

**REDACTED PURSUANT TO CODE OF VIRGINIA
SECTION 2.2-3705.2(2)&(14) (IT SYSTEMS SECURITY)**

Internal Audit Report on Revenue Billing System – Personal Property Tax and Business License Modules

County of Henrico



*Proud of our progress;
Excited about our future*

**Internal Audit Report #254
July 7, 2016**

HENRICO COUNTY INTERNAL AUDIT
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Internal Audit Report on Revenue Billing System- Personal Property Tax and Business License Modules




Report #254
July 7, 2016



Audit Summary


- Scheduled Audit
- Conclusions on Audit Objectives
 - Reviewed contracts related to services to be rendered by vendor and evaluate sufficiency of any service level agreements
 - ▲ Assessed and tested security access controls to database, application, and associated servers, including vendor access
 - ▲ Evaluated application and database change control for appropriate testing, approvals, and documentation
 - Assessed and test interface controls including error reporting and balancing
 - ▲ Evaluated and tested processing controls related to Personal Property tax billing, Business License Renewal and processing of past due accounts
 - ▲ Evaluated other system controls such as training, system incident handling, problem management and escalation
- Exception Oriented
- 2 reportable Issues and 2 Other Observations
- 2 Action Plans from prior audits of personal property and business license taxes are not yet fully resolved
- Management Action Plans have been developed to address all risks identified

■ Sufficient ▲ Needs Improvement ● Insufficient – Needs Immediate Attention




Contents

- Introduction and Background
- Scope, Internal Controls, and Methodology
- Conclusions on Audit Objectives
- Issues and Management Action Plans
- Closing and Report Distribution




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Introduction

- IT Auditor III, Sharon Thornton, performed audit work
- Used professional auditing standards
- Examined controls & tested for selective compliance
- All exceptions given to Agency
- Reported control design issues & significant test exceptions
- Work for same Government we audit



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Revenue Billing System - Personal Property Tax and Business License Module**



Revenue Billing System (RBS)

- Personal Property and Business License modules were implemented July 8, 2012.
- The vendor is PCI LLC which provides ongoing maintenance support.
- The system replaced the legacy PALS system which was developed in-house and had become out-of-date.
- This system also has Real Estate and Meals Tax modules.

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Agencies' Responsibilities

- Finance: Revenue – Business Licenses and Vehicle Tax Assessments
- Finance: Treasury – Cash Receipts, Adjustments and Collections
- Finance: Information Technology – Bill Processing and System Support with assistance from Department of Information Technology

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Revenue Billing System - Personal Property Tax and Business License Module**




General Personal Property Tax Rates

Calendar Year 2015

- General Personal Property - \$3.50 per \$100 of assessed value. Rate will vary slightly for sanitary districts.
- Exceptions:
 - \$1 per \$100 of assessed value on qualifying vehicles used by volunteer firefighters and volunteer members of rescue squads.
 - \$0.01 of the assessed value for disabled veterans' vehicles and motor vehicles specially modified to provide transportation to physically handicapped individuals.
- Adjustments are also made for high mileage and physical condition of the vehicle.
- Personal Property Tax Relief Act (PPTRA) – if the qualified vehicle is assessed at more than \$1,000, tax relief will be given at a rate of 55% (up to a maximum of \$20,000 in assessed value) for 2015.

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Business Licenses Rates

Calendar Year 2015
(County License Rates only When Tax Base Exceeds \$100,000)

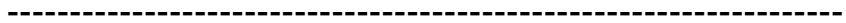
Amusement Promoter, Business & Misc Service; Commission Merchant; First Mortgage Loan & Money Lender (excluding principal); Personal Service (includes Taxi); Professional Service; Retail Merchant; and Hotel & Motel	\$0.20 per \$100 of gross receipts or \$30 whichever is greater
Coin Machine Operator	\$200 plus \$0.20 per \$100 of gross receipts from machines
Contractor	\$0.15 per \$100 of gross fees or \$30, whichever is greater
Contractor (Fee Basis)	\$1.50 per \$100 of gross fees or \$30, whichever is greater
Speculative Builder	\$0.15 per \$100 of gross receipts (excluding cost of land) or \$30, whichever is greater
Itinerant Merchant	\$200 flat tax or \$0.20 per \$100 of gross receipts, whichever is greater
Peddler – Ice and Wood Peddler – Seafood (Catch)	\$30 flat tax \$15 flat tax
Sale Promotion Show	\$250 per week
Wholesale Merchant	\$100,000 standard deduction. Tax detailed on worksheet
Utility – Water, Telephone, Heat, Light and Gas	\$0.50 per \$100 of gross receipts

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Business Personal Property Tax Rates

- Vehicle Personal Property - \$3.50 per \$100 of assessed value. Rate will vary slightly for sanitary districts.
- Most other Business Tangible Personal Property - \$3.50 per \$100 of assessed value.



All tax rates are approved by the Board of Supervisors annually




RBS System

Personal Property & Business License Diagram



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Revenue Billing System - Personal Property Tax and Business License Module**



RBS Software and Maintenance


03/01/2015 – 02/28/2016

Description	Amount
Annual Software and Maintenance Fees*	\$102,103
Annual Support for PCI Business Tax Module	20,837
Annual Support for PCI Payment Register	2,216
Annual Support for PCI DMV Stop Module	2,216
Total	\$127,372

All items include contractual 5% annual increase in fees.

* Includes RBS Real Estate, REAP, and Personal Property Modules

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Audit Scope

In Scope:


- Finance
 - Revenue and Treasury Divisions: Business License, Tangible Property, Personal Property and Adjustment processes related to RBS System
 - Finance Technology: RBS System support
- Systems
 - Revenue Billing System (RBS)
 - Personal Property and Business License modules
 - Revenue Cashier System (RCS)
 - Pass-through only to RBS
- RBS interfaces with other internal systems
 - Core Cashier System, Oracle Financials, and Henrico Debt Set-Off System
- RBS and RCS interfaces with external systems
 - Division of Motor Vehicles (DMV)
 - Batch payments
 - Lockbox (paper), Ebox (electronic), Wbox (wholesale), and Paymentus (online)

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Audit Scope

Out of Scope:
External Collection Agency (ERS)
Real Estate Tax, CAMA Vision, and REVQ (Real Estate Delinquents) modules
All other agencies, divisions, departments, systems, and processes




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Internal Controls

Objectives

- Reliability and integrity of information
- Compliance with policies, procedures, laws and regulations
- Safeguarding of assets
- Effectiveness and efficiency of operations



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Internal Controls Cont'd

General Limitations of any Controls

- Errors and irregularities may go undetected
- Inherent limitations in any control structure
- Limitations include resource constraints, legislative restrictions, etc.
- Projection to future subject to risk of change in effectiveness
- Compliance may deteriorate




Audit Methodology

1. Evaluated internal control systems through completion of questionnaires
2. Validated answers to questionnaires by sample testing and securing evidence
3. Performed walkthroughs to obtain an understanding of the application system processes
4. Evaluated applicable regulations, policies and procedures and sample test for compliance



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Revenue Billing System - Personal Property Tax and Business License Module**




Conclusions on Audit Objectives

Objective	Conclusion
A. Reviewed contracts related to services to be rendered by vendor and evaluate sufficiency of any service level agreements	■
B. Assessed and tested security access controls to database, application, and associated servers, including vendor access	▲ Issue 2
C. Evaluated application and database change control for appropriate testing, approvals and documentation	▲ Other Observation 2
D. Assessed and tested interface controls including error reporting and balancing	■
E. Evaluated and tested processing controls related to Personal Property tax billing, Business License Renewal and processing of past due accounts	▲ Issue 1
F. Evaluated other system controls such as training, system incident handling, problem management and escalation	▲ Other Observation 1

See Slide 36 for discussion of two open action plans from prior audits of Personal Property and Business License Taxes.

■ Sufficient
 ▲ Needs Improvement
 ● Insufficient – Needs Immediate Attention

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Issues

1. Increase Controls over Personal Property Tax Billings
2. Review Adjustment Transactions made by System Administrators

Other Observations


1. Record All Vendor-Related Issues in the Vendor’s Problem Management System
2. Document All System Updates and Non-Vendor User Requests in Change Documentation System

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Issue 1

Increase Controls over Personal Property Tax Billings



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Issue 1

Condition

- At the time of the audit, a reasonableness check was being utilized to determine if the number of bills being printed was accurate. However, it did not include a formal signed reconciliation of the bills printed and not printed in the Personal Property Tax billing runs to ensure the appropriate number of bills was generated from the system for distribution.


Minimum thresholds for total tax due were set for each billing run and bills were not to be printed for accounts below the threshold. However, the number of accounts below the threshold was not documented to facilitate reconciliation.

- Information Technology recorded control totals for 1st Installment, Supplemental and 2nd Installment Billings but there were no control totals available for Past Due bill print other than the record count included as part of the past due pdf pages.

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Issue 1




Effect

There was no assurance of the accuracy and completeness of the billing runs.

Cause

Oversight


Criteria



All billing runs should have controls to ensure the completeness of the run and the number of bills produced should be reconcilable.

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Issue 1




Recommendation

1. Control totals should be documented for all regular and supplemental final billing runs, and past due bill print.
2. The Finance IT Project Manager should reconcile the billing run counts to print file counts to ensure completeness.
3. The Treasury Director should sign-off on acceptance of the reconciliation of the final bill run.

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Issue 1



Management Action Plan


Bill Print file control totals will be reconciled to bill print return files from Wells Fargo to ensure completeness and signed off by Treasury Division Director.

By Whom: Finance IT Project Manager
When Completed: 7/1/2016




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Issue 2



Review Adjustment Transactions made by System Administrators



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Issue 2

Condition


Occasionally, it is necessary for system administrators to aid users who are having trouble entering transactions in the system. However, no one from Treasury or the Revenue Division reviewed adjustment transactions by system administrators on the system's "Adjustments and Exonerations (HICO) Report".

Additionally, no support of these transactions is being maintained as is done for other adjustment transactions.

There were 47 transactions related to Business Licenses and Personal Property made by a system administrator in 2015 calendar year.

In one instance, an adjustment made by a system administrator on the Adjustment Report did not show up on the Accounts Receivable History screen even though it should have.

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Issue 2

Effect

Since 6 users have system administrator capabilities and, thus, have complete access to the system, they could potentially enter inappropriate or incorrect transactions which may not be verified or noticed if not specifically reviewed.


Additionally, such adjustments may not be easily validated if appropriate support is not retained.

Cause

Treasury only reviews adjustment transactions made by their staff members and overlooked the need to validate and retain support of entries by system administrators.


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Issue 2



Criteria


All adjustments should be reviewed and appropriate supporting documentation should be maintained.



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Issue 2




Recommendation

1. Treasury should extend their review to all adjustment and exoneration transactions reported on the Adjustment and Exoneration (HICO) Report.
2. The same degree of support should be provided and maintained for system administrator generated transactions as is required for any other adjustment.



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Issue 2

Management Action Plan


A cover sheet will be attached to all requested adjustments. The form will be sent to the IT Project Manager to process the adjustment or to assign it. The system administrator will adjust the account, sign the form and return the form to the Assistant Division Director to review and approve or to obtain the appropriate signature if it is over the approval limit. The documentation will be filed with the Division processed adjustments.

By Whom: Treasury Director
When Completed 7/1/2016




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Other Observations


The following slides include observations noted during our review which were not considered critical in reaching our conclusions on our audit objectives.



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Other Observation 1



Record All Vendor-Related Issues in the Vendor's Problem Management System


Not all vendor-related issues are recorded in the Vendor's Problem Management System. There is no way to determine how many issues have been resolved outside of the Vendor Problem Management System.

Some urgent issues are discussed over the phone. Additionally, when vendor consultants are onsite, issues are discussed and acted upon informally.

Recommendation: Record all vendor-related issues in the Vendor Problem Management System and track for completion. When urgent issues occur, they should be added to the Vendor Problem Management System once time permits even if the issue has been resolved. A description of the problem, the resolution, and indication of acceptance should be documented.

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Other Observation 1



Management Action Plan

Billing system admin team will log and review all issues requiring vendor support or development resources into the vendor's online issues tracking system.


By Whom: Finance IT Project Manager
When Completed: 7/1/2016



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Other Observation 2



Document All System Updates and Non-Vendor User Requests in Change Documentation System


Not all system updates and non-vendor user requests were being documented in the Redmine change documentation system at the time of receipt. For those entered, all related activity was not documented. The Finance IT Support Manager was keeping track of requests and activity in his County email folders.

In a test of Business License and Personal Property Redmine issues completed during the period of January – November 2015, the following was noted:

Project	No Evidence of Testing	No Evidence of Approval
Business License	6 of 8 or 75%	5 of 8 or 62.5%
Personal Property	3 of 5 or 60%	4 of 5 or 80%

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Other Observation 2




Document all System Updates and Non-Vendor User Requests in Change Documentation System, cont.

Additionally 4 of 8 (50%) Personal Property Redmine issues remained in an open status in excess of 1 year. Only one had a legitimate reason to be open this long. Another one appeared to be a Revenue ticket that was placed in the Personal Property Project in Redmine in error.

Recommendation: Record all updates and non-vendor service requests in Redmine upon receipt and store evidence of testing and approvals as well as other activity related to the request in the issue. Also, ensure issues are set-up in the correct Redmine project.

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Other Observation 2




Management Action Plan

Billing system admin team will log and review all requests for service into the internal Redmine issues tracking system for all service requests that do not involve vendor support or development resources.

By Whom: Finance IT Project Manager
When Completed: 7/1/2016



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In-Progress Action Plans from Prior Related Audits

There are two action plans related to issues identified in prior audits of Personal Property Tax and Business License Taxes which are still in progress at this time:


Recommendation	Status
Replace the personal property tax system with an automated system fully integrated with the new financial management system for enhanced reporting capabilities and to facilitate reconciliation of tax system to accounting records.	The implementation of the RBS billing system has addressed part of the original issue. However, the issue remains open pending implementation of integrated cashiering functionality with real time updates. RFP responses have been received and it is expected that vendor selection and contract negotiations will occur this summer.
We recommend that Finance implement new billing and license systems and fully separate duties between business revenue assessment and collections.	The assessment and collection duties are not currently fully separated for Business Inspectors who may accept collections in limited situations (e.g. peddlers). Management is currently evaluating an alternative approach to address the segregation of duties risk.

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Closing

- Appreciate Agency's cooperation
- Follow up on open Action Plans will be performed as completion dates are reached



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Report Distribution

Audit Committee (Mr. Glover, Mrs. O'Bannon, County Manager)	Board of Supervisors, Non-Committee Members
Deputy County Manager for Administration	Director of Finance Director of Information Technology
Internal Audit Staff	

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