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Forest Service National Forest System Perceptions of Law Enforcement and Investigations: Nationwide Study

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Abstract

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This is the fifth in a series of studies to evaluate perceptions of the roles, responsibilities, and issues entailed in the jobs of U.S. Department of Agriculture Forest Service law enforcement and investigations (LEI) personnel. An e-mail survey was administered to the 537 Forest Service forest supervisors and district rangers (National Forest System [NFS] line officers) across the United States. Two-hundred and seventy-six completed and returned the questionnaire. Interaction, collaboration, and teamwork were important to the NFS line officer respondents—they reported the need for frequent interactions and had general agreement on priorities with LEI. Budget was a major concern for the NFS line officer respondents as was the shortage of law enforcement officers and forest protection officers. Natural resource protection was seen as important and was thought to be a priority, along with budget and safety. A successful LEI program was characterized as one that is understood by those engaged in or affected by the program and that has sufficient personnel and good communication.

Keywords: Crime and violence, law enforcement, forest visitors, successful management.

Executive Summary

This study is the fifth in a series of studies evaluating U.S. Department of Agriculture Forest Service (USFS) law enforcement. The ultimate goals of the work are threefold. First, the law enforcement and investigations (LEI) studies serve as a followup to a previous qualitative study to learn more about crime and violence on national forests and grasslands and the impacts on recreation visitation and management of those national forests. Second, the LEI studies serve as a followup to a previous qualitative study testing the key characteristics of success in law enforcement, measuring opinions about recreation visitor and public safety, and evaluating impacts to natural resources. Third, the LEI studies serve to provide Credibility Through Accountability/Performance Accountability System data for LEI.

Specific research objectives were to:

- Develop, pretest, and administer a quantitative survey to gather information from forest supervisors and district rangers (National Forest System [NFS] line officers) about crime and violence at USFS sites nationwide.
- Confirm what crimes and acts of violence are occurring, the extent of crimes, and the impacts they have on public land management and public safety.
- Ascertain whether NFS line officers perceive that acts of crime and violence are changing, and, if so, why.
- Determine NFS line officers' perceptions of the impacts of crime and violence to recreation visitors and other forest users.
- Establish measures of law enforcement success.
- Identify successful LEI programs regionally and locally.
- Confirm the key characteristics of law enforcement success.
- Identify additional successful strategies for LEI to deal with crime in forest settings.

To obtain this information, an e-mail survey along with an endorsement letter from (then) Chief Bosworth was sent to NFS line officers. To begin, the NFS line officers received an e-mail message. Of the 537 questionnaires sent via e-mail, 276 were completed and returned, for a response rate of 51.4 percent.

Most of the NFS line officer respondents are male. Average age of respondents is about 50 years. They are predominately White, although 14 percent are from other racial and ethnic groups. They had been in the USFS an average of 25 years, and had worked as an NFS line officer for an average of 9 years.

A median 420,000 acres is contained within the unit for which the NFS line officer respondents have responsibility, although the law enforcement officers

(LEOs) in their area of responsibility usually patrol less than that. While on patrol, the most common task LEOs have is violations/warnings or performing investigations, followed by public relations/education/information. Communication with LEI personnel in the USFS is important to the respondents, as evidenced by their efforts to talk face-to-face and attend meetings and other functions. They also used the phone, e-mail, and weekly reports to get their messages out.

The NFS line officer respondents reported a shortage of LEO and forest protection officers. Most NFS line officers reported having cooperative law enforcement agreements with county sheriff offices, but, for many, their perceptions were that these services were not adequate in responding to or preventing crime. Many of the NFS line officer respondents noted that law enforcement visibility, support, and funding should be increased.

The NFS line officer respondents ranked their highest job priorities as protecting NFS employees and forest users, followed by protecting forest resources, and protecting public property. They believed that the LEI officers with whom they most commonly interacted had a similar set of priorities. Most NFS line officer respondents believed that LEI's relationship with the rest of the USFS should be one of collaboration and teamwork. Percentage of respondents reporting that LEI personnel were outsiders to the agency was similar to the percentage reporting they were well integrated. Most NFS line officer respondents felt they had a good knowledge and understanding of the job LEI personnel perform, and most felt supported by LEI personnel.

Several types of crime were on the increase according to NFS line officer respondents. Dumping of household waste and methamphetamine labs topped the list, followed by natural fire hazards, road hazards, dumping of landscape waste, and methamphetamine chemical dumps. Many LEI line respondents thought that arson, wildlife hazards, weather hazards, accidental fire activity, theft of visitor property, and suicides remained unchanged from fiscal year (FY) 2003 to FY2004. Many of the NFS line officer respondents reported they were threatened or attacked because of their job. Most reported this was related to large group activity or was related to natural resource issues.

According to the NFS line officer respondents, the priority issues facing LEI were funding, safety, and natural resource protection. Most NFS line officers believe that the officer they most commonly interact with is in general agreement with their list of priorities.

The respondents described USFS employees and forest users (the general public and recreation visitors) as their primary customers. They believed that forest users wanted safety/protection while on the forest, they wanted prevention of crime, and

Communication with LEI personnel in the USFS is important to the respondents, as evidenced by their efforts to talk faceto-face and attend meetings and other functions.

they wanted law enforcement to take action. More than half of the NFS line officer respondents felt that recreation visitors are mostly safe from other visitors and mostly physically safe from site features. Most of the NFS line officer respondents also believed that recreation visitors were much safer from others and from site features compared to being in the visitors' own neighborhoods. The top three types of crime or law enforcement violations that NFS line officers reported most commonly affect recreation visitors were urban-associated crimes (e.g., theft, weapons violations, and break-ins), drug activity, and natural resource issues. The top three types of special problems in protecting forest users were a lack of law enforcement personnel, social conflict (such as conflict between recreation groups), and drug activity.

Most of the NFS line officer respondents described a successful LEI program as one with increased understanding and interaction, adequate numbers of personnel, and good communication.

Almost equal percentages of the NFS line officer respondents reported that the quality of the natural resources in their patrol area of responsibility had declined during the time they worked there as reported it has remained the same. Some reported it had improved. More than half of the NFS line officers believed that the media portrayal of crimes against resources and the media portrayal of fire crimes were mostly positive for law enforcement.

Several NFS line officer respondents had success stories to share. Most comments were related to solving crimes/getting convictions and good cooperation. Several NFS line officer respondents reported that law enforcement on their unit performed special community outreach programs; most were related to public education.

Most of the NFS line officer respondents described a successful LEI program as one with increased understanding and interaction, adequate numbers of personnel, and good communication. Improvements in the law enforcement program could be made in field presence and good fiscal management.

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Introduction

Crime and acts of violence are a part of the national forest setting, making the work of national forest and grassland managers more hazardous and jeopardizing the safety of forest users. To understand and respond appropriately to current and future Forest Service law enforcement needs, it is important to hear from the professionals most closely associated with these issues—forest supervisors and district rangers (National Forest System [NFS] line officers) of the U.S. Department of Agriculture Forest Service (USFS).

Another incentive for conducting this study was to respond to the federal initiative for performance-based measures. As a consequence of budget cuts and competing demands for federal dollars, the USFS must demonstrate its accountability to Congress, the Office of Management and Budget, the Government Accountability Office, and the general public for its level of performance. Under the aegis of the Credibility Through Accountability/Performance Accountability System (CTA/PAS), USFS Law Enforcement and Investigations (LEI) was tasked with developing and implementing performance outcome measures. In addition, LEI wanted recognition for the benefits that accrue to visitors, employees, and cooperators beyond what is addressed in the performance measures. They wanted an opportunity to "tell their story." They believe that "locking up bad guys and writing tickets" does not adequately describe the benefits they provide. This report includes CTA/PAS performance measures for USFS law enforcement as well as many of the stories and opinions expressed by their customers in the NFS.

This is the fifth in a series of studies addressing the CTA/PAS component. Previously, we collected data from Law Enforcement Officers (LEOs), Special Agents in Charge, Patrol Commanders and Patrol Captains, and Special Agents. Results from those studies appear in separate reports.

Background

Research on national forest crime is limited. Historically, research efforts focused on vandalism (Christensen and Clark 1978), especially graffiti and target shooting. More recently, Munson (1995) noted problems such as the dumping of garbage and toxic chemicals, vandalism, marijuana cultivation, and timber thefts. Marosi (1999) found that national forests were being used as a dumping ground for murders committed elsewhere, especially in urban-proximate forests (those within an hour's drive of a million or more people). Pendleton (1996) found a 100-percent increase in national forest crime from 1989 to 1992. More recently, Chavez and Tynon (2000) found that clandestine methamphetamine manufacture and methamphetamine lab chemical dumps, once thought to be the bane of urban environments,

indiscriminately endanger both those who visit and those who work on national forests. Methamphetamine has become a dangerous and environmentally damaging drug problem.

Chavez and Tynon (2000) reported on crime in a study conducted at eight USFS sites in four USFS regions. The kinds of crime taking place at these sites were sorted into the following categories: urban-associated crime (e.g., arson, body dumping, domestic violence, drive-by shooting, gang activity, murder, rape and sexual assault, suicide), assault (e.g., personal assault, criminal property damage, threats against property), drug activity (e.g., marijuana cultivation, methamphetamine labs, methamphetamine chemical dumps, armed defense of crops), and takeover or violence perpetrated by members of extremist and nontraditional groups (e.g., satanic cults, EarthFirst!, survivalists, and militia/supremacy groups). Later research at other USFS sites lent support to those findings (Chavez et al. 2004, Tynon and Chavez 2006).

These crime categories are familiar to readers of the "USDA Forest Service Law Enforcement and Investigations Weekly Report" (LEI Summary), where nonrandomly selected topics are reported each week. An analysis of 5 years of data (from October 1997 through the end of September 2002) revealed that the percentages in the LEI Summary report mimic estimates from managers' perceptions of time spent in city law enforcement (such as domestic violence or murder) vs. natural resources law enforcement (such as timber theft¹) (Chavez and Tynon 2000, Tynon et al. 2001). The analysis of the LEI Summary reports indicated that about 17 percent of USFS LEO time was spent conducting natural resources law enforcement, and 48 percent investigating urban crime (the remainder of topics and time were for assault, drug activities, and extremist groups). The groupings are based on research conducted by Chavez and Tynon (2000).

Crime mitigation efforts—

In addition to knowing what kinds of crime are occurring, it is important to understand how to mitigate crime. Case-study research conducted at two USFS sites uncovered strategies that resulted in areas being safer for visitors, natural resource managers, and staff. Chavez et al. (2004) conducted face-to-face interviews with LEOs, district rangers, recreation officers, public affairs officers, resource specialists, and recreation planners, as well as interviews with those outside the agency (e.g., county sheriff's deputies, a resort owner, public relations employees, and community representatives). The benefit of conducting indepth interviews is in its

¹ Tynon, J.F.; Chavez, D.J. 2002. Crimes and violence on public lands post-9/11. Keynote address presented at the leisure research symposium, National Recreation and Park Association, October 16–17, Tampa, FL.

flexibility. Respondents can "elaborate, question, go off on [informative] tangents, and often provide answers to questions that the interviewer did not foresee being asked" (Lersch 2004: 25).

The interviews revealed problems common at both sites. These included assaults, drug abuse, alcohol abuse, and problems created by gang activity or members of extremist groups. Isolation or distance from assistance was also a familiar theme. There were watershed events that led to action (a riot at one site and a murder at another). Some of the specific actions taken to manage crime and violent acts and events were (1) development of sites, (2) addition of physical barriers (categorized as prohibition and harm-reduction actions), (3) control of parking and motor vehicles, (4) increased law enforcement presence, (5) temporary and permanent closures, and (6) traffic checkpoints.

Evaluation of the case studies resulted in the identification of key characteristics of success in law enforcement. The key characteristics were force of personalities (i.e., attention to an area depended upon individuals, not on policies), resources (i.e., money and people), persistence (i.e., planning, consistency, and visibility), collaboration (i.e., within the Forest Service, with other law enforcement agencies, with community and volunteer groups, and with recreation visitors and recreation clubs), and communication (e.g., follow a communication plan, get the word out to the public, be reliable, and be consistent).

The replication of site-specific actions might prove useful in other areas. But the take-home message was that successful crime mitigation characteristics (e.g., force of personalities, resources, persistence, collaboration, and communication) are not "business as usual" for law enforcement—they go beyond the cooperative agreements that already exist.

Data collection issues on national forests—

Obtaining statistical data to substantiate how much crime is occurring in USFS settings has been difficult because of the way crime is reported and recorded. Agreements between the USFS and other law enforcement entities can result in several agencies tracking crime. Local sheriffs track incidents by using categories based on the Federal Bureau of Investigation Uniform Crime Reporting (UCR) guide. Part I of the UCR includes categories such as criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson. Part II includes other assaults, drug violations, stolen property (receiving, buying, possessing), vandalism, weapons-related offenses, driving under the influence, liquor law violations, drunkenness, and disorderly conduct (Lersch 2004). Part III of the UCR is about assists to USFS NFS and assists to the public, where state or local law enforcement personnel contribute to USFS enforcement efforts. Although

The take-home message was that successful crime mitigation characteristics (e.g., force of personalities, resources, persistence, collaboration, and communication) are not "business as usual" for law enforcement—they go beyond the cooperative agreements that already exist.

this information can be made available, local LEOs/sheriffs, in general, do not specifically tie data to incidents on USFS lands—data for all types of incidents are combined.

Forest Service LEI has its own database to track crime incidents, also using categories from the UCR guide. In addition, it has categories specific to forest or land management (e.g., campfire where prohibited, camping where prohibited, violating curfew). It tracks observations of problems, verbal warnings, and written warnings (together these are the total violations), and tracks tickets given. Total violations and tickets written equal the total incidents or occurrences.

A significant problem is getting the data into the database. Originally, LEI entered crime data into a USFS system database called Law Enforcement Management Attainment Reporting System (LEMARS). Then the USFS transported all their data into a new database program called Law Enforcement and Investigations Management Attainment Reporting System (LEIMARS). Unlike LEMARS, LEIMARS contains not only investigative information but also the latitude and longitude coordinates of crime incidents, allowing it to serve as a geographic information system database. Unfortunately, data at some sites were permanently lost during the transfer process. Problems with the new system (i.e., some data were either not recorded or disappeared after being entered into the program) are being corrected.

Study Objectives

The best, and only, available source of crime statistics for the entire 193 million acres of national forests and grasslands in the USFS is LEIMARS, but it does not capture all the crime that is occurring. Crime data collected by non-Forest Service law enforcement are not specifically earmarked to USFS lands, are not included in the USFS crime database, and are not available for analysis. Therefore, we decided to survey law enforcement personnel directly to obtain their perceptions rather than analyzing incomplete records of actual crime/incidents and we decided to contact their primary customers directly—the forest supervisors and district rangers.

Specific research objectives were to:

- Develop and administer a quantitative survey instrument to gather information from NFS line officers about crime and violence at USFS sites nationwide.
- Confirm what crimes and acts of violence are occurring, the extent of crimes, and the effects they have on public land management and public safety.
- Ascertain whether NFS line officers perceive that acts of crime and violence are changing, and if so, how.

- Determine NFS line officers' perceptions of the effects of crime and violence on recreation visitors and other forest users.
- Establish measures of law enforcement success.
- Identify successful LEI programs regionally and locally.
- Confirm the key characteristics of law enforcement success.
- Identify additional successful strategies for LEI to deal with crime in forest settings.

Methods

Several individuals reviewed the first draft of the questionnaire, including staff at LEI in the Washington office, leaders then in the Alaska Region working on the CTA program, and fellow social scientists. We enlisted the cooperation and participation of all NFS line officers across the United States by including an endorsement letter from the Chief of the Forest Service. We administered the questionnaire via e-mail between March and April 2006.

There were 42 questions, both closed- and open-ended,² on the questionnaire eliciting information about crime and violence that had occurred within the past year on each respective administrative unit. Questions measured experience levels of respondents: years with the USFS and years as a line officer for the USFS. Other questions focused on respondents' areas of responsibility: the number of acres contained within their unit of responsibility, the approximate number of acres normally patrolled by law enforcement, and the patrol setting (e.g., urban, semirural, extremely remote). We also asked them to characterize the purpose of law enforcement contacts and to describe how they communicate with law enforcement in the USFS.

We asked NFS line officers a series of questions related to enforcement levels and perceptions about visibility and support of the LEI program.

Questions that focused on roles in the USFS asked about job priorities and perceptions of LEO job priorities. They were also asked what they believe the relationship of LEI to the rest of the USFS should be and where LEI fits within the organization and programs. We also asked if they had a good knowledge and understanding of the job that LEI personnel does for them and if they felt supported by LEI personnel. Additional questions were about LEI interaction with the leadership team, public affairs proactive involvement with media, and if elected officials understand the LEI program.

Questions with no response categories provided to respondents are called open-ended. Responses are divided into response categories after reading all responses. Many respondent comments have been paraphrased to help ensure confidentiality.

To confirm what crimes and acts of violence are occurring and the extent of crimes, we asked NFS line officers about 28 types of crime, law enforcement violations, and other patrol activities. Specifically, they were asked if these had increased, decreased, or remained about the same from fiscal year (FY) FY2003 to FY2004. We asked NFS line officers to identify activities they found more common during the week, during daytime hours, or when areas were more crowded. We also asked if they had ever been threatened or attacked because of their job.

We asked two open-ended questions about priorities: priority issues facing the law enforcement profession in the USFS today and how the priorities of NFS compare with LEI priorities.

Several questions focused on USFS customers including what respondents think customers want and their views on recreation visitor safety and forest user safety. We also asked about the media portrayal of crimes against forest users.

We asked NFS line officers if the quality of the natural resources had degraded, improved, or remained about the same. We asked if maintenance of facilities and developed areas had changed. We also asked about media portrayals of fire crimes and crimes against resources.

We used an open-ended question to identify measures of law enforcement successes. We also asked about law enforcement successes in special community outreach programs. Respondents were asked to describe a successful LEI program at their unit level (regional or local) and suggestions they had to improve the LEI program.

The survey closed with a number of sociodemographic questions about the respondents. There was also an opportunity for respondents to add final thoughts. A copy of the questionnaire is included in the appendix.

The e-mail survey was administered according to Dillman's Total Design Method (Dillman 2000). To begin, NFS line officers received an e-mail message from the Chief of the Forest Service. Next, they received the first mailing from us. This consisted of a questionnaire and a personalized letter. The next e-mail was a "postcard" reminder sent a week later. In subsequent e-mail contacts, the respondent received another copy of the questionnaire. Completed questionnaires were returned in several ways: via e-mail, FAX, FedEx, or through the U.S. postal system.

Data Analysis

The data were analyzed by using an SPSS v. 12 software program.³ We ran frequencies on all variables to confirm data integrity. Then SPSS was used to provide percentages, averages (and standard deviations), or medians, as appropriate.

³ The use of trade of firm names in this publication is for the reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

Results

Of the 537 questionnaires sent via e-mail, 276 were completed and returned, for a response rate of 51.4 percent. Results are reported for all respondents unless noted otherwise. We did not test for nonresponse bias.

Demographics

Most of the NFS line officer respondents are male (67 percent). They averaged 50 years of age (n = 265; SD = 5.74).

The majority of NFS line officer respondents are White (76 percent). Six percent are Hispanic, 3 percent are multiracial, 2 percent are African American, 2 percent are Asian, and 1 percent is Native American/American Indian. Years of school completed averaged 17 years (n = 227; SD = 1.38). Most held a bachelor's degree (70 percent) or a master's degree (25 percent).

Table 1 reports the distribution of response by USFS region.

The NFS line officer respondents had an average of 25 years (n = 271; SD = 6.53) with the Forest Service. Number of years as a line officer for the Forest Service ranged from 0 to 30 with an average of 9 years (n = 267; SD = 5.69).

Table 1—Distribution of response by USFS region

| Region | Distribution | |
|--------|--------------|--|
| | Percent | |
| 1 | 13 | |
| 2 | 11 | |
| 3 | 10 | |
| 4 | 14 | |
| 5 | 11 | |
| 6 | 14 | |
| 8 | 14 | |
| 9 | 10 | |
| 10 | 2 | |
| 276 | 100 | |

Area of Responsibility

A median of 420,000 acres is contained within the unit for which NFS line officer respondents have responsibility (range is 357 to 5.5 million; n = 272). The LEOs in their area of responsibility normally accessed a median of 150,000 acres for patrol purposes (range is 0 to 3 million; n = 177).

The setting of the patrol area of responsibility differed. Most NFS line officer respondents reported their area of responsibility as primarily semirural (61 percent).

The NFS line officer respondents had an average of 25 years with the Forest Service. Number of years as a line officer for the Forest Service ranged from 0 to 30 with an average of 9 years.

Others reported the areas were best described as primarily extremely remote (28 percent) or urban/urban-interface (27 percent).

The NFS line officer respondents were asked to rate 1 to 5 their most common activity during public contacts (1 is most common). Violation notices/warnings/investigations was rated "1" by 45 percent, public relations/education/information was rated "1" by 37 percent, nonviolator public assistance was rated "1" by 5 percent, and search/rescue/medical response was rated "3" by 4 percent.

The NFS line officer respondents communicated with LEI personnel on their unit through various means. About one-third reported they communicate face-to-face (32 percent). Other communications means included:

- 22 percent reported they talked at group functions.
- 16 percent reported they talked by phone.
- 14 percent reported they sent e-mail messages.
- 10 percent reported they made themselves available to communicate.
- 1 percent reported they provided weekly reports.
- 52 percent had other comments:
 - I never hear from them.
 - We don't always agree, but we listen to one another and he makes the
 decisions he has to make within his area of responsibility and I make the
 decisions I need to make within my area of responsibility.
 - My LEO is zoned with a duty station on another district. I have very infrequent communications with him. Most of my communication is with the PC [patrol captain].

Enforcement Level and Cooperation

On an average day, there was a median of 1 LEO responsible for law enforcement patrols or regulatory compliance in the respondent's area of responsibility (range 0 to 12; n = 270). Also, on an average day, there weas a median of 2 FPOs responsible for law enforcement patrols or regulatory compliance in the patrol area of responsibility (range 0 to 60; n = 270).

More than 8 in 10 (85 percent) respondents reported there were too few LEOs in their area of responsibility, and more than 7 in 10 (74 percent) reported too few FPOs in their area of responsibility. Thirteen percent reported the amount of LEOs in their area of responsibility was about right, and 24 percent reported the amount of FPOs in their area of responsibility was about right.

More than 9 in 10 (92 percent) respondents reported having cooperative agreements with other law enforcement agencies. Most reported agreements with county

sheriff's offices (88 percent). Some had agreements with state police (13 percent) or agreements with city/town/community law enforcement (9 percent).

We asked if **reimbursed** patrols/enforcement work by cooperating law enforcement officers offer adequate services or inadequate services in responding to or preventing crime. Perceptions about services from county sheriff's law enforcement for those who had them (n = 242) were relatively evenly split between those saying they were adequate (39 percent) and those saying they were inadequate (48 percent). Perceptions about services from state police law enforcement for those who had them (n = 37) were relatively evenly split between those saying they were adequate (27 percent) and those saying they were inadequate (32 percent). Perceptions about services from city/town/community law enforcement for those who had them (n = 24) differed greatly with 58 percent who reported them to be adequate, and 17 percent who reported they were inadequate.

We also asked if **nonreimbursed** patrols offer adequate services or inadequate services in responding to or preventing crime. Perceptions about services from county sheriff's law enforcement for those who had them (n = 242) were mostly negative with 55 percent reporting they were inadequate, and 25 percent reporting they were adequate. Perceptions about services from state police for those who had them (n = 37) were mostly negative with 49 percent reporting they were inadequate, and 16 percent reporting they were adequate. Perceptions about services from city/town/community law enforcement for those who had them (n = 24) were relatively evenly split with 33 percent reporting they were adequate and 29 percent reporting they were inadequate.

Forty-two percent of the NFS line officer respondents felt that law enforcement visibility, support, and funding should be increased. Those respondents provided 41 comments.

- 54 percent reported comments related to visibility:
 - Visibility can be increased through more public education.
 - Currently LEI [officers] have too much area to cover so they are not seen.
 - We need more patrols with higher visibility to even begin to do justice to enforcing regulations and preventing violations.
- 34 percent reported comments related to funding:
 - Funding appears to be going away from the field where patrols are needed.
 - Funding has to be increased to keep pace with increasing criminal activity.
 - The program is sadly underfunded—too few people means increased risk to officers, public, and resources. It is unbelievable how much is done with so little, but I can see it really wearing on our officers and their families.

Forty-two percent of the NFS line officer respondents felt that law enforcement visibility, support, and funding should be increased.

- 24 percent reported comments related to support:
 - I think support can come in the way of better communication and shared responsibility with other USFS employees and perhaps some more legal tools.
 - We need to support the officers' needs—such as their need to work near home for long periods of time. Too often they are sent to distant locales.
 We're stretching the LEI organization far too thin when it comes to their families' needs, constantly assigning them to incidents far away from home.
 - We need to support LEI personnel by looking at our supposed culture of safety—we are knowingly putting people in harm's way without adequate backup or equipment and nobody seems willing to acknowledge this.

Roles

The NFS line officer respondents reported their highest priorities as protecting NFS employees (table 2). This was followed by protecting forest users, protecting resources, and protecting public property. They were also asked to rank 1 to 4 what they believed the LEO with whom they most commonly interacted with thought was the highest priority: protecting forest users; protecting resources; protecting NFS employees; or protecting public property. The NFS line officer respondents reported their perception that the LEOs' highest priority was protecting NFS employees, followed by protecting forest users.

Table 2—Priorities of forest supervisors and district rangers (NFS line officer) and their perceptions of law enforcement officer (LEO) priorities

| Priority | Average (n) NFS line view | Average (n) perception of LEO view |
|----------------------------|---------------------------|--|
| Protecting NFS employees | 1.5 (229) | 1.7 (195) |
| Protecting forest users | 2.3 (229) | 2.0 (194) |
| Protecting resources | 2.9 (229) | 3.1 (197) |
| Protecting public property | 3.5 (229) | 3.1 (194) |

Ranked 1 to 4, with 1 being highest priority.

NFS = National Forest System.

The NFS line officer respondents were asked what they believed LEI's relationship with the rest of the Forest Service should be. We grouped their responses into several categories:

- 64 percent reported the relationship should be one of collaboration and teamwork:
 - A contributing member of the USFS unit and team included in day-to-day activities and the planning process.

- The relationship should be collaborative and mutually supportive. Most LEOs I have worked with want to be in synch with the local line officers' priorities.
- 20 percent reported non-stovepipe:
 - I am a proponent that law enforcement needs to go back to the non-stovepipe organization. There have been too many times I've experienced LEOs who have no idea as to what resource management is all about and are just concerned with LEO work
- 12 percent reported increased NFS direction:
 - I believe that law enforcement should still look to forest managers to set priorities.
- 10 percent reported a need for site-specific responsiveness:
 - The LEOs need to work one on one with all local USFS employees in their day-to-day duties.
- 8 percent reported good communication.
- 5 percent reported natural resources.
- 4 percent reported service.
- 4 percent reported more responsive.
- 2 percent reported less drug emphasis.
- 2 percent reported separate investigations.
- 1 percent reported be more in touch.
- 8 percent had other comments:
 - Ensure public compliance with forest management.

We asked the NFS line officer where LEI fits within the Forest Service organization and programs. The responses were quite varied. We grouped their responses into several categories:

- 29 percent reported LEI were outsiders:
 - It is pretty much "stand alone," and not well integrated. It gets involved when it determines it's important enough and has enough time.
- 24 percent reported well-integrated:
 - Where I work, LEI works very closely with management to set all forest priorities.
 - They are an integral part to get the job done.
- 13 percent reported they were equal partners in the USFS:
 - They are a partner in our organization and our programs.

Sixty-seven percent of the NFS line officer respondents reported they had a good knowledge and understanding of the job that LEI personnel on their unit performs everyday.

- 8 percent reported LEI served a protection role.
- 1 percent reported LEI was forgotten/misunderstood.
- 1 percent reported educators of public and NFS.
- 32 percent had other comments:
 - In the agency, the role of law enforcement is absolutely critical to accomplishing the agency's mission, caring for the land, serving people.
 - Varies by unit. Some try hard to serve the forest; others are more into "busting heads."

Sixty-seven percent of the NFS line officer respondents reported they had a good knowledge and understanding of the job that LEI personnel on their unit performs everyday. Those who thought they had a good knowledge and understanding reported this was because they communicated regularly and they had interaction in the office. Those who reported they did have a good knowledge and understanding reported it was mostly due to regular communications and interactions. Those who reported they did not have a good knowledge and understanding reported it was mostly due to a lack of interaction and that LEI officers were not often in the office.

The majority of NFS line officer (73 percent) felt supported by LEI personnel. Those who did not feel supported by LEI provided 92 responses why not:

- 33 percent reported LEI has different priorities:
 - We have no full-time LEO, and the one we share spends most of their time
 on the other unit. This unit has higher needs than ours, not that ours are not
 important. Also LEI leadership does not have the money to hire a person for
 our unit.
 - Too distant and removed from day-to-day operations on the ranger district.
- 32 percent reported there were too few personnel and not enough coverage:
 - I believe that LEI personnel want to help but they cannot. No dollars, no people.
 - We have some good folks; however, they have too much to cover and there are too few of them.
- 10 percent reported support was inconsistent:
 - The support from LEI seems to be there one minute and gone the next.
- 3 percent reported they rely on other agencies.
- 17 percent had other comments:
 - It takes forever to get a forest order in place.
 - They have a harassing attitude rather than a host attitude. For example, they have an attitude that every hunter is an outlaw.

More than half (58 percent) of the NFS line officer respondents reported that local LEOs routinely interact with their leadership team. Many (40 percent) reported that their public affairs employees routinely work proactively with local media sources on law enforcement activities and programs. Many (48 percent) NFS line officer respondents reported that local elected officials and congressional offices had at least some knowledge of USFS law enforcement programs and activities. Others (48 percent) reported local elected officials and congressional offices as having very little or no knowledge of USFS law enforcement programs and activities.

Existing Issues

The NFS line officer respondents were asked about 28 types of crime, law enforcement violations, and other patrol activities in their area. First they were asked if these had increased, decreased, or remained about the same in FY2004 as compared to FY2003. They were then asked to specify which ones were more common during the week, during daytime hours, or when the area was more crowded.

At least 50 percent of the NFS line officer respondents reported the following activities had increased from FY2003 to FY2004 (see table 3); in rank order:

- Dumping of household waste
- Methamphetamine labs

At least 50 percent of the NFS line officers reported the following activities had remained the same from FY2003 to FY2004, in rank order:

- Arson
- Wildlife hazards
- Weather hazards
- Accidental fire activity
- Theft of public property
- Suicides

Of the above patrol activities (table 3), the five thought to be more common during the week (rather than the weekend) were dumping household waste (33 percent), dumping landscape waste (21 percent), theft of public property (16 percent), methamphetamine labs (13 percent), and marijuana cultivation (10 percent).

Of the above patrol activities (table 3), the five thought to be more common during daytime hours (as opposed to nighttime) were dumping household waste (23 percent), dumping landscape waste (18 percent), shooting (indiscriminate) (17 percent), arson (12 percent), and theft of public property (12 percent).

Table 3—Perceptions about different types of crime, law enforcement violations, and other patrol activities in the patrol area of responsibility for fiscal year (FY) FY04 compared to FY03

| Activity | Increased | Decreased | Remained the same | Don't know |
|--|-----------|-----------|-------------------|---------------|
| | | Percent | | |
| a. Arson | 12 | 4 | 63 | 18 |
| b. Domestic violence | 13 | 0 | 48 | 34 |
| c. Thefts of visitor personal property | 29 | 3 | 51 | 13 |
| d. Thefts of public property | 34 | 1 | 49 | 9 |
| e. Gang activity | 17 | 1 | 37 | 36 |
| f. Body dumping | 8 | 0 | 46 | 36 |
| g. Shooting (indiscriminate) | 33 | 1 | 41 | 18 |
| h. Suicides | 11 | 4 | 51 | 29 |
| i. Murder | 8 | 1 | 48 | 34 |
| j. Rape / sexual assault | 7 | 1 | 45 | 39 |
| k. Drive-by shooting | 2 | 1 | 41 | 45 |
| 1. Criminal damage | 39 | 1 | 40 | 15 |
| m. Personnel threats | 27 | 3 | 46 | 20 |
| n. Threats against property | 23 | 1 | 45 | 23 |
| o. Marijuana cultivation | 29 | 4 | 44 | 17 |
| p. Meth labs | 51 | 4 | 23 | 17 |
| q. Meth chemical dump | 42 | 3 | 28 | 21 |
| r. Armed defense of crops | 14 | 1 | 38 | 38 |
| s. Dumping of household waste | 55 | 2 | 32 | 7 |
| t. Dumping of landscape waste | 44 | 1 | 37 | 12 |
| u. Trespass of undocumented immigrants | 17 | 0 | 31 | 46 |
| v. Armed defense of forest products | 6 | 1 | 39 | 45 |
| w. Natural fire hazards | 45 | 4 | 35 | 10 |
| x. Accidental fire activity | 32 | 1 | 54 | 8 |
| y. Weather hazards | 21 | 0 | 61 | 13 |
| z. Wildlife hazards | 18 | 2 | 62 | 13 |
| aa. Road hazards | 45 | 3 | 38 | 9 |

Row totals do not add to 100 percent owing to missing data. All percentages based on n = 276.

Of the above patrol activities (table 3), the five thought to be more common when the area is crowded (as opposed to when not many visitors are in the area) were personnel threats (23 percent), theft of visitor property (21 percent), domestic violence (15 percent), accidental fire activity (14 percent), and road hazards (13 percent).

Forty-three percent of the NFS line officer respondents reported they had been threatened or attacked because of their job. We asked about incidents in the past 3 years. The NFS line officer respondents who had been threatened or attacked provided 123 comments:

- 26 percent reported incidents were related to large groups:
 - Some of the local community got upset over proposed designated routes. We had protests, vandalism at our work center, and a lot of other encounters.
 Law enforcement was right there to help.
 - We had demonstrations at one of my offices and another was fire bombed, and I had employees and their children threatened. USFS law enforcement provided coordination with local city and county police to provide the needed protection and investigations.
- 16 percent reported incidents were related to natural resources:
 - It happened while I was dealing with the theft of wild horses.
- 10 percent reported incidents occurred during contacts with recreation visitors:
 - Hunter intimidation, but no law enforcement was available to assist.
- 5 percent reported incidents were related to incidents with ranchers.
- 4 percent reported incidents were related to drug activity.
- 4 percent reported incidents were a common occurrence.
- 33 percent had other comments:
 - A LEO I supervised threatened to whip me. The ranger discussed disciplinary action with the LEO.
 - I handled a threat myself and law enforcement was never involved.
 - A person went wild in the office when we had no LEO stationed at the unit. By the time one arrived the person had left.

Priorities

The NFS line officer respondents provided comments on priority issues. The responses were quite varied and were grouped into these categories: fiscal, safety, natural resource protection, cooperation, occupational ideals, management, and other. Most had comments related to budgets:

Forty-three percent of the NFS line officer respondents reported they had been threatened or attacked because of their job.

- 60 percent reported the priority was fiscal:
 - Inadequate resources to get the job done.
 - Lack of staffing to deal with methamphetamine labs, illegal off-highway vehicle (OHV) use, marijuana gardens, theft, and vandalism.
 - Budget!
 - Budgets to handle increased numbers of users, increased drug and alcohol use by forest visitors.
- 33 percent reported the priority was safety:
 - Personal safety for themselves. They are often acting alone in a location with poor communication.
 - Drugs and deterioration of society put field personnel and visitors at risk.
 - The focus on homeland security puts our LEOs at risk of becoming more and more involved with national security and counterterrorism efforts of sister agencies.
- 25 percent reported the priority was natural resource protection:
 - Keeping up with the growing uses on the forests and staying in touch with our natural resource mission.
 - Focus on stopping resource abuse.
- 14 percent reported cooperation:
 - How to successfully integrate with ranger districts and forests.
- 12 percent reported occupational ideals:
 - Unfortunately, people are so unpredictable that law enforcement needs to be trained for every possible situation.
- 11 percent reported management:
 - They need to stay connected to the agency mission.
- 29 percent had other comments:
 - Stretched too thin leaving the rest of the USFS frustrated with not enough involvement.
 - They are viewed as additional police resources paid for by the federal government. Their connection to the land is lost.

We asked how NFS priorities for law enforcement compared with the priorities set by LEI. Most (53 percent) of the comments were that there was general agreement between the NFS line officer and LEI priorities. Other categories of responses were conflicting priorities, desire for increased enforcement, and other responses.

Most comments on priorities were that there was general agreement between NFS line officer and LEI priorities.

Some examples follow:

- 53 percent reported there is general agreement in priorities:
 - We meet yearly for the purpose of setting a law enforcement agenda for the forest.
 - We closely coordinate priorities.
 - There is a pretty good alignment.
- 26 percent reported there are conflicting priorities:
 - At any time, a higher priority for LEI may bump our priorities.
 - Local priorities are similar; however, national or regional priorities may override local issues.
- 13 percent reported the NFS line officer wants increased enforcement:
 - We want more pressure and interaction with visitors than LEI is providing.
- 1 percent reported the NFS line officer is apathetic.
- 6 percent had other comments:
 - We agree on paper, but because they are autonomous they end up doing what they want.

Customers

The NFS line officer respondents described their customers as Forest Service employees and forest users.

- 84 percent reported Forest Service employees.
- 82 percent reported forest users:
 - Forest users, general public, recreating public.
- 16 percent reported local agencies:
 - Local law enforcement.
- 10 percent reported the natural and cultural resources:
 - Natural resources; our lands.
- 7 percent reported law-abiding users.
- 4 percent reported adjacent landowners.
- 3 percent reported violators of rules and regulations.
- 9 percent had other comments:
 - They are whomever the Washington office or regional office dictates (such as the Drug Enforcement Agency or the Border Patrol).

We also asked what they think these customers want from LEI on NFS lands. Most comments were related to safety/protection. Other comments were grouped

into prevention, action, conservation, use/access, unregulated activity, regulations that are clear and concise, crime opportunities, and other. Some examples of what NFS line officers reported customers want follows:

- 57 percent reported customers want safety/protection:
 - They want what we all want and that is to feel safe from other people and human hazards in a natural environment.
 - They want a sense of security when they work or recreate on NFS lands.
 - They want a reliable presence to deal with rapidly developing problems, they want attention given to chronic abuses such as illegal all-terrain vehicle (ATV) use, and they want 24/7 advice when situations arise requiring indirect or direct action protecting users, employees, government property, and resources.
- 40 percent reported customers want prevention:
 - The availability and support of LEI to reduce issues of concern and escalating issues.
 - They want people working so that the forest is safe to visit.
- 36 percent reported customers want action:
 - They want to make people responsible for breaking the rules.
 - They want enforcement of the law.
- 20 percent reported customers want conservation:
 - Enforcement of natural resource protection laws.
- 14 percent reported customers want use/access:
 - A safe environment and control of uses.
- 3 percent reported customers want regulations that are clear and concise.
- 1 percent reported customers want unregulated activity.
- 23 percent had other comments:
 - They want a cooperative relationship.
 - They want to be partners, to help with solutions, help with visibility, and law enforcement education.

Recreation visitors—

We asked the NFS line officer respondents to think about recreation visitor safety in their primary patrol area of responsibility related to personal safety from other visitors and for physical safety from site features (e.g., hazard trees, wild animals, road hazards, etc.). We also asked them to compare these to the average recreation visitors' neighborhood.

Most NFS line officer respondents reported that recreation visitors are mostly safe (67 percent) from other visitors or that visitors are very safe (17 percent). Eleven percent reported safety varies over the unit, and 2 percent reported recreation visitors are not safe.

Most NFS line officer respondents reported that recreation visitors are mostly physically safe (73 percent) from site features or that recreation visitors were very safe from site features (14 percent). Others reported that it varies within the patrol area (10 percent).

The NFS line officer respondents reported that when compared to the average recreation visitor's neighborhood, recreation visitors are very (23 percent) or mostly safe (68 percent) onsite from other visitors and are very (16 percent) or mostly safe (74 percent) from site features.

The NFS line officer respondents were asked the types of crime or law enforcement violations most commonly thought to affect recreation visitors. Their comments differed widely. We grouped responses into these categories: urban-associated crime, drug activity, natural resource issues, vandalism, motor vehicle violations, assaults, dumping household/landscape waste/littering, other violations, and other. Some examples follow:

- 41 percent reported urban-associated crime:
 - Arson, domestic violence, gang activity, theft of personal property.
- 41 percent reported drug activity or alcohol:
 - Marijuana cultivation or use, methamphetamine labs or use, alcohol violations.
- 30 percent reported natural resource issues:
 - Timber theft, fuelwood violations, destruction of natural resources, unlawful trail creation, archaeological resource violations.
- 13 percent reported vandalism:
 - Vandalism to facilities.
- 10 percent reported motor vehicle violations:
 - Reckless driving.
- 9 percent reported assaults.
- 8 percent reported dumping of household or landscape waste or littering.
- 56 percent reported other violations:
 - Recreation fee violations, juvenile parties, fire violations, conflicts with OHV/ATV use.

- 16 percent had other comments:
 - Protection from bears.
 - Dogs off leash.
 - Occupancy violations.

Forest users—

We asked what special problems NFS line officers have protecting forest users in their patrol area of responsibility. Their comments ranged widely. Some examples follow:

- 26 percent reported lack of law enforcement personnel:
 - There is a general lack of law enforcement presence.
 - There is a lack of personnel to assist visitors, lack of funding to hire additional personnel, and a lack of qualified LEOs to deal with criminal activity.
- 22 percent reported social conflict:
 - There is conflict between recreational groups, for example, road-based hunters versus foot or horseback hunters.
 - There are groups getting drunk and even indiscriminate shooting that scares other visitors.
- 19 percent reported it was remote or too large an area to cover adequately:
 - Long response times if there is a response by LEI at all.
- 13 percent reported drug activity:
 - We have an increasing level of cartel-related marijuana cultivation protected by armed guards.
- 13 percent reported natural hazards:
 - Visitors constantly go into the forest, mountains, and waters unprepared and underequipped and get into deep trouble because of weather, treacherous terrain, and an unlimited belief that someone will rescue them if something goes wrong.
- 10 percent reported forest violations:
 - Illegal outfitters tend to ignore regulations, sometimes placing recreationists and employees in danger.
- 10 percent reported OHV/ATV:
 - One of our biggest violations is off-highway travel.
- 8 percent reported urban crime.
- 24 percent had other comments:

- We are a target for protest/vandalism, and eco-terrorism.
- Law enforcement often arrives after the fact when and if an incident gets reported.

The media portrayal of crimes against forest users in the patrol area of responsibility was described as either nonexistent (48 percent) or mostly positive (29 percent) for law enforcement.

Natural Resources

Almost equal percentages of the NFS line officer respondents reported the quality of the natural resources in their patrol area of responsibility had (1) declined (32 percent) during the time they worked there or (2) remained the same (36 percent). Some reported it had improved (28 percent).

Nearly half of the NFS line officer respondents reported the maintenance of Forest Service facilities and developed areas in their patrol area of responsibility had declined (49 percent) during the time they worked there. Others reported the maintenance had remained the same (24 percent) or that it had improved (23 percent).

The media portrayal of crimes against resources in the patrol area of responsibility was mostly positive for law enforcement (52 percent) or nonexistent (25 percent). The media portrayal of fire crimes in the patrol area of responsibility was mostly positive for law enforcement (57 percent) or nonexistent (20 percent).

Success Stories

Several NFS line officer respondents had success stories to share (32 percent). They provided 128 comments about successes. The comments the NFS line officers provided were grouped into the following categories:

- 31 percent reported solving crimes/getting convictions:
 - Our LEO recently caught a logger hauling an unbranded load and seized the load. Everyone in the community quickly heard about the situation and the word on the street was that you better follow the rules because the USFS was serious about enforcement.
 - After dealing with a dishonest resort special permit holder for a year and a
 half, with little success, I finally asked our neighboring LEO for assistance.
 Due to her skill as an LEO and her training and ability to skillfully use "verbal
 judo," she was able to get a confession that he had done something illegal.

Almost equal percentages of the NFS line officer respondents reported the quality of the natural resources in their patrol area of responsibility had declined during the time they worked there or remained the same.

- 29 percent reported good cooperation:
 - We hosted a rainbow gathering and I think law enforcement kept a lid on the gathering, kept the participants as safe as they would let us, and protected USFS employees and the forest. The law enforcement team worked with local and state officials in a professional manner and helped protect area communities.
 - Our LEO works well with county search and rescue and has helped them with numerous successful rescues on NFS lands.
- 12 percent reported proactive programs:
 - We came up with a proposal to ban alcohol from ATV open riding areas.
 Between LEI and NFS management we were able to get four counties and their sheriff departments to join us in the ban and thereby increase user and employee safety.
- 7 percent reported positive feedback/gratitude.
- 6 percent reported operations work.
- 16 percent had other comments:
 - We had a somewhat unstable miner who claimed surface rights on a claim and was threatening employees/public. Short story is that LEI showed up in good strength (despite a lack of personnel), and protected the extraction crew.
 - I have worked with some excellent LEOs through my career, but one stands out as respectful, willing to get involved with district programs by way of providing input and ideas, and was loyal to the USFS and the district.

Several NFS line officer respondents (22 percent) reported that law enforcement on their unit performed special community outreach programs. Of those who did, there were 96 comments about those programs. A few examples of comments follow:

- 46 percent reported public education:
 - Conservation program with local schools.
 - Presentations at community events.
- 14 percent reported cooperation with other agencies:
 - Youth conservation field days with state game management personnel.
- 9 percent reported community involvement.
- 8 percent reported patrol/visibility.
- 8 percent reported specialized equipment.

- 5 percent reported public contact.
- 9 percent had other comments:
 - Career opportunities; resource protection information.

Successful LEI Program

The NFS line officer respondents were asked to describe a successful LEI program at their unit (region or district) level. Over half of the respondents provided comments related to understanding and interaction. Other frequent comments related to personnel and good communication.

- 62 percent reported understanding/interaction:
 - Just the way it is, only with a higher and more consistent budget, and with more LEI staffing. It is characterized by shared priorities and objectives, mutual respect for our respective roles, frequent and open communication, and working together as partners.
 - A program that is integrated with the state, county, and city law enforcement departments and has a consistent program so as to build mutual respect with other departments and our recreating public. State and local departments are respected. Our land management agency enforcement officers are not well respected by local elected officials and, as a consequence, [are] not highly respected by the forest users.
 - Rules are enforced. People are protected. LEI and NFS work well together. LEI has good relationships with local enforcement and other federal agencies.
 - LEOs willing to communicate with all our ranger district employees, provide training on safe public contacts, support of FPOs on a daily basis. Good briefing from LEO on potential issues he or she feels could develop into incidents or resource problems. Respected by our forest users and is consistent and balanced in enforcement actions and educational direction.
- 36 percent reported personnel:
 - Have one LEO at every district.
 - A successful LEI program on my unit would be one that maintains a presence in the field making public contacts. Violations of our travel plan would be at a minimum as a result of this.
 - Adequate field presence, emphasis on violation prevention and education, good relationships with local cooperators, good FPO program, feeling of safety. Good relations with local magistrate.

Over half of the respondents said a successful LEI program related to understanding and interaction.

- 26 percent reported good communication:
 - Good communication between managers and law enforcement.
 - Officers that are trained with excellent communication and people skills.
- 12 percent reported support/trust:
 - A successful LEI program at the district supports all our work with advice, on the ground support, and immediate response in emergencies.
- 10 percent reported occupational ideals:
 - Officers have a sound knowledge of natural resource management issues.
- 8 percent reported resources.
- 7 percent reported leadership.
- 3 percent reported consistent policies/regulations.
- 22 percent had other comments:
 - Have our LEOs accountable for their time and what they are doing.

The NFS line officer respondents were also asked how law enforcement programs can be improved. Most comments were categorized as improvements needed in field presence and management of funding.

- 36 percent reported the need to increase field presence:
 - The stovepipe isn't working from my perspective. It needs to get moved down in the organization. There needs to be more LEOs, especially on urban-interface forests. There needs to be a lot more field presence and interaction with field- level employees.
 - Fund them! Staff them so they have a reasonable area to patrol. Give officers training in the USFS mission and the jobs we do. Remove stovepipe so that LEOs work for the forest/district.
 - More boots on the ground.
- 21 percent reported a need to better manage funding:
 - Need a better budget, be more responsive to the NFS side of things, and not as spread out as they are today with Homeland Security.
 - Need more of them with better funding.
- 11 percent reported a need to eliminate the stovepipe organization:
 - Programs could be more improved with decentralized leadership and authority from forest supervisors and district rangers. This would give NFS

managers a chance at least to have some influence on directing the program to meet changing and local resource needs.

- 11 percent reported a need to build integration:
 - More interaction with unit managers. Integration into all NFS programs.
- 7 percent reported the need to develop mutual goals and priorities.
- 7 percent reported a need to focus more on natural resources.
- 7 percent reported a need to modify the stovepipe organization.
- 6 percent reported the need to improve communication.
- 5 percent reported a need to focus more on public service.
- 4 percent reported a need to improve the accountability process.
- 3 percent reported a need to improve field presence.
- 3 percent reported a need for more public outreach/relations.
- 1 percent reported a need to reduce drug law enforcement.
- 1 percent reported a need to reduce upper law enforcement management.
- 1 percent reported a need to reduce investigative presence.
- 1 percent reported a need to involve middle law enforcement management.
- 18 percent had other comments:
 - Since LEI supervision is often done from remote locations, it results in officers "chasing rabbits" or wasting time. With strong, close supervision from a line officer there would be more focused work.
 - There is a need to put more effort into identifying bureaucratic barriers and how to overcome them.

The NFS line officer respondents were also asked about the result they could foresee if the LEI program was improved. These were clearly linked to the response provided above. For example, the respondents reported that increased field presence might result in being more visible to the public, improved compliance with regulations, better coverage, and more "boots on the ground." Respondents felt that better managed funding might result in better coverage; reduced stress, fatigue, and burnout; and greater visibility and enhanced communication with the local units. Respondents reported that eliminating the stovepipe would result in local management having some influence on directing the LEI program, improved accountability, and savings in overhead funding. Respondents reported that building integration would result in improved relationships, and LEI would feel a part of the "real USFS organization."

Respondents reported that increased field presence might result in being more visible to the public, improved compliance with regulations, better coverage, and more "boots on the ground."

Other Comments

We asked the NFS line officers if there was anything else they would like to tell us. Some comments were positive, most were negative, and others were about the survey itself:

- 11 percent provided negative comments:
 - Ever since law enforcement has been stovepiped, the rest of the agency does not feel like it is their job. It is very difficult to get folks to take forest protection officer training.
 - I believe having our own independent law enforcement is too expensive and overkill in most situations. Contracting and judicious use of other federal agencies could get the job done.
- 9 percent provided positive comments:
 - I now work on a forest with a great relationship with LEI personnel and I appreciate them very much. We work together to resolve serious issues of crime and public safety and they support our needs very well. This LEI group believes in service and it shows.
 - I look forward to working with law enforcement to improve an already good, cooperative working relationship.
- 8 percent provided comments about the survey:
 - The form was not user friendly. As I typed my responses, it affected the tabs and margins.
 - I would suggest a Web-based instrument that is easier to fill out.
- 9 percent provided other comments (9 percent):
 - When I read the LEI summaries for each week I am amazed at what our LEOs are being asked to do and with what they are confronted. We need to beef up the law enforcement program. Our public lands are not safe in many parts of the U.S.
 - We need to have the public read about what goes on on their public lands and I believe they would support an increase in LEOs throughout the country.
 - We have too few LEOs to cover a large acreage of land. Is this adequate for you? Or our publics? Or our employees?

Discussion

This study was the fifth in a series of studies evaluating perceptions of law enforcement personnel in the USFS. The ultimate goals of the work are threefold. First, the

LEI studies serve as a followup to a previous qualitative study to learn more about crime and violence on national forests and grasslands and about the impacts of crime on recreation visitation and management of those national forests (Chavez and Tynon 2000, Tynon et al. 2001). Second, the LEI studies serve as a followup to a previous qualitative study testing the key characteristics of success in law enforcement, measuring opinions about recreation visitor and public safety, and evaluating impacts to natural resources (Chavez et al. 2004, Tynon and Chavez 2006). Third, the LEI studies serve to provide CTA/PAS data for LEI.

The research results met several study goals. We gathered information from NFS line officers about crime and violence at USFS sites nationwide, confirmed what crimes and acts of violence are occurring, gained estimates of the extent of crimes and the impacts they have on public land management and public safety, determined perceptions of the impacts of crime and violence on recreation visitors and other forest users, established measures of law enforcement success, identified successful LEI programs at the unit level, confirmed the key characteristics of law enforcement success, and identified additional successful strategies to deal with crime in forest settings. Summaries of specific subject findings are found within the report. The purpose of this section is to discuss some overall findings.

The NFS line officer respondents reported that LEOs are dealing with a very large variety of crimes and acts of violence. Many of these incidents were either thought to have remained at the same rate in FY2004 compared to FY2003 or were thought to be on the increase. At the same time, they reported that LEOs are patrolling large numbers of acres with what they perceived to be too few officers and sometimes inadequate external support.

A common focus was on interaction. The respondents reported that a collaborative relationship and teamwork are necessary. They also reported a good understanding and knowledge of LEI and felt supported by LEI.

Another focus was safety and action. Law enforcement was seen as successful if LEOs solve crimes/get convictions and when they focus on giving violation notices/warnings/investigations. The respondents reported that law enforcement customers wanted safety/protection, and they felt that most recreation visitors and other forest users are safe onsite.

Another focus was resources, often expressed in terms of funding and personnel. The respondents reported that LEI needs an increased budget and good management of the budget. Many reported that the top priority for LEI should be the budget. They also noted that there were too few LEOs and that to improve LEI would require an increase in personnel.

The NFS line officer resopndents reported that LEOs are dealing with a large variety of crimes and violent acts and that crime had remained the same or increased from FY2003 to FY2004.

Natural resource protection was seen as important, too. Many NFS line officer respondents reported increasing problems with forest users dumping household waste on national forest lands. Many reported that the quality of the natural resources had remained the same during the time they worked there, but reported that natural resource protection should be a law enforcement priority.

Current successes in law enforcement were described as successes in solving crimes and getting convictions, good cooperation, and proactive programs. Several of the descriptions matched the key characteristics of success we identified in earlier studies (Chavez et al. 2004, Tynon and Chavez 2006). These characteristics included adequate personnel and funding, collaboration, and communication. These also tie into the characteristics identified as integral to a successful law enforcement program including resources and understanding.

We think there are several ways to use the results of this study of NFS line officers. The identification of issues, particularly issues that are consistent across regions, could be used to prioritize law enforcement efforts. The case studies of success indicated that focus on problem areas was important to overcoming the problems. In addition, some of the successes that have occurred, in combination with a focus on the characteristics identified as integral to a successful LEI program, could help identify priority focus areas for law enforcement officers and leaders. This has some serious implications for budgeting and staffing. Some consideration might be made of the current allocation of resources and whether it is congruent with the issues identified by current respondents and the law enforcement personnel from previous studies.

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Metric Equivalents

| When you know: | Multiply by: | To find: |
|----------------|--------------|----------|
| Acres | 0.405 | Hectares |

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Appendix: National Forest System Line Officer Survey Questionnaire

Dear Forest Supervisors and District Rangers,

You recently received a letter from Chief Bosworth about the survey being conducted by myself (Dr. Debbie Chavez, PSW) and Dr. Jo Tynon (Oregon State University) for Law Enforcement & Investigations. We thank you for taking time from your busy schedules to respond to this survey.

In the last few years, law enforcement in the USFS has faced some tough challenges. In order to understand and respond appropriately to current and future needs, it is important to hear from you. This study is part of a larger effort to capture law enforcement successes so that others can benefit from what already works. LEI is partnering with those who seek to develop meaningful performance measures for what they do. This study is one way for you to tell <u>your story</u> related to LEI.

Completing the questionnaire will take about an hour of your time. Your answers will be coded for computer analysis, combined with those from other Forest Supervisors and District Rangers, and used for statistical summaries only. At no time will your name be released or associated with your responses. Your participation in this study is voluntary and you may refuse to answer any question. Your participation is vital to the study, and to future planning for LEI. Responses are due April 17th, 2006.

The answers you provide will be kept confidential to the extent permitted by law. Special precautions have been established to protect the confidentiality of your responses. Your completed questionnaire will be destroyed once your responses have been tallied. There are no foreseeable risks to you as a participant in this project, nor are there any direct benefits. However, your participation is extremely valued.

If you have any questions about the survey, please contact Debbie Chavez at (951) 680-1558 (email chavez_lei_questionnaire@fs.fed.us) or Jo Tynon at (541) 737-1499 (email Jo.Tynon@oregonstate.edu). If we are not available when you call, please leave a message and one of us will call you back. If you have questions about your rights as a participant in this research project, please contact the Oregon State University Institutional Review Board (IRB) Human Protections Administrator at (541) 737-3437 (email IRB@oregonstate.edu).

Responses can be sent in several ways: You can send the completed survey via e-mail to chavez_lei_questionnaire@fs.fed.us you can fax it to Debbie

Chavez at (951) 680-1501, or you can mail it to Debbie Chavez at PSW, 4955 Canyon Crest Drive, Riverside, CA 92507. Thank you for your help. We appreciate your cooperation.

Deborah J. Chavez, Ph.D., Joanne F. Tynon. Ph.D., Social Scientist

Research Social Scientist Forest Recreation Resources

PSW Research Station Department of Forest Resources, 107 Peavy Hall

USDA Forest Service College of Forestry
4955 Canyon Crest Dr. Oregon State University
Riverside, CA 92507-6099 Corvallis, OR 97331-5703

Law Enforcement Survey for Line Officers

| 1. | Approximately how many acres are contained within the unit for which you have responsibility? acres Of that total, what are the approximate acres of area that are normally patrolled by law enforcement personnel? acres don't know | | | | |
|----|--|--|--|--|--|
| 2. | Which description would best apply to the area of your unit that is normally patrolled by law enforcement? | | | | |
| | urban or urban-interface | | | | |
| | semi-rural | | | | |
| | extremely remote | | | | |
| 3. | Rate $1-5$ the purpose of law enforcement contacts that occur on your unit (1 is most common): | | | | |
| | violation notices/warnings/investigations | | | | |
| | public relations/education/information | | | | |
| | non-violator public assistance | | | | |
| | search/rescue/medical response | | | | |
| | other (please specify) | | | | |
| | don't know | | | | |
| 4. | On an average day, how many USFS people are responsible for law enforcement patrols or regulatory compliance on your unit? | | | | |
| | LEOs | | | | |
| | FPOs | | | | |
| | others (please explain:) | | | | |
| | don't know | | | | |
| 5. | Do you think there are too few, too many, or about the right amount of USFS law enforcement officers or FPOs working on your unit? | | | | |
| | LEOs: FPOs: | | | | |
| | too few too few | | | | |
| | too many too many | | | | |
| | about rightabout right | | | | |
| | don't know don't know | | | | |
| 6. | Do you have cooperative law agreements with other law enforcement agencies? | | | | |
| | noyes If yes, please identify: | | | | |
| | City/town/community law enforcement | | | | |
| | County sheriff's office | | | | |
| | State police | | | | |
| | other (please explain:) | | | | |
| | don't know | | | | |

| 7. Do you think the reimbursed patrols/enforcement work by cooperating law enforcement officers on your unit offer adequate services or inadequate service responding to or preventing crime? don't know | | | | | | |
|--|--|-----------------|-----------------|-------------------------------|--|--|
| | City/town/community: | County sh | eriff's: | State police: | | |
| | adequate | | _ adequate | adequate | | |
| | inadequate | | _ inadequate | inadequate | | |
| | don't know | | _don't know | don't know | | |
| 8. Do you think the level of non-reimbursed services by non-FS law e officers on your unit are adequate or inadequate in preventing or recrime? | | | | | | |
| | City/town/community: | County she | eriff's: | State police: | | |
| | adequate | | adequate | adequate | | |
| | inadequate | | inadequate | inadequate | | |
| | don't know | | don't know | don't know | | |
| 9. When you think about <u>recreation visitor</u> safety on your unit, do you think it is very safe, mostly safe, not safe, very dangerous, or it varies over your unit? Ple respond for personal safety from other visitors and for physical safety from site features (e.g., hazard trees, wild animals, road hazards, etc). | | | | | | |
| | Personal safety from other visi | tors: | Physical safety | from site features: | | |
| | recreation visitors are ve | ry safe here | recreation | visitors are very safe here | | |
| | recreation visitors are mo | ostly safe here | recreation | visitors are mostly safe here | | |
| recreation visitors are not safe here recreation visitors are not safe here | | | | visitors are not safe here | | |
| | it is very dangerous for v | risitors here | it is very | dangerous for visitors here | | |
| it varies over my unit | | | it varies o | it varies over my unit | | |
| | don't know | | don't kno | W | | |
| 10. When you think about <u>recreation visitor</u> safety on your unit, do you think it is very safe, mostly safe, not safe, or very dangerous compared to places in the average recreation visitors' neighborhood? | | | | | | |
| | Personal safety from other visi | tors: | Physical safety | from site features: | | |
| | recreation visitors are ve | ry safe here | recreation | visitors are very safe here | | |
| | recreation visitors are me | ostly safe here | recreation | visitors are mostly safe here | | |
| | recreation visitors are no | t safe here | recreation | visitors are not safe here | | |
| | it is very dangerous for v | risitors here | it is very | dangerous for visitors here | | |
| | don't know | | don't kno | don't know | | |
| 11 | . What types of crimes or recreation visitors on you | | | | | |

12. Do you think the following crimes, law enforcement violations, and other patrol activities on your unit have increased, decreased, or remained about the same when comparing FY04 to FY03?

| | | Increased | Decreased | Remained the same | Don't know |
|----|-------------------------------------|-----------|-----------|-------------------|---------------|
| a. | Arson | | | | |
| b. | Domestic violence | | | | |
| c. | Thefts of visitor property | | | | |
| d. | Thefts of public property | | | | |
| e. | Gang activity | | | | |
| f. | Body dumping | | | | |
| g. | Shooting (indiscriminate) | | | | |
| h. | Suicides | | | | |
| i. | Murder | | | | |
| j. | Rape / sexual assault | | | | |
| k. | Drive-by shooting | | | | |
| 1. | Criminal damage | | | | |
| m. | Personnel threats | | | | |
| n. | Threats against property | | | | |
| 0. | Marijuana cultivation | | | | |
| p. | Meth labs | | | | |
| q. | Meth chemical dump | | | | |
| r. | Armed defense of crops | | | | |
| s. | Dumping of household waste | | | | |
| t. | Dumping of landscape waste | | | | |
| u. | Trespass of undocumented immigrants | | | | |
| V. | Armed defense of forest products | | | | |
| w. | Natural fire hazards | | | | |
| X. | Accidental fire activity | | | | |
| y. | Weather hazards | | | | |
| Z. | Wildlife hazards | | | | |
| | aa. Road hazards | | | | |
| | bb. Other | | | | |

- 12a. Of the above, which ones are more common during the week (rather than the weekend; list the letter of the items, for example, b & d):
- 12b. Of the above, which are more common during the daytime hours (as opposed to nighttime):
- 12c. Of the above, which are more common when the area is crowded (as opposed to when not many visitors are in the area):
- 13. What special problems do you have protecting forest users on your unit?
- 14. During the time you have worked on your unit have you seen the quality of the natural resources on your unit degrade, improve, or remain the same? How about the maintenance of FS facilities and developed areas?

| | maintenance of 1's facilities and devi | stoped areas! | | | |
|-----|--|--|---|--|--|
| | Quality of the natural resources: areas: | Maintenance of FS | facilities/developed | | |
| | degraded | degraded | degraded | | |
| | improved | improved | improved | | |
| | remained the same | remained the | remained the same | | |
| | don't know | don't know | don't know | | |
| 15. | Rank 1 to 4 <u>your</u> highest priority (1 in protecting resources, protecting NFS 1 to 4 what you believe the law enforthinks is the highest priority: protect NFS employees; or protecting public the highest priority) | employees, or protect cement officer you moving forest users; protect | ting public property? Rank ost commonly interact with cting resources; protecting | | |
| | Your view: | Law enforcement o | Law enforcement officer's view: | | |
| | protecting forest users | protecting forest users | | | |
| | protecting resources | protecting res | protecting resources | | |
| | protecting NFS employees | protecting NI | FS employees | | |
| | protecting public property | protecting pu | protecting public property | | |
| | don't know | don't know | don't know | | |
| 16. | What has been the media portrayal of crimes against forest users, crimes against resources, and fire crimes on your unit? | | | | |
| | Crimes against forest users: Crim | es against resources: | Fire crimes: | | |
| | mostly positive | _ mostly positive | mostly positive | | |
| | mostly negative | _ mostly negative | mostly negative | | |
| | no coverage | no coverage | no coverage | | |
| | don't know | _don't know | don't know | | |
| 17. | What do you believe LEI's relationsh | ip with the rest of the | FS should be? | | |
| 18. | Where does LEI fit within the FS org | anization and progran | ns? | | |

| 19. | Has law enforcement on your unit performed any special community outreach programs (e.g.) school presentations) that have worked well? |
|-----|--|
| | no yesdon't know. If yes, what are they? |
| 20. | Has law enforcement pursued any community outreach programs that were not successful? Briefly explain why they were not successful. |
| 21. | What do you believe are the priority issues facing the law enforcement profession in the FS today? |
| 22. | How do NFS priorities for law enforcement on your unit compare with the priorities set by LEI? |
| 23. | Do you feel you have a good knowledge and understanding of the job that LEI personnel on your unit perform everyday? Why or why not? |
| 24. | Please identify who you think the "customers" of law enforcement are. |
| 25. | What do you believe these customers want from LEI on NFS lands? |
| 26. | Do you feel supported by LEI personnel? yes no, please explain: |
| 27. | How well do you communicate with LEI personnel on your unit? How well do LEI personnel on your unit communicate with you? Please explain and add how you go about communicating. |
| 28. | Do local law enforcement officers routinely interact with your leadership team at the District or Forest level? |
| | noyes |
| 29. | Do your public affairs employees routinely work proactively with local media sources on law enforcement activities and programs? |
| | noyesdon't know |
| 30. | How well do local elected officials and congressional offices understand Forest Service law enforcement programs and activities? |
| | Very wellSomewhatVery little/no knowledge |
| 31. | How would you describe a successful LEI program at your unit level? |
| 32. | Do you have a LE success story you'd like to share? |
| | no yes, please describe: |
| 33. | Have you ever been threatened or attacked because of your job? |
| | no yes. |
| | Please briefly describe incidents, and if law enforcement became involved in your situation. |
| 34. | From your perspective, how can law enforcement programs be improved? Please provide the basis for your recommendation and the result you would foresee. |
| 35. | As a line officer, do you think law enforcement visibility, support and funding should be increased? |
| | no yes Please explain your answer. |

| <u>Ple</u> | <u>ase tell us about you:</u> | <u>rself.</u> | | | |
|------------|--|-----------------------|-----------------|--|--|
| 36. | I am male | female | | | |
| 37. | I am years o | old | | | |
| 38. | I consider myself: | | | | |
| | Black | White | Hispanic | | |
| | Asian | Multiracial | | | |
| | Other: | | | | |
| 39. | I have been a line of | fficer for a total of | f years. | | |
| 40. | 40. I have been with the FS a total of years | | | | |
| 41. | 1. I have completed (please circle) | | | | |
| | 9 10 11 12 | 13 14 15 16 17 | 18 19 20 21 22+ | | |
| | High School | College through | Graduate School | | |
| | | | | | |
| 42. | The highest academ | ic degree I hold is | S: | | |
| | Is there anything els Thank you!!! | se you would like | to tell us? | | |

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