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A comparison and benefit analysis of the
Eight-hour and Twelve-hour schedule models for
The Highland Village Police Department

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By

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ABSTRACT

The Highland Village Police Department currently utilizes the 5-8 scheduling model. This model requires that officers' work five, eight-hour workdays during a forty-hour workweek. Officers have two scheduled days off per workweek or four days off per eighty-hour pay period, depending on staffing needs. The Highland Village Police Department's current scheduling model attempts to evenly spread manpower across any given twenty-four hour period with some additional emphasis on periods of heavier call load. The department's Field Operations staff, four patrol Sergeants, twelve patrol officers, cover these twenty-four hour time periods with three main shifts broken into three, eight-hour time periods. A fourth shift overlaps Evening and Night watches. These shifts consist of Day watch, Evening watch, Night watch and Power. Three to four Field Operations personnel ideally staff each main shift. Two additional officers are assigned to Power.

This research project will prove that the 12-hour scheduling model optimizes available Field Operations staff for the Highland Village Police Department. A side-by-side comparison of these two scheduling models over the course of one year indicates a stable, consistent workforce with multiple benefits that the 8-hour model cannot match. While some manpower levels may remain fairly close to current levels, the additional benefits of the 12-hour model make it superior.

This research will prove that the 12-hour model accomplishes much more than the 8-hour schedule. It optimizes staffing while at the same time eliminating many of the problems that plague the 8-hour model. It accomplishes both organizational goals and the personal goals of the officers of the Highland Village Police Department. It is the opinion of this researcher that the Highland Village Police Department will benefit from the transition to the 12-hour scheduling model.

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Introduction

The purposes of this research project is to completely and thoroughly examine the benefits of the 12-hour scheduling model for the City of Highland Village, Texas Police Department. The focus of this paper will be the comparison of the 12-hour scheduling model and its benefits to the eight-hour scheduling model currently in use by the department. The paper will also examine the negative aspects of the two models.

Daily operational issues faced by Field Operations personnel will also be addressed in this research. These issues include, but are not limited to, inequity in days off, inequity in the span of control by Field Operations supervisors, inequity in the distribution of administrative duties, lack of unit cohesion, lack of consistent unit supervision due to necessary scheduling, poor ability to disseminate information in a timely manner, inconsistency in the Field Training Program and in distribution of Field Training Officers and inconsistent manpower availability. The research question to therefore be answered is; What will and how will the City of Highland Village Police Department benefit by utilizing the twelve-hour scheduling model?

The principle audiences for this research project are the Chief of Police, Field Operations Captain and Field Operation's personnel for the City of Highland Village Police Department. Information for this project was gathered by traditional research methods, personal comparisons and information obtained from agencies utilizing the 12-hour scheduling model. The expected outcomes of this research are to definitively show that the 12-hour model is the most efficient method of deploying and utilizing Field Operations personnel for the Highland Village Police Department. This research paper will compare both models and provide an analysis of available manpower to prove the 12-hour model's superiority.

Many aspects of this new system were examined. Would it help the department become more efficient? Would employees become more satisfied with a different scheduling model? Many of the effected employees have not worked a twelve-hour schedule before yet believe strongly in the concept. Would the work hours and the newfound freedom they bring cause the employee to be retained rather than leave for another agency?

Research will show that both the officers of the Highland Village Police Department and the organization as a whole will benefit from the transition to a twelve-hour work schedule.

Review of Literature

Twelve-hour schedules are designed on the one-for-one principle of one day off for each day worked. Employees are off as many days as they work, which maximizes off time during the pay period (Booth 222). Twelve-hour schedules are very easily managed and are the most efficient in terms of labor utilization and organizational cost, both factors that the Highland Village Police Department struggles with. The major drawback of the twelve-hour schedule is convincing managers and employees alike that a labor force is quite capable of working effectively for twelve continuous hours (Booth 222). Research has shown that many people already work twelve hours a day without appropriate compensation. Which schedule is best is a matter of what is best for the particular organization considering the change.

A study conducted by J. Barton and S. Folkard investigated advancing versus delaying shift systems. The study was published in Ergonomics magazine in 1993. The study indicated favorable sleep disruption patterns (less) when using a delayed (forward) schedule. Quick returns to work produced less favorable results. The study concluded that backward rotations and quick returns to work should be avoided (Barton 93).

One goal of a transition to a twelve-hour model would be to better match cyclical time demands for work with people and with schedules in a way that leads to better coverage of work needs, greater commitment of employees, better utilization of human resources and greater productivity (Cohen). Of concern during the design and consideration period was how to maximize the mutual benefits of both the organization and the employee. Several factors considered were: limiting days-in-a-row (HVPD model uses no more than three workdays in a row), starting both shifts at seven o'clock instead of six to avoid early morning starts (Knauth 15).

Sleep and fatigue issues were also considered during the initial consideration of the transition to the twelve-hour model. It was determined that shift work was found to have a consistent effect on quality of sleep, even when other variables were controlled (Frese 561). Sleep patterns would be affected no matter how the shifts were arranged because of the very nature of shift work itself. There is a definite cause-and-effect relationship between shiftwork and well-being. Would a transition have a positive or negative effect? Evidence suggests that a shift workers schedule has a ripple effect upon the workers entire family and, if that effect is negative, the family is often a less restrictive buffer for the workers psychological stress (Hood 95).

Historically, the Highland Village Police Department has used a traditional 5/8 schedule model using three main shifts; Days, Evenings and Nights along with a Power shift. Day shift begins at 6:00 am and ends at 2:00 pm, Evening shift begins at 2:00 pm and ends at 10:00 pm, Night shift begins at 10:00 pm and ends at 6:00 am the following morning. Evening and Night shifts are supplemented by the Power shift that begins at 6:00 pm and ends at 2:00 am. The purpose of the Power shift is to supplement times of the day that are theoretically more active. The Highland Village Police Department consists of twenty-four

sworn personnel, nineteen of whom are assigned to the Field Operations Division, sixteen to patrol duties. Day and Night shifts are assigned a Sergeant and three officers. Evening shift is assigned a Sergeant and four officers and Power shift is assigned two officers. The fourth Sergeant provides relief for the three shift Sergeants. The Special Services Sergeant fills in on Day shift two days a week.

Currently, days off and shifts are assigned by the administration and while the department does not utilize seniority or a bid process, most officers are assigned where they wish to be. Days off are assigned to each individual slot and are generally awarded by seniority. Junior officers are most often assigned to Night shift. The twelve-hour system would continue on a semi-permanent basis with very little rotation. As stated earlier, officers generally gravitate to the positions they desire and therefore have greater tolerance and control over their work times. During evaluation of the twelve-hour model, officers voiced satisfaction at being part of the design process (Barton 1993).

Under the current system, officers accrue vacation and sick time in either eight or ten hour increments depending on tenure. They are paid overtime or use time management for any time over eighty hours in a two-week period. Meal breaks are thirty minutes in duration or two breaks are allowed in fifteen-minute increments. If the meal break is chosen then breaks are not allowed, it is an either/or system. Shifts are generally stable and do not change over time. There are no shift rotations.

As the department has grown and the workload has increased, it has become apparent that supervision must be maintained at all times when feasible. Under the current 5/8 model, a Sergeant is assigned to every shift with the relief Sergeant covering the Evening and Night shift Sergeant's days off from Saturday through Wednesday (Sat/Sun-Nights, Mon-Power & Tues/Wed-Evenings). The Special Services Sergeant covers the Day shift

Sergeant's days off on Friday and Saturday. When the Sergeants use leave time, the remaining Sergeants are forced to work twelve-hour shifts to cover the time period that the Sergeant is on leave.

The minimum staffing level for each shift is currently three uniformed personnel; this usually consists of a Sergeant and two patrol officers. Under the current system, and due to uneven staffing, when an Evening or Night officer takes leave, a Power shift officer must move from 6:00 pm - 2:00 am to 2:00 pm – 10:00 pm or 10:00 pm – 6:00 am. Currently, Power shift officers generally do not enjoy stability in their schedules due to this unofficial fill-in duty.

The current eight-hour model presents multiple failures. Field Operations personnel are not evenly distributed. This results in fewer officers for Night and Day shifts although Day shift handles similar call and work loads as Evening shift. Night shift is understaffed and struggles to handle its workload, much of which is preventative in nature (Close Patrols, Park and Walks etc.). Evening shift is assigned an additional officer and is supplemented by Power shift. Night shift does share the benefit from the Power shift, however if Evening shift is short personnel, the Power shift officer must fill the gap. This disruption can have consistent effects on the sleep patterns of the individual officers (Frese 561).

Since a Sergeant and two officers typically staff Day and Night shifts as the norm, approved leave disrupts the minimum staffing level of three and forces either a CID investigator or a School Resource Officer to fill the gap. As stated earlier, the current 5/8 model dictates that the Relief Sergeant work two Nights, two evenings and one Power shift. When working the Power shift, this supervisor overlaps with the Evening supervisor and thus wastes supervisory manpower, not to mention that the schedule is grueling in nature.

Since all shifts do not have a consistent Sergeant due to days off, supervision and communication can be inconsistent at times. Research indicated that communication would improve and officers would be better informed under the new system because the same personnel are present every day at the same times (Bloodworth 2). The relief Sergeant feels that his responsibility is to oversee and not “rock the boat”. Briefing training and information pass-down are inconsistent as well as the same officers may not be present from day to day due to days off etc. By its very nature, the 5/8 model does not promote unit cohesion; officers do not work with each other every day and supervisors may be different depending on what day of the week it is.

The Highland Village Police Department does not experience an overuse of sick leave; however, research indicated that sick leave would become an even smaller issue under the twelve-hour system (Bloodworth 2).

Methodology

Will a transition to a twelve-hour work schedule increase the efficiency and morale of the Highland Village Police Department? Research into specific improvements in the work environment indicate that not only is the twelve-hour schedule better for the department but will improve morale and provide stability that the more traditional 5/8 schedule can not. Research into the twelve-hour model began in late 2002 at the request of the Chief of Police. Several models were considered and one was chosen as best for the specific needs of the Highland Village Police Department. The model chosen offered rotating days off as the worker moved through the rotation, days off depend on which shift, day or night, A or B platoon, that the worker was on.

All Field Operations personnel were polled (16 personnel). The Special Services Sergeant and CID (3 personnel) also all agreed that implementing a twelve-hour work

schedule would be best for the agency. One Sergeant indicated a negative response initially but later decided in favor of the switch. The work schedule was divided into four platoons of twelve hours each (D1-A, D2-B & N1-A, N2-B), Day shift and Night shift. Power and relief positions would be eliminated. Day shift would begin at 6:00 am; Night shift would begin at 6:00 pm. All platoons were assigned a Sergeant and three officers. Each platoons would work together and share identical shifts and days off.

The new schedule was arranged so that D1-A and N1-A worked the same schedule and shared the same days off through the rotation. The same principle held true for D2-B and N2-B shifts. When D1-A and N1-A work, D2-B and N2-B were off. This schedule model provided for half of the department's Field Operation's personnel to be present every day as the remaining personnel enjoyed extended time off.

While the shifts were to be changed, the eighty-hour pay period used by the City of Highland Village would remain intact. Pay periods begin every other Monday and continue through the second Sunday. Workers would be off two, work two, be off three, work two, be off two and work three. The pay period would then begin again. The rotation allows for every uniformed officer and Sergeant to enjoy every other Friday, Saturday and Sunday off in addition to days off during the week.

The change from the 5/8 model to a twelve-hour model not only affects police personnel, it also includes the Finance department as well. Traditionally, officers accrue sick and leave time in eight-hour intervals up to five years. After five years, accrual is in 10-hour increments. Officers are paid for an eighty-hour pay period. Time over eighty hours is compensated at time and a half either through overtime pay or compensatory time off. Officers working city holidays are eligible for double time and a half (holiday pay); Sergeants

are exempt employees and do not accrue overtime or compensatory time. Meal breaks are thirty minutes in duration or officers may take two, separate fifteen-minute breaks.

Under the twelve-hour model, offices would continue to accrue sick and vacation leave at the same rates as they accrue them under the eight-hour model. The biggest differences will be that sick/vacation time will be used in twelve-hour increments. City holidays would be accrued as workdays not as hours, and will be used as full days, not in portions. A poll of non-exempt employees indicated that all personnel would formally forgo holiday pay in order to transition to a twelve-hour schedule. These employees would accrue the holidays rather than receive pay for them; they could then take them as leave days at a time of their choosing. Conversations with the Director of Finance indicated support for the transition and no reservations were indicated.

Findings

The current 5/8 scheduling model in use by the Highland Village Police Department was found to have little or no support among those personnel directly effected by it. Of all the personnel polled, none supported the continued use of this scheduling model. Sample schedules were built using available personnel. The initial schedules accounted for all available personnel being assigned to either Day or Night shifts with appropriate days off. The twelve-hour schedule provided a Sergeant and three officers per shift. The following remaining benefits would also be realized by implementing the twelve-hour scheduling model:

- Platoons would begin taking responsibility for ensuring that each officer's leave; training etc. does not interfere with another's request therefore ensuring that at least three of the four assigned personnel were present during their shift. This will result

in consistent manpower levels and will not allow these levels to fall below the mandatory level of three at any given time

- Sick/Vacation leave accruals would continue as they are under the 5/8 model, thus making no accounting changes necessary.
- Officers would forgo Holiday Pay that routinely costs the Police Department upwards of three thousand dollars per holiday. These funds currently come from the overtime line.
- The twelve-hour model distributes personnel evenly across a twenty-four hour period. All shifts are assigned the same number of personnel.
- Supervisory responsibility is evenly distributed so that each Sergeant has a comparable workload. This workload consists of employee evaluations, mobile-video reviews, daily span of control issues etc.
- Removes Field Operations responsibility from personnel formerly used to fill gaps in the Field Operations schedule (CID, Special Services Sergeant and SRO).
- The movement of information and Briefing Training will be more efficient as half of the department's Field Operation personnel will be present every day. This change will enable information to pass more quickly to line personnel.
- Creates and improves unit cohesiveness. Officers' from each platoon will work solely with those personnel and supervisors assigned to their platoon; this will have the effect of forming closer relationships among personnel.
- Sick leave will be reduced.
- Employees will need only to use equivalent leave to accomplish the same time off as under the 5/8 model.

- Power and Relief shifts will be abolished. These personnel will enjoy stability in their work schedules.
- The twelve-hour model is more flexible for special event planning purposes. This effect is due mainly to seven days off during the fourteen-day pay period that allows for more flexibility.
- Further overtime and compensatory time will begin to decrease as most employees voiced the desire to leave as soon as their assigned workday was complete. This will result in smaller compensatory balances and lower financial liabilities to the city.
- Fatigue should not be a factor as the longest sustained work period will be three days only.
- Allows Night shift personnel to work during hours of daylight as well as night decreasing the segregation that many Night shift personnel experience.
- Allows for Field Operations personnel to enjoy seven days off during a fourteen-day pay period. This translates into 182 potential workdays a year as opposed to 260 potential workdays under the 5/8 system. After subtracting city holidays and vacation accruals from the total, officers will work approximately 167 days a year as compared to 241 days a year under the 5/8 system.
- No additional vehicle fleet acquisitions will be necessary. Personnel will share the existing vehicles in the fleet more efficiently.
- Polls of potentially effected personnel indicated that the twelve-hour schedule model would be a large factor in their decisions to either remain with the Highland Village Police Department or to move to another agency. They also cited the existence of

twelve-hour work schedules as attractive features of other local law enforcement agencies.

Discussions/Conclusions

Police managers in the 21st Century must contend with a younger, more educated and constantly changing workforce. This newer generation of police officer is not content to live and work as their predecessors did. The days of poor health, less than professional wages and damaging schedules are numbered. As the police profession moves into the future it must adapt quickly to the changing times.

The findings of this research show that the Highland Village Police Department can operate just as well or better by utilizing the twelve-hour scheduling model. Under the current number of authorized sworn positions manpower totals may not change however, the overwhelming benefits of the transition are unmistakable. There will always be positive and negative consequences to any staffing model. The ultimate goal of any police agency should be to maximize efficiency and get the job done in a way that meets the needs of both the organization and those that make it work; those that perform the work.

Confirmation of this research can only be made through real-world use of the twelve-hour model. It is recommended that a trial period of three to six months be completed in order to gain experience with the new model. The Highland Village Police Department, its employees and the community it serves can only gain from the experience.

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