

# Internal Audit Department

O R A N G E C O U N T Y  
5<sup>th</sup> 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:  
August 2010**

We analyzed 10,415 vendor invoices paid in July 2010 amounting to about \$340 million and found 99.99% of the invoices were paid only once.

Of the \$340 million vendor invoices, we identified 1 potential duplicate payment made to vendors for \$786.

To date we have identified \$949,668 in duplicate vendor payments, of which \$904,864 has been recovered.

AUDIT NO: 1041-B  
REPORT DATE: AUGUST 31, 2010

**Director:** Dr. Peter Hughes, MBA, CPA, CIA  
Deputy Director: Eli Littner, CPA, CIA, CISA  
Senior Audit Manager: Autumn McKinney, CPA, CIA, CISA  
Audit Manager: Carol Swe, CPA, CIA, CISA

#### 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**

**Dr. Peter Hughes** **Ph.D., MBA, CPA, CCEP, CITP, CIA, CFE**  
Director Certified Compliance & Ethics Professional (CCEP)  
Certified Information Technology Professional (CITP)  
Certified Internal Auditor (CIA)  
Certified Fraud Examiner (CFE)  
E-mail: peter.hughes@iad.ocgov.com

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**Eli Littner** **CPA, CIA, CFE, CFS, CISA**  
Deputy Director Certified Fraud Specialist (CFS)  
Certified Information Systems Auditor (CISA)

**Michael J. Goodwin** **CPA, CIA**  
Senior Audit Manager

**Alan Marcum** **MBA, CPA, CIA, CFE**  
Senior Audit Manager

**Autumn McKinney** **CPA, CIA, CISA, CGFM**  
Senior Audit Manager Certified Government Financial Manager (CGFM)

**Hall of Finance & Records**

12 Civic Center Plaza, Room 232  
Santa Ana, CA 92701

Phone: (714) 834-5475

Fax: (714) 834-2880

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OC Internal Audit Department, visit our website: [www.ocgov.com/audit](http://www.ocgov.com/audit)



**OC Fraud Hotline (714) 834-3608**

# Letter from Director Peter Hughes



## Transmittal Letter



**Audit No. 1041-B August 31, 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 August 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 **\$904,864**.

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,

A handwritten signature in blue ink that reads "Peter Hughes".

Dr. Peter Hughes, CPA, Director  
Internal Audit Department

## Attachment

# Letter from Director Peter Hughes



Distribution Pursuant to Audit Oversight Committee Procedure No. 1:

Members, Board of Supervisors  
Members, Audit Oversight Committee  
Thomas G. Mauk, County Executive Officer  
Jan Grimes, Director, Auditor-Controller/Central Accounting Operations  
Victoria Ross, Senior Manager, Auditor-Controller/Claims & Disbursing Section  
Bill Malohn, A-C/Information Technology/CAPS G/L System Support  
Shelley Carlucci, Assistant Director, Human Resources/Administration  
Bob Leys, Assistant Director, Human Resources/Services and Support  
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Laurence McCabe, Admin. Manager II, Human Resources  
Foreperson, Grand Jury  
Darlene J. Bloom, Clerk of the Board of Supervisors

# Table of Contents



***Results of Continuous Auditing Using CAATS:  
Auditor-Controller, Human Resources, & County Procurement Office  
Duplicate Vendor Payments and Other Routines  
Audit No. 1041-B***

***For the Month:  
August 2010***

<b>Transmittal Letter</b>	<b>i</b>
<b>OC Internal Auditor's Report</b>	<b>1</b>
<b>OBJECTIVES</b>	<b>1</b>
<b>BACKGROUND</b>	<b>2</b>
<b>SCOPE</b>	<b>2</b>
<b>RESULTS</b>	<b>3</b>
<b>DETAILED RESULTS</b>	
<b>1. Duplicate Payments (Objective #1)</b>	<b>4</b>
<b>2. Employee Vendor Match (Objective #2)</b>	<b>5</b>
<b>3. OC Working Retiree/Extra Help Hours (Objective #3)</b>	<b>5</b>
<b>4. Payroll Direct Deposits (Objective #4)</b>	<b>6</b>



**Audit No. 1041-B**

**August 31, 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 10,415 vendor invoices paid in July 2010 amounting to about \$340 million and found 99.99% of the invoices were only paid once.

Of the \$340 million vendor invoices, we identified one (1) potential duplicate payment made to vendors for \$786.

To date we have identified **\$949,668** in duplicate vendor payments, of which **\$904,864** 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 10-11. 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 August 2010. Our analysis included a review of the following data:

1. **Duplicate Payments:** 10,415 vendor invoices totaling \$340,297,300 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. This routine is performed on a quarterly basis; therefore, it was not performed in July 2010. Our next analysis will be performed at 9/30/10.
3. **OC Working Retiree/Extra Help Hours:** County working retiree/extra help hours worked during FY 10/11 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:** 36,733 payroll direct deposit transactions processed for pay periods #14 (6/18/10 – 7/1/10) and #15 (7/2/10 – 7/15/10) for suspicious direct deposit activity.



## RESULTS

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

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

We identified one (1) duplicate payment made to vendors for \$786 or .0002% of the **\$340 million** of vendor invoices processed during July 2010.

#### **Value-added Information**

Based on the to-date recoveries of **\$904,864** 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 99 monthly performance reports for the CAATs.

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

At quarter-end 3/31/10, we identified **1** employee/vendor match that was included in our May report and submitted to Human Resources Department (HRD) for further evaluation. As of August 27, 2010, HRD determined that this employee/vendor match was not a conflict. All potential employee/vendor matches identified to date have been researched and resolved to HRD's satisfaction.

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

As of 8/25/10, no working retirees exceeded the annual limits of 960 or 720 hours for FY 10/11, 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 July 2010.

### A. Results

We identified one (1) duplicate payment for \$786 or .0002% of the \$340 million of vendor invoices processed during July 2010. The Auditor-Controller continues to investigate all duplicate payments and is pursuing collection. Currently, the County has a recovery rate of about **95%** 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	55	\$68,050	4	\$2,868
2009	100	\$155,529	10	\$30,173	72	\$103,184	18	\$22,172
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	1	\$1,140	0	\$0
May 2010	9	\$2,665	0	\$0	0	\$0	9	\$2,665
June 2010	8	\$11,746	3	\$6,660	1	\$3,720	4	\$1,366
July 2010	6	\$954	0	\$0	0	\$0	6	\$954
August 2010	1	\$786	0	\$0	0	\$0	1	\$786
<b>TOTAL</b>	<b>622</b>	<b>\$1,059,593</b>	<b>87</b>	<b>\$109,925</b>	<b>467</b>	<b>\$904,864</b>	<b>68</b>	<b>\$44,804</b>

### 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 August 2010, 10,415 invoices for \$340,297,300 were added to this data sub-set representing July 2010 transactions. Currently, the data sub-set includes 1,080,453 invoices totaling \$11,495,358,005.

The total data file from which the sub-set is derived includes 3,183,648 records totaling \$23,579,135,773. 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:

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 our July 2010 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. As HRD's reviews are completed for each quarter, that quarter's status will be removed from the below table.

Status as of August 27, 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
3/31/10	May 2010	1	0	0	1	0	0
6/30/10	July 2010	0	--	--	--	--	--
	TOTAL	1	0	0	1	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. To date in FY 10-11, there have been approximately 79 OC working retirees; non-County working retirees are excluded from these totals (e.g. Superior Court, OCERS, LAFCO, etc.). As of August 25, 2010, no individuals have exceeded the annual limits for FY 10-11.

# Detailed Results



For FY 10-11, OC working retiree/extra-help data as of August 25, 2010 is:

Department	No. of OC Working Retirees	Total FY Hours to Date
Sheriff-Coroner	57	6,112
District Attorney	8	1,157
Health Care Agency	8	885
Auditor-Controller	1	231
Assessor	2	201
OC Public Works	2	149
County Counsel	1	135
Total	79	8,870

#### 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 August 2010 with no significant findings.

##### Attachments:

Details of Duplicate Payments provided to the Auditor-Controller/Claims & Disbursing Section, dated 8/26/10.