



Shift Coverage and Labor Force Allocation Study Completed for the Nebraska State Patrol

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EXECUTIVE SUMMARY

This study, conducted by the University of Nebraska Public Policy Center, examined shift coverage and labor force allocation for the Nebraska State Patrol. It included a comprehensive review of literature, Nebraska State Patrol data, Nebraska legislative mandates and a survey of Troopers augmented by interviews in each Troop Area.

The Nebraska State Patrol (NSP) implemented a new policy in 2012 requiring all personnel to work five eight-hour shifts to ensure adequate availability of personnel to carry out the agency mission and provide equity across Troop Areas and Divisions. For the decade prior to this mandate, the NSP allowed Troop Area commanders to schedule either five eight-hour shifts or four ten-hour shifts for their Troop Areas. The literature and data are mixed and do not definitively support or refute use of eight- or ten-hour shifts; however Troopers prefer to have ten-hour shifts available to them. Labor force allocation in the NSP is influenced by increasing responsibilities and by the level of funding available to create and sustain positions for sworn law enforcement and civilian workforce members. Overall the number of sworn personnel has declined in Nebraska relative to population growth and is insufficient to provide the shift coverage desired by leadership.

This report concludes with nine recommendations:

1. Articulate minimum staffing standards for coverage in written policy
2. Return staffing patterns and shift coverage decisions to Troop Area commands
3. Implement a system to hold command staff accountable for shift coverage decisions
4. Prioritize Investigative Services Division duties as a way to provide guidance to personnel with multiple investigative responsibilities and determine which functions should have expanded or reduced availability
5. Examine overtime costs closely and consider how the addition of sworn personnel may decrease these costs
6. Hold the training academy at least once a year to avoid long waits to fill sworn law enforcement vacancies
7. Increase the number of sworn personnel to achieve desired staffing levels
8. Prepare realistic fiscal notes that always include staffing impacts for each piece of future legislation implicating the Nebraska State Patrol
9. Engage Troopers in future strategic planning and major decisions impacting the agency

INTRODUCTION

The University of Nebraska Public Policy Center (PPC) was asked to conduct this study for the Nebraska State Patrol (NSP) to examine current agency needs and practices related to shift coverage and overall labor force allocation. As part of this study, the PPC team was asked to review the current practice of requiring all personnel to work eight-hour shifts in the context of data and best practices in similar state police organizations.

The approaches used in this study included 1) a review of literature from academic and industry sources to provide context from which to view current practices and to determine best practices in labor force allocations for state police organizations; 2) a review of data from the NSP such as response data, aggregate use of leave time, and funding information; 3) a review of Nebraska legislative documents including legislative service mandates; and 4) an online survey of NSP personnel and site visit interviews with a convenience sample of personnel in each Troop Area and agency leadership.

BACKGROUND

The Nebraska State Patrol is Nebraska's only statewide law enforcement agency and was founded in 1937 as the Division of Highway Safety and Patrol to enforce traffic laws. In 1941, it was combined with the State's Sheriff's Office to assume many of its police powers. In 1944 the Investigative Division was added to investigate crimes. In 1967 and 1972 respectively the Drug Control Division and Crime Labs were added. In 1985 the Carrier Enforcement Division was added to enforce commercial vehicle laws (Nebraska State Patrol, 2010).

The NSP has sole or concurrent jurisdiction across the State of Nebraska (Nebraska Revised Statute 81-2004, 81-2006) with a scope of duties generally covering the following:

- Enforcement of the traffic laws on the highways
- Enforcement of commercial carrier laws
- Responsibilities in disaster and public safety emergency management operations
- Community safety areas ranging from alcohol/tobacco enforcement to explosives regulation to concealed handgun permitting (Nebraska State Patrol, 2010)
- Maintaining a state capitol and executive protection force
- Criminal investigation including responsibilities related to illegal drug manufacturing and trafficking, internet crimes (especially against children), maintaining the state crime laboratory, maintaining the state sex offender registry, and maintaining the Nebraska Information Analysis Center to oversee crime and homeland security intelligence and data operations.

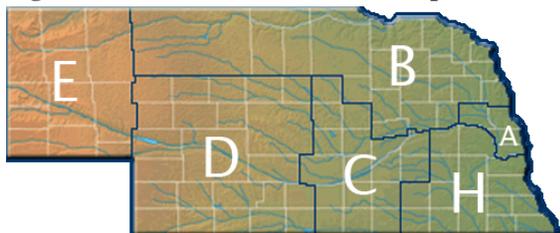
The NSP assumes these responsibilities under a single force. This singular entity differs from many other states that have multiple state law enforcement entities that divide responsibilities.

The NSP is made up of sworn law enforcement personnel and civilians. The Colonel (Superintendent of Law Enforcement and Public Safety) and Lt. Colonel (Assistant Superintendent) set policy and provide overall direction for the agency that is divided into six functional Divisions.

- Office of the Superintendent
- Field Services
- Investigative Services
- Administrative Services
- Office of Professional Standards
- Legal

Divisions are led by sworn personnel. Civilian personnel respond administratively in the same supervisory chain of command as sworn personnel within the agency; thus, law enforcement Majors or Captains may supervise both officers and civilians. Law enforcement functions are further divided by geographic areas of responsibility through designation of six Troop Areas. Each Troop Area is led by a Captain reporting to the Major in charge of the Field Services Division.

Figure 1: Nebraska State Patrol Troop Areas



The agency has established policies and agreements for mutual aid and assistance with federal, state, and local agencies. Troop Area commanders and their personnel are expected to regularly work with allied criminal justice and law enforcement agencies at all levels (NSP Policies

and Procedures Manual, 01-15). In many instances, these liaisons are informal and based on relationships developed by specific Troopers and local law enforcement officers in their patrol areas. These reciprocal relationships are key because many Nebraska communities are served by very small local law enforcement agencies that rely on NSP assistance and because some NSP Troopers work in remote areas without nearby support from other Troopers and rely on local law enforcement for assistance (Nebraska State Legislature, 2000). Public safety, Trooper safety, and the ability to respond to other law enforcement entities are all important aspects of scheduling and deploying Troopers in Nebraska.

The Colonel and agency leadership made a decision in February 2012 to move all personnel statewide to eight-hour shifts to ensure public safety functions were addressed with the maximum number of officers available for as many hours of the day as possible, particularly in the Field Services Division that provides Trooper coverage on Nebraska highways. This policy change was also intended to create more equity for all personnel in the number of days off per year and leave usage and improve overall coverage for Trooper functions. For the decade prior to

this mandate, the NSP allowed Troop Areas commanders to employ either five eight-hour shifts or four ten-hour shifts for their Troop Areas.

In this study we examine the issue of shift coverage and overall labor force issues by looking at documented best practices, pertinent data, and perspectives of NSP personnel. We begin with NSP definitions of minimum and desired shift coverage. Then we focus on examining literature and Nebraska data as it relates to length of shift (eight versus ten hours) and the impact the change to eight-hour shifts may or may not have had. Following the shift coverage discussion we examine labor force issues relevant to achieving the desired shift coverage in each Troop Area. The report concludes with recommendations.

SHIFT COVERAGE

How shifts are structured (length of shift, static versus staggered starts, overlapping shifts) is a process designed to achieve the outcome of having good coverage. Before considering the impact of changing the process (assigning shifts), we believe it is important to understand the desired outcome. There is currently no NSP policy defining minimum or desired shift coverage other than a policy setting a goal of 24-hour coverage by noting that NSP “will attempt to provide uniformed personnel for 24-hour coverage seven days a week, if shifts can be developed to provide this coverage.” All sworn personnel may be called upon 24 hours a day, including while off-duty if needed.

We asked NSP leadership to define the outcomes they desire for coverage in each Troop Area, particularly for the Field Services Division (including carrier enforcement). Coverage was defined by NSP leadership in terms of minimum coverage (staffing with existing personnel) and desired coverage if they were not constrained by current resources. Coverage decisions are based on considerations related to public safety (reducing crashes and fatalities), Trooper safety, and being responsive to calls for service and affiliate agency needs, special event or seasonal staffing adjustments, data driven staffing adjustments, and time off for personnel. This approach is consistent with NSP policy 07-01, which allows Troop Area commanders to distribute and schedule officers in their areas (subject to the oversight of the command and applicable statutory/regulatory requirements and the labor contract) based on, but not exclusively limited to: activity and incident reports, traffic and accident data, community activities, and weather reports.

Nebraska’s geography, roads and population density also play a role in decisions about coverage in Troop Areas. We provide details for each Troop Area’s minimum and desired coverage in the appendices (See Appendix A: Troop Areas). In general, NSP leadership would like 24-hour, 7-day coverage in areas along Interstate 80 and more populous regions of the state. Currently only Troop A (Omaha/East) and portions of Troop HQ (Lincoln) have 24-hour coverage with minimum staffing patterns (often only one Trooper on duty in each part of the Troop Area). Less

populous areas of the state would like to routinely cover 19 to 21 hours per day. Troop Area C is currently staffing 16-20 hours/day. Troop Areas B (North and Northeast), D (South Central), and E (Panhandle) are staffed between 16-20 hours with minimal staffing patterns. Carrier Enforcement would like to provide 24-hour coverage of secondary and portable scales, but can only do this for primary scales with current personnel levels.

The Investigative Services Division covers a number of functions – some investigators need to be available 24-hours per day while others have less need for that level of availability. We recommend this Division review and prioritize services that require 24-hour availability in each Troop Area. This suggestion emanated from the field interviews and surveys completed as part of this project

Other NSP Divisions (Office of the Superintendent, Administrative, Legal and Professional Standards) have functions that require 24-hour availability as needed but do not require around the clock staffing. Knowing the preferred outcome (minimum and desired staffing levels) sets the stage to examine the process (assigning shifts) via literature, data and perceptions.

LITERATURE

A few studies have examined effects of shift changes on police activity, but such studies are rare because of the difficulty enrolling law enforcement officers in long-term research studies and modifying conditions in active law enforcement environments. Consequently, most existing studies have serious limitations. For example, many of the studies related to compressed work schedules are not scientifically designed experiments with randomly selected samples (Amendola, 2012). Such research designs would be hard to conduct without significantly intruding on police operations. A 2011 Detroit, MI and Arlington, TX study currently remains the only rigorously designed study with random assignment to conditions that specifically examined health and performance outcomes among police based on differing shift lengths (Amendola et al., 2011b). Amendola and colleagues (2011b) found significant differences among officers randomly assigned to 8, 10, and 12-hour work shifts. Officers in ten-hour shifts reported significantly more sleep than those in eight-hour shifts; greater sleepiness was reported among officers in 12-hour shifts; and a greater amount of overtime pay was used by officers in eight-hour shifts, suggesting that ten-hour shifts may be a more preferred scheduling approach. However, this study was conducted with municipal police departments, not state police organizations, which have much different missions and geographic areas of responsibility.

Although other studies we reviewed were not as rigorous as the Amendola study, and there is a dearth of hard evidence establishing a link between shift length and performance; it should be noted that the existing studies generally suggest that work schedules do impact officer performance and morale, and there is mounting evidence that law enforcement officers

experience high levels of stress and fatigue that are impacted by shift work. We were unable to find studies specific to outcomes of varying work schedules among state law enforcement agencies. Both the State and Provincial Police planning division of the International Association of Chiefs of Police and the Police Foundation were unaware of similar studies specific to state law enforcement agencies. Shift-length assignment in the state police environment must consider the characteristics of the state law enforcement context, particularly the emphasis on highway patrol and road safety, enforcement through visibility, the much broader geographic scope of state police coverage, and its implications for officer safety and responsiveness. A more complete literature review is contained in the appendix of this document (See Appendix B: Literature Review).

There is some evidence that ten-hour shifts may have advantages over eight-hour shifts in law enforcement. However, because most existing studies specific to shift coverage in law enforcement agencies are scientifically weak or not specific to state police operations, we cannot draw definitive conclusions from them to support or refute the use of eight- or ten-hour shifts to achieve the desired coverage outcomes for NSP. We did draw ideas from the literature and from surveys or interviews with NSP personnel about the kind of data that could be affected by a movement from a mix of ten- and eight-hour shifts to only eight-hour shifts. In the next section we review our findings based on the available Nebraska data.

NEBRASKA DATA

Some NSP personnel we interviewed or surveyed had the perception that accidents, enforcement activities, and leave time were negatively impacted by the eight-hour shift mandate. We obtained a number of databases from Nebraska agencies and Federal data sources to examine the impact of the mandated eight-hour shifts on each area of concern. We looked for trends over time and specifically examined data one year prior to the eight-hour shift mandate and year after it had been in effect. Troop Area D has always been on eight-hour shifts, so it is essentially a control region to which we can compare other areas. For example, accident rates decreased in some Troop Areas in the year after the shift mandate, but that did not provide evidence that the shift mandate caused the drop in accidents because Troop D also experienced a decrease in accident rate and did not undergo any change. In addition, the trend over time has been a gradual decrease in accidents in all areas of the state which could be due to a number of factors.

ACCIDENTS

We examined accident data by Troop Area, month, day of the week, and hours of the day from July 1, 2011 to December 31, 2012. We also reviewed fatal or injury accidents versus non-injury accidents and only those accidents investigated by the NSP. We could not find any accident

trends that we could say with certainty are linked specifically to the shift change. Our review of the accident data is in the appendix (See Appendix C: Accident Rates).

Although we cannot conclude with certainty that there are connections between accident data and shift length, we can say that the accident data should continue to guide decisions about shift overlap and higher staffing time periods. Distributed by hour, the total accident rate and rate of accidents involving injuries or fatalities were highest during the evening rush hour period of 4 PM – 6 PM with the least number of accidents occurring in the 2 AM – 4 AM time frame. However, the hours for peak fatal accidents varies across Troop Areas; for example, while the peak hours for fatal accidents is 4 PM to 6 PM in four Troop Areas, for the two other Troop Areas (Troop Areas B and E), the peak hours for fatal accidents is 2 PM to 4 PM.

The day with the highest number of total accidents was Thursday (16.7%) followed by Wednesdays (15.8%). Sundays had the lowest total accidents (11.8%). However, the peak days for accidents involving injuries or fatalities were Wednesdays (17.3%) and Saturdays (15.2%). We saw differences by Troop Area when we examined the accident rates for days of the week. The two days with the highest volume of total accidents were Thursdays then Wednesdays in Troops A and B; Wednesdays then Thursdays in Troop C; Thursdays then Fridays in Troop D; Saturdays then Wednesdays in Troop E; and Fridays and Saturdays in Troop HQ. The accident data suggests that individual Troop Areas experience different accident rates on different days of the week.

CALLS FOR SERVICE

We examined NSP call data for January 1, 2012 to December 31, 2012 (See Appendix D: Calls for Service). This dataset allowed us to examine field activities of the NSP for the 2012 calendar year. The call dataset is for all Troop Areas plus the State Capitol Security (SCS) and Mobile Command Post (MCP). There were a total of 194,549 calls and 80 different call types from January 1 to December 31, 2012. The largest proportion of calls were for general traffic (89,563 / 46%), followed by building checks (19,135 / 9.8%). The top twenty types of calls amounted to 93% of all calls for the state. A full table listing all call types and frequency is listed in the Appendix along with a more complete summary and breakdown of calls by Troop Area. The highest number of total calls was for the SCS function (39,661 / 20.4%) followed by Troop D (30,094 / 15.5%). The Troop Area with the lowest number of calls was Troop B (20,449 / 10.5%).

Call data is influenced by many factors. NSP personnel suggested that some Troop Areas don't have high numbers of calls for service because of low traffic counts and a low number of Troopers covering large geographic areas. For example, NSP may not be called for assistance in an area because the only Trooper on duty is hours away and would not be able to respond in a timely manner. Thus local agencies make the decision not to call NSP at all even if it would be appropriate to do so.

Although calls for service data did indicate that each Troop Area varies in terms of the time spent on calls and on traffic stops, we found nothing conclusive in the call data to support or refute that the eight-hour shift mandate had an impact on calls for service.

LEAVE TIME

We examined the amount of sick time, vacation time, and overtime used by NSP traffic enforcement Troopers one year prior to the shift policy change (February 1, 2011 to January 31, 2012) and one year after the shift policy change (February 1, 2012 to January 31, 2013) (See Appendix E: Leave Time).

Sick Time. There was an overall increase in sick time used by traffic enforcement Troopers from the pre-policy change period to the post-policy change period. There were a total of 11,750.5 sick hours taken by Troopers from February 1, 2011 to January 31, 2012. That number increased to 12,445.5 from February 1, 2012 to January 31, 2013. However, the increase was not a uniform trend. Three of the six Troop Areas saw an increase of sick time among Troop Areas (Troops C, D, and HQ) and three experienced a decrease (Troops A, B, and E). Troopers assigned to work at state headquarters (not on the road or responsive to the Troop Area captain) increased sick time usage.

Vacation Time. We examined the amount of vacation time that was documented and discovered an overall decrease in vacation time from the pre-policy change period to the post-policy change period. There were a total of 34,665.5 vacation hours used from February 1, 2011 to January 31, 2012. That number decreased to 33,109 from February 1, 2012 to January 31, 2013. However, this decrease was also not uniform. Two of the six Troop Areas saw an increase of vacation time among Troop Areas (Troops C and E) and four experienced a decrease (Troops A, B, D, and HQ). Troopers assigned to work at state headquarters increased vacation time usage.

We actually expected the number of vacation hours to increase for Troopers in all Troop Areas (except Troop Area D) because individuals previously working ten-hour shifts were left with fewer days off and voiced a desire for more time off to tend to personal issues and maintain morale. We were unclear why vacation decreased but heard from some survey and interview participants that the new shift schedules made it harder to get requested vacation time approved.. This expectation was not substantiated by data, but is a noteworthy perception that.

Overtime. We examined overtime data for the NSP in dollar figures that was made available to us for the period starting February 2007 and ending January 2013. The overtime data could thus be broken down into yearly blocks, and allowed us to compare overtime funds spent in one year prior to the shift policy change (February 1, 2011 to January 31, 2012) and one year after the

shift policy change (February 1, 2012 to January 31, 2013), as well as for the preceding four years from February 1 to January 31.

There are two major limitations to the overtime data. First, the data provided to us was for dollar figures, not hours. Second, the overtime dollar figures could not be conveniently categorized by program area over this entire six year period. It thus represents total dollar figures for agency-wide overtime.

The five-year average for overtime funding was \$1,552,354.37, with a standard deviation of \$56,858.12. In the one year prior to the shift policy change the agency overtime dollar amount was \$1,569,744.89. In the one year after the shift policy change the agency overtime amount was \$1,585,240.20. Both years were thus higher than the five year average. There was an increase in overtime from the pre to the post-policy change year. However, the increase relative to the five year average ($\$1,585,240.20 - \$1,552,354.37 = \$32,885.92$) fell within the standard deviation amount (\$56,858.12) of the five year pre-policy change average, and was lower than that of the February 2007-January 2008 period (\$1,632,745.73). Because of these limitations, we cannot conclude that the shift policy change affected overtime.

The amount of money spent on overtime seems relatively large, so we suggest examining the impact increased staffing might have on overtime spending. We understand that cutting down on overtime spending that has been high over a period of years would likely be viewed by Troopers who benefit from this expenditure as a cut in pay. We are not advocating for a decrease in funding to NSP, instead we believe it is prudent to look at the potential to repurpose these funds to increase staffing levels rather than to continue requiring existing Troopers to work more hours.

TRAFFIC ENFORCEMENT ACTIVITY

We examined how the shift policy change may have impacted traffic enforcement patterns among Troopers. We obtained data on summons, violations, and warnings conducted by traffic enforcement Troopers, as well as by Troopers under the State Headquarters Division (air wing, K-9) and Carrier Enforcement. We examined the number of summons, violations, and warnings conducted by Troopers one year prior to and one year following the shift policy change in February 2012 (See Appendix F: Traffic Enforcement Activity).

In general, the largest changes in activity before and after February 2012 were experienced by Carrier Enforcement and those Troopers affiliated with state headquarters, not on the road. Both these groups were not directly affected by the shift policy mandate change. Troop Areas varied widely when we limited our examination to activity of traffic enforcement Troopers. For instance, in summons, Troop E experienced a 23% increase in summons following the shift policy change, whereas Troop B experienced a 9% decrease, and Troop C experienced an 8%

decrease. In violations, Troop C experienced a 17% decrease, whereas Troop HQ experienced a 12% increase. In warnings, Troop HQ experienced a 9% increase. Of the Troop Areas directly affected by the shift mandate, only Troop B experienced a decrease in all three categories. Only Troop A experienced an increase across all three categories. This suggests that rates of enforcement activity vary across the Troop Areas, and that the shift policy assignment change may not have had a significant impact across Troop Areas, at least to the extent that it resulted in consistent changes across all Troop Areas.

With all divisions combined, in the pre to post one-year time frames, there was a 2.93% decrease in summons, a 3.13% decrease in violations, and a 1.29% increase in warnings. When State Headquarters staff members not on the road and Carrier Enforcement are removed, the total combined activity rates for traffic enforcement Troopers just in Troop Areas A, B, C, D, E, and HQ decreased 0.13% in summons, increased 0.1% in violations and 3.91% in warnings. When Troop D was removed, traffic enforcement activity actually increased in all three categories, though only slightly (.65% for summons, .56% for violations, and 4.53% for warnings.)

It should be noted that increases or decreases in enforcement activity may not be causally related to shift assignment alone. Activity changes may be the direct result of initiatives taken within individual Troop Areas, such as selective enforcement operations determined by leadership, or by the discretion of Troopers. Nor should activity rates alone solely reflect standards of proper enforcement. For example, Troopers may – at their discretion – determine that warnings are an ineffective sanction for bad driving behavior and may instead issue a summons. A low level of warnings does not reflect improper traffic enforcement.

We were also interested in knowing if there were immediate impacts of the shift policy mandate on traffic enforcement activity among Troopers. For summons, violations, and warnings, February 2012 marked a lower point in activity relative to the preceding and subsequent year, followed by a visible increase in activity thereafter. This immediate decrease in activity could reflect logistical challenges of adjusting to a new scheduling system. We also heard from both Troopers and officers that a minority of individual Troopers may have intentionally decreased enforcement activity as a form of protest to the shift policy change. However, the data indicates that the aggregate enforcement activity rebounded to patterns similar to that of the pre-policy change period shortly thereafter.

NEBRASKA STATE PATROL SURVEY AND INTERVIEWS

We believe it is important to factor in Trooper perceptions and experiences because they are most directly impacted by the implementation of the eight-hour shift mandate. Their insight is valuable in other ways too. For example, as a result of involving Troopers and officers in this study we received references to previous studies not published in academic journals; we were given ride-along opportunities to help provide context for the work Troopers engage in; and we

were provided with thoughtful opinions and perspectives about the work done by Troopers, their expectations for leadership and suggestions for improving coverage and morale.

We administered an online survey with sworn law enforcement employees of the Nebraska State Patrol to gauge perceptions of shift scheduling impacts (See Appendix G: Nebraska State Patrol Survey). The survey was administered through Qualtrics[®] secured online survey platform. Of the 459 individuals who were sent the survey, 398 individuals participated, a response rate of 87%. This rate is an exceptionally high response rate for online surveys, which told us that the survey topic was important to Troopers.

The interviews took place in each Troop Area either one-on-one or in small groups. The purpose of interviewing individuals in addition to the survey was to obtain richer explanations that could be used to help interpret the survey results. We asked questions similar to the survey but allowed individuals to expand upon reasons for their response. The interview data is combined with the survey results in the appendices to provide explanation or context to results. A total of 52 interviews were completed with 88 individuals.

In general, two major issues emerged from the survey and interviews. First, individuals clearly preferred having the option of working ten-hour shifts available. Second, the mandated change to eight-hour shifts affected Trooper morale and reportedly impacted the personal lives of individuals moving from ten- to eight-hour shifts. Although Troopers have made adjustments to accommodate the new shift schedules and there seems to be no conclusive impact on their work (as evidenced by accident data, calls for service and leave time), we were left with the impression that Troopers believed the impact of low morale would corrode the department's ability to recruit and retain personnel in the future.

Survey participants were asked how satisfied they were overall with work/life balance and with their current shift schedule. Troopers were less satisfied than officers and the Division least satisfied was Field Services. The area with the highest satisfaction with work/life balance was Carrier Enforcement and the lowest was Troop C.

Survey participants were then asked what their preferred shift schedule would be. Among all participants, 81.4% indicated they preferred 4 days on/3 days off, followed by 16.3% of participants preferring 5 days on/ 2 days off. Among field services only, over 92% of Troopers and 66% of officers preferred a 4 days on/3 days off schedule. About 6% of Troopers and 30% of officers preferred a 5 days on/2 days off schedule.

Survey participants were asked how their shift schedules affected various work and life areas. Field Services Troopers reported that all work and life areas we asked about were negatively affected by their shift schedules. The least negatively affected area was "communication with other law enforcement agencies" and the most negatively affected was "other professional

opportunities or responsibilities.” Officers said the only work and life area negatively affected by their shift was “other professional opportunities or responsibilities.”

We then asked survey participants to rank order how important they believed various factors should be when it came to making shift scheduling decisions. A total of 12 factors were listed as possible responses. Overall, the most important ranking factor was “Maintaining officer morale” and the least important ranking factor was “Taking into account previous call rates.”

NSP personnel seemed genuinely pleased to be asked about their opinions in interviews conducted in each Troop Area. They were open about their commitment to NSP and expressed a desire for NSP leadership to hear their concerns. Being heard and part of the process seemed very important to the Troopers even if their ideas were simply taken under consideration or not implemented. A number of policy issues were raised in these discussions that were not directly related to shift coverage or labor force issues that could be explored more deeply at a later date by NSP leadership (e.g., concerns that the current practice of excluding applicants to NSP with visible tattoos may limit employment of young Veterans).

LABOR FORCE ISSUES

Previous studies and the Nebraska data including the survey/interview data led us to conclude that shift coverage cannot be examined in isolation from the overall manpower issues within the NSP. All Troopers and officers want adequate coverage of Nebraska’s state police functions, and it was clear to us that NSP personnel are dedicated, hardworking, and concerned about providing good service. We received many suggestions from the NSP workforce about scheduling, but the shift coverage issues are strongly influenced by the availability of Troopers. We were surprised at the onset of this project that in many areas of the state, the NSP does not have Troopers on the road 24 hours a day, and in some areas of the state it might take over an hour for Troopers to arrive at the location of a call for service or accident. The availability of NSP sworn law enforcement officers is influenced by the state budget, availability of federal funding for specific policing functions, and the number of responsibilities assigned to the NSP by statute. It is also influenced by the lengthy recruiting and training process for new sworn officers. We were told that there was no shortage of applicants for positions, but the process is so long and drawn out that good candidates may find other employment before they can be hired and trained by NSP. Due to limited resources, the NSP training academy may not take place for two or three years, leaving positions vacant until recruits complete it. NSP leadership has determined that the training academy is only cost effective if there are at least 15 new recruits in each class.

NEBRASKA STATE PATROL STAFFING

The shift coverage issue is linked to a shortage of sworn personnel available to cover all Field Services and Investigative Services functions, so we were interested in examining trends related to sworn versus civilian personnel at NSP (See Appendix H: Nebraska State Patrol Staffing).

Sworn and civilian NSP personnel figures were obtained from the annual “FBI Crime in the United States” survey compared to U.S. Census figures for Nebraska in 1990, 2000, and 2010. There were 39 NSP sworn and civilian employees per 100,000 residents of Nebraska in 2010, compared to 37 in 2000 and 40 in 1990. This reflects a relatively level workforce even though the actual total number of personnel at NSP rose from 670 in 2002 to 731 in 2012. We then looked at per capita figures for sworn law enforcement (without civilian workforce members). There were 26 NSP sworn officers per 100,000 residents of Nebraska in 2010, compared to 27 in 2000 and 32 in 1990, indicating a general decline in sworn state law enforcement police relative to an increase in population. As of December 2013, NSP had a total authorized sworn strength of 486 in comparison to the sworn strength of 512.5 in 2000 (a decrease of about 5%).

Although the number of NSP sworn personnel has been declining in Nebraska, there has been a general increase in civilian personnel at NSP. There were 13 NSP civilian employees per 100,000 residents of Nebraska in 2010, compared to 10 in 2000 and 8 in 1990. As of 2012, there were a total of 260 civilian personnel in the NSP up from 185 in 2002. This trend reflects a general movement toward hiring civilians for activities that do not require sworn personnel.

Per capita figures alone are not sufficient to base labor force decisions on for law enforcement organizations. We were interested in knowing how Nebraska compares to peer states in terms of sworn personnel. Peer states mean Midwestern or Western states that share the largely rural characteristics of Nebraska, cover relatively large geographic areas, and have a single state law enforcement agency. Nebraska differs from many states which may have multiple state law enforcement agencies, such as both a Highway Patrol and a Department of Public Safety. However, even the states we examined as peers to Nebraska vary widely in their scope of responsibilities, organization, and mission. Of these nine peer states from 2002 to 2012 there were decreases in sworn personnel among five states (including Nebraska), and increases in four states. Four of the states started with and still have larger absolute numbers of sworn personnel in their departments than Nebraska (Iowa, Michigan, New Mexico, and Texas.)

STATE LEGISLATIVE FUNDING FOR THE NEBRASKA STATE PATROL

The duties of the NSP derive from its mission as the state police entity for Nebraska. The primary responsibilities of the NSP are created by the legislature of the state. As previously noted, the NSP’s responsibilities have grown significantly since its creation in 1937. The NSP was originally created to provide traditional patrol along the highways. It gradually grew to incorporate state police responsibilities, including numerous criminal investigation tasks, followed by integration with commercial vehicle regulation. It also provides a variety of other public safety administrative and enforcement tasks, as well as homeland security functions and capitol/executive security.

Since 2001, the NSP has assumed a number of new responsibilities (See Appendix I: Statutory Responsibilities of the Nebraska State Patrol). Major new responsibilities include those created to support and enforce the concealed handgun permit law (LB 454) in 2006, and liquor control law in (LB 579) in 2013. Additional responsibilities for the NSP have included those created to support the Missing Persons Information Clearinghouse law (LB 111) in 2005 and responsibilities related to management of the state's DNA Database (LB 385) in 2006.

Although responsibilities have increased, the NSP has not significantly increased the number of its personnel. New positions were created to enforce the handguns permit law, but those positions have since been reduced. Funding for six Trooper positions was increased in 2013 to enforce the liquor control act; however at the same time federal grant funds for drug investigators ended which essentially left personnel numbers at the same level. Additional funds were provided in the 2011-2013 budget cycle to alleviate a significant backlog in fingerprinting and other records administration within the criminal identification division of the NSP (Nebraska State Legislature, Fiscal Office, 2010). That division had experienced an increased demand for services related to the handguns permit law and other public safety regulations.

We were interested in the extent the state's funding for the NSP kept up with its passage of new responsibilities for the patrol so we obtained documentation from the Nebraska Legislature's fiscal office which tracks funding and the number of full time equivalent (FTE) positions for the NSP in its main program areas (See Appendix J: Fiscal Tracking of NSP FTE Positions).

The period from 2007-2011 experienced several such reductions for the largest NSP budget area (Public Protection). Nineteen positions were eliminated in the 2009-10/2010-11 fiscal years. Prior to that, ten positions were eliminated that were initially created for LB 454 responsibility (Concealed Handguns). Most recently, funding for six additional sworn Troopers dedicated to enforcement of state liquor laws under LB 579 was added, though vacant positions are being eliminated in fiscal years 2013-15 and federal funding ended which essentially meant the new state funding would prevent laying off Troopers previously funded with grant money. Additional funding was also provided in 2011-2013 to assist the criminal identification division with fingerprinting and records administration, but those support civilian positions, not sworn law enforcement officers. Both Carrier Enforcement and Capitol Security funds have remained relatively static over the past ten years, and have also experienced vacant position reductions. Communications has also seen reductions in funding.

CARRIER ENFORCEMENT

The Carrier Enforcement (CE) division had previously been part of the Nebraska Department of Roads. It was merged into the NSP in 1985, and CE officers became NSP Troopers in 2001. The mission of the CE division is “To promote public safety” and “To preserve and protect the state highways and bridges from immoderate and destructive use.” The CE division enforces state and federal law in regards to the operation of commercial motor vehicles. Some of the division’s organizational characteristics still derive from its past as a part of the Department of Roads. For example, it has a command structure that is separate from road enforcement Troopers, and it has three geographic CE command areas across the state that do not align with the traffic enforcement Troop Areas. CE Troopers are specially trained to operate weigh stations and portable scale units along major highways, provide carrier compliance inspections, conduct educational initiatives on vehicle regulations, and provide other necessary services aimed at protecting the motoring public. However, as sworn NSP Troopers they are also empowered to enforce state laws as any other NSP Trooper.

With the exception of five sworn personnel, the majority of CE Troopers (currently 89) have always been on eight-hour shifts, and were thus not impacted by the February 2012 shift assignment policy change for traffic enforcement Troopers. However, during the interviews, the CE Troopers indicated that the labor force and shift coverage issues that impact traffic enforcement Troopers routinely have an impact on CE Troopers and their legislated duties. For example, CE Troopers may be required to respond to calls for service if traffic enforcement Troopers are far from the scene.

We examined the extent to which labor force or shift coverage issues affecting the agency had an impact on CE activity (See Appendix K: Carrier Enforcement Impact). We obtained monthly CE truck weighing and inspections figures for January 2009 to November 2013. We compared truck weighing and inspection rates for yearly blocks running from February to January for 2009, 2010, 2011, against 2012 – when the statewide shift assignment policy was instituted in February of that year.

From the year immediately preceding the shift assignment policy change (Feb 2011-Jan 2012) to the year of the change (Feb 2012-Jan 2013), there was an increase of 38,646 trucks weighed from 1,163,079 to 1,201,725, which was a higher number than the 2009-2011 three-year average (Feb 2009-Jan 2012) of 1,102,523. However, this increase fell within the standard deviation of that prior three-year period of 55,861. Thus, it is difficult to conclude if the shift assignment change for traffic enforcement Troopers had any impact on truck weighing activities of the CE division.

From the year immediately preceding the shift assignment policy change (Feb 2011-Jan 2012) to the year of the change (Feb 2012-Jan 2013), there was a decrease of 630 inspections from 30,094 to 29,464, which was a lower number than the 2009-2011 three-year average (Feb 2009-Jan 2012) of 31,788. However, this decrease fell within the standard deviation of that prior three-year period of 3,656. Thus, it is difficult to conclude if the shift assignment change for traffic enforcement Troopers had any impact on vehicle inspection activities of the CE division.

For these reasons, it is inconclusive as to whether the shift assignment policy change affecting traffic enforcement Troopers influenced the primary responsibilities of the CE division. However, it should be noted that our data analysis was limited. We only examined available data, which spanned less than four years, and was statewide and not reflective of more specific Troop Areas. There could indeed be impacts affecting traffic enforcement on CE, as we heard anecdotally, but this effect is not apparent in the data we examined.

SUMMARY AND RECOMMENDATIONS

The number of FTEs within the NSP has fluctuated within a relatively static range for the past ten years. In the meantime there has been a simultaneous elimination of vacant positions by the agency, and an increase in statutory responsibilities – though only a small number of those statutes have specifically appropriated funds for new positions. NSP leadership has leveraged federal funding for investigative functions and patrol activities when it is available and moved some jobs to the civilian workforce when the activities do not specifically require sworn law enforcement involvement. This effort has been part of a general approach to carry out statutorily mandated services while not increasing personnel costs. The current practice of mandating eight-hour shifts for the entire NSP workforce has negatively impacted morale among troops but no other data trends could be attributed to the change and we found nothing in the academic literature to refute the use of ten-hour shifts. We did note that the accident data and calls for service data indicate that each Troop Area has different needs and characteristics.

Upon careful review of labor force issues, best practices, data trends, and perceptions we recommend the following:

1. NSP leadership should establish in writing the expected minimum staffing standards for each Troop Area. This ensures that NSP leaders, Troop Area Captains, Sergeants and Troopers have shared expectations related to shift coverage.
2. Responsibilities for shift length and scheduling should be moved back to the Troop Areas and functional area commands. There was insufficient evidence to substantiate any positive change or trend that could be attributed directly to the movement to eight hour shifts statewide; the only real change has been a negative impact on morale.
 - a. Shift coverage decisions cannot be made by Troop Area Captains in the same way they did prior to the eight hour shift mandate. Instead, we recommend Captains be required to submit a formal staffing plan to Headquarters that is directly related to achieving the staffing standard for their Troop Area. This plan must be approved by NSP leadership and should not incorporate any regular use of overtime to achieve the standard. Once the plan is approved, the Troop Area Captain should be held accountable for ensuring it is implemented in a way that consistently meets the staffing standard for their area. NSP leadership should incorporate meeting the standard in the evaluation criteria for effectiveness of command staff.
 - b. Troop Area Captains should involve their Lieutenants and Sergeants in development of a staffing plan to meet the shift coverage standard for their area.
3. A quality assurance system should be established to allow NSP leadership to monitor adherence to staffing standards. We do not recommend micromanagement, however it is important to be able to hold command staff accountable for shift coverage decisions. For

example, if the minimum staffing level is 1 active Trooper in each sergeant area for 21 hours a day and 24 hour coverage in urban areas, NSP leadership must have a way to periodically check during different hours to see if there actually is a Trooper on duty in that area, rather than rely solely on schedules provided by command staff.

4. The Investigative Services Division should prioritize the myriad of duties they are assigned as a way to provide guidance to personnel with multiple investigative responsibilities and to determine which functions should have expanded and reduced availability. For example, troops on the road may require 24-hour access to certain kinds of investigative functions. Additionally, benchmarks for responding to investigative requests could be set and monitored to ensure priority activities are tended to in a timely fashion and to reallocate resources when needed. For example, NSP may prioritize services like getting data from a cellphone as part of an investigation and set a benchmark of getting the information within 48 hours of the request. Other important factors in setting priorities may include severity of the offense being investigated, how the investigation fits with NSP legislative responsibilities and how the investigative capabilities of the NSP strategically mesh with the investigative capabilities of other law enforcement agencies in Nebraska. Similar to traffic coverage, we recommend a quality assurance system to monitor and track adherence to investigative standards. The resulting ability or inability to meet the benchmark could signal a need to reallocate resources to ensure the standards can be met for the priority service.
5. NSP should examine overtime costs closely and consider how the addition of sworn personnel may decrease these costs. We were only able to obtain gross dollar amounts for overtime and were thus unable to determine how much of it was unavoidable and how much could be decreased if staffing patterns were increased.
6. NSP should continue to anticipate vacancies for sworn personnel and consider scheduling a yearly training academy/camp. It takes a great deal of time to screen and train applicants for NSP sworn positions and there has not been a training academy in several years. We recommend that NSP hold at least one training academy each year to ensure vacancies are filled in a timely fashion. The current practice of holding a training academy once every two to three years undoubtedly contributes to the labor force and shift coverage issues. We understand that a determination has been made that 15 vacancies must be filled to make a camp cost effective, but we believe overtime costs may be cut down if classes of recruits were hired and trained on a more regular, predictable basis.
7. NSP continues to move toward civilian staffing whenever possible, which is cost effective and prudent. However, an increase in qualified, trained, sworn law enforcement

personnel is justified and needed by the NSP. Nebraska deserves a state patrol with resources adequate to meet the mandates given by its legislature. Public safety and Trooper safety would both be enhanced if sworn personnel staffing levels were even slightly increased. To achieve the desired staffing levels in every Troop Area we believe it would require a total of 80 additional positions which is not currently feasible or realistic. However we believe it is realistic to expect adequate staffing levels to achieve 24 hour coverage along the interstate and in urban areas, and 21 hour coverage in rural areas.

8. We recommend a realistic fiscal note be prepared for each piece of future legislation that impact NSP. These notes should always include staffing impacts including how funds will be reallocated from existing services if mandates are given without additional funding, which allows legislators to make informed decisions and provides greater transparency about how the agency will adapt to increasing demands.
9. Finally, we recommend that NSP leadership identify ways to formally engage troops in future strategic planning for the agency. We know from the leadership literature that involving employees at all levels in some aspect of decision making enhances morale and creates a positive work culture. Troopers understand that hard decisions must be made by command staff in their role as supervisor, but we heard from many individuals that they felt discounted and uninvolved in major agency decisions that ultimately impact their personal and professional lives. Leaders often fail to involve direct line staff in planning because of the misperception that there is not much they can add to the process. We disagree and recommend any future planning processes within the agency include ways for direct line staff to contribute or react to plans before they are final.