INTERNAL AUDIT DEPARTMENT

COUNTY OF ORANGE

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Integrity ◆ Objectivity ◆ Independence

Monthly Report
on
Computer-Assisted Audit Techniques (CAAT)

for the
Month of June 2007

IAD's Computer Automated Query Results
for
Duplicate Vendor Payments and Other Periodic Routines
(for details see Executive Summary)

REPORT NUMBER: 2620-L **REPORT DATE: JUNE 25, 2007**

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Monthly Report on
Computer-Assisted Audit Techniques
(CAAT)

For the Month of June 2007

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COUNTY OF ORANGE
BOARD OF SUPERVISORS'
INTERNAL AUDIT DEPARTMENT

Transmittal Letter

Report No. 2620-L

June 25, 2007

TO: David Sundstrom, Auditor-Controller
Carl Crown, Interim Director, Human Resources
Ronald C. Vienna, County Purchasing Agent, CEO/Purchasing

FROM: Peter Hughes, Ph.D., CPA, Director
Internal Audit Department
for

SUBJECT: Monthly Report on Computer-Assisted Audit Techniques (CAAT)

We have completed the June 2007 report of the results of our Computer-Assisted Audit Techniques (CAAT). The final report is attached for your information.

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 you so that you can successfully implement or mitigate difficult audit issues. 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 the Auditor-Controller's Office and the Human Resources Department. If we can be of further assistance, please contact me, Eli Littner, Deputy Director at (714) 834-5899, or Autumn McKinney, Senior Audit Manager at (714) 834-6106.

Attachments

Other recipients of this report:

- Members, Board of Supervisors
- Members, Audit Oversight Committee
- Thomas G. Mauk, County Executive Officer
- Robert Leblow, Senior Manager, Auditor-Controller/Claims & Disbursing Section
- Bill Malohn, A-C/Information Technology/CAPS G/L System Support
- Kathy Tahilramani, Assistant Director, Human Resources
- Rosie Santiesteban, HR Programs, Human Resources
- Foreperson, Grand Jury
- Darlene J. Bloom, Clerk of the Board of Supervisors

EXECUTIVE SUMMARY

Description of CAAT Program:

The CAAT Routines (Computer Assisted Audit Techniques) are automated queries applied to large amounts of electronic data searching for specified characteristics. 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. These CAAT routines are not an audit because we have not audited the underlying business processes or internal controls.

Results (for the Month of June 2007):

No material weaknesses or significant issues identified. See Appendix A for a description of report item classifications.

Control Findings:

- Duplicate Payments to Vendors:
  We identified **9** duplicate payments made to vendors, totaling **$7,431 or .003% of the $286 million** of vendor invoices processed during May 2007. Our prior research has indicated that the duplicate payments are typically caused by a compounded human clerical error.

  We have communicated the duplicate payments to the Auditor-Controller. The Auditor-Controller is currently investigating all duplicate payments and is pursuing collection. Currently, the Auditor-Controller has a recovery rate of about **86%** on these duplicate payments that we have brought to their attention since the inception of the CAAT routines.

- Deleted Vendors:
  No findings.

Value-Added Information:

Based on the to-date recoveries of $583,464 from the duplicate vendor payment routine, these computer assisted routines have paid for themselves and are returning monies to the County that would otherwise be lost.

MONTHLY CAAT REPORT

CAAT Program:
This report details the monthly activity from the Computer-Assisted Auditing Techniques (known by the acronym CAAT). We use a proprietary, best practices and industry recognized software product to help us in this process. 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.

The CAATs are automated queries applied to large amounts of electronic data searching for specified characteristics. The CAATs differ from our traditional audits in that the CAATs can query 100% of a data universe whereas the traditional audits typically test but a sample of transactions from the population.

For example, each month we download the monthly disbursement activity from the County's data warehouse into a cumulative vendor payment database that we have created. Then, we query 100% of the database looking for payments with the same invoice number and the same amount. We then subject the resulting matches to further review and analysis (such as obtaining and reviewing copies of the paid invoices) to determine if a duplicate payment was made. We then forward resulting findings to the Auditor-Controller for validation and recovery.

We also work 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 currently perform five CAAT routines described below utilizing selected payroll and vendor data. Depending on the nature of the CAAT, we perform them monthly, annually, or periodically as needed.

1. **<u>CAAT Performed</u>: Duplicate Payments**

We used a CAAT routine to identify potential duplicate payments made to vendors during May 2007.

A. Results:

We identified nine (9) duplicate payments totaling $7,431 or .003% of the $286 million of vendor invoices processed during May 2007. We have communicated the duplicate payments to the Auditor-Controller. The Auditor-Controller is currently investigating all duplicate payments and is pursuing collection. Currently, the Auditor-Controller has a recovery rate of about **86%** on these duplicate payments that we have brought to their attention 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	$99,981	19	$10,334	79	$87,188	5	$2,459
2003	50	$33,307	7	$10,175	37	$20,556	6	$2,576
2004	33	$105,778	7	$2,990	24	$101,459	2	$1,329
2005	67	$80,163	2	$668	59	$40,786	6	$38,709
January 2006	3	$828	1	$144	1	$534	1	$150
February 2006	4	$1,011	1	$329	3	$682	0	$0
March 2006	15	$12,808	1	$147	9	$9,494	5	$3,167
April 2006	2	$3,216	1	$3,069	0	$0	1	$147
May 2006	1	$7,680	0	$0	1	$7,680	0	$0
June 2006	8	$4,994	2	$1,173	4	$1,800	2	$2,021
July 2006	5	$31,859	2	$1,173	3	$30,686	0	$0
August 2006	19	$4,937	2	$628	17	$4,309	0	$0
September 2006	2	$20,028	0	$0	2	$20,028	0	$0
October 2006	8	$7,043	1	$937	3	$2,672	4	$3,434
November 2006	1	$142	0	$0	0	$0	1	$142
December 2006	7	$252,462	2	$23,365	5	$229,097	0	$0
January 2007	22	$14,514	0	$0	17	$13,197	5	$1,317
February 2007	18	$19,992	1	$1,400	10	$11,538	7	$7,054
March 2007	5	$25,159	0	$0	2	$27	3	$25,132
April 2007	4	$406	0	$0	4	$406	0	$0
May 2007	10	$10,373	0	$0	1	$1,325	9	$9,048
June 2007	9	$7,431	0	$0	0	$0	9	$7,431
TOTAL	**396**	**$744,112**	**49**	**$56,532**	**281**	**$583,464**	**66**	**$104,116**

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 June 2007, 17,991 invoices for $285,729,511 were added to this data sub-set representing May 2007 transactions. Currently, the data sub-set includes 936,302 invoices totaling $10,450,156,272. The total data file from which the sub-set is derived includes 3,850,986 records totaling $17,828,566,961.

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

2. **<u>CAAT Performed</u>: Employee Vendor Match**
   We used a CAAT routine to identify employees that share a similar address as a vendor. This may identify employees buying goods or issuing contracts to themselves or a related vendor

   Status:
   This routine is performed periodically as necessary. There is no current work in progress for this item.

3. **<u>CAAT Performed</u>: Retiree/Extra Help Hours**
   We used a CAAT routine to identify retirees working as extra help in excess of contracted or mandated limits. Our criteria was 960 hours (maximum allowed for regular retirees) or 720 hours (maximum for early retirees) during the fiscal year (FY).

   Status:
   This routine is performed annually. There is no current work in progress for FY 06-07.

4. **<u>CAAT Performed</u>: Direct Deposits**
   We used a CAAT routine to review for multiple employee paychecks directly deposited to the same bank account. This may identify employees paid twice in the same pay period or fictitious employees.

   Status:
   We are rewriting the CAAT routine to accommodate the new data format. We hope to have the routine functioning soon.

5. **<u>CAAT Performed</u>: Deleted Vendors**
   We used a CAAT to identify Vendors that have been deleted or removed from the Vendor Master List. For deleted vendors, we verify that there has been no recent activity for that vendor.

   Results:
   This CAAT was applied in June 2007 with no significant findings.

<u>Attachments:</u>
Provided to the Auditor-Controller: dated 6/21/07 – A/C-Claims & Disbursing Section.

Appendix A: Report Item Classifications

For purposes of reporting our audit observations and recommendations, we have classified audit report items into three distinct categories:

- **Material Weaknesses:** Audit findings that can result in significant financial liability and exposure to a department/agency and to the County as a whole. Management is expected to immediately address "Material Weaknesses" brought to their attention.
- **Significant Issues:** Audit findings that represent a significant deficiency in the design or operation of processes or internal controls.
- **Control Findings:** Audit findings that require management's corrective action to implement or enhance processes and internal controls.