tuesday, are off Wednesday and Thursday, and work Friday, Saturday, and Sunday the first week. During the second week, they are off Monday and Tuesday, work Wednesday and Thursday, and are off Friday, Saturday and Sunday. One of the work days is an eight-hour day.” (p. 29)

There are several other variations to the 12-hour shift that involve overlapping shifts and increasing the number of platoons. However, the above three seemed to be favored in the literature for days off rotation. Shift rotation is another element of scheduling that has several different methods of implementation.

Shift rotation is a factor that varies greatly from department to department. The literature focuses mostly on a rotating shift format. Some departments rotated shifts inside the week while others did a six-month rotation. There are also departments that use a fixed shift on a seniority bid basis. This allows senior officers to bid for the shift that they prefer. Another area that can allow for a seniority bid system would be the actual days off.

Determining days off under the 12-hour system can be extremely easy. For example, the 2-2-3 plan simply rotates days off every other week for all platoons. Each platoon takes turns on their two days on and two days off week and on their three days off week. This seems to be an equitable system in that every officer will get a three day weekend (Friday, Saturday, and Sunday) every other week. However, on the other end of the spectrum it can get more challenging to schedule the 12-Hour shift. Under the four on four off plan a monthly schedule must be maintained to allow officers to know what days off they will be getting because days off will rotate. Another challenging scheduling issue is court time. However, as noted by Metzger (1995), flexibility seemed to be the key to this issue:

Although we were initially concerned on this point, particularly with regard to the night-shift officers, this has not been a significant problem. The very few times that an officer has had an early morning case scheduled after the night shift, we have either swapped him with the swing shift or, depending on the length of time involved, had him appear in

court after working his shift. Some jurisdictions have successfully worked with the courts to schedule court appearances for night shift officers in the afternoon. (p. 30)

Primary Comparative Subject Areas

Throughout the literature reviewed there are several areas that are consistently discussed that have an impact on both the department and the officers working for the department. These areas of interest are referred to, in this paper, as primary comparative subject areas. These subject areas are critical to the functioning of any police department and should be seriously studied when conducting a shift change. The primary comparative subject areas are: recruitment and retention issues, productivity, fiscal impact, morale, sick time usage, fatigue, and quality of service.

Recruiting new officers and retaining existing officers is a very important issue in our current environment when qualified applicants are very difficult to find and even harder to get hired. With regard to the literature there is a school of thought that indicates that the 12-hour shift can be an effective recruiting and retention tool. The predominant argument in the literature indicates that a department that offers the 12-hour shift is offering officers more days off to spend with family or for leisure. The extra time off is viewed as a “benefit” to officers and those departments that offer this “benefit” will enjoy an advantage in recruiting and retaining officers. An example of this is demonstrated by Williams and Eide’s (1995) assertion on recruiting.

“Indications are that compressed work schedules are an important recruitment and retention tools. Departments can no longer recruit and retain employees solely on salary and reputation. (p. 18)

In the literature reviewed there was no information that rebutted that 12-hour shifts could be used as an effective recruiting tool.

A review of literature indicates that there is some debate as to whether productivity increases, decreases or is static. There are arguments on both sides but an interesting view on this is cited by Smith (1998) who described the 12-hour shift as a non-desirable alternative to the 8-hour shift.

Smith States, “There were several areas of concern that were virtually unaffected by the twelve hour work schedules according to surveys completed by Texas agencies.

Complaints against officers, fleet accidents, productivity, and Officer Survival instincts remained the same.” (p. 8)

Fiscal impact to a department is another area that is covered quite extensively in the literature. Although there is some debate about the impact of the 12-hour shift, most of the literature indicates that sick time and overtime costs would probably be reduced. Court overtime however, was predicted to increase. However, after considering all fiscal matters in total the literature indicates that the fiscal impact will either be a cost savings or have no effect.

Morale is one of the most important factors that has to be assessed in a police department. Again, under this subject area, the studied literature favors the fact that morale will improve and that officers are very satisfied with the 12-hour shift. In fact, as indicated by Loudoun (2004) one of the more important aspects of changing shifts is realized through involvement of the effected employees in the process.

Loudon cites Conrad-Betschart as one example of how involving employees with decision making which directly affects them can improve morale;

Conrad-Betschart (1990) found that giving employees the ability to have input into deciding on working conditions during a roster change (such as provisions for an extra break during 12-hour shifts and improved meal facilities at night) was critical for the acceptance of a new roster. (p.1).

Fatigue is a critical factor that can influence many of the other subject areas ultimately affecting employee performance and morale. The literature covers fatigue in some detail and as expected there are differing opinions and studies that indicate that fatigue is and is not a factor while using a 12-hour shift. However, Williams and Eide (1995) indicate that fatigue for the 12-hour shift was not as significant a factor as many have made it out to be:

Most agencies agreed that fatigue was a concern when implementing a compressed work schedule. However, many agencies reported that the problem resolved itself after two or three months. Employees seemingly adapted well to compressed work schedules... current circumstances indicate that many officers are already working 10 or more hours without a claim of fatigue. (p. 21)

Quality of service is the final area that is heavily covered in the literature in reference to the 12-hour shift. The literature seems to be consistent in this area that it is difficult to evaluate the quality of service due to the kind of shift that is utilized and that quality of service is based on a number of factors one of which may be general satisfaction or dissatisfaction with a schedule. Cunningham (1990) addresses this issue in his article and states “Most studies which have sought to answer this question suggest that there are no more complaints from the public under the twelve-hour shift schedule” (p. 189).

With all of the critical areas identified in reference to the 12-hour shift the literature also examines the best method of implementing a shift change.

Implementation

The literature is fairly consistent in the method of implementing a shift change. The majority of the sources indicate that the implementation process should consist of the following: a thorough and complete study of all factors (many of which are cited above) that could impact the department and its officers, a year long pilot program to include either a segment of the department or the whole department, and an oversight committee that can respond to disputes and other concerns during the process of the pilot program.

It is also important, which was clear from the literature, that the pilot program must have purpose and direction. It makes no sense to establish a program if it is going to be overshadowed by other programs or if it does not have the backing of the administration. It is clear that if the previously mentioned circumstances exist the program will probably fail as evidenced by Davis and Tracy (1980):

The trial period lasted for less than a year and was overshadowed by the implementation of team policing. Because of the administration's greater commitment to team policing, the 12-hour shift was discontinued without being evaluated. (p. 8)

A well planned trial period and commitment to the endeavor is equally noted by Smith (1998);

The Longview Police Department discontinued their twelve-hour shifts at the completion of its six month trial period... When Longview was conducting its test program, there were several other relatively new projects going on at the same time... that may have had some affect on the programs outcome. The program was also conducted during the summer months which may have played a part in manpower shortages and there really was

not enough officers to properly staff twelve hour shifts. It probably would have been a better test program if it would have lasted a full year, to allow officers time to adjust and included the whole patrol division. Most of the administration was not in favor of the program when it was presented and it appears that the only reason that the program was conducted was to appease some members of the Police association. (p.9)

However, for the implementation to be successful there must be evaluation criteria to compare the 12-hour shift to the previous shift schedule.

Another factor that must be considered in the implementation phase is law and policies that are affected by the shift change and determining what coordination and action must be taken from other entities outside of the police department to implement the program.

Evaluation Criteria

Before implementing the program, it is a good idea to gather data from the past years and compare them with results from the year long pilot program. A good system to start with will include and consider the following criteria: response time to calls, overall crime rate, deployment scheme, amount of overtime usage (broken down into end of shift overtime, and other types), officer complaints (both personnel and service complaints), sick leave usage, productivity, fatigue, morale, and number of traffic collisions.

Each department will have to define and evaluate these criteria in its own context. However, according to the literature these are most of the critical areas that should be evaluated. All of the data should be gathered and evaluated by one source and critical issues should be noted and dealt with in a timely manner. At the end of the pilot program an overall review should

be conducted to determine if the shift change is an overall positive or negative change for the department.

METHODOLOGY

The purpose of this research paper is to identify whether a change to a 12-hour shift format from an 8-hour shift format is a viable option for a mid-sized police department and to determine the attitudes of police officers and supervisors in reference to several critical comparative areas between the two shifts. The focus is refined by considering whether attitudes are influenced significantly by the age, length of service, and the amount of time the officers and supervisors have worked on a 12-hour shift.

The hypothesis asserts that the 12-hour shift is a viable substitute for a traditional 8-hour shift. The researcher expects to find that officers in departments utilizing a 12-hour shift will overwhelmingly report that the 12-hour shifts are well-liked and through this, morale is increased, overtime expenditures will decrease, recruiting and retention will be aided, sick time usage will decrease, officers (for the most part) will not be fatigued by a 12-hour shift, more manpower will be available, and officers will have more time to do their work, which therefore contributes to productivity. The researcher expects to find some correlation between the age of officers and experience level of officers in the area of satisfaction with the 12-hour shift.

The method of inquiry is partially accomplished by interviewing several people on the telephone and in person. However, the bulk of the inquiry is conducted by a written survey that was sent out to various departments that include a separate survey for police officers and another survey for police supervisors. The researcher tried to incorporate and ask questions that could be closely linked back to the review of the literature so the questions could be matched back up with

some of the more significant subject areas that are identified in the reading material that was utilized.

The survey sample was broken down into departments, police officers and police supervisors. Eight police departments were surveyed. These were derived by finding departments that worked 12-hour shifts simply by word of mouth. From the eight police departments a total of 111 police officers and 51 police supervisors were surveyed. The intent was to keep the departments surveyed in the North Texas region; however three departments from the Central Texas area had to be used. Demographically, the focus is on the age of the officers, their years of service in the police field, and the amount of time they have been working on a 12-hour shift.

The response rate to the survey was very good. Eight of nine police agencies responded to the surveys. Of the eight departments that responded, mixed results were received. Two of the larger departments provided a good number of the surveys. However, compared to the number of officers in each department, the researcher felt that all departments except for one, sent back a sufficient number of surveys to make the inquiry fairly accurate. Even the one department that was not able to send as many surveys as anticipated sent back enough surveys to be included in the sample.

The information was analyzed by breaking down the surveyed officers and supervisors into three distinct classifications: Age, experience, and the amount of time the officer or supervisor had worked on a 12-hour shift. Each of the above classifications was examined using the same set of survey questions to determine if there was a correlation to the questions asked and the classification. The answers were then tabulated and graphed to determine a raw number and percentage of officers that responded to the questions by age range, years of experience and number of years of working the shift. All of the questions were analyzed in this fashion to allow

a snap shot view of how a particular age group, experience group, or years of working 12-hour shifts answered to a particular question. This survey of officers allowed for a simple graphical way to determine if there could be a possible correlation to the questions asked and the age, experience level, and amount of years of working 12-hour shifts.

FINDINGS

The focus of this study has branched into two directions, one of which was to determine whether there was data to support the concept that age, experience level, and the length of time working 12-hour shifts effects an officer's perception or attitude regarding the 12-hour shift. Secondly, the focus of this study compares the details of a 12-hour shift as opposed to an 8-hour shift to determine if the 12-hour shift is a viable replacement for the 8-hour shift.

The issue of age, experience, and length of service under a 12-hour shift was considered first. There seemed to be very little if any data that indicates that the factors of age, experience and length of time working a 12-hour shift has any bearing on the opinion of the 12-hour shift. In fact, after reviewing the data of the survey sample collected it appears that there is not a significant correlation between the factors. However, what may be a factor is the attitude of some senior officers belief that they have "paid their dues" to get where they are and they feel that younger officers should do the same. It appears that officers who have weekends off and work during the day do not have anything to gain from a change of schedule and this is probably the factor that drives a negative response to the idea of a 12-hour shift more than age, experience or length of service in a certain shift configuration.

A combined use of the literature available, a phone survey and personal contacts were used to produce the following findings for the comparative portion of the findings. The findings

will follow the same format as presented in the previous portion of the paper which is as follows: scheduling, primary comparative subject areas, implementation and evaluation criteria.

Scheduling

There are a vast array of methods that can be utilized to implement a 12-hour shift which include a myriad of ways of implementing days off, shift rotations, and shift hours. However, the two most common schedules used were the 4-3 method and the 2-2-3 method. There is another method that is less frequently used which is the 4-4 method. The information received from the participating departments seems to indicate that most police departments follow either the 4-3 method or the 2-2-3 method.

The two methods seem to be evenly split (throughout everything considered) and the results of the survey indicate that 5 departments used the 2-2-3 method while 3 departments used the 4-3 method.

Any of the 12-hour shift methods produce work hours that do not mesh with the currently accepted 40-hour work week. The most glaring problem is that during one week of work officers will incur 48 hours and during the second week officers will accrue 36 hours of work. The total for the work period is 84 hours. During the research it is discovered that officers would have to wave their right to the 40-hour work week in favor of the longer work period that was produced by a 12-hour shift. The waiver must be signed by all police officers in a police department and a majority of the officers must waive their right to a 40-hour work week before the administration may impose such a work schedule.

It seems that one of the advantages of the 2-2-3 and 4-3 methods over the 4-3 method is that they both fit into an 80-hour work period fairly easily with little modifications. The modifications normally utilized include implementing an 8-hour work day during a two week

pay period, extending officers lunch periods to incorporate the additional 4 hours, or to just pay the extra 4 hours in overtime.

It seems that choosing which schedule to use will come down to the personnel preference of the individual department. It would probably be a good idea to involve the officers that work the schedule (in which system will be utilized) because there are really no pros or cons to choosing one or the other.

Primary Comparative Subject Areas

Overall the 12-hour shift appears to be a viable replacement for the 8-hour shift when comparing primary subject areas such as recruiting and retention, productivity, fiscal impact, morale, fatigue, and quality of service.

The 12-hour shift has several advantages when it comes to recruiting and retaining police officers. The idea that new officers who are just entering the career field will be able to have three to four days off in a row or an alternating three day weekend off is very enticing. According to the survey conducted two questions were asked that are very closely related to the subject area of recruiting and retaining officers. The questions were: 1) Do you like 12-hour shifts and 2) If you could go back to an eight hour shift would you? The above questions are related to schedule satisfaction. If an officer is happy with his/her schedule and it provides more time off or more quality days off it is not unreasonable to believe that an officer would consider this to be a benefit over a traditional schedule where a younger officer may be on a schedule with Monday and Tuesday off for quite some time. 91% of all police officers surveyed indicated that they liked the 12-hour shift. In addition, 94% of all officers surveyed indicated that they would not go back to an 8-hour shift if they had the opportunity. This seems to indicate that police

officers that are working 12-hour shifts like them and do not want to return to the traditional 8-hour shift.

It seems likely that those who are working 12-hour shifts would consider the extended time off or the possibility for weekend days off to be a benefit and thus should enhance a policed departments ability to retain or recruit officers over a department that has an 8-hour shift if all other variables are equal.

In the subject area of productivity, sources have indicated that continuity of investigation plays a big part in productivity. The idea that an officer has more hours, which according to schedule hours may mesh better with citizens work schedules, indicates that officers can be more productive regarding the contact of citizens for investigation and follow up. Also, from the survey, officers were asked if they felt like the length of the 12-hour shift increased the likelihood of doing police work beyond that of taking calls for service. Seventy-one percent of all police officers surveyed, indicated that it was more likely that they would be able to do other types of work apart from just taking calls on a 12-hour shift as opposed to an 8-hour shift. This, presumably would equate to officers working more traffic stops, making more arrests or conducting preventative patrol.

The majority of the literature studied seems to indicate that overtime costs and sick time usage will be reduced. Reductions in these two areas have the potential to provide significant savings with regard to the fiscal impact that may be encountered from the transition from an 8-hour schedule to a 12-hour schedule.

End of shift overtime may be reduced because officers have more time to complete their tasks during the lengthened schedule period. Additionally, due to the length of the schedule,

officers are ready to go home at the end of their 12-hour shift. However, it is possible that a department may experience a slight increase in court related overtime.

From the survey, 59% of all supervisors that were polled indicated, from their experience, that overtime would decrease in a 12-hour format as compared to an 8-hour format. Twenty-six percent of the supervisors polled indicated that they believed there would be neither an increase nor a decrease in overtime. Only 15% of the supervisors polled felt that in their experience overtime increased. A total of 85% of the supervisors polled felt that overtime would likely either decrease or stay the same.

Sick time stands an equal chance to be reduced due to the fact that officers will realize more days off in a specified period of time and also because officers may be more reluctant to call in sick for very minor issues because it will cost 12 hours instead of 8 hours of sick time.

From the survey data collected it was determined that 65% of all officers polled felt that they used less sick time under the 12 hour shift schedule. On the other hand, of the supervisors that were polled 37% felt that sick time was reduced and 44% felt that there was no significant change from an 8-hour format to a 12-hour format. Combined together 81% of all supervisors polled felt that sick time would either be reduced or would remain constant. Only 19% of supervisors polled believed that a switch to a 12-hour shift would increase the use of sick time.

According to the aforementioned findings, it is reasonable to expect that the fiscal impact of implementing a 12-hour shift in place of an 8-hour shift will be favorable. According to available data fiscal savings are probable.

Morale is one of the most important of the factors that is being considered in the research. All indicators seem to point to an improvement of morale. Available sources cite that one of the

benefits of a 12-hour schedule as an increase in the amount of time off. Added time off can be used by officers to spend more time with their families, in leisure, or to pursue educational goals.

One of the sources utilized for this paper indicates that some of the departments that were surveyed had a reduction in morale. However, the researcher is skeptical of the findings in this source due to a limited number of people that were polled (only ten people from eight departments) and because the subjects polled were all sergeants or above. This, in the researcher's opinion, provides no credible insight into officer morale.

According to the survey conducted, there were several questions that can be used to speculate on morale: 1) Do you like 12-hour shifts? 2) What do you like most about 12-hour shifts? 3) Do 12-hour shifts increase manpower on the street? 4) If you could would you go back to a 12 hour shift? 5) Do 12-hour shifts increase the likelihood of doing police work other than calls for service? 6) Do you believe sick time is reduced on a 12-hour shift? By combining the responses to these questions, one can get a considerable idea of whether or not an officer is satisfied with his working environment.

Ninety-one percent of all officers that were polled responded that they liked the 12-hour shift, which indicates that there is a great amount of satisfaction regarding this shift schedule. When polled as to what the officers liked most about the 12-hour shift, 91% of respondents that they liked the time off. This further supports the idea that the more time off allows officers to engage in more family, leisure, and educational activities. Sixty-four percent of all officers polled indicated that they felt that the 12-hour shift increased the daily manpower available on the street. Ninety-four percent of the officer respondents said that they would not go back to an 8-hour shift if given the opportunity. Also, 71% of officers indicated that they felt that their ability to do police work beyond that of responding to calls for service increased when utilizing

the 12-hour format. Finally, 65% of all officers responded that they used less sick time under a 12-hour schedule as compared to an 8-hour schedule.

Considering the above factors seems to conclude that a majority of polled officers are satisfied with the internal workings of the 12-hour shift. The responses to the above stated question can be interpreted as significant indicator that at least one of the facets of good morale is present with regards to schedule satisfaction.

Fatigue is another factor that must be considered when implementing a schedule that will increase the number of hours worked during a day. The switch from an 8-hour day to a 12-hour day will surely require a period of adjustment. The research and survey that was conducted indicate that fatigue may be an issue at the onset of the program but becomes less of an issue after officers are acclimated to the schedule. Overall, 22% of all polled officers reported that they felt exhausted working a 12-hour shift. When referring to age groups, the number of officers that report being exhausted is fairly consistent within the 15th -20th percentile. There were two exceptions 41% of the 35-40 age group said that they were exhausted and 0% of Officers that were older than 45 indicated that they were exhausted. The findings indicate that overall the mass majority of officers will have no problem becoming acclimated to the 12-hour shift.

Finally, under the comparative subject areas, is quality of service. There was no indication in the literature researched that quality of service would be negatively impacted. It is the researcher's contention that quality of service is primarily impacted by morale and the concept of officers believing in what they are doing. It seems logical that officers who are happy with their work environment will espouse a better work ethic and therefore serve the public better. The survey questions that were posed seem to indicate schedule satisfaction which is one important factor of job satisfaction.

Implementation

Implementing a new shift schedule will be a stressful change and therefore must be implemented with a strong, insightful plan. There are two major areas that must be considered before implementation can begin: 1) legal and procedural issues, and 2) administrative/control issues.

With regard to the legal and procedural issues it became evident throughout the study of this issue that the department could not just implement the 12-hour shift without involving outside entities. First of all, the nature of the shift will require officers to work more than 40 hours in a one week period. This constraint on working hours is both mandated by federal law as well as state law. Upon further review, the researcher discovered that all police officers in the department shall have an opportunity to sign, or not sign, a waiver that removes the working hour's restriction. Also, if a majority of the officers in the department do not sign the waiver then the department cannot mandate a shift that requires an officer to work more than 40-hours in a week. There are also procedural issues such as work time calculation, pay administration, and how holidays are calculated which may or may not require action from city administration and city council.

As for the administrative issues it is important to understand that a full study of advantages and disadvantages for the department must be conducted to ensure that the department should embark on such a change. Also, the change should be implemented through some sort of pilot program and should be monitored. An oversight committee that understands the schedule should be established before the change occurs and should be held responsible for hearing issues. The committee should also be given equal authority to correct problems if necessary.

Evaluation Criteria

Before implementation of the program it is a good idea to gather data from the past years and compare them with results from the year long pilot program. A good system to start with will include and consider the following criteria: response time to calls, overall crime rate, deployment scheme, amount of overtime usage (broken down into end of shift overtime and other types), officer complaints (both personnel and service complaints), sick leave usage, productivity, fatigue, morale, and number of traffic collisions.

Evaluation criteria are crucial to the system of implementation in the fact that the goal of the change must be understood. Obviously, the change to a 12-hour shift is done for a reason and more than likely includes fiscal savings, police coverage, employee satisfaction and more. The only way to determine if the system has been a success is to track the areas that are important to the department and do a comparison of these subject areas at the completion of the trial period.

DISCUSSION/CONCLUSIONS

Law enforcement agencies in today's environment have a difficult task of providing police service that is expected to be professional, effective and courteous at times when funding makes it difficult to meet citizen's expectations. Two of the greatest challenges to police executives are to provide a reasonable amount of police protection with a limited amount of resources and also to continue to attract and retain highly qualified and effective police officers.

The purpose of the study is to determine if implementing a 12-hour shift in place of an 8-hour shift will provide a viable option to a traditional 8-hour shift. Additionally, the focus of the study is to determine if the department will benefit by realizing an increase in manpower, decrease in overtime and sick time usage, improvement in morale, and improvement in officer satisfaction among other pertinent details.

The researcher expects to determine that the 12-hour shift is indeed a viable replacement for a traditional 8-hour shift. The researcher expects to encounter some resistance to the concept of changing shifts but to also see a strong majority that was in favor of the system due to its potential to decrease overtime budgets and sick time usage, provide more manpower on the street, and provide better shift satisfaction to officers by offering more time off or more quality days off.

After conducting the survey and reviewing the available literature, the twelve hour shift seems to be an excellent replacement for the traditional 8-hour shift. The scheduling of the shifts can be done in a rather simple manner and the shifts seem to be universally liked by officers that were polled. Although, there were some sources that noted negative views on the 12-hour shift the preponderance of the literature and data suggested that 12-hour shifts could provide a very positive change.

Twelve-hour shifts can be presented as a benefit to new officers and current officers due to the ability to give officers more days off or the possibility of more quality days off. The 12-hour shifts appear to encourage better productivity by allowing officers to be on duty during some hours when citizens are easily accessible. Also, productivity is more probably linked to job satisfaction and the 12-hour shift seems to be able to provide at least one facet of that by offering schedule satisfaction. Indicators in the literature and survey seem to point to a real probability of reducing the cost of overtime and sick time under this system. Morale stands a very good chance of increasing under the 12-hour shift due to greater job satisfaction. Fatigue initially can be a safety concern but all indicators are that officers will become acclimated to the hours in a rather short period of time. Overall, the 12-hour shift seems to be a very good project to implement on a

trial basis to determine if it will work in a real setting. The hypothesis seems to be fairly well supported by the data and current literature available.

One limitation that should be noted is the fact that the researcher has not had an opportunity to observe the actual shift system as it is utilized in an actual situation. However, the next step in this study, will be to implement this shift system on a trial basis, observe and evaluate it.

The research presented can be valuable to a police department that looking for different ideas that may increase manpower, lower operating costs, and increase morale within a department under tight and unforgiving budget constraints.

In today's law enforcement, it is critical that police administrators maximize the resources that are available to them. The concept of using a compressed work schedule may provide the ability to increase the number of personnel available. Any concept that can allow a police department to maximize the utilization of critical assets is worth studying.

REFERENCES

- Cunningham, J.B. (1995). Twelve hour shift schedules in policing: a review of the evidence. *Canadian Police College journal*, 14(3), 184-201.
- Davis, Gil & Tracy, James (1980, April). Everett's 12-hour Shift. *FBI Law Enforcement Bulletin*, 7-9.
- Lausten, Bob. (1995, December). 12-Hour Shifts comments from the field. *Police Chief*, 29.
- Lawrence, John. (1995). Patrol Scheduling Methods in Texas Police Agencies. *TELEMASP BULLETIN*, 2(4), 1-7.
- Loudoun, Rebecca. (2004). Changing from 8 to 12 hour Shifts: Towards a Conceptual Framework.
- Metzger, Robert. (1995, December). The switch to a 12-Hour Shift. *Police Chief*, 30-36.
- Smith, Durward (1998). *The Feasibility of Twelve Hour Shifts for Patrol Officers*. LEMIT Paper #544.
- Trochesset, Henry. *The Impact of Eight-Hour Shifts Versus Twelve-Hour Shifts for Law Enforcement*. LEMIT Paper.
- Williams, Willie & Eide, Richard. (1995, December). LAPD Conducts One-Year Test. *Police Chief*, 18-27