

# Internal Audit Department

O R A N G E C O U N T Y  
6<sup>th</sup> Largest County in the USA

## RESULTS OF CONTINUOUS AUDITING USING CAATS: AUDITOR-CONTROLLER, HUMAN RESOURCE SERVICES, & 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 2013

Duplicate Vendor Payments: We analyzed 26,675 vendor invoices paid in June 2013 amounting to about \$290 million and found 99.99% of the invoices were paid only once. Of the \$290 million vendor invoices, we identified two (2) potential duplicate payments made to vendors for \$4,548.

To date we have identified \$1,025,731 in duplicate vendor payments, of which \$1,011,706 or 99% has been recovered.

AUDIT NO: 1349-A  
REPORT DATE: AUGUST 21, 2013

**Director:** Dr. Peter Hughes, MBA, CPA, CIA  
Senior Audit Manager: Michael Goodwin, CPA, CIA  
Audit Manager: Carol Swe, CPA, CIA, CISA

#### RISK BASED AUDITING

GAO & IIA Peer Review Compliant – 2001, 2004, 2007, 2010



American Institute of Certified Public Accountants Award to Dr. Peter Hughes as 2010 Outstanding CPA of the Year for Local Government

GRC (Government, Risk & Compliance) Group 2010 Award to IAD as MVP in Risk Management



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



2008 Association of Local Government Auditors' Bronze Website Award



2005 Institute of Internal Auditors' Award to IAD 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, 2010*

*Providing Facts and Perspectives Countywide*

**RISK BASED AUDITING**

**Dr. Peter Hughes**

Director

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Certified Information Technology Professional (CITP)

Certified Internal Auditor (CIA)

Certified Fraud Examiner (CFE)

Certified in Financial Forensics (CFF)

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To access and view audit reports or obtain additional information about the 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. 1349-A    August 21, 2013**

**TO:** Jan Grimes, Auditor-Controller

Steve Danley, Chief Human Resources Officer  
Human Resource Services

Rob Richardson, County Purchasing Agent  
County Procurement Office

**SUBJECT:** Results of Continuous Auditing Using CAATS:  
Auditor-Controller, Human Resource Services,  
& County Procurement Office – Audit for  
Duplicate Vendor Payments & Other Periodic  
Routines

We have completed the July 2013 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 **\$1,011,706**.

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 directly at (714) 834-5475 or Michael Goodwin, Senior Audit Manager at (714) 834-6066.

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  
Michael B. Giancola, County Executive Officer  
Mark Denny, Chief Operating Officer  
Frank Kim, Chief Financial Officer  
Victoria Ross, Director, Central Accounting Operations, Auditor-Controller  
Paul Villanueva, Senior Manager, A-C/Claims and Disbursing  
Bill Malohn, Manager, A-C/Information Technology/CAPS G/L System Support  
Terri Bruner, Assistant Director, Human Resource Services/Operations Division  
Kim Evans, Administrative Manager, Human Resource Services/Administration  
Foreperson, Grand Jury  
Susan Novak, Clerk of the Board of Supervisors  
Macias Gini & O'Connell LLP, County External Auditor

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Auditor-Controller, Human Resource Services, &  
County Procurement Office – Audit for Duplicate Vendor Payments  
and Other Periodic Routines  
Audit No. 1349-A***

***For the Month:  
July 2013***

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# OC Internal Auditor's Report



Audit No. 1349-A

August 21, 2013

TO: Jan Grimes, Auditor-Controller  
Steve Danley, Chief Human Resources Officer  
Human Resource Services  
Rob Richardson, 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 Resource Services, & County  
Procurement Office – Audit for Duplicate Vendor Payments  
and Other Periodic Routines

## Audit Highlight

We analyzed 26,675 vendor invoices paid in June 2013 amounting to about \$290 million and found 99.99% of the invoices were only paid once.

Of the \$290 million vendor invoices, we identified two (2) potential duplicate payments made to vendors for \$4,548.

To date we have identified **\$1,025,731** in duplicate vendor payments, of which **\$1,011,706** or **99%** has been recovered.

## OBJECTIVES

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

1. **Duplicate Vendor 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 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 12-13. 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% 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 payments 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 2013. Our analysis included a review of the following data:

1. **Duplicate Vendor Payments:** 26,675 vendor invoices totaling \$289,821,629 for potential duplicate payments.
2. **Employee Vendor Match:** 41,411 employee and 18,237 vendor addresses/phone numbers at June 30, 2013 for potential matches.
3. **OC Working Retiree/Extra Help Hours:** County working retiree/extra help hours worked during FY 12-13 for individuals exceeding annual fiscal year limits of 960 or 720 hours, as mandated by Government Code Sections 31680.6 and 31641.04.
4. **Payroll Direct Deposits:** 36,076 payroll direct deposit transactions processed for pay periods #12 (5/17/13 – 5/30/13) and #13 (5/31/13 – 6/13/13) for suspicious direct deposit activity.



## RESULTS

For the month of July 2013, we found the following:

### ■ **Objective #1 – Duplicate Vendor Payments:**

We identified **two (2) potential duplicate payments** made to vendors for \$4,548 of the **\$290 million** of vendor invoices processed during June 2013.

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

Based on the to-date recoveries of **\$1,011,706** 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 134 monthly performance reports for the CAATs.

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

The June 30, 2013 analysis is still in progress and results will be provided in a future report. In addition, **one (1)** potential employee-vendor match identified in our March 31, 2013 analysis is currently being reviewed and the results will be included in a future report.

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

For the fiscal year 2012-2013, **one individual exceeded annual limits** of 960 or 720 hours mandated by Government Code Sections 31680.6 and 31641.04. The annual limit was exceeded by **42.5 hours**.

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

Analysis performed on 36,076 direct deposit transactions with **no findings noted**.

See the Detailed Results section for further information.



# Detailed Results



## 1. Duplicate Vendor Payments (Objective #1)

We used a CAAT routine to identify potential duplicate payments made to vendors during June 2013.

### A. Results

We identified two (2) potential duplicate payments made to vendors for \$4,548 of the \$290 million in vendor invoices processed during June 2013. The Auditor-Controller continues to investigate all duplicate payments and is pursuing collection. Currently, the County has a recovery rate of about **99%** 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         | 56         | \$311,421          | 3          | \$1,867         |
| 2007          | 93         | \$99,999           | 12             | \$8,411          | 78         | \$90,920           | 3          | \$668           |
| 2008          | 70         | \$77,712           | 11             | \$6,794          | 58         | \$70,718           | 1          | \$200           |
| 2009          | 100        | \$155,529          | 10             | \$30,173         | 90         | \$125,356          | 0          | \$0             |
| 2010          | 40         | \$84,059           | 7              | \$8,050          | 31         | \$75,980           | 2          | \$29            |
| 2011          | 22         | \$9,351            | 0              | \$0              | 22         | \$9,351            | 0          | \$0             |
| 2012          | 18         | \$38,843           | 0              | \$0              | 18         | \$38,843           | 0          | \$0             |
| January 2013  | 1          | \$65               | 1              | \$65             | 0          | \$0                | 0          | \$0             |
| February 2013 | 1          | \$120              | 0              | \$0              | 1          | \$120              | 0          | \$0             |
| March 2013    | 3          | \$384              | 0              | \$0              | 1          | \$237              | 2          | \$147           |
| April 2013    | 0          | \$0                | 0              | \$0              | 0          | \$0                | 0          | \$0             |
| May 2013      | 1          | \$237              | 0              | \$0              | 0          | \$0                | 1          | \$237           |
| June 2013     | 1          | \$29               | 0              | \$0              | 0          | \$0                | 1          | \$29            |
| July 2013     | 2          | \$4,548            | 0              | \$0              | 0          | \$0                | 2          | \$4,548         |
| <b>TOTAL</b>  | <b>680</b> | <b>\$1,137,111</b> | <b>92</b>      | <b>\$111,380</b> | <b>562</b> | <b>\$1,011,706</b> | <b>26</b>  | <b>\$14,025</b> |

### B. Background

This CAAT routine concentrates on a sub-set of vendor invoices paid by the County that possess 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 2013, 26,675 invoices for \$289,821,629 were added to this data sub-set representing June 2013 transactions. Currently, the data sub-set includes 1,310,613 invoices totaling \$13,979,280,709. The total data file from which the sub-set is derived includes 2,848,264 records totaling \$31,031,881,290. For FY 12-13, established vendor payments were about \$2.6 billion.

Our prior research has indicated that the duplicate payments are typically caused by 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:

Our analysis at quarter-end June 30, 2013 is in progress. Results of our analysis will be included in a future report.

In addition, **one (1) potential employee-vendor conflict** identified in our analysis at quarter-end March 31, 2013 is still under review. Results of this review will be included in a future report.

## 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 FY 12-13.

### Status:

The Government Code Sections 31680.6 and 31641.04 mandated limits are per fiscal year and we perform this review monthly. The County's timekeeping system (VTI) automatically alerts the working retiree and their supervisor when the working retiree is approaching the mandated limit.

In FY 12-13, there were 177 OC working retirees with hours; non-County working retirees are excluded from these totals (e.g. Superior Court, OCERS, LAFCO, etc.). In FY 12-13, **one (1) OC working retiree** exceeded the FY 12-13 annual limits by **42.5 hours**.

FY 12-13 OC working retiree/extra-help hours were as follows:

| Department              | No. of OC Working Retirees | FY 12-13 Hours |
|-------------------------|----------------------------|----------------|
| Sheriff-Coroner         | 92                         | 61,738         |
| District Attorney       | 30                         | 24,735         |
| Assessor                | 13                         | 7,310          |
| Probation               | 11                         | 6,731          |
| Health Care Agency      | 12                         | 5,511          |
| OC Public Works         | 5                          | 3,538          |
| Social Services Agency  | 4                          | 1,938          |
| Child Support Services  | 3                          | 963            |
| Treasurer-Tax Collector | 1                          | 848            |
| Human Resource Services | 3                          | 802            |
| CEO Data Center         | 1                          | 309            |
| Auditor-Controller      | 1                          | 250            |
| Clerk of the Board      | 1                          | 124            |
| Total                   | 177                        | 114,797        |



#### 4. Payroll Direct Deposits (Objective #4)

We used a CAAT routine to identify multiple employee paychecks directly deposited to the same bank account in the same pay period. For the month of June 2013, there were 36,076 regular payroll direct deposit transactions as shown below:

| Pay Period | Pay Period Dates  | # of Direct Deposit Transactions |
|------------|-------------------|----------------------------------|
| PP12       | 5/17/13 – 5/30/13 | 18,042                           |
| PP13       | 5/31/13 – 6/13/13 | 18,034                           |
|            | TOTAL             | 36,076                           |

#### Results:

We reviewed results to determine whether there has been any irregular direct deposit activity. No unusual direct deposit activity was identified. For FY 11-12, direct deposits for regular payroll were about \$1.3 billion.