

Internal Audit Department

O R A N G E C O U N T Y
5th Largest County in the USA

RESULTS OF CONTINUOUS AUDITING USING CAATS:

AUDITOR-CONTROLLER, HUMAN RESOURCES, &
COUNTY PROCUREMENT OFFICE

AUDIT FOR DUPLICATE VENDOR PAYMENTS AND OTHER PERIODIC ROUTINES

(Cited as a Best Practice by the Institute of Internal Auditors)

**For the Month:
July 2010**

We analyzed 22,765 vendor invoices paid in June 2010 amounting to about \$205 million and found 99.97% of the invoices were paid only once.

Of the \$205 million vendor invoices, we identified 6 potential duplicate payments made to vendors for \$954.

To date we have identified \$955,828 in duplicate vendor payments, of which \$893,962 has been recovered.

AUDIT NO: 1041-A
REPORT DATE: JULY 28, 2010

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Deputy Director: Eli Littner, CPA, CIA, CISA
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RISK BASED AUDITING

GAO & IIA Peer Review Compliant – 2001, 2004, 2007



2009 Association of Certified Fraud Examiners' Hubbard Award to Dr. Hughes for the Most Outstanding Article of the Year



2008 Association of Local Government Auditors' Bronze Website Award



2005 Institute of Internal Auditors' Award for Recognition of Commitment to Professional Excellence, Quality, and Outreach



ORANGE COUNTY BOARD OF SUPERVISORS'
Internal Audit Department

GAO & IIA Peer Review Compliant - 2001, 2004, 2007

Providing Facts and Perspectives Countywide

RISK BASED AUDITING

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Letter from Director Peter Hughes



Transmittal Letter



Audit No. 1041-A July 28, 2010

TO: David Sundstrom, Auditor-Controller
Carl Crown, Director, Human Resources
Department
Ronald C. Vienna, County Purchasing Agent
County Procurement Office

SUBJECT: Results of Continuous Auditing Using CAATS:
Auditor-Controller, Human Resources, &
County Procurement Office – Duplicate
Vendor Payments & Other Routines

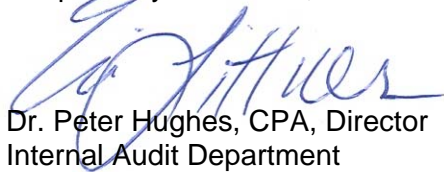
We have completed the July 2010 report of Results of Continuous Auditing Using CAATS (Computer-Assisted Audit Techniques). The final report is attached for your information. Recoveries to date from duplicate vendor payments are **\$893,962**.

Each month I submit an **Audit Status Report** to the Board of Supervisors (BOS) where I detail any material and significant audit issues released in reports during the prior month and the implementation status of audit recommendations as disclosed by our Follow-Up Audits. Accordingly, the results of this audit will be included in a future status report to the BOS.

As always, the Internal Audit Department is available to partner with your staff so that they can successfully implement or mitigate difficult audit recommendations. Please feel free to call me should you wish to discuss any aspect of our audit report.

We appreciate the courtesy and cooperation extended to us by the personnel of your offices. If we can be of further assistance, please contact me or Eli Littner, Deputy Director at (714) 834-5899, or Autumn McKinney, Senior Audit Manager at (714) 834-6106.

Respectfully Submitted,


Dr. Peter Hughes, CPA, Director
Internal Audit Department

FOR

Attachment

Letter from Director Peter Hughes



Distribution Pursuant to Audit Oversight Committee Procedure No. 1:

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Auditor-Controller, Human Resources, & County Procurement Office
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Audit No. 1041-A***

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July 2010***

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Audit No. 1041-A

July 28, 2010

TO: David Sundstrom, Auditor-Controller
Carl Crown, Director, Human Resources Department
Ronald C. Vienna, County Purchasing Agent
County Procurement Office

FROM: Dr. Peter Hughes, CPA, Director
Internal Audit Department

SUBJECT: Results of Continuous Auditing Using CAATS:
Auditor-Controller, Human Resources, & County Procurement
Office – Duplicate Vendor Payments and Other Routines

Audit Highlight

We analyzed 22,765 vendor invoices paid in June 2010 amounting to about \$205 million and found 99.97% of the invoices were only paid once.

Of the \$205 million vendor invoices, we identified six (6) potential duplicate payments made to vendors for \$954.

To date we have identified **\$955,828** in duplicate vendor payments, of which **\$893,962** has been recovered.

OBJECTIVES

Each month, the Internal Audit Department conducts a variety of continuous auditing of vendor payment and payroll activity utilizing Computer-Assisted Audit Techniques (known by the acronym CAAT). Our objectives are to analyze selected vendor payment and payroll data to identify:

1. **Duplicate Payments:** Duplicate payments made to vendors. This CAAT is performed monthly.
2. **Employee Vendor Match:** Employees that bought goods or issued contracts to themselves or a related vendor. This CAAT is currently performed quarterly.
3. **OC Working Retiree/Extra Help Hours:** County retirees working as extra help in excess of mandated hour limits of 960 or 720 hours for FY 09-10. The mandated limits required by Government Code Sections 31680.6 and 31641.04 are per fiscal year and this CAAT is performed monthly and annually.
4. **Payroll Direct Deposits:** Multiple employee paychecks directly deposited to the same bank account which could be an indicator of inappropriate payments. This CAAT is performed monthly.



BACKGROUND

Continuous auditing is a change to the traditional audit approach of periodic reviews of a sample of transactions to ongoing audit testing of 100 percent of transactions. Continuous auditing provides efficient and timely testing of transactions and/or controls to allow immediate notification and remediation by management. An important component of continuous auditing is the development of models for the ongoing (continuous) review of transactions at, or close to, the point at which they occur.

As a supplement to traditional audits performed, Internal Audit performs continuous auditing of selected vendor payment and payroll activities utilizing Computer Assisted Audit Techniques (CAATs).

CAATs are automated queries applied to large amounts of electronic data searching for specified characteristics. We use a proprietary, best practices and industry recognized software product to help us in this process.

CAATs differ from our traditional audits in that CAATs can query **100%** of a data universe whereas the traditional audits typically test but a **sample** of transactions from the population.

Resulting exceptions or findings are forwarded to the appropriate department for validation and/or resolution. Depending on the department's review, the exceptions may or may not be a finding.

Often there is additional data needed to validate the exception that is only known at the department level. We also partner with the departments to identify internal control enhancements with the purpose of preventing future occurrences of the type of findings identified by the CAATs.

We are keeping the details of our process and the vulnerabilities identified to a general discussion because of the risks associated with disclosing specific details of our financial and accounting processes.

SCOPE

This report details the CAAT work we performed in July 2010. Our analysis included a review of the following data:

1. **Duplicate Payments:** 22,765 vendor invoices totaling \$204,805,899 for potential duplicate payments.
2. **Employee Vendor Match:** 49,324 employee and 12,322 vendor addresses and phone numbers at 6/30/10 for potential conflicts of interest.
3. **OC Working Retiree/Extra Help Hours:** County working retiree/extra help hours worked during FY 09/10 for individuals exceeding annual limits of 960 or 720 hours, as mandated by Government Code Sections 31680.6 and 31641.04.
4. **Payroll Direct Deposits:** 36,944 payroll direct deposit transactions processed for pay periods #12 (5/21/10 – 6/3/10) and #13 (6/4/10 – 6/17/10) for suspicious direct deposit activity.



RESULTS

For the month of July 2010, we found the following:

■ **Objective #1 - Duplicate Payments:**

We identified six (6) duplicate payment made to vendors for \$954 or .0005% of the **\$205 million** of vendor invoices processed during June 2010.

Value-added Information

Based on the to-date recoveries of **\$893,962** from the duplicate vendor payment routine, these computer assisted routines have paid for themselves and are returning monies to the County that may otherwise be lost. To date, we have issued 98 monthly performance reports for the CAATs.

■ **Objective #2 – Employee Vendor Match:**

For prior quarters 6/30/09 through 3/31/10, we identified **13** employee/vendor matches. We have submitted these matches to Human Resources Department (HRD) for further evaluation. As of July 20, 2010, HRD determined that 12 employee/vendor matches were not a conflict. Their review is in process for the remaining 1 match. For the current quarter 6/30/10, no employee/vendor matches were identified.

■ **Objective #3 – OC Working Retiree/Extra Help Hours:**

During FY 09/10, two working retirees exceeded the annual limits of 960 or 720 hours by 4 hours each (less than one pay period), as mandated by Government Code Sections 31680.6 and 31641.04.

■ **Objective #4 – Payroll Direct Deposits:**

Analysis performed with no findings noted.

See the Detailed Results section for further information.

Detailed Results



1. Duplicate Payments (Objective #1)

We used a CAAT routine to identify potential duplicate payments made to vendors during June 2010.

A. Results

We identified six (6) duplicate payments for \$954 or .0005% of the \$205 million of vendor invoices processed during June 2010. The Auditor-Controller continues to investigate all duplicate payments and is pursuing collection. Currently, the County has a recovery rate of about **94%** on these duplicate payments that have been identified since the inception of the CAAT routines.

The table below summarizes the duplicate payment activity to date:

CAAT Report	Total		Not Duplicates		Recovered		In Process	
	#'s	\$'s	#'s	\$'s	#'s	\$'s	#'s	\$'s
2002	103	\$99,980	19	\$10,334	80	\$87,808	4	\$1,838
2003	50	\$33,306	7	\$10,175	39	\$21,020	4	\$2,111
2004	33	\$105,779	7	\$2,990	24	\$101,460	2	\$1,329
2005	67	\$80,162	2	\$668	64	\$78,472	1	\$1,022
2006	75	\$347,008	16	\$33,720	54	\$310,019	5	\$3,269
2007	93	\$99,999	12	\$8,411	76	\$88,735	5	\$2,853
2008	70	\$77,712	11	\$6,794	54	\$67,780	5	\$3,138
2009	100	\$155,529	9	\$29,887	67	\$97,412	24	\$28,230
January 2010	0	\$0	0	\$0	0	\$0	0	\$0
February 2010	6	\$42,827	0	\$0	1	\$41,256	5	\$1,571
March 2010	0	\$0	0	\$0	0	\$0	0	\$0
April 2010	1	\$1,140	0	\$0	0	\$0	1	\$1,140
May 2010	9	\$2,665	0	\$0	0	\$0	9	\$2,665
June 2010	8	\$11,746	0	\$0	0	\$0	8	\$11,746
July 2010	6	\$954	0	\$0	0	\$0	6	\$954
TOTAL	621	\$1,058,807	83	\$102,979	459	\$893,962	79	\$61,866

B. Background

This CAAT routine concentrates on a sub-set of vendor invoices paid by the County that possesses certain common attributes. The sub-set excludes one-time payments (such as election worker pay, jury duty pay, etc.) as well as recurring payments (periodic payments to the same payee for the same amount such as welfare, family support, etc.).

During the month of July 2010, 22,765 invoices for \$204,805,899 were added to this data sub-set representing June 2010 transactions. Currently, the data sub-set includes 1,070,038 invoices totaling \$11,155,060,705.

The total data file from which the sub-set is derived includes 3,150,450 records totaling \$23,121,247,194. For FY 09-10, established vendor payments were about \$2.2 billion.

Our prior research has indicated that the duplicate payments are typically caused by a compounded human clerical error.



2. Employee Vendor Match (Objective #2)

We used a CAAT routine to identify employees that share a similar address or phone number as a vendor. This may identify employees buying goods or issuing contracts to themselves or a related vendor. This routine is performed quarterly.

Status:

6/30/09 & 9/30/09: We performed an analysis of employee and vendor addresses at 6/30/09 and 9/30/09, as well as an analysis of employee and vendor phone numbers at 9/30/09. We identified **7** employee-vendor matches included in our November 2009 report.

12/31/09: We performed an analysis of employee and vendor addresses and phone numbers at 12/31/09. We identified **5** employee-vendor matches included in our January 2010 report.

3/31/10: We performed an analysis of employee and vendor addresses and phone numbers at 3/31/10. We identified **1** employee-vendor match included in our May 2010 report.

6/30/10: We performed an analysis of employee and vendor addresses and phone numbers at 6/30/10. We identified **no** employee-vendor matches as noted in this report.

Our results have been provided to the Human Resources Department (HRD) for their evaluation as to whether any employee vendor conflicts exist in the matches identified. HRD's review is currently in process as shown in the table below. As HRD's reviews are completed for each quarter, that quarter's status will be removed from the below table.

Status as of July 20, 2010:

Quarter-End	CAAT Report Month	Matches Submitted to HR	In Progress	HR Disposition			
				Not a Valid Match	No Conflict Exists	No Conflict – Potential HR Policy Issue Resolved to HR's Satisfaction	Conflict – Issue Resolved to HR's Satisfaction
6/30/09 & 9/30/09	November 2009	7	0	0	7	0	0
12/31/09	January 2010	5	0	0	5	0	0
3/31/10	May 2010	1	1	0	0	0	0
6/30/10	July 2010	0	--	--	--	--	--
	TOTAL	13	1	0	12	0	0



3. OC Working Retiree/Extra Help Hours (Objective #3)

We performed an analysis of working retiree hours to identify retirees working as extra help in excess of Government Code Sections 31680.6 and 31641.04 mandated limits.

Our criteria are 960 hours (maximum allowed for regular retirees) or 720 hours (maximum for early retirees) during the fiscal year (FY).

Status:

The Government Code Section 31680.6 and 31641.04 mandated limits are per fiscal year and we perform this review monthly. In FY 09-10, there were 120 OC working retirees with hours; non-County working retirees are excluded from these totals (e.g. Superior Court, OCERS, LAFCO, etc.). During FY 09/10, two individuals exceeded the annual limits for FY 09-10 by 4 hours each (less than one pay-period).

For FY 09-10, OC working retiree/extra-help data is:

Department	No. of OC Working Retirees	Total FY Hours to Date
Sheriff-Coroner	79	30,687
Assessor	18	12,515
Health Care Agency	8	5,135
County Executive Office	2	1,558
OC Public Works	1	922
County Counsel	1	902
District Attorney	8	887
Human Resources	1	528
Treasurer-Tax Collector	1	294
Auditor-Controller	1	199
Total	120	53,627

4. Payroll Direct Deposits (Objective #4)

We used a CAAT to identify multiple employee paychecks directly deposited to the same bank account in the same pay period. We review results to determine there has been no irregular direct deposit activity. For FY 09-10, direct deposits for regular payroll were about \$1.3 billion.

Results:

This CAAT was applied in July 2010 with no significant findings.

Attachments:

Details of Duplicate Payments provided to the Auditor-Controller/Claims & Disbursing Section, dated 7/9/10.