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:
December 2012

Duplicate Vendor Payments: We analyzed 15,072 vendor invoices paid in November 2012 amounting to about $158 million and found 100% of the invoices were paid only once. Of the $158 million vendor invoices, we identified no (0) potential duplicate payments made to vendors.

To date we have identified $1,020,413 in duplicate vendor payments, of which $995,084 or 98% has been recovered.

AUDIT NO: 1238-F
REPORT DATE: DECEMBER 19, 2012

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

RISK BASED AUDITING
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.

Providing Facts and Perspectives Countywide

**RISK BASED AUDITING**

*Dr. Peter Hughes*  
Director  
Ph.D., MBA, CPA, CCEP, CITP, CIA, CFE, CFF, CGMA  
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Certified Information Technology Professional (CITP)  
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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
Audit No. 1238-F  December 19, 2012

TO:  Jan Grimes, Chief Deputy Auditor-Controller
     Steve Danley, Director
     Human Resource Services
     Ronald C. Vienna, County Purchasing Agent
     County Procurement Office

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

We have completed the December 2012 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 $995,084.

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,

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
Robert J. Franz, Interim County Executive Officer
Victoria Ross, Interim Director, Central Accounting Operations, Auditor-Controller
Bill Malohn, A-C/Information Technology/CAPS G/L System Support
Bob Leys, Assistant Director, Human Resource Services/Support Division
Kim Evans, Administrative Manager, Human Resource Services/Administration
Foreperson, Grand Jury
Susan Novak, Clerk of the Board of Supervisors
Results of Continuous Auditing Using CAATS: Auditor-Controller, Human Resource Services, & County Procurement Office
Duplicate Vendor Payments and Other Routines
Audit No. 1238-F

For the Month:
December 2012

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Audit No. 1238-F

December 19, 2012

TO: Jan Grimes, Chief Deputy Auditor-Controller
    Steve Danley, Director, Human Resource Services
    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 Resource Services, & County
         Procurement Office – Duplicate Vendor Payments and Other
         Routines

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 CAATs). 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 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.

**Audit Highlight**

We analyzed 15,072 vendor invoices paid in November 2012 amounting to
about $158 million and found 100% of the invoices were only paid once.

Of the $158 million vendor invoices, we identified no (0) potential duplicate
payments made to vendors.

To date we have identified $1,020,413 in duplicate vendor payments, of
which $995,084 or 98% has been recovered.
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 December 2012. Our analysis included a review of the following data:

1. **Duplicate Payments:** 15,072 vendor invoices totaling $157,587,794 for potential duplicate payments.

2. **Employee Vendor Match:** This routine is performed on a quarterly basis; therefore, it was not performed in November 2012. The next analysis will be performed at December 31, 2012.

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:** 54,498 payroll direct deposit transactions processed for pay periods #23 (10/19/12 – 11/1/12), #24 (11/2/12 – 11/15/12), and #25 (11/16/12 – 11/29/12) for suspicious direct deposit activity.
RESULTS

For the month of December 2012, we found the following:

- **Objective #1 - Duplicate Payments:**
  We identified no (0) potential duplicate payments made to vendors of the **$158 million** of vendor invoices processed during November 2012.

  **Value-added Information**
  Based on the to-date recoveries of **$995,084** 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 127 monthly performance reports for the CAATs.

- **Objective #2 – Employee Vendor Match:**
  This routine is performed on a quarterly basis. All employee-vendor matches identified to date have been resolved to Human Resource Services (HRS) satisfaction. The next analysis will be performed at December 31, 2012.

- **Objective #3 – OC Working Retiree/Extra Help Hours:**
  As of November 29, 2012, no OC working retirees exceeded the annual fiscal year 2012-2013 limits of 960 or 720 hours 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.
1. Duplicate Payments (Objective #1)

We used a CAAT routine to identify potential duplicate payments made to vendors during November 2012.

A. Results

We identified no (0) potential duplicate payments made to vendors of the $158 million of vendor invoices processed during November 2012. The Auditor-Controller continues to investigate all duplicate payments and is pursuing collection. Currently, the County has a recovery rate of about 98% 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:

<table>
<thead>
<tr>
<th>CAAT Report</th>
<th>Total #’s</th>
<th>Total $’s</th>
<th>Not Duplicates #’s</th>
<th>Not Duplicates $’s</th>
<th>Recovered #’s</th>
<th>Recovered $’s</th>
<th>In Process #’s</th>
<th>In Process $’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>103</td>
<td>$99,980</td>
<td>19</td>
<td>$10,334</td>
<td>80</td>
<td>$87,808</td>
<td>4</td>
<td>$1,838</td>
</tr>
<tr>
<td>2003</td>
<td>50</td>
<td>$33,306</td>
<td>7</td>
<td>$10,175</td>
<td>39</td>
<td>$21,020</td>
<td>4</td>
<td>$2,111</td>
</tr>
<tr>
<td>2004</td>
<td>33</td>
<td>$105,779</td>
<td>7</td>
<td>$2,990</td>
<td>24</td>
<td>$101,460</td>
<td>2</td>
<td>$1,329</td>
</tr>
<tr>
<td>2005</td>
<td>67</td>
<td>$80,162</td>
<td>2</td>
<td>$668</td>
<td>64</td>
<td>$78,472</td>
<td>1</td>
<td>$1,022</td>
</tr>
<tr>
<td>2006</td>
<td>75</td>
<td>$347,008</td>
<td>16</td>
<td>$33,720</td>
<td>56</td>
<td>$311,421</td>
<td>3</td>
<td>$1,867</td>
</tr>
<tr>
<td>2007</td>
<td>93</td>
<td>$99,999</td>
<td>12</td>
<td>$8,411</td>
<td>78</td>
<td>$90,920</td>
<td>3</td>
<td>$668</td>
</tr>
<tr>
<td>2008</td>
<td>70</td>
<td>$77,712</td>
<td>11</td>
<td>$6,794</td>
<td>58</td>
<td>$70,718</td>
<td>1</td>
<td>$200</td>
</tr>
<tr>
<td>2009</td>
<td>100</td>
<td>$155,529</td>
<td>10</td>
<td>$30,173</td>
<td>90</td>
<td>$125,356</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>2010</td>
<td>40</td>
<td>$84,059</td>
<td>7</td>
<td>$8,050</td>
<td>29</td>
<td>$74,517</td>
<td>4</td>
<td>$1,492</td>
</tr>
<tr>
<td>January 2012</td>
<td>2</td>
<td>$1,200</td>
<td>0</td>
<td>$0</td>
<td>2</td>
<td>$1,200</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>February 2012</td>
<td>4</td>
<td>$165</td>
<td>0</td>
<td>$0</td>
<td>4</td>
<td>$165</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>March 2012</td>
<td>2</td>
<td>$360</td>
<td>0</td>
<td>$0</td>
<td>2</td>
<td>$360</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>April 2012</td>
<td>1</td>
<td>$300</td>
<td>0</td>
<td>$0</td>
<td>1</td>
<td>$300</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>May 2012</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>June 2012</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>July 2012</td>
<td>2</td>
<td>$315</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>2</td>
<td>$315</td>
</tr>
<tr>
<td>August 2012</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>September 2012</td>
<td>4</td>
<td>$8,528</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>4</td>
<td>$8,528</td>
</tr>
<tr>
<td>October 2012</td>
<td>2</td>
<td>$22,962</td>
<td>0</td>
<td>$0</td>
<td>1</td>
<td>$22,016</td>
<td>1</td>
<td>$946</td>
</tr>
<tr>
<td>November 2012</td>
<td>1</td>
<td>$5,013</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>1</td>
<td>$5,013</td>
</tr>
<tr>
<td>December 2012</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>671</strong></td>
<td><strong>$1,131,728</strong></td>
<td><strong>91</strong></td>
<td><strong>$111,315</strong></td>
<td><strong>550</strong></td>
<td><strong>$995,084</strong></td>
<td><strong>30</strong></td>
<td><strong>$25,329</strong></td>
</tr>
</tbody>
</table>

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 December 2012, 15,072 invoices for $157,587,794 were added to this data sub-set representing November 2012 transactions. Currently, the data sub-set includes 1,145,616 invoices totaling $12,447,427,043. The total data file from which the sub-set is derived includes 2,568,189 records totaling $27,163,870,529. For FY 11-12, established vendor payments were about $2.7 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:**
   This routine is performed on a quarterly basis. All employee-vendor matches identified to date have been resolved to Human Resource Services (HRS) satisfaction. The next analysis will be performed at December 31, 2012.

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 FY12-13.

   **Status:**
   The Government Code Section 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. As of November 29, 2012, there were 156 OC working retirees with hours; non-County working retirees are excluded from these totals (e.g. Superior Court, OCERS, LAFCO, etc.). As of November 29, 2012, no OC working retiree exceeded the annual fiscal year limits.

   As of November 29, 2012, FY 12-13 OC working retiree/extra-help hours were:

<table>
<thead>
<tr>
<th>Department</th>
<th>No. of OC Working Retirees</th>
<th>FY 12-13 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheriff-Coroner</td>
<td>88</td>
<td>28,805</td>
</tr>
<tr>
<td>District Attorney</td>
<td>26</td>
<td>13,662</td>
</tr>
<tr>
<td>Probation</td>
<td>9</td>
<td>3,958</td>
</tr>
<tr>
<td>Health Care Agency</td>
<td>8</td>
<td>2,321</td>
</tr>
<tr>
<td>Assessor</td>
<td>12</td>
<td>2,170</td>
</tr>
<tr>
<td>OC Public Works</td>
<td>4</td>
<td>1,257</td>
</tr>
<tr>
<td>Child Support Services</td>
<td>2</td>
<td>575</td>
</tr>
<tr>
<td>Treasurer-Tax Collector</td>
<td>1</td>
<td>363</td>
</tr>
<tr>
<td>Social Services Agency</td>
<td>2</td>
<td>350</td>
</tr>
<tr>
<td>Auditor-Controller</td>
<td>1</td>
<td>255</td>
</tr>
<tr>
<td>CEO Data Center</td>
<td>1</td>
<td>243</td>
</tr>
<tr>
<td>Clerk of the Board</td>
<td>1</td>
<td>79</td>
</tr>
<tr>
<td>County Counsel</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>156</strong></td>
<td><strong>54,045</strong></td>
</tr>
</tbody>
</table>
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 11-12, direct deposits for regular payroll were about $1.3 billion.

   **Results:**
   This CAAT was applied in December 2012 with no significant findings.

   **Attachments:**
   Details of Duplicate Payments provided to the Auditor-Controller/Claims & Disbursing Section, dated December 7, 2012.