Performance Audit
Police Department
Workers' Compensation

November 2010

City Auditor's Office

City of Kansas City, Missouri

09-2009

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November 12, 2010

Honorable Mayor, Members of the City Council, and Members of the Board of Police Commissioners:

This performance audit of the Kansas City, Missouri Police Department's workers' compensation program was initiated by the city auditor pursuant to Article II, Section 216 of the city charter and Section 84.350 of Revised Statutes of Missouri at the request of the Board of Police Commissioners. The audit focuses on cost and incident trend and pattern analysis the Police Department can perform on its workers' compensation data.

The Police Department should expand its workers' compensation cost and injury data analysis to include annual trend and pattern analysis in order to reduce costs and prevent injuries. Currently the department generates cost reports that identify costs over short periods of time. By expanding its analysis to include annual costs, trends will be more likely to emerge. The department will be able to identify the cost components that are increasing and the rate of increase. Knowing which costs are driving workers' compensation costs can help focus where the department can reduce costs or slow increases. Analyzing trends in workers' compensation costs can also highlight when costs are above or below expected values and provide data for making cost projections.

Currently the department reports injuries monthly, grouping them by what the employee was doing at the time of the injury. The department should expand its incident analysis to look for annual trends and patterns in several grouping of injury data including the body part injured, division, position, and days of the week. Trends or other patterns in the data may point to injuries that have similar causes that the department can address in an effort to reduce future injuries.

The department should reduce the frequency it uses "other" to describe the activity the employee was engaged in at the time of the workers' compensation injury. Using "other" reduces the number of incidents the department can use to analyze injuries. The department should also begin to compare its workers' compensation incidence rate to the Bureau of Labor Statistics' workplace injury and illness incidence rate for local police protection to determine whether the department compares well to other law enforcement agencies.

The audit includes recommendations to expand the department's analysis of workers' compensation costs and injuries, to improve the usefulness of the injury data collected by the department, and to utilize benchmarking data to determine how the department compares to other law enforcement agencies.

We shared a draft of this report with the chief of police on September 28. His response is appended. We would like to thank the Kansas City, Missouri Police Department staff for their assistance and cooperation. The audit team for this project was Joyce Patton and Sue Polys.

Gary L. White
City Auditor

Kansas City, Missouri Police Department Workers' Compensation

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Introduction

Objectives

We conducted this audit of Kansas City, Missouri Police Department workers' compensation under the authority of Article II, Section 216 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the city auditor's primary duties. We also conducted the audit under the authority of Section 85.350 of Revised Statutes of Missouri, which authorizes the city auditor to audit the Police Department and at the request of the Board of Police Commissioners.

A performance audit provides assurance or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria. Performance audits provide objective analysis so that management and those charged with governance and oversight can use the information to improve program performance and operations, reduce costs, facilitate decision making, and contribute to public accountability.[1]

This report is designed to answer the following question:

- What are the cost and injury trends in Police Department workers' compensation data?

Scope and Methodology

Our review focuses on the Police Department's workers' compensation cost and injury trends. Our audit methods included:

- Reviewing Missouri Revised Statutes pertaining to workers' compensation to understand statutory regulations.
- Reviewing the Police Department's policies and procedures on the workers' compensation program to identify expected practices.

[1] Comptroller General of the United States, *Government Auditing Standards* (Washington, DC: U.S. Government Printing Office, 2007), p. 17.

- Reviewing the Memorandum of Understanding between the Police Department and the City Attorney's Office on the administration of the Police's workers' compensation program to identify the obligations of each department.

- Interviewing Police personnel from the department's Benefits Section, Accounting and Payroll Section, and the Office of General Counsel to understand the workers' compensation program's actual practices.

- Reviewing professional literature to identify workers' compensation cost and injury trends and analysis the department should review when analyzing the program's effectiveness.

- Analyzing workers' compensation cost and incident trends and patterns from fiscal years 2005 through 2009 to demonstrate how performing trend and other analysis could benefit the department in administering the program.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. No information was omitted from this report because it was deemed privileged or confidential.

Background

Kansas City, Missouri Police Department Workers' Compensation

Missouri Revised Statutes Chapter 287 requires the Kansas City Police Department to provide workers' compensation for employees injured while performing their duties. Workers' compensation also covers illnesses related to job duties. The Police Department's workers' compensation pays for the employee's medical care, rehabilitation services, disability, death benefit, and supplemental payments for lost wages. The department's workers' compensation program is self-insured.

The workers' compensation process begins when an employee suffers an injury or illness while performing duties as a part of his/her job functions. According to department procedures, once an injury occurs,

the department sends the employee to a health facility authorized by the department to provide treatment. The employee's supervisor ensures an injury report is completed and sent to the Benefits Section of the department within 48 hours of the reported injury. If the injury is serious (e.g. gunshot wound), the Benefits Section is notified immediately. The Benefits Section forwards the injury report to the state's workers' compensation division.

When an employee makes a workers' compensation claim, staff in the Benefits Section estimates the claim's medical expenses based on their experience with similar injuries. While the injured employee is receiving treatment, Benefits staff monitors his/her progress. If approved by the physician, the Police Department places the employee on light duty until he/she can return to normal job duties.

If the injury requires the employee to miss work, the employee may receive temporary total or partial disability payments. The department pays temporary total disability at the state required level of two-thirds of the employee's salary[2] but allows the employee to choose to receive his/her full salary while on workers' compensation. If the employee chooses to receive an amount over two-thirds of his/her salary while on temporary total disability, the additional amount will be deducted from any payment the employee may receive for permanent disability.

Employees on workers' compensation sometimes file claims to receive a settlement for their injuries. Most of these claims involve injuries resulting in either partial or total permanent disability; however, they can also include disfigurement injuries. The City Attorney's Office handles the claims. The Board of Police Commissioners approves any settlement greater than $25,000.

[2] RSMo 287.170.

Findings and Recommendations

Summary

The Police Department should expand its analysis of workers' compensation costs to include annual cost trend analysis. Currently the department generates cost reports that identify costs over shorter periods of time. Analysis of annual cost trends should help the department identify costs that could be contained or reduced, identify costs that are fluctuating from expected values, and predict future workers' compensation costs.

The Police Department should expand its workers' compensation incident analysis to look for annual trends and patterns in injuries, divisions, positions, as well as other groupings that describe the incident data. Trends and other patterns in the data may point to injuries that have similar causes that the department can then address to help prevent future incidents.

The department should reduce the frequency it uses "other" to describe what the employee was doing at the time of the workers' compensation injury. When the department uses "other," it reduces the number of incidents that it can use for analysis. In addition to analyzing cost and injury trends, the department should compare its incidence rate against the Bureau of Labor Statistics' workplace injury and illness incidence rate for local police protection to determine whether the department compares well with other law enforcement agencies.

Cost Analysis Could Reduce and Control Workers' Compensation Costs

The Police Department should expand its analysis of workers' compensation costs to include annual cost trend analysis. Analysis of annual cost trends should help the department identify costs that could be contained or reduced and costs that are fluctuating from expected values, and predict future costs. We analyzed the department's workers' compensation costs to give the department examples of analyses they could do. We broke the costs into their components and calculated change over time. In addition, we describe other cost measures the department could consider calculating in order to reduce and control costs.

Police Should Expand Workers' Compensation Analysis to Include Cost Trend Analysis

The Police Department should expand its workers' compensation cost analysis to include annual trend analysis. Currently, the Police Department reviews segments of workers' compensation costs over short periods of time. The department generates monthly reports that address workers' compensation costs, including one by employee and one by medical service provider. A third report includes total medical costs by month for the current fiscal year. The department also generates a monthly report on paid salary replacement for employees unable to work because of a workplace injury. The report shows individual's salary replacement by current pay period and current calendar year. Looking at one month's worth of workers' compensation costs in isolation does not allow analysis of trends. Even if the department reviews multiple months' data, identifying trends is a problem because seasonal variations can affect monthly data. Analysis of annual total cost or annual average cost data should smooth seasonal variations and reveal trends. The Government Finance Officers Association recommends[3] using at least five years of data for effective financial trend analysis.

By analyzing the cost trends using annual cost data over multiple years, the department will be able to identify the cost components that are increasing and the rate of increase. Analyzing trends in workers' compensation costs can also highlight when costs are above and below expected values. Knowing which costs are driving workers' compensation costs can help focus where the department can reduce costs or slow increases. Tracking workers' compensation cost trends also provides data for making cost projections. In order to identify cost drivers and cost variations and to help when making cost projections, the chief of police should ensure that the department performs annual cost trend analysis.

More Detailed Analysis Can Point to Areas Where Costs Can Be Reduced

To provide the Police Department with examples of how they can identify workers' compensation costs that can be reduced, we reviewed workers' compensation cost components and identified which components are increasing. We also calculated average medical cost per claim over time. The department can use average cost per cost component to examine increases and look for trends from year to year, as well as compare averages with other similar entities.

To understand workers' compensation costs the department should identify and analyze cost components and their trends. For example,

[3] Best Practice, The Use of Trend Data and Comparative Data for Financial Analysis (2003), Government Finance Officers Association.

workers' compensation costs increased eight percent between fiscal years 2005 and 2009. (See Exhibit 1.) Medical claims represent the largest portion of workers' compensation spending at almost 50 percent of costs in 2009. Two costs which contributed to the overall increase were settlement costs and medical costs. Settlements had the highest percentage increase (116%) since 2005. Medical claims costs had the largest dollar increase ($260,000). Once the department identifies the trends in the cost components, the department can determine what is driving the costs and develop strategies to contain them. For example, the department can examine medical claims data to identify which claims are more costly. By knowing what claims are more costly, the department can focus efforts on developing a safety prevention program for that type of injury.

Exhibit 1. Police Department Workers' Compensation Expenses, Fiscal Year 2005 - 2009

Expense	2005	2006	2007	2008	2009	Percent Change
Medical Claims	$830,009	$961,510	$1,216,091	$1,400,080	$1,088,837	31.2%
Payment to Beneficiaries (Widow/Widower)	112,493	121,435	112,761	97,811	112,761	0.2%
Settlements (Permanent Partial and Total Disability)	125,792	204,380	215,697	123,148	271,308	115.7%
Human Resources Staff' Salaries[4]	139,635	143,954	148,406	152,996	152,996	9.6%
Billing Services	96,524	119,528	110,263	123,549	136,297	41.2%
Extra Workers' Comp. Insurance	98,681	234,524	112,406	123,351	118,996	20.6%
Liability/Property Ins. (Self-Insurance Bond)	20,500	22,900	22,900	-	2,254	(89.0%)
2nd Injury Fund Tax	167,007	202,627	94,017	109,750	141,431	(15.3%)
Self-Insurance Tax	77,931	-	9,248	19,507	42,104	(46.0%)
Self-Insurance Escrow Costs	303,000	126,802	157,720	700,000	-	(100.0%)
Current Year Encumbrances	110,244	-	-	35,740	207,077	87.8%
Prior Year Encumbrances	(9,000)	(110,244)	-	-	(35,740)	297.1%
Workers' Comp. Costs	$2,072,816	$2,027,416	$2,199,509	$2,885,932	$2,238,321	8.0%

Sources: Kansas City, Missouri Police Department Fiscal Division and City Auditor's Office calculations.

Average costs are useful to identify trends, project future costs, and provide comparisons. The Police Department can analyze workers' compensation costs by calculating averages for total cost per incident, medical cost per incident, cost per body part injured, and other cost components. Calculating the annual cost averages for different cost components provides a way to summarize each component's costs from all months as a single, typical value. The department can use those annual averages to determine whether costs are trending up or down. Cost averages can help project future costs by

[4] We estimated this cost based on staff salaries and percent of time spent on workers' compensation claims as reported by the department.

multiplying the average cost by estimated future incidents. The department can also use average costs for comparisons with similar entities or varying types of injuries. Comparisons with similar entities help identify potential problem areas. Comparison of average costs for varying injuries can show which injuries cost the most and, therefore, could be a place to focus cost reduction efforts.

Between fiscal year 2005 and 2009, the Police Department's average medical cost per workers' compensation incident[5] increased from $2,343 per incident to $3,512. (See Exhibit 2.) The department's increase in average medical treatment costs could be investigated further to determine whether the increases are due to a few expensive claims which inflated the average, an increased number of medical procedures performed per injury, or some other factor.

Exhibit 2. Number of Workers' Compensation Incidents and Average Medical Cost per Incident, Fiscal Year 2005 - 2009

Incidents and Average Cost	2005	2006	2007	2008	2009
Incidents that Resulted in Medical Costs to KCPD	299	269	294	331	284
Average Medical Cost Per Incident[6]	$2,343	$2,980	$3,073	$3,994	$3,512[7]
Percent Increase (Decrease) in Average Medical Cost per Incident	N/A	27.2%	3.1%	29.9%	(12.0%)

Sources: Kansas City, Missouri Police Department Incident Data and City Auditor's Office calculations.

Additional Measures Could Provide Further Opportunities to Control or Reduce Costs

During the course of our audit, we identified additional cost measures the Police Department could consider calculating in an effort to control or reduce workers' compensation costs. The measures and their importance are described in Exhibit 3. We did not determine whether the department is currently collecting the necessary data to calculate these cost measures.

[5] We excluded incidents that did not incur medical costs.

[6] Costs are attributed to the year in which the incident occurred.

[7] The average cost for injuries that occurred in 2009 may be low. Some of these injury cases may still be open and costs not fully incurred.

Exhibit 3. Additional Workers' Compensation Cost Measures KCPD Could Calculate

Measure	Importance
The time between when the incident occurs and is reported	Delays in reporting incidents increase costs and the probability of litigation. Promptly reporting incidents also sends employees the message management takes injuries seriously.
Percentage of claims litigated	Litigated claims increase employers' costs. A high or increased percentage of claims litigated could signal problems in the employer/employee relationship.
Average cost per medical visit or service	Medical costs can be broken out by medical service or type of service provider. Calculating the cost averages provides a way to summarize costs as a single, typical value. The averages can then be analyzed for trends and comparisons made with like entities.
Percentage of claims that involve loss time	Loss time is the time that injured employees miss from work. The more time spent on disability the more wage replacement and medical costs increase. Employers should try to reduce loss time by bringing employees back to work as soon as possible. High percentages can signal the need to look at the return to work process.

Sources: Teresa A. Long, "Workers' Compensation Loss Run Reports: How To Assess Your Safety Culture," *Industrial Maintenance & Plant Operation*, October 2009; Teresa A. Long, "10 Ways to Find Lost Money in Workers' Compensation Loss Runs," *MyNewMarkets.com*, December 2009; "Employee Risk Management: Reduce Your Workers' Compensation Costs," *AllBusiness.com*, September 2008; Amber Hyman, Andrew Snyder, and Angie Sweeney, "Workers' Compensation in Milwaukee: Analyzing Spending Increases," 2002; Joel Raedeke, "Data Digging: Analytics Provide Risk Managers with Cost-Containment Insight," *Claims*, 2009.

Police Department Can Use Incident Analysis to Prevent Work-Related Injuries

The Police Department should expand its workers' compensation incident analysis to look for annual trends and patterns in injuries, divisions, positions, as well as other groupings that describe the incident data. The department currently reviews incident reports of the most recent month, grouped by service.[8] By analyzing trends and other patterns in the data groupings, the department may identify injuries that have similar causes that it needs to

[8] "Service" is the data field that the Police Department uses in its workers' compensation claims software to describe the activity the employee was engaged in at the time of the injury. It includes the categories of injured during arrest, vehicular accident, slip and fall, assault, repetitive motion, other, etc.

address. Fluctuations in patterns may indicate problems that the department needs to address.

The department should reduce the frequency it uses "other" to describe the employee's activity at the time of the workers' compensation injury. Using "other" reduces the number of incidents the department can use for analysis of injuries. In addition to analyzing trends and patterns, the department should benchmark its incidence rate against the Bureau of Labor Statistics workplace injury and illness incidence rate to determine whether the department compares well with other law enforcement entities.

Identifying Incident Trends and Patterns Can Help Police Prevent Workers' Compensation Incidents

The Police Department can expand its incident analysis to help prevent work-related injuries. The department currently reviews a summary of the month's workers' compensation injuries, categorized by what activity the employee was engaged in at the time of the injury. Police staff reports that they use the monthly injury report to try to determine whether there are problems that caused the workers' compensation incident that the department needs to address. The department can expand its incident analysis to look for annual trends and patterns in several groupings of the injury data including the body part injured, the division in which the employee works, the employee's position, and the day of the week of the incident. Additionally, by expanding its analysis to look at annual incident data, trends will be more likely to emerge, and seasonal fluctuations will be reduced.

The Occupational Safety and Health Administration (OSHA) maintains that by analyzing workplace illness and injury trends over time, illnesses and injuries having similar causes may be identified and prevented. OSHA recommends looking for patterns in where the injury occurred, nature of the work, time of day, and type of equipment. Injury and illness patterns can indicate a lack of controls, such as lack of training or poor hiring practices. Implementing one corrective action could reduce or eliminate several incidents having common causal patterns. Increases in incident trends could indicate that a safety problem has developed that the department needs to address. Looking at incident data can also help identify the areas with the fewest incidents. The department can analyze the areas with the fewest incidents to determine differences that may contribute to reduced or limited injuries.

In order to improve the effectiveness of the department's analysis of workers' compensation injuries, the chief of police should ensure the department performs annual trend and pattern analysis of its workers' compensation incident data.

More Detailed Analysis of Incident Data Can Point to Trends and Patterns

To provide the Police Department with examples of how they can analyze workers' compensation injuries for trends and patterns, we analyzed frequency by incident service, frequency of injury by body part, percentage of employees injured by division, percentage of employees injured by position, frequency of incident by day of the week, and frequency of employees involved in multiple incidents. We also compared incidents by body part injury to service, by service and patrol division, and by the day of the week and the time of day.

Analysis of injuries by service can reveal trends and fluctuations. For example, in three of the five years of incident data we reviewed, there were 30 or more physical training/defensive tactic incidents, but for the other two years, there were less than 20. (See Exhibit 4.) Annual trend analysis would allow the department to notice the drop in injuries in 2007 and 2009. If the department investigates why the number of defensive tactic incidents dropped, the department may be able to use this information to reduce training tactic incidents in future years. The department may also want to examine why injuries during arrest have more than doubled between 2005 and 2009.

Exhibit 4. Police Department Incident by Service, Fiscal Year 2005 – 2009

Service	2005	2006	2007	2008	2009
Injured During Arrest	34	56	70	60	82
Other	58	57	56	58	46
Vehicular Accident	50	39	43	61	47
Slip and Fall	39	28	38	34	25
Foot Chase	50	18	23	36	29
Physical Training/Defensive Tactics	31	38	16	30	13
Assault	22	15	24	15	20
Lifting Injury	12	9	9	11	10
Slip and Fall - Weather Related	4	2	17	16	8
Poison Ivy	12	5	5	7	3
Repetitive Motion	7	4	2	0	2
Unknown	0	4	6	2	1
Firearms Training	0	2	4	4	2
Bike Patrol	0	0	0	3	0
Not Applicable	1	0	0	0	0

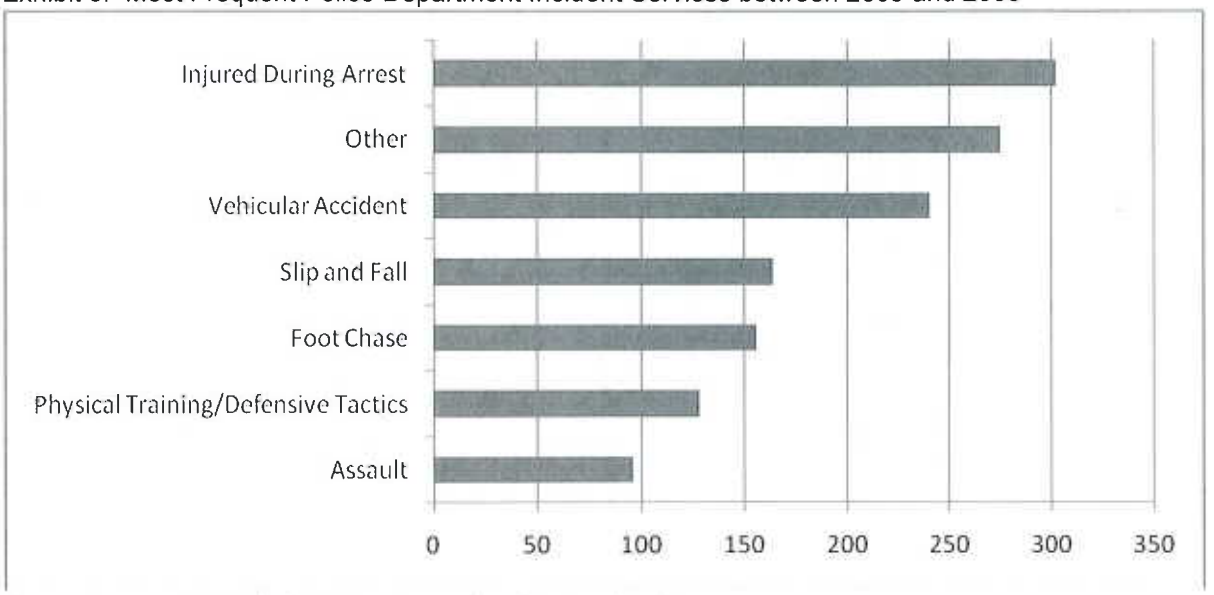
Source: Kansas City, Missouri Police Department Incident Data.

Use of "other" to categorize incidents reduces injury data that the department can analyze. Between 2005 and 2009, the Police Department recorded "other" as the second-most frequently used category in RiskMaster's[9] "service" data field. (See Exhibit 5.) When staff records "other" as the category for describing the activity the employee was engaged in at the time of the injury, it reduces the number of incidents that can be used for analysis. In

[9] RiskMaster is the Police Department's software used to record workers' compensation incident and claims data.

order to improve the usefulness of the "service" data field, the chief of police should ensure department staff uses descriptive categories for the data field "service."

Exhibit 5. Most Frequent Police Department Incident Services between 2005 and 2009



Source: Kansas City, Missouri Police Department Incident Data.

Incident analysis could point to common causes and opportunities to prevent injuries to specific body parts. The department could investigate injuries to specific body parts that have a consistently higher frequency of occurrence or are trending higher in recent years. For example, shoulder injuries more than doubled between 2005 and 2009. (See Exhibit 6.) Further analysis of the increase of these injuries might show a common cause for the increase. Once the department identifies the cause, it could seek opportunities to change how it performs some functions or provide different equipment or training to reduce injuries to this body part.

Exhibit 6. Police Department Body Part Injuries,[10] Fiscal Year 2005 - 2009

Body Part[11]	2005	2006	2007	2008	2009
Knee	43	31	49	55	49
Hand	42	34	34	40	44
Finger	29	32	29	28	29
Lower Back	26	22	28	28	24
Ankle	27	18	23	17	26
Shoulder	14	10	26	24	32
Lower Arm	29	18	19	17	13
Neck	14	12	19	30	21
Wrist	24	13	21	27	8
Soft Tissue	19	21	14	16	16
Upper Back Area (Thoracic Area)	14	10	8	26	15
Eye (s)	14	9	11	16	9
Elbow	12	16	5	13	12
Lower Leg	13	7	12	12	14
Multiple Injuries	6	18	14	11	7
Chest	11	7	5	7	6
Hip	6	8	5	11	3
Upper Arm (Including Clavicle and Scapula)	5	9	7	3	9
Head	6	5	7	10	4
Foot	10	4	4	10	2
Abdomen (Including Groin)	7	3	5	4	4
Upper Leg	12	3	2	2	3
Nose	2	6	5	6	0
Mouth	3	3	5	2	3
Unknown	1	2	3	4	3
Ear	2	2	0	1	2
Pelvis	0	1	2	1	1
Toe(s)	0	2	1	1	0

Source: Kansas City, Missouri Police Department Incident Data.

Combined analysis of incident frequency by service and body part injury could help identify needed safety improvements. We identified knee, hand, and finger as body parts that have high frequencies of injuries and sorted them by the service the employees were engaged in at the time of the incident. (See Exhibit 7.) The department could examine why many arresting injuries involved knees, hands, and fingers. Similar causes could suggest safety precautions to take to protect those body parts.

[10] For our analysis, we combined some of the body-part classifications the department currently uses. For example, our finger category includes finger and thumb injuries.

[11] More than one body part may be injured in one incident.

Exhibit 7. Body Part Injuries by Service, Fiscal Year 2005 - 2009[12]

Body Part	Assault	Foot Chase	Injured During Arrest	Other	Slip and Fall	Vehicular Accident	Total
Knee	18	38	39	18	55	27	195
Hand	24	38	58	26	16	12	174
Finger	11	8	55	42	10	9	135
Total	53	84	152	86	81	48	504

Source: Kansas City, Missouri Police Department Incident Data.

Disparities in total incident frequencies by division could identify internal "best practices." The department could compare frequencies of injuries in divisions that perform like duties. For example, Central, East, and Metro Patrol Divisions have the highest percentage of employees involved in workers' compensation incidents averaging at least 21 percent of FTE's while the North Patrol averaged only 8.3 percent. (See Exhibit 8.) The department could try to determine what factors are influencing the rates and creating disparities between the divisions. If these factors are within its control, the department can make changes. For example, if North Patrol has additional safety procedures that other patrol divisions could adopt, it may help reduce its incident frequency. The department could then monitor the frequency to see whether instituting the safety changes affects the rates in the expected way.

[12] For our analysis, we combined some of the body-part classifications the department currently uses. For example, our finger category includes finger and thumb injuries.

Exhibit 8. Police Department Percent of FTEs on Workers' Compensation by Division, Fiscal Year 2005 - 2009

Division	2005 Injured # (%)	2006 Injured # (%)	2007 Injured # (%)	2008 Injured # (%)	2009 Injured # (%)	Average Percent
Central Patrol	53 (24.8%)	48 (22.4%)	57 (27.1%)	56 (25.8%)	57 (25.5%)	25.1%
East Patrol	50 (23.6%)	44 (21.0%)	53 (24.9%)	52 (23.4%)	48 (22.2%)	23.0%
Metro Patrol	51 (26.2%)	34 (17.4%)	46 (23.2%)	45 (22.4%)	37 (19.0%)	21.6%
Shoal Creek Patrol[13]	N/A	3 (4.9%)	14 (33.3%)	10 (15.9%)	14 (13.9%)	17.0%
South Patrol	15 (12.8%)	16 (13.7%)	19 (16.0%)	17 (14.1%)	14 (12.0%)	13.7%
North Patrol	11 (8.6%)	15 (12.2%)	3 (2.2%)	12 (11.2%)	8 (7.4%)	8.3%
Facilities Management	11 (22.5%)	9 (17.0%)	5 (9.6%)	8 (15.7%)	6 (11.8%)	15.3%
Training	19 (13.7%)	29 (29.3%)	10 (7.3%)	21 (16.2%)	8 (9.6%)	15.2%
Special Operations	14 (10.7%)	10 (8.9%)	17 (13.0%)	18 (13.0%)	20 (14.5%)	12.0%
Narcotics and Vice	11 (13.3%)	5 (5.9%)	11 (13.4%)	13 (14.1%)	11 (12.1%)	11.8%
Investigations Bureau Office	1 (7.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (33.3%)	8.1%
Administration Bureau Office	0 (0.0%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6.7%
Investigations Support	10 (5.7%)	7 (3.9%)	10 (5.6%)	12 (6.6%)	18 (9.7%)	6.3%
Fiscal	5 (5.0%)	7 (6.9%)	4 (4.0%)	7 (6.7%)	5 (4.8%)	5.5%
Board of Police Commissioners	5 (7.9%)	1 (1.5%)	4 (6.0%)	5 (7.0%)	1 (1.4%)	4.8%
Operations Support	5 (3.8%)	7 (5.3%)	4 (3.0%)	8 (6.0%)	7 (5.4%)	4.7%
Violent Crimes	5 (5.0%)	5 (5.0%)	1 (0.9%)	5 (4.6%)	4 (3.5%)	3.8%
Property Crimes	3 (4.6%)	1 (1.5%)	2(3.0%)	3 (4.5%)	3 (4.2%)	3.6%
Human Resources	2 (5.1%)	1 (3.0%)	1 (3.3%)	0 (0.0%)	0 (0.0%)	2.3%
Information Services	0 (0.0%)	1 (0.9%)	5 (4.4%)	4 (3.6%)	3 (2.6%)	2.3%
Patrol Bureau Office	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (10.0%)	0 (0.0%)	2.0%
Executive Services Bureau Office	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.0%

Source: Kansas City Missouri Police Department Incident Data.

Comparisons by division and services could identify variances in similar operations. The department could perform additional analysis of incident frequency by patrol division and service. Central Patrol had 92 injuries during arrests while South Patrol had 16 injuries during arrests. (See Exhibit 9.) It is likely that several factors influence the injury differences between Central and South, such as the number of arrests or calls for service per patrol division. However, further analysis could show that there may be some practices used by South Patrol that Central Patrol could adopt in order to reduce injuries during arrest.

[13] Staff were not assigned to the Shoal Creek Patrol Division until fiscal year 2006.

Exhibit 9. Top Six Incidents by Patrol Division and Service, Fiscal Year 2005 - 2009

Patrol Division	Assault	Foot Chase	Injured During Arrest	Other	Slip and Fall	Vehicular Accident	Total
Central	20	48	92	37	31	62	290
East	23	50	74	52	28	44	271
Metro	23	34	62	23	18	44	204
South	11	11	16	16	13	16	83
North	1	5	15	15	8	6	50
Shoal Creek	2	3	11	8	4	5	33

Source: Kansas City, Missouri Police Department Incident Data.

Comparing incidents by position could identify unsafe conditions. Despite changes in the frequency of incidents for police officers from 2005 to 2009, the percentage of injured in that position has remained stable. (See Exhibit 10.) However, if a rash of injuries occurred in one position, it could indicate inadequate training, poor hiring practices, or unsafe conditions.

Exhibit 10. Police Department Percent of FTEs on Workers' Compensation by Position, FY 2005 - 2009

Position	2005	2006	2007	2008	2009	Average Percent
	Injured # (%)	Injured # (%)	Injured # (%)	Injured # (%)	Injured # (%)	
Police Officer	188 (23.2%)	168 (21.2%)	192 (23.4%)	214 (24.3%)	200 (22.6%)	23.0%
Entrant Officer	16 (16.3%)	16 (12.5%)	6 (4.7%)	12 (13.6%)	4 (8.3%)	11.1%
Detention Facility Officer	2 (4.1%)	2 (4.1%)	4 (8.2%)	7 (15.9%)	5 (11.4%)	8.7%
Civilian	36 (5.7%)	34 (5.5%)	32 (5.1%)	33 (5.1%)	32 (5.0%)	5.3%
Sergeant	12 (5.8%)	12 (5.8%)	11 (5.1%)	8 (3.7%)	7 (3.0%)	4.7%
Detective	11 (5.1%)	7 (3.2%)	10 (4.5%)	12 (5.3%)	5 (2.1%)	4.0%
Captain	3 (6.3%)	2 (4.1%)	2 (3.9%)	0 (0.0%)	0 (0.0%)	2.9%
Major	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.3%)	1.1%
Deputy Chief	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.0%
Police Chief	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.0%
Unknown	2 (N/A)	0 (N/A)	5 (N/A)	7 (N/A)	7 (N/A)	N/A

Sources: Kansas City, Missouri Police Department Incident Data and City Auditor's Office calculations.

Comparing incidents on day of week and time of day may identify addressable problems. A higher frequency of incidents occurring on the first day of the employee's workweek may indicate workers' compensation fraud. Employees who are actually injured when off from work may report the injury at work on the first day back, in order to receive injury benefits.

The department could compare the day of the week incidents occurred against the employees work schedules to determine whether employees are routinely involved in incidents on the first day of their work week.

Tuesdays had the highest frequency of incidents. (See Exhibit 11.) Further examination by the department might determine why workers' compensation incidents occurred most often on Tuesdays, while the frequency of incidents were lowest on the weekends.

Exhibit 11. Incidents by Day of the Week, Fiscal Year 2005 - 2009

Day	2005	2006	2007	2008	2009	Total
Sunday	29	27	31	47	29	163
Monday	48	56	50	47	48	249
Tuesday	52	55	53	54	49	263
Wednesday	53	51	51	50	42	247
Thursday	53	32	56	55	43	239
Friday	45	27	41	49	38	200
Saturday	40	29	31	35	39	174

Source: Kansas City, Missouri Police Department Incident Data.

The department could perform additional analysis to determine the incident frequency by day of the week and by time of day that incidents occur. Incidents occurred most frequently on Monday afternoons and least frequently on Sunday mornings. (See Exhibit 12.) The department may be able to identify conditions on Monday afternoons that contribute to a comparatively high number of injuries. If those factors are under the department's control, the department can make changes to decrease incidents.

Exhibit 12. Number of Incidents by Day of Week and Time of Day,[14] Fiscal Year 2005 - 2009

Day	Morning	Afternoon	Evening	Overnight
Sunday	21	27	69	46
Monday	59	84	70	36
Tuesday	69	79	83	33
Wednesday	65	74	68	40
Thursday	70	73	51	45
Friday	55	55	53	37
Saturday	28	36	54	56

Source: Kansas City, Missouri Police Department Incident Data.

Multiple workers' compensation incidents may signal need for training. Between fiscal years, 2005 and 2009, 895 employees in the Police Department were involved in 1,476 incidents. Of the 895 employees, 346 were involved in more than one incident. (See Exhibit 13.)

[14] In performing our analysis, we labeled incidents occurring from 6:00 a.m. to 11:59 a.m. as morning incidents; incidents occurring from noon to 5:59 p.m. as afternoon incidents; incidents occurring from 6:00 p.m. to 11:59 p.m. as evening incidents; and incidents occurring from midnight to 5:59 a.m. as overnight incidents.

Employees having multiple workers' compensation injuries, especially when the same employee has more than one injury in a year can be a signal for employee error as opposed to unsafe conditions.

Exhibit 13. No. of Employees with Workers' Comp. Injuries and No. of Injuries They Were Involved In, 2005 - 2009

	Number of Employees	Number of injuries
	549	1
	209	2
	82	3
	32	4
	23	5 or more
Total	895	1,476

Source: Kansas City, Missouri Police Department Incident.

Benchmarking Incidence Rates Can Improve Management of Workers' Compensation

Benchmarking workers' compensation incidence rates against a similar industry or job type helps show whether the rate is comparable to others performing similar jobs. If the incidence rate is high in comparison to the benchmark, this may signal a problem that an organization can address by implementing practices used by groups having lower rates. Benchmarks can also be used as targets that management can work towards.

The Bureau of Labor Statistics (BLS) reports an incidence rate for local government police protection. The BLS data provides police departments with a nonfatal workplace injury and illness incidence rate benchmark. Between fiscal years 2005 and 2009, the Police Department's incidence rate ranged between 14 and 16.8[15] employees per 100 FTEs. The department's incidence rate in 2008 was 16.8.[16] BLS's incidence rate in 2008, which was the first year it was reported and the most recent data available, was 14.5. This benchmark comparison allows the department to determine whether its rate is unusually high compared to other local police departments or helps identify progress made in preventing work-related injuries and illnesses. In order to monitor the reasonableness of its rate of workplace injuries and illnesses in comparison to other local government police protection, the chief of police should ensure the department calculates the department's incidence rate annually and compares its rate to BLS's workplace injury and illness incidence rate for local government police protection.

[15] Bureau of Labor Statistics calculates incident rates as (N/EH) x 200,000 where N = number of injuries and illnesses; EH = total hours worked by all employees during the calendar year; 200,000 = base for 100 equivalent full-time workers (40 hours per week, 50 weeks per year).

[16] We calculated KCPD's 2008 incident rate by fiscal year. Bureau of Labor Statistics calculates incident rate by calendar year.

Recommendations

1. The chief of police should ensure that the department performs annual cost trend analysis of the department's workers' compensation cost data.

2. The chief of police should ensure that the department performs annual trend and pattern analysis of its workers' compensation incident data.

3. The chief of police should ensure that the department uses a more descriptive category than "other" when completing the "service" data field in RiskMaster to describe the activity the employee was engaged in at the time of the workers' compensation injury.

4. The chief of police should ensure the department annually calculates its workers' compensation incidence rate and compares it to the Bureau of Labor Statistics' workplace injury and illness incidence rate for local government police protection.

Appendix A

Chief of Police's Response

Police
KC/MO

James D. Corwin
Chief of Police

Headquarters Building

1125 Locust
Kansas City, Missouri 64106

(816) 234-5000

October 28, 2010

RECEIVED
OCT 19 2010
CITY AUDITOR'S OFFICE

Mr. Gary White
Office of the City Auditor
21st Floor, City Hall
414 E. 12th St.
Kansas City, MO 64106

Dear Mr. White,

I have reviewed the City Auditor's findings and recommendations for the *Performance Audit Police Department Worker's Compensation* and offer the following comments.

Recommendation 1: The Chief of Police should ensure that the department performs annual cost trend analysis of the department's workers' compensation cost data.

Recommendation 2: The Chief of Police should ensure that the department performs annual trend and pattern analysis of its workers' compensation incident data.

Recommendation 4: The Chief of Police should ensure the department annually calculates its workers' compensation incidence rate and compares it to the Bureau of Labor Statistics' workplace and illness incidence rate for local government police protection.

Response: I agree that it would be helpful to department management to have an annual analysis report of workers' compensation data as described above. Therefore, I have assigned the Internal Audit Unit the responsibility of producing such a report beginning in 2011 using the 2010 data. Currently, the Internal Audit Unit produces annual reports with analysis for preventable accidents; response to resistance; and car chases. This new report would add to and strengthen our efforts to reduce departmental risk.

In regard to making comparisons with other police agencies (recommendation 4) it is my opinion that such comparisons have limited value. There are over 17,000 policing agencies in this country and most are well under 50 officers and police a large variety of geography and populations. Using a national average statistic based on all local police agencies may not be representative of the experiences of major city police departments. A better comparison can be made using similar size departments in similar environments.

Recommendation 3: The Chief of Police should ensure that the department uses a more descriptive category than "other" when completing the "service" data field in RiskMaster to describe the activity the employee was engaged in at the time of the workers' compensation injury.

Response: I agree and the following changes have been made in the RiskMaster reporting process. The following five new discrete categories have been added: foreign object in eye; injury caused by uneven surface; dog bite; injury caused by sharp object; exposure to toxic substances. These categories represent the most frequently encountered causes which were previously reported as "other".

Additional Comments: I make the following comments in regard to specific areas within the audit:

- Exhibit 1, page 7, reflects a percentage change of 31.2% in medical claims from 2005 through 2009. I believe the information should be presented in an average annualized percentage increase since the figure of 31.2% seems excessive until it is considered that the average annual growth of medical claims is probably reflective of the average growth in medical costs nationwide.

- Exhibit 1, page 7, reflects self-insurance escrow costs of $700,000 in 2008 compared to $157,720 in 2007. The report should note that 2008 costs resulted from the Board's decision to self-fund $700,000 in escrow costs in lieu of paying a 3rd party to insure the amount since the 3rd required the Police Department to provide a financial instrument for escrow costs above the $700,000 figure.

- Exhibit 8, page 15, reflects injuries by division suggesting comparison of CPD, MPD, and EPD against NPD since this division has a lower incident rate. I believe that any analysis should focus urban core division versus urban core division. Conversely, NPD should be compared to SPD and SCPD only. Oftentimes, the Police Department, as a whole, is compared against other agencies when there are no similarities between the two. Any analysis should avoid this on a micro level. Moreover, any benchmarking done on an agency level concerning an ongoing workers' compensation analysis should avoid the same.

Finally, I wish to express my thanks to you and your staff for your work on this audit which will be very helpful to us in providing due diligence and oversight of our injury experience.

Sincerely,

James D. Corwin
Chief of Police