September 29, 2000

KENNETH C. WEAVER
CHIEF POSTAL INSPECTOR

SUBJECT: Audit of the Inspection Service Reporting of Cost-Avoidance Savings Under the Fraudulent Workers' Compensation Program (Report Number OV-AR-00-002)

This report presents the results of our audit of the Inspection Service's reporting of cost-avoidance savings under the Fraudulent Workers' Compensation Program (Project Number 99CR002OV000). Our objective was to assess the effectiveness and accuracy of information reported to agencies external to the Inspection Service.

We concluded that cost avoidance savings were generally accurate and supportable. We identified discrepancies, but the errors did not have a material affect on savings figures reported under the Inspection Service Fraudulent Workers' Compensation Program. Management provided comments on the report and agreed with our recommendation to require the use of birth month and year to calculate cost-avoidance savings for long-term periodic roll cases. Management's comments were responsive to the recommendation. Management's comments and our evaluation of these comments are included in the report.

We appreciate the cooperation and courtesies provided by your staff during the audit. If you have any questions, please contact Cathleen Berrick, director, Oversight, or me at (703) 248-2300.

Debra D. Pettitt
Acting Assistant Inspector General
for Oversight and Business Evaluations

Attachment

cc: James K. Belz
John R. Gunnels

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EXECUTIVE SUMMARY

Introduction

This report presents the results of our review of the Postal Inspection Service's reporting of cost-avoidance savings under the Fraudulent Workers' Compensation Program (Project Number 99CR002OV000). Specifically, we evaluated the accuracy and supportability of cost-avoidance savings calculations; the adequacy of the Inspection Service methodology used to calculate cost-avoidance savings; and the purposes for which cost-avoidance savings figures are used.

Results in Brief

Our review disclosed that cost avoidance savings were generally accurate and supportable. We identified discrepancies, but the errors did not have a material affect on savings figures reported under the Inspection Service Fraudulent Workers' Compensation Program. In addition, cost-avoidance savings figures were adequately documented and the methodology used to generate cost-avoidance savings for long-term periodic roll cases was reasonable. Finally, Inspection Service management primarily used cost-avoidance savings figures for internal purposes, such as evaluating individual and program performance.

Although discrepancies in the calculation of cost-avoidance savings had an immaterial impact on claimed savings, discrepancies due to a variation in the application of the Inspection Service methodology occurred frequently throughout the projected audit universe. These discrepancies relate to the calculation of birth dates and benefit termination dates for long-term periodic roll cases. Specifically, when applying the methodology for long-term periodic roll cases, some inspectors applied both the month and year to the calculation when evaluating birth dates and benefit termination dates, while other inspectors applied only the year. Consistent application of the Inspection Service methodology would help ensure more accurate calculations of cost-avoidance savings to assist in the evaluation of individual and program performance.

Summary of Recommendation	We recommend the chief postal inspector modify the Inspection Service Manual to require the use of birth month and year to calculate cost-avoidance savings for long-term periodic roll cases.
Management's Comments	The deputy chief inspector, Criminal Investigations, provided comments to the report. The deputy chief inspector identified that the Inspection Service is in general agreement with the results presented in the report. The deputy chief inspector further identified that beginning in fiscal year 2001, the Inspection Service will issue instructions to standardize the computation of cost-avoidance savings in accordance with the recommendation. Management's comments, in their entirety, are included in Appendix E of this report.
Overall Evaluation of Management's Comments	Management's comments are responsive to the recommendation.

INTRODUCTION

Background

The Federal Employees' Compensation Act provides compensation benefits to civilian employees of the United States for disability due to personal injury or disease sustained while in the performance of duty. The Federal Employees' Compensation Act also provides for the payment of benefits to dependents if a work-related injury or disease causes an employee's death. Benefits provided under the Federal Employees' Compensation Act constitute the sole remedy against the United States for work-related injury or death.

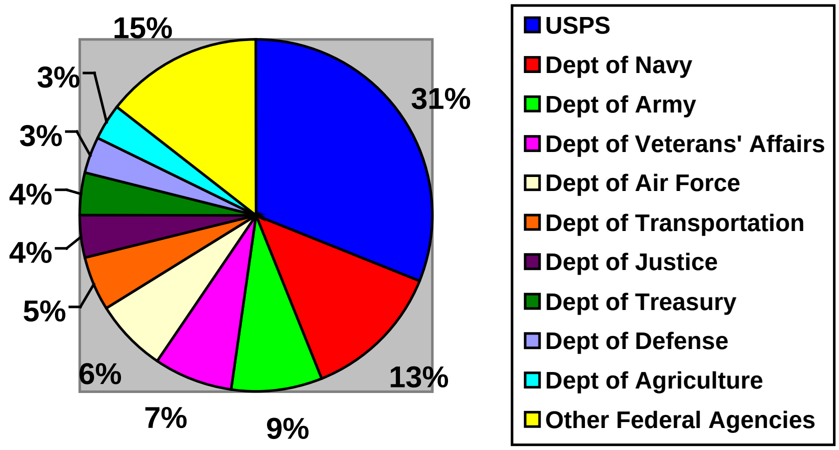
All Federal Employees' Compensation Act claims are adjudicated, approved, and paid by the Department of Labor, Office of Workers' Compensation Programs. The Department of Labor is reimbursed for all claims by the affected federal agency. Title 5 of the United States Code grants the Department of Labor, Office of Workers' Compensation Programs, exclusive authority for administrating, implementing, and enforcing the Federal Employees' Compensation Act. Title 39 of the United States Code provides coverage of postal personnel under the Federal Employees' Compensation Act.

The Postal Service is one of the nation's largest civilian employers with approximately 792,000 career employees. The Postal Service is also the largest payer of Federal Employees' Compensation Act claims within the federal government. A postal employee who experiences a physical or mental injury while on duty is eligible to receive payments for medical treatment and lost wages under the Federal Employees' Compensation Act. The injury may be due to a one-time, traumatic incident or an occupational condition that develops over time.

The graph below identifies that from July 1, 1998, through June 30, 1999, the Postal Service paid 31 percent (over $594 million) of the total workers' compensation costs charged to the federal government. During this same timeframe, the entire federal government combined paid over $1.9 billion in workers' compensation benefits.[1]

[1] See Appendix B for a listing of the ten federal agencies with the highest workers' compensation costs.

Graph 1. Federal Government Agencies Workers' Compensation Percentage of Total Costs
(07/01/98 - 06/30/99)



Fraudulent Workers' Compensation Program	The Inspection Service established the Fraudulent Workers' Compensation program to support and complement the Postal Service in the management of the Injury Compensation Program under the Federal Employees' Compensation Act. The objectives of the Fraudulent Workers' Compensation Program are to: • Review internal controls and identify problems and solutions to prevent the loss of postal resources and reduce compensation costs. • Investigate and initiate administrative, civil, or criminal actions against individuals responsible for fraud, waste, misuse or abuse under the Federal employees' Compensation Act. .
Cost-Avoidance Savings Methodology	Inspection Service personnel calculate cost-avoidance savings under the Fraudulent Workers' Compensation Program using a standard, internally-generated methodology. Inspection Service personnel calculate cost-avoidance savings for long-term periodic roll and continuance of pay cases. Long-term periodic roll cases are cases in which Department of Labor personnel decide that the employee's incapacitation will be long-term and the employee is placed on the periodic, automatic rolls. Continuance of pay cases are cases in which employees incur an on-the-job injury that causes them to be unable to work. These individuals are eligible to receive

compensation at their stated rate of pay for up to 45 calendar days.

The Inspection Service Manual, Section 930, "Fraudulent Workers' Compensation (FWC)," dated July 30, 1999, identifies that the following cost-avoidance savings methodologies will be used when calculating cost-avoidance savings for long-term periodic roll and continuance of pay cases under the Fraudulent Workers' Compensation Program.

- **Long-Term Periodic Roll Cases.** Calculated on the basis of a normal life expectancy age of 70. Expected remaining years of claimant's life are multiplied by the annual compensation rate or reduction in annual compensation rate. For example, the cost-avoidance savings for a case involving a letter carrier, age 37, receiving $2,000 each payment period of 28 days would be calculated as follows: $2,000 X 13 = $26,000 X 33 years (70-37) = $858,000.

- **Continuance of Pay Cases.** Calculated on the basis of an employee's daily wage rate multiplied by 30, regardless of the actual number of continuance of pay days avoided. For example, the cost-avoidance savings for a case involving a mailhandler resulting in the savings of 12 days of continuance of pay would be calculated based on the mailhandler's daily wage rate multiplied by 30 days of continuance of pay as follows: $100 (daily wage rate) X 30 days = $3,000.

Beginning in fiscal year (FY) 2000, Inspection Service management revised the Inspection Service methodology for calculating cost-avoidance savings for continuance of pay cases. Specifically, the Postal Service National Accounting Office, at the request of the Inspection Service, identified that the average cost per continuance of pay case to the Postal Service was $41,812. Accordingly, Inspection Service management modified the methodology used to calculate cost-avoidance savings for continuance of pay cases to use a standard $41,812 per case.

Objective, Scope & Methodology

The overall objective of the audit was to assess the effectiveness and accuracy of information reported to agencies external to the Inspection Service. Specifically, we evaluated the accuracy and supportability of cost-avoidance savings calculations under the Inspection Service's Fraudulent Workers' Compensation Program; the adequacy of the Inspection Service methodology used to calculate cost-avoidance savings; and the purposes for which cost-avoidance savings figures are used. Since Inspection Service cost-avoidance savings for continuance of pay cases amounted to less than one percent of all workers' compensation cost-avoidance savings during FY 1999, we focused on the methodology used to calculate cost-avoidance savings for long-term periodic roll cases during our review.

To accomplish our objective, we interviewed personnel from the Inspection Service, Postal Service National Accounting Office, and Postal Service Safety and Workplace Assistance Office. We also interviewed injury compensation personnel from the 13 Postal Service area offices. We further interviewed representatives from the following federal agencies[2] to identify the methodologies used to calculate workers compensation cost-avoidance savings and to determine the purposes for which cost-avoidance savings figures are used.[3]

- Bureau of Alcohol, Tobacco and Firearms
- Defense Criminal Investigative Service
- Department of Agriculture
- Department of Defense
- Department of Labor
- Department of Justice
- Department of Transportation
- Department of Treasury
- Department of Veterans' Affairs
- Federal Aviation Administration
- Internal Revenue Service

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[2] We judgmentally selected the 16 federal agencies for review. The information obtained from federal agency representatives was self-reported and was not independently verified.

[3] We identified that the Department of Justice, Department of Transportation, and Department of Treasury did not calculate workers' compensation cost-avoidance savings. See Appendix A for the methodologies used by the federal agencies reviewed for calculating cost-avoidance savings for long-term periodic roll cases.

- Maritime Administration
- Naval Criminal Investigative Service
- Tennessee Valley Authority
- U.S. Coast Guard
- U.S. Mint

We selected and reviewed a statistical sample of 50 long-term periodic roll workers' compensation cases from FY 1999 to determine the accuracy and supportability of claimed cost-avoidance savings figures.

We conducted this review from March through September 2000 in accordance with generally accepted government auditing standards and included such test of control as were considered necessary. We discussed our conclusions and observations with appropriate management officials and included their comments, where appropriate.

AUDIT RESULTS

Cost-Avoidance Savings Calculations

Our review disclosed that cost avoidance savings were generally accurate and supportable. We identified discrepancies, but the errors did not have a material affect on savings figures reported under the Inspection Service Fraudulent Workers' Compensation Program. In addition, cost-avoidance savings figures were adequately documented and the methodology used to generate cost-avoidance savings for long-term periodic roll cases was reasonable. Finally, Inspection Service management primarily used cost-avoidance savings figures for internal purposes, such as evaluating individual and program performance.

Based upon a review of the Inspection Service methodology and a comparison of methodologies used by other federal agencies, we concluded that the Inspection Service methodology used to generate cost-avoidance savings for long-term periodic roll cases was reasonable. Specifically, we believe that the cost-avoidance savings calculated using the Inspection Service methodology is a reasonable estimation of savings that could be achieved had the individual remained on the long-term periodic rolls for the life expectancy age calculated. In addition, the Inspection Service methodology resulted in cost-avoidance savings that were similar to the savings calculated under methodologies used by the federal agencies surveyed. See Appendix C for a comparison of sample cost-avoidance savings calculations under the Inspection Service methodology and other federal agency methodologies reviewed.

Inspection Service management, like management from the other federal agencies surveyed who calculated cost-avoidance savings, used cost-avoidance savings figures for internal purposes, such as evaluating individual and program performance. We determined that cost-avoidance savings figures were not reported to the Postal Service and, therefore, had no impact on the Postal Service's financial or budgetary statements.

Calculation Discrepancies

Although discrepancies in the calculation of cost-avoidance savings had an immaterial impact on claimed savings, discrepancies due to a variation in the application of the

Inspection Service methodology occurred frequently throughout the projected audit universe. Specifically, we are 95 percent confident that 94 to 123 cases in the audit universe contain a variation in the application of the Inspection Service methodology. See Appendix D for a detailed explanation of the sample results.

Discrepancies due to a variation in the application of the Inspection Service methodology relate to the calculation of birth dates and benefit termination dates for long-term periodic roll cases. Specifically, when applying the methodology for long-term periodic roll cases, some inspectors applied both the month and year to the calculation when evaluating birth dates and benefit termination dates, while other inspectors applied only the year. For example, an individual born on August 19, 1968, who had his/her compensation benefits terminated on June 20, 1999, should be considered as being 30 years, 10 months old. However, when the inspector calculated the cost-avoidance savings, the individual was considered to be only 30 years old, thereby overstating the cost-avoidance savings by over $19,000. The consistent application of the Inspection Service methodology would help ensure more accurate calculations of cost-avoidance savings to assist in the evaluation of individual and program performance.

Recommendation

We recommend the chief postal inspector modify the <u>Inspection Service Manual</u> to require the use of birth month and year to calculate cost-avoidance savings for long-term periodic roll cases.

Management's Comments

The deputy chief inspector, Criminal Investigations, provided comments to the report and stated that the Inspection Service was in general agreement with the results presented in the report. The deputy chief inspector further stated that the Inspection Service agrees that consistency and accuracy in the calculation of long-term savings was preferred, and that the variation in calculations by inspectors relative to claimant's birth dates is not material to total savings claimed. However, beginning in FY 2001, the Inspection Service will issue instructions to standardize the computation of cost-avoidance savings. Management's comments, in their entirety, are included in Appendix E of this report.

Evaluation of Management's Comments

Management's comments are responsive to the recommendation.

APPENDIX A

PERIODIC ROLL COST-AVOIDANCE SAVINGS METHODOLOGIES USED BY FEDERAL AGENCIES REVIEWED

1. **Life Expectancy Method Using 70 as the Age Cut-Off.** Subtract the age of the individual when they are removed from workers' compensation from 70 (for example, if the individual were 30, the calculation would be 70 – 30 = 40). Multiply the amount of compensation the individual receives every 28 days by 13 to obtain the annual compensation while on workers' compensation. Multiply the age difference (i.e. 40) by the annual compensation while on workers' compensation to obtain the cost-avoidance savings. This methodology is used by the Inspection Service and the Department of Veterans' Affairs.

2. **Life Expectancy Method Using 70 as the Age Cut-Off Plus an Inflation Factor.** Same methodology as the Life Expectancy Method Using 70 as the Age Cut-Off with the addition of an inflation factor, which may fluctuate from year-to-year. This methodology is used by the Department of Defense and the Naval Criminal Investigative Service.

3. **Life Expectancy Method Using 70 as the Age Cut-Off Plus Adjustments.** Same methodology as the Life Expectancy Method Using 70 as the Age Cut-Off. However, if a claimant is over the age of 60, the life expectancy age is gradually modified upwards. This methodology is used by the Internal Revenue Service.

4. **Life Expectancy Chart.** A chart, developed by insurance companies in 1994, that uses discriminators such as sex and race to determine the estimated life expectancy of an individual. Multiply the amount of compensation the individual receives every 28 days by 13 to obtain the annual compensation while on workers' compensation. Multiply the estimated life expectancy, based upon the chart, by the annual compensation while on workers' compensation to obtain the cost-avoidance savings. This methodology is used by the Tennessee Valley Authority.

5. **One Year's Salary while on Workers' Compensation.** Multiply the amount of compensation the individual receives every 28 days by 13 to obtain the annual compensation while on workers' compensation, which becomes the cost-avoidance savings. This methodology is used by the Department of Agriculture.

6. **Department of Labor Methodology.** This calculation is based upon information entered into a mathematical model using ten years of historical data using such discriminators as type of injury, age, and gender.

APPENDIX B

TEN FEDERAL AGENCIES WITH HIGHEST WORKERS' COMPENSATION COSTS

(July 1, 1998, through June 30, 1999 (in dollars))

Federal Government Agency	Total Workers' Compensation Cost
1. U.S. Postal Service	$594,503,325
2. Department of the Navy[3]	240,491,952
3. Department of the Army[5]	163,126,939
4. Department of Veterans' Affairs	137,864,786
5. Department of the Air Force[5]	123,349,006
6. Department of Transportation	97,154,531
7. Department of Justice	76,319,055
8. Department of Treasury	75,124,734
9. Office of the Secretary of Defense and Other Defense Agencies[5]	63,563,204
10. Department of Agriculture	59,850,844

[3] Total amount of workers' compensation costs paid by the entire Department of Defense was $590,531,101.00.

APPENDIX C

COMPARISON OF SAMPLE COST-AVOIDANCE SAVINGS CALCULATIONS UNDER INSPECTION SERVICE AND OTHER FEDERAL AGENCY METHODOLOGIES REVIEWED

Savings	Life Expectancy[4]	Life Expectancy Plus Inflation Factor[5]	Life Expectancy with Adjustments for Over 60 years of Age[6]	Life Expectancy Chart[7]	1 Year of Compensation[8]
Case 1	$278,607.42	$566,326.48	$278,607.42	$381,654.00	$9,087.00
Case 2	$673,322.00	$1,477,008.73	$673,322.00	$814,951.80	$23,218.00
Case 3	$548,071.94	$1,331,150.80	$548,071.94	$715,526.50	$21,359.00
Case 4	$696,277.66	$1,765,415.46	$696,277.66	$756,330.90	$28,327.00

Case 1 Information
Gender: Female
Race: White
Age: 39 years, 4 months
28-Day Compensation: $699.00
70 - Current Age = 30 years, 8 months
Assuming 5% inflation rate

Case 2 Information
Gender: Male
Race: White
Age: 41 years
28-Day Compensation: $1,786.00
70 - Current Age = 29
Assuming 5% inflation rate

Case 3 Information
Gender: Female
Race: African American
Age: 44 years, 4 months
28-Day Compensation: $1,643.00
70 - Current Age = 25 years, 8 months
Assuming 5% inflation rate

Case 4 Information
Gender: Male
Race: African American
Age: 45 years, 5 months
28-Day Compensation: $2,179.00
70 - Current Age = 24 years, 7 months
Assuming 5% inflation rate

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[4] Used by the Inspection Service and Department of Veterans' Affairs.
[5] Used by the Department of Defense and Naval Criminal Investigative Service.
[6] Used by the Internal Revenue Service.
[7] Used by the Tennessee Valley Authority.
[8] Used by the Department of Agriculture

APPENDIX D

STATISTICAL SAMPLING AND PROJECTIONS FOR REVIEW OF INSPECTION SERVICE COST SAVINGS FROM THE WORKERS' COMPENSATION FRAUD PROGRAM

Purpose of the Sampling. The overall objective of this audit was to assess the effectiveness and accuracy of the methodology used by the Inspection Service to calculate the cost-avoidance savings attributable to their workers' compensation fraud program. In support of this objective, the audit team employed a simple random attribute sample design that allows statistical projection of the number of savings computation errors and variations in the application of the cost-avoidance savings methodology for the individual workers' compensation cases on the long-term periodic rolls.

Definition of the Audit Universe. The audit universe consisted of 236 workers' compensation cases on the long-term periodic roll for FY 1999. The Inspection Service management was the source of the universe data.

Sample Design and Modifications. The audit used a simple random sample design. Seventy cases were randomly selected for review, to provide a two-sided 95 percent confidence interval with a 6 percent precision, based on auditor expectations of approximately a 10 percent error rate. In the course of the review, the team examined the first 50 randomly-selected cases. The attributes examined were the existence of computational errors and the variation in the application of the cost-avoidance savings methodology.

Statistical Projections of the Sample Data. The sample results were analyzed using the formulas for estimation of a population proportion for a simple random attribute sample, as described in Elementary Survey Sampling, Scheaffer, Mendenhall, and Ott, c.1990.

Presence of Cost Savings Calculation Error. Based on a projection of the sample results, we are 95 percent confident that in the audit universe, 20 to 65 cases (8.5 percent to 27.5 percent) contain computational errors. The unbiased point estimate is 43 cases, or 22.5 percent of the 236 cases for FY 1999.

We note that calculation errors may understate or overstate the savings. In the sample, we observed nine calculation errors ranging from -$106,888.00 to +$20,179.35. When we attempted to compute the projected dollar impact of these errors, we determine a point estimate of the average error to be slightly negative. However, when placing a 95 percent confidence bound on the estimated mean dollar effect, we determine that it passed through zero. Therefore, because of the small sample size and high variability in the error amounts, we are unable to show a statistically significant overstatement or understatement effect.

<u>Presence of Variation in Application of Cost-Avoidance Savings Methodology</u>. Based on a projection of the sample results, we are 95 percent confident that in the audit universe, 94 to 123 cases (39.8 percent to 52.2 percent) contain a variation in the application of the cost-avoidance savings methodology. The unbiased point estimate is 109 cases, or 46 percent of the 236 cases for FY 1999.

We note that a variation in the application of the cost-avoidance savings methodology may understate or overstate the savings. In the sample, we observed 23 cases that applied a variation in the application of the cost-avoidance savings methodology with the difference ranging from -$20,471.20 to +20,268.00. When we attempted to compute the projected dollar impact of these errors, we identified a point estimate of the average error to be slightly negative. However, when placing a 95 percent confidence bound on the estimated mean dollar effect, we found that it passed through zero. Therefore, because of the small sample size and high variability in the amounts, we are unable to show a statistically significant overstatement or understatement effect.

APPENDIX E. MANAGEMENT'S COMMENTS

UNITED STATES POSTAL INSPECTION SERVICE

DEPUTY CHIEF INSPECTOR - CRIMINAL INVESTIGATIONS

September 14, 2000

DEBRA PETTITT
ACTING ASSISTANT INSPECTOR GENERAL
FOR OVERSIGHT AND BUSINESS EVALUATIONS
OFFICE OF INSPECTOR GENERAL

SUBJECT: Response to FWC Cost Avoidance Savings Audit
OIG Report OV-AR-00-Draft

We have reviewed the subject audit report and are in general agreement with the results presented. The audit had three main objectives: 1) an evaluation of the accuracy and supportability of cost-avoidance savings calculations; 2) review of the adequacy of the Inspection Service methodology used to calculate cost-avoidance savings; and 3) a review of the purposes for which cost-avoidance figures were used.

We are pleased that your audit supported our assessment of our work in each of these three areas. You validated the accuracy and supportability of cost-avoidance calculations, agreed with the adequacy of the methodology used, and found that the calculations were primarily used for internal purposes.

In your review of the accuracy and supportability of the cost-avoidance calculations, you made a recommendation relative to consistency in the application of the formula used. Specifically, your recommendation was:

> "We recommend the chief postal inspector modify the Inspection Service Manual to require the use of birth month and year to calculate cost-avoidance savings for long-term periodic roll cases."

Further, you indicated that inconsistencies noted did not have a material effect on the savings calculations. The Inspection Service agrees that consistency and accuracy in the calculation of long-term savings is preferred. We also agree that the variation in calculations by inspectors relative to the claimants' birth dates is not material to total savings claimed. Beginning in FY 2001 we will issue instructions to standardize the computation of cost-avoidance savings according to your recommendation.

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