State of Nevada
Department of Administration
Division of Internal Audits

Audit Report

Department of Public Safety

Report No. 13-02
December 2012
INTRODUCTION

At the direction of the Executive Branch Audit Committee, we conducted an audit of the Department of Public Safety. The Department is headquartered in Carson City and promotes public safety. It is comprised of three bureaus\(^1\) and nine divisions\(^2\). Our audit focused on the Divisions of Highway Patrol and Records and Technology. During the audit we addressed the following four questions:

✓ What is the Department’s role?
✓ What services must the Department provide?
✓ Is the State the proper level of government to provide these services?
✓ If State government is the appropriate level of government, is the Department carrying out its duties efficiently and effectively?

Our audit focused on the Department’s communications operations and the Nevada Division of Highway Patrol’s (NHP) fleet operations. The Department could save up to $10.6 million in one-year savings and up to $3.4 million annually thereafter by improving its operations.

Role and Public Purpose

The Department of Public Safety (Department) was created in 2001 when the Legislature separated it from the Department of Motor Vehicles. The Department is responsible for promoting safety in Nevada. It accomplishes its mission to protect the citizens and visitors of Nevada through prevention, preparedness, response, recovery, education, and enforcement of highway laws.

The Department employs approximately 1,500 staff. In FY12 the Department and its divisions received $212 million to promote public safety in Nevada.

\(^1\) Criminal Justice Assistance, Professional Responsibility and Traffic Safety.
Highway Patrol

NHP promotes safety on Nevada's highways by providing traffic law enforcement services to the motoring public. NHP headquarters is co-located with the Department in Carson City.

NHP employs 648 sworn and civilian positions. It currently has 430 of its 485 authorized sworn positions filled (about 89 percent). There are about 163 civilian positions.

NHP is funded primarily by State highway funds. NHP also receives State general funds, which amount to one percent of NHP's total funding. In FY12 NHP received $70.4 million in State funds. See Exhibit I.

Organization

NHP has two regions, a Northern Command headquartered in Reno and a Southern Command headquartered in Las Vegas. The Northern Command is split into two areas, the west area command is located in Reno and the east area command is located in Elko.

There are three dispatch centers. The centers in Carson City and Elko support the Northern Command patrols. The center in Las Vegas supports the Southern Command patrols.

NHP Commands manage communications and fleet operations to support public safety:

- Communications operations include dispatch operations and warrant processing. NHP staff enters warrant information into the Criminal History Repository for warrants issued by the courts resulting from NHP citations.3

- Fleet operations include vehicle maintenance/repair, radio service and vehicle "build-out". A "build-out" refers to the installation of additional equipment necessary to become operational.

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3 The Criminal History Repository is the database law enforcement agencies use to access criminal justice information.
Records & Technology

Records and Technology Division (R&T) promotes safety in Nevada by providing accurate, timely and appropriate public safety information. Information is provided to other divisions within the Department, law enforcement agencies, and courts. R&T is headquartered in Carson City.

The Department anticipates reassigning responsibility for dispatch operations and the warrant offices from NHP to R&T. Additionally, it began planning to transfer R&T information technology’s assets and responsibilities to the Department of Administration’s Division of Enterprise IT Services (EITS) during the audit. The plan will be submitted to the 2013 Legislature for approval.

R&T currently has 130 staff and total funding in FY12 was $26.8 million:

- The records section manages the Criminal History Repository and other services and has 77 staff.

  R&T’s records section is funded primarily by division administration fees and court assessments. The records section receives less than one percent in general funds. In FY12 the records section received $20.9 million, including $9.6 in administration fees, and $3.8 million in courts’ assessments. See Exhibit I. In the exhibit, other includes administration fees, transfers from other budget accounts and ARRA funds.

- The technology section provides information technology services and has 53 staff. This group may transfer to EITS.

  R&T’s technology section is funded primarily by cost allocation reimbursements. The technology section does not receive general funds. In FY12 the technology section received $5.8 million, 98 percent of the funding was from cost allocations to other divisions. The remainder was received from transfers from other budget accounts. See Exhibit I.
Exhibit I

Department's FY12 Funding Sources (in millions)

Table Note: Other includes administration fees, cost allocation reimbursements, transfers from other budget accounts, and ARRA funds; administration fees include finger prints, background checks and Brady Bill checks for gun purchases.

Conclusion

The State is the proper level of government to complete communications operations and fleet management; however, it may be more efficient to complete the warrant processing through the local court systems.
Scope and Objectives

We began audit work in February 2012. In the course of our audit, we reviewed budgets, expenditures, inventories, repair documents, and communications data. We interviewed representatives from the Department Divisions and representatives from other state\textsuperscript{4} and local law enforcement agencies\textsuperscript{5}. Additionally, we tested repair records and reviewed fleet inventory and fiscal data. We concluded field work and testing in August 2012.

Our audit focused on the following objectives:

✓ Can the Department Improve Communications Operations?
✓ Can Highway Patrol Improve Fleet Management?

We performed our audit in accordance with the Standards for the Professional Practice of Internal Auditing.

The Division of Internal Audits expresses appreciation to the management and staff of the Department, NHP and R&T for their cooperation and assistance throughout the audit.

Contributors to this report:

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Executive Branch Audit Manager

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Executive Branch Auditor

\textsuperscript{4} We received responses from the following western states: California, Colorado, Idaho, Montana, New Mexico, Oregon, Utah, Washington, and Wyoming.

\textsuperscript{5} We received responses from the following local law enforcement agencies: Reno Police Department, Sparks Police Department, Fallon Police Department, Washoe County Sheriffs Department, and Las Vegas Metropolitan Police Department.
Department of Public Safety
Response and Implementation Plan

We provided draft copies of this report to Department officials for their review and comments. Their comments have been considered in the preparation of this report and are included in Appendix B. In its response, the Department accepted each of the recommendations we made. Appendix C includes a timetable to implement our recommendations.

NRS 353A.090 specifies that within six months after the Executive Branch Audit Committee releases the final audit report, the Administrator of the Division of Internal Audits shall evaluate the steps the Department has taken to implement the recommendations and shall determine whether the steps are achieving the desired results. The Administrator shall report the six-month follow-up results to the Committee and Department officials.

The following report contains our findings, conclusions, and recommendations.
Can the Department Improve Communications Operations?

The Department of Public Safety (Department) can improve communications operations. Consolidating northern dispatch operations, redistributing court warrant processing, and using information technologies within patrol vehicles could save up to $1.2 million annually.

Dispatch Operations

The Department can save up to $696,000 annually by consolidating the two northern dispatch centers.

Dispatch operations provide the communications necessary for Nevada Highway Patrol Division (NHP) troopers and other Department staff to promote public safety. Dispatch operations include taking phone calls from the public and other state agencies, and using radios to communicate with troopers and other state agencies’ staff. Other agencies using NHP dispatch services include the State Fire Marshall, Capital Police and the Attorney General’s Office.

Dispatch operations are currently under the control of NHP; however, the Department is considering moving control to the Division of Records and Technology (R&T). The move would reassign responsibility for the operations but is not expected to change any of the processes.

Dispatchers support troopers by assigning them to respond to events, such as accidents. Troopers may also initiate events, such as traffic stops, driver’s license checks, registration checks, and/or warrant checks. Troopers may request information on vehicles and people they come into contact with, such as checking for vehicle registrations or warrants.

Dispatch operations occur in three centers: Carson City, Elko and Las Vegas. The centers have dispatchers with a computer aided dispatch system and telephones. Each center has the ability to dispatch throughout the State. Illustration I is an example of one dispatch center.
Illustration I:

Las Vegas Dispatch Center

There are two dispatch centers in the northern region. Exhibit II provides the staffing and approximate funding for each of the northern dispatch centers.

Exhibit II

Northern Dispatch Centers

<table>
<thead>
<tr>
<th></th>
<th>Carson City</th>
<th>Elko</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Benefits</td>
<td>$854,000</td>
<td>$685,000</td>
</tr>
<tr>
<td>Facility Costs</td>
<td>$32,000</td>
<td>$215,000</td>
</tr>
<tr>
<td>Total</td>
<td>$886,000</td>
<td>$900,000</td>
</tr>
<tr>
<td>Staff</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Redundant Dispatch Centers

Any one of the three centers can dispatch throughout the State; two centers allow for redundancy in case of an emergency or local outage. We reviewed NHP dispatch transmission data for January, April, and July of 2012. The Elko dispatch center averaged about 6 percent of the northern region workload.

Occasionally, Carson City takes over another dispatch center’s work and sometimes calls in an additional dispatcher to augment the shift. Carson City could assume the workload from Elko. The Department indicates it would need all 12 staff from Elko to augment Carson City if the centers are consolidated. However, we concluded Carson City would need up to four additional dispatchers based on workload to cover the three shifts and off duty dispatchers.

The Department could save up to $696,000 (the cost of the Elko dispatch center and 8 positions) by merging it into the Carson City center. See Exhibit III.
Exhibit III

Consolidation Savings

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential savings(^a)</td>
<td></td>
<td>$900,000</td>
</tr>
<tr>
<td>Transferred positions(^b)</td>
<td>4</td>
<td>-204,000</td>
</tr>
<tr>
<td>Net savings</td>
<td></td>
<td>$696,000</td>
</tr>
</tbody>
</table>

Table Notes:
\(^a\)Potential savings is the Elko facility costs and the salary and benefit costs of 12 staff. See Exhibit II.
\(^b\)Transferred position cost is the estimated salary and benefit costs of 4 dispatchers transferring during consolidation: 1 Public Safety Dispatcher (PSD) III (approximately $58,000) and 3 PSD I's (approximately $146,000).

Recommendation:

1. Consolidate the two northern dispatch centers.
Warrant Processing

The Department can save up to $492,000 annually by coordinating with the Administrative Offices of the Court a change to an electronic warrant system.

The Department’s warrant processing is under the control of NHP. However, the Department is considering moving warrant processing to R&T. The move would reassign responsibility for warrant processing but is not expected to change the processes.

Courts’ Warrants

Arrest warrants (warrants) result when drivers fail to pay citations and to appear in court. NHP citations are forwarded to city or county courts for payment or adjudication. When a driver does not pay and does not appear in court, the court issues a warrant for the driver’s arrest.

Most courts require NHP to pick up hard copy warrants and enter warrant information into the Criminal History Repository. Every 90 days NHP manually verifies that each warrant is still active by sending a list of open warrants to the courts to identify which warrants have been closed. Once the court identifies closed warrants, NHP removes the hard copy warrant from its files and enters closing information in the repository. Between verification periods a person may be arrested on a warrant that is closed by the court but not yet verified by NHP. NHP verifies up to 6,000 warrants each month.

The courts receive money from citations and warrants. The courts also collect an administrative fee. The State receives a portion of the administrative fee. The State’s portion helps support the Criminal History Repository and other non-Departmental programs.6

In FY12 the State received about $6 million in court assessment fees. Of that, R&T spent about $3.8 million to maintain the Criminal History Repository. R&T receives court fees to maintain the repository; however, NHP does not receive court fees to process warrants.

NHP Processes

NHP has warrant offices co-located with dispatch centers in Carson City, Elko, and Las Vegas. These offices receive hard copy warrants from the courts by mail and/or by traveling to the courts to pick them up. All the offices process NHP warrants. Elko also processes warrants for other State agencies, such as the

6 NRS 176.059(8)(b).

R&T reports there are 606,510 warrants in the repository. Of these, NHP entered 65,000 or about 11 percent.

Coordinate Efficiencies

Local courts have Criminal History Repository access as part of their normal course of business. The Las Vegas Municipal and Justice Courts (Las Vegas Courts) have an automated warrant entry process. Las Vegas Courts purchased new case management software as part of their budgeted system upgrades. The upgraded system enables courts to automatically post warrant information in the repository. The automated process does not require a staff member to enter the warrant. Warrants are automatically closed when court staff closes the case.

The Department could free up to eight NHP staff for other priorities, resulting in a benefit of $492,000 annually.\(^7\)

Recommendation:

2. Coordinate with the Administrative Offices of the Court a change to an electronic warrant system.

Summary of Benefits

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Consolidate dispatch centers</td>
<td>$696,000</td>
</tr>
<tr>
<td>2 Change to an electronic warrant system</td>
<td>$492,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,188,000</td>
</tr>
</tbody>
</table>

\(^7\) Benefit of $492,000 resulting from the salary and benefits of one Administrative Assistant IV (approximately $54,000) and seven Administrative Assistant IIIIs (approximately $438,000).
Patrol Efficiencies

Technology can enable troopers who are on patrol to receive data from the dispatch system through a mobile data computer (MDC). Interviews with other state\(^8\) and local law enforcement agencies\(^9\) indicate MDCs may have several benefits, including:

- Receiving text, identification pictures, driver’s license information, vehicle registrations, and warrants.
- Providing alternative communications and global positioning data to locate officers.
- Sharing data between law enforcement agencies.
- Reducing scanner vulnerabilities, such as voice transmissions.

Illustration II is one type of MDC.

NHP does not currently use an MDC system in patrol vehicles. In 2000 NHP installed 47 MDCs in its commercial enforcement trucks; the MDCs are not fully functional and do not provide any of the above benefits because they are not linked to the dispatch system.

Trooper Safety

NHP troopers may be at greater risk without an MDC system. During high volumes of radio transmissions in the Southern Region, troopers reported they had to wait for their turn to talk. A few troopers have reportedly been in foot pursuits and other potentially dangerous situations without the ability to communicate due to the high volume of radio transmissions. Additionally, dispatch centers do not have the ability to determine officers’ locations.

NHP has attempted to mitigate the risk by reassigning radio channels to more evenly distribute voice communications. NHP reports southern communications channels are at about 80 percent capacity after the reassignment. An MDC system may offer additional remedies for future communications needs.

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\(^8\) We received responses from the following western states: California, Colorado, Idaho, Montana, New Mexico, Oregon, Utah, Washington, and Wyoming.

\(^9\) We received responses from the following local law enforcement agencies: Reno Police Department, Sparks Police Department, Fallon Police Department, Washoe County Sheriffs Department, and Las Vegas Metropolitan Police Department.
Other Law Enforcement Agencies Use MDCs


Local law enforcement agencies within Nevada also use MDCs: Reno Police Department, Sparks Police Department, Washoe County Sheriff’s Department, Fallon Police Department, North Las Vegas Police Department (NLVPD), Henderson Police Department (HPD), and Las Vegas Metropolitan Police Department. In addition, NHP and Metro report NLVPD and HPD are doing limited data sharing.

We spoke with other state highway patrols, state police and local law enforcement agencies that identified the following benefits from using an MDC system:

- Voice transmissions may decrease
- Enables officers to:
  - See dispatch event information
  - Self-dispatch to events
  - Run drivers' license and registration checks
  - Receive photographic identification images
  - Write electronic reports
- May offer an alternative communication means in areas of bad reception
- Improve security by eliminating scanner vulnerability
- Supports e-ticketing systems

These benefits should improve efficiency and officer safety.

EITS may be assuming R&T’s information technology responsibilities. EITS suggested some modifications to a potential MDC system, such as an automated video recognition capability that uses cameras to identify subjects.

The Department should coordinate with EITS to write a Technical Investment Request (TIR) for a mobile data computer system. A TIR provides project planning, cost projections, and cost-benefit analysis. A TIR is required for all projects over $50,000.

Recommendation:

3. Coordinate with Enterprise IT Services to write a Technical Investment Request for a mobile data computer system.

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10 We received responses from the following western states: California, Colorado, Idaho, Montana, New Mexico, Oregon, Utah, Washington, and Wyoming.
Can Highway Patrol Improve Fleet Management?

The Nevada Division of Highway Patrol (NHP) can improve fleet management by reducing fleet size and increasing oversight of fleet operations. Reducing fleet size could save up to $7.2 million one-time savings and $1.8 million annually; increasing oversight of fleet operations could save up to $426,000 annually.

Reduce Fleet Size

Reducing fleet size could save NHP up to $7.2 million one-time purchase costs and up to $1.8 million annually.

NHP maintains a fleet of vehicles to help promote safety and protect citizens and visitors to Nevada. We noted NHP had 593 total patrol vehicles as of August 2012. NHP agrees their inventory is too high based on historical standards.

NHP has historically maintained its fleet size based upon the number of sworn officers plus a five percent management adjustment intended to ease the impact of lengthy repairs, and receiving and returning vehicles. There are currently 485 authorized sworn positions of which 430 are filled. We calculate the Division should have between 416 and 474 vehicles. See Exhibit IV. This represents a 20 to 30 percent decrease in patrol vehicles.

Exhibit IV

Fleet Size Calculations

<table>
<thead>
<tr>
<th></th>
<th>Authorized Positions</th>
<th>Current Staffing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sworn positions</td>
<td>485</td>
<td>430</td>
</tr>
<tr>
<td>Less: alternate enforcement vehicles</td>
<td>-34</td>
<td>-34</td>
</tr>
<tr>
<td>Subtotal</td>
<td>451</td>
<td>396</td>
</tr>
<tr>
<td>Plus: 5% management adjustment</td>
<td>+23</td>
<td>474</td>
</tr>
<tr>
<td>Current vehicles</td>
<td>593</td>
<td>593</td>
</tr>
<tr>
<td>Recommended Reduction</td>
<td>119</td>
<td>177</td>
</tr>
<tr>
<td>Percent</td>
<td>20%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Table Note: Some troopers may be assigned multiple vehicles. Alternate enforcement vehicles, such as motorcycles, K-9 units, and incident response vehicles, are removed as the troopers may not need an alternate vehicle and a patrol vehicle.

NHP is implementing a three phase vehicle lifecycle schedule. The phases are:
1. Pre-deployment – newly received vehicles that have not been built out.
2. Deployment – operational use.
3. Post-deployment – preparation to turn over to State Purchasing.

Applying the calculated inventory to NHP’s new lifecycle schedule, the five percent management adjustment should be primarily within the pre-deployment and post-deployment phases. NHP should have 396 to 451 vehicles deployed and 20 to 23 vehicles should be split between the pre-deployment and post-deployment phases.

Cost of Deployment

The cost of deploying a vehicle is the purchase cost and the equipment that is installed after the vehicle is received. Our test sample shows purchase costs ranged from $23,000 to $30,000. After a new vehicle is received, NHP adds additional equipment or “build-outs”. These build-outs include radios, radio consoles, cages, light bars, bumper push-guards and decals. Build-out costs vary between vehicle models and the rank of the assigned driver. NHP believes the cost of a build-out is about $15,000 and takes up to forty hours to complete depending on the configuration. Exhibit V shows the estimated cost of deployment ranging from $38,000 to $45,000 per vehicle.

Exhibit V

<table>
<thead>
<tr>
<th>Cost</th>
<th>Sedans</th>
<th>SUVs</th>
<th>Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase</td>
<td>$23,000</td>
<td>$29,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Build-out</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Deployment</td>
<td>$38,000</td>
<td>$44,000</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

We estimate that reducing the fleet size proportionally is saving the Division between $4.8 and $7.2 million in one-time purchase costs. See Exhibit VI.

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11 We reviewed records for 32 sedans (13 northern region and 19 southern region), 7 SUVs (4 northern region and 3 southern region) and 8 trucks (4 northern region and 4 southern region).
Exhibit VI

**Fleet Reduction One-time Savings**

<table>
<thead>
<tr>
<th></th>
<th>Sedans</th>
<th>SUVs</th>
<th>Trucks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Deployment</td>
<td>$38,000</td>
<td>$44,000</td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td>Portion of the 593 vehicle fleet</td>
<td>360</td>
<td>124</td>
<td>109</td>
<td>593</td>
</tr>
<tr>
<td>Recommended Reduction based on authorized sworn positions</td>
<td>72</td>
<td>25</td>
<td>22</td>
<td>119</td>
</tr>
<tr>
<td><strong>Potential savings</strong></td>
<td>$2,736,000</td>
<td>$1,100,000</td>
<td>$990,000</td>
<td>$4,826,000</td>
</tr>
<tr>
<td>Recommended Reduction Based on filled sworn positions</td>
<td>107</td>
<td>37</td>
<td>33</td>
<td>177</td>
</tr>
<tr>
<td><strong>Potential savings</strong></td>
<td>$4,066,000</td>
<td>$1,628,000</td>
<td>$1,485,000</td>
<td>$7,179,000</td>
</tr>
</tbody>
</table>

**Cost of Operation**

The cost of operation is the cost of preventive maintenance, repairs and replacements, such as tires and fuel. Our test data shows the average cost of operations, less fuel costs, is about $12,000 for sedans, $10,000 for SUVs and $5,000 for trucks.

We estimate that reducing the fleet size proportionally will save the Division between $1.2 and $1.8 million in annual operations costs. See Exhibit VII.

Exhibit VII

**Fleet Reduction Annual Savings**

<table>
<thead>
<tr>
<th></th>
<th>Sedans</th>
<th>SUVs</th>
<th>Trucks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Operations</td>
<td>$12,000</td>
<td>$10,000</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>Portion of the 593 vehicle fleet</td>
<td>360</td>
<td>124</td>
<td>109</td>
<td>593</td>
</tr>
<tr>
<td>Recommended Reduction based on authorized sworn positions</td>
<td>72</td>
<td>25</td>
<td>22</td>
<td>119</td>
</tr>
<tr>
<td><strong>Potential savings</strong></td>
<td>$864,000</td>
<td>$250,000</td>
<td>$110,000</td>
<td>$1,224,000</td>
</tr>
<tr>
<td>Recommended Reduction based on filled sworn positions</td>
<td>107</td>
<td>37</td>
<td>33</td>
<td>177</td>
</tr>
<tr>
<td><strong>Potential savings</strong></td>
<td>$1,284,000</td>
<td>$370,000</td>
<td>$165,000</td>
<td>$1,819,000</td>
</tr>
</tbody>
</table>
Recommendation:

4. Reduce number of patrol vehicles and manage vehicle inventories based upon the number of sworn positions plus five percent.

Increase Oversight of Fleet Operations

Increasing oversight of fleet operations by NHP fleet management staff could save up to $426,000 annually.

Regional commands manage repair and radio shops that provide vehicle and radio services. Shops are located in Reno, Elko, and Las Vegas and are overseen by sworn troopers as an ancillary duty. Repair shops have a supervisor position that reports to the trooper; communication shops do not have a supervisory position. See Appendix A for the organization of NHP and regions.

Regional commands may not be effectively managing shop operations because sworn troopers are not experienced in shop operations and have other duties to perform. We found the lack of effective management may have contributed to low productivity and incomplete work orders and inventories at the shops.

NHP has fleet management staff at its Carson City headquarters that are experts in logistics and experienced in managing repair and radio communications shops. Staff responsibilities include coordinating statewide fleet and parts inventories, tracking vehicle assignments and mileage, and reviewing service records.

NHP fleet management staff experts should work with regional commands to improve shop management, increase productivity, and ensure work orders and inventory records are complete, accurate, and properly maintained.

Productivity

Our audit found that shop staff could increase productivity by about 35 percent to achieve NHP goals.

Staff work is recorded in NHP’s automated fleet management records system. Additionally, the system records fleet and parts inventories, and work orders for services, such as build-outs, tire work, preventive maintenance, and repair services.

The system can also track staff available work hours. Available work hours include productive and administrative hours. All available staff hours should be
recorded in the system; however, we found that not all available hours were recorded.

- Productive hours include both direct and indirect hours. Direct hours are time coded to repair work, parts quotes, pick-up/delivery, and radio projects or programing. Indirect hours are time coded to data input and shop cleaning.
- Administrative hours include leave and holiday hours.

NHP’s goal for mechanics and communications technicians is 80 percent of available hours are productive. We reviewed the system records of staff from FY11 and found less than 50 percent of recorded available hours were productive. See Exhibit VIII.

**Exhibit VIII**

**Recorded Shop Hours**

<table>
<thead>
<tr>
<th></th>
<th>Repair Shop Mechanics</th>
<th>Radio Shop Technicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive to available hours</td>
<td>44%</td>
<td>46%</td>
</tr>
<tr>
<td>NHP productivity goal</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Potential increase</strong></td>
<td>36%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Increasing oversight should increase productivity in repair and radio shops. We calculated the value of increased productivity to reach NHP’s goal to be $235,000 for the repair shop and $191,000 for the radio shop, or about $426,000 annually.\(^{12}\)

**Work Orders**

Both repair and radio shops use work orders to record services. Work orders record the amount of time taken to complete the repair and the cost of parts used.

We found a lack of supervisory review may have caused incomplete or incorrect work orders. We tested work order records and noted discrepancies, for example:

\(^{12}\) Benefit of $426,000 results from total salary and benefits of repair shops ($651,000) times improved efficiency (36.1 percent), which equals $235,000, plus radio shop salaries and benefits ($567,000) times improved efficiency (33.6 percent), which equals $191,000.
- Work orders were opened and closed by mechanics without subsequent supervisory review.
- Preventive maintenance was recorded without associated parts and/or labor costs.
- $65 in air conditioning parts were recorded without associated labor costs.
- $50.80 in parts for preventive maintenance work was recorded without associated labor costs.

Increasing oversight should reduce the number of incomplete or incorrect work orders.

Additionally, we noted the shops have a bar code system that is not functioning. An operational bar code system could also help reduce the number of incomplete or incorrect work orders. Bar code systems record parts numbers and associate specific parts with work orders and inventory records. A bar code system could be used to automatically associate parts with a work order and inventory record. Neither the manufacturer nor R&T have repaired the bar code system.

**Inventory Records**

NHP policies state that shops shall conduct physical inventories and maintain inventory records. NHP officials stated inventories were performed in the repair shops; however, no documentation was retained evidencing the inventories. Additionally, NHP officials stated radio shop inventories were not performed.

Inventories will help better manage fleet operations and account for parts used in repair vehicles and radio communications. Increasing oversight should ensure inventories are performed and documented. Additionally, the bar code system could also be used to automate the shop inventory process.

**Conclusion**

Increasing oversight of repair and radio shops by NHP fleet management should provide the staff expertise and experience needed to help regional commands increase productivity and maintain accurate and complete records. We estimate that increasing oversight of fleet operations should improve productivity valued at $426,000 annually.

**Recommendation:**

5. Increase oversight of fleet operations by NHP fleet management staff to:
   a. Increase productivity, and
b. Ensure work orders and inventory records are complete, accurate, and properly maintained.
Summary of Benefits

One Time Savings

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Reduction of fleet size (purchases)</td>
<td>$4,826,000</td>
<td>$7,179,000</td>
</tr>
</tbody>
</table>

Annual Savings

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Reduction of fleet size (operations)</td>
<td>$1,224,000</td>
<td>$1,819,000</td>
</tr>
<tr>
<td>5 Centralize management of fleet operations</td>
<td>$426,000</td>
<td>$426,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,650,000</td>
<td>$2,245,000</td>
</tr>
</tbody>
</table>

*****

Consolidated Summary of Audit Benefits (Annual)

<table>
<thead>
<tr>
<th></th>
<th>First Year</th>
<th>Subsequent Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Communications Operations</td>
<td>$1,188,000</td>
<td>$1,188,000</td>
</tr>
<tr>
<td>Fleet Management – one time</td>
<td>$4,826,000</td>
<td>$7,179,000</td>
</tr>
<tr>
<td>Fleet management – annual</td>
<td>$1,650,000</td>
<td>$2,245,000</td>
</tr>
<tr>
<td>Total</td>
<td>$7,664,000</td>
<td>$10,612,000</td>
</tr>
</tbody>
</table>
Appendix A
Repair and Radio Shops
Organizational Chart
Mr. Steve Weinberger, Administrator  
Department of Administration  
Internal Audits Division  
209 East Musser Street, Room 302  
Carson City, Nevada 89701

Dear Mr. Weinberger,

The Department of Public Safety received and reviewed the draft audit report, dated October 23, 2012. The Director’s Office, Highway Patrol and Records and Technology Divisions contributed in the formulation of the responses to the audit. The Department appreciates the information and the recommendations contained in the work product presented by your Division audit staff and hereby submits the following responses to the recommendations contained in the audit report.

Recommendation #1: Consolidate the two Northern Dispatch Centers.

Response: The Department accepts the audit’s recommendation to consolidate the two Northern Dispatch Centers (Carson City and Elko). A consolidation of this nature should be properly addressed and approved through the State budgetary process during the Legislative Session. Personnel impacts and political concerns created by such a move would need to be assessed and addressed. Given the timing of this recommendation, the Department has already submitted its 14/15 budget request to the Budget Office. The Department will notify the Budget Office of this recommendation; however it is doubtful this could be included as a late submittal to the Department’s budget request. Given this situation, it is difficult at this time to determine when this recommendation could be implemented. If the Department is unable to address this recommendation during the upcoming biennium, it will certainly be evaluated for the 16/17 biennium.
**Recommendation #2:** Coordinate with the Administrative Office of the Court a change to an electronic warrant system.

**Response:** The Department accepts the recommendation in fact the Department completed a project (eWarrant #P2010-005) in conjunction with the Administrative Office of the Court (AOC) in January, 2011. That project created an electronic warrant capability for those Nevada courts wishing to participate in the system. While not all Nevada courts are represented by the AOC, all courts can use this capability via AOC if they so desire. Despite a concerted effort by the AOC to get courts to participate, there has been little interest to date.

If a court does decide to participate, implementation requires technical work by the courts and involves associated costs which may be challenging given the current fiscal environment. It is difficult to estimate a timeline where all Nevada courts would have the electronic warrant capability given the responsibility for those individual courts to act and the demand such a transition places on those courts. It is likely that the transition from all the courts will take many years and until this occurs, an alternate manual process must remain in place. Thus the Department would not realize the audit’s projected savings.

**Recommendation #3:** Coordinate with Enterprise IT Services (EITS) to write a Technical Investment Request (TIR) for a mobile data computer system.

**Response:** The Department accepts the recommendation to coordinate with EITS to write a Technical Investment Request (TIR) for a mobile data computer system. The Highway Patrol Division’s Research and Planning section has been researching mobile data systems since April 2012, and will have the TIR completed by April, 2013. It is likely that this project would not be considered before the 16/17 biennium.

**Recommendation #4:** Reduce number of sworn patrol vehicles and manage vehicle inventories based upon the number of sworn positions plus five percent.

**Response:** The Department accepts the recommendation to reduce the number of sworn Highway Patrol vehicles and manage the vehicle inventories based upon the number of sworn positions plus five percent. The Nevada Highway Patrol Division (NHP) concurs with reducing the fleet size as a whole however there are some concerns and issues related to the actual amount of vehicles stated within the draft audit report which will require follow-up clarification. NHP has implemented a three phase fleet flow model as referred to in the draft audit report. Implementation and continual refinement of the vehicle inventory lifecycle will be structured to meet the goals and objectives for the Division. The NHP will outline the concerns and issues related to the current fleet size and will detail it in the fleet reduction action plan which will be completed by December 31, 2012. Please review the three phase fleet flowchart attached to this correspondence.
Recommendation #5: Increase oversight fleet operations by NHP fleet staff to:
   a. Increase productivity, and
   b. Ensure work orders and inventories are complete, accurate, and properly maintained.

Response: The Department accepts the audit recommendation to increase oversight of fleet operations. The NHP has already established increased oversight and coordination of fleet operations in terms of the findings above at NHP Headquarters. Work orders and inventory go hand in hand and provide the means to attribute parts to services provided by the mechanic or radio shops in each of the NHP Regional Commands. To facilitate correct and consistent completion of work orders, NHP HQ will provide administrative oversight, training, and reinforcement of policies regarding best inventory practices.

The following resources and processes have been implemented to better support NHP Regional commands in addressing the audit findings including:

- NHP has separated radio from fleet operations in terms of productivity and work orders/inventory management.
- A Communications Systems Radio Coordinator has been added to assist the Regions with implementation of radio unit goals, objectives, strategies, policies, processes, and procedures necessary to meet regulatory requirements and Departmental and Divisional goals in police communications.
- Along with Fleet Management the Communications Systems Radio Coordinator will assist NHP Headquarters in facilitating radio replacement scheduling and deployment, radio equipment and supplies procurement, and inventory management.
- NHP has assigned two Headquarters Administrative Assistants to track Regional Command work orders and ensure that all fleet shop material, direct/indirect labor, and overhead costs are accurately attributed onto radio/mechanical shop work orders to better manage service outputs and cost to the services provided.
- NHP has created a monthly fleet management report that provides a summary of all patrol and civilian vehicles managed, assignment status, and lifecycle status (age and mileage) that provides information to Headquarters and Regional management to better manage our fleet and effective utilize fleet resources.
- NHP Headquarters will monitor work orders and labor utilization against the productivity target provided in the audit and will report these results to our Regional Commands. The utilization reporting will be built into our existing application and provided on a quarterly basis.

Please contact me should you have any questions or require additional information.

Chris Perry, Director
Nevada Department of Public Safety

attachment
Appendix C

Timetable for Implementing Audit Recommendations

In consultation with the Department and NHP, the Division of Internal Audits categorized the five recommendations contained within this report into two separate implementation time frames (i.e., Category 1 – less than six months; Category 2 – more than six months). The Division should begin taking steps to implement all recommendations as soon as possible. The Division’s target completion dates are incorporated from Appendix D.

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Category 1: Recommendation with an anticipated implementation period of less than six months.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Increase oversight of fleet operations by NHP fleet management staff to:</td>
<td>April 2013</td>
</tr>
<tr>
<td>a. Increase productivity, and</td>
<td></td>
</tr>
<tr>
<td>b. Ensure work orders and inventory records are complete, accurate, and</td>
<td></td>
</tr>
<tr>
<td>properly maintained. ([page 19])</td>
<td></td>
</tr>
</tbody>
</table>

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Category 2: Recommendations with an anticipated implementation period exceeding six months.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consolidate the two northern dispatch centers. ([page 9])</td>
<td>July 2017</td>
</tr>
<tr>
<td>2. Coordinate with the Administrative Offices of the Court a change to an</td>
<td>July 2017</td>
</tr>
<tr>
<td>electronic warrant system. ([page 11])</td>
<td></td>
</tr>
<tr>
<td>3. Coordinate with Enterprise IT Services to write a Technical Investment</td>
<td>July 2017</td>
</tr>
<tr>
<td>Request for a mobile data computer system. ([page 13])</td>
<td></td>
</tr>
</tbody>
</table>
4. Reduce number of patrol vehicles and manage vehicle inventories based upon the number of sworn positions plus five percent. (page 19)

The Division of Internal Audits shall evaluate the action taken by the Division concerning report recommendations within six months from the issuance of this report. The Division of Internal Audits must report the results of its evaluation to the Committee and the Division.