

TO: Board of Education

CC: Dr. Martin Pollio, Superintendent
Cordelia Hardin, Chief Financial Officer/Treasurer

FROM: Jim Tencza, Dean Dorton Allen Ford – Internal Audit

SUBJECT: Internal Audit Plan for Year Ending June 30, 2019 – Executive Summary

DATE: August 29, 2018

This report summarizes the Internal Audit activities plan from July 1, 2018 through June 30, 2019.

- The Internal Audit Plan is a risk-based plan
- The most significant changes in the Internal Audit Plan from the prior year are:
 - Dean Dorton time cut in half from 1,200 hours and \$160,000 to 600 hours and \$80,000
 - Addition of new Internal Audit Director for 75% of the year
 - Addition of internal audit staff and clerk for 50% of the year
 - Risk assessment to be completed in the Fall
 - 552 hours of audit work “to be determined” in the 2nd half of the year – will be determined after risk assessment is completed and will be discussed with/approved by Audit Committee and Board in January
 - Bus referrals and FRYSC – not included in the plan this year because they were audited last year and there were no issues
 - Attendance and Redbook Audits – reduced number of audits but increased hours per audit so we can focus on higher priority schools and do more thorough work
 - Information Technology work focuses on IT Security Risk Assessment, Penetration Testing, and Vulnerability Assessment – see attached for summary
- Internal Audit Plan includes 480 hours for administration and investigation of reports through the anonymous hotline
- Internal Audit Plan includes 500 hours of “special audits” which can come from requests by Principals, management or the Board
- Internal Audit will report to the Board at least once during the year as to any significant deficiencies or material weaknesses as well as the progress of the Internal Audit Plan
- If there are any potential significant changes to the Internal Audit Plan, we will seek Board approval
- See attached spreadsheet for a summary of the proposed internal audits including the expected timing and hours
- See attached spreadsheet for allocation of time by person for the Internal Audit department

Area	Audit Procedures	Timing	Hours	Lead Personnel
Payroll	Complete payroll audit from prior year which includes testing a sample of employees with significant overtime and/or extra time.	July-Aug	340	Greg Crump
Travel & Other Business Expenses	Test sample of travel or business expenses for Superintendent, Directors, Assistant Superintendents, and/or Principals to ensure they comply with policies and procedures.	Sept	80	Sonya Miller
Fundraising and Boosters	Test a sample of schools to determine if all student activity fundraisers and Booster fundraisers, budgets and financial reporting have been properly documented and approved by the Principal. Also, select a sample of fundraisers at each selected school to determine if all reporting and cash collection procedures have been properly followed.	Sept-Oct	240	Greg Crump
Risk Assessment	Perform risk assessment to determine Internal Audit Plan for 2nd half of the year and the following year.	Sept-Oct	320	Jodi Renn
Attendance Audits	Attendance audits for 7 high priority schools and the 35 to be reviewed by KDE - 16 hours per school for 42 schools.	Sept-Dec	672	JCPS Staff
Information Technology	Assist with IT risk assessment and Virtual Information Security Officer.	Nov-Dec	212	Dean Dorton IT
Human Resources	Follow up from prior year HR audit. Review various changes in HR policies and procedures including interview process. Test a sample of new hires to determine if they have been set up properly in the system and if proper hiring policies have been followed including background checks and verification of certifications.	Dec	300	Dean Dorton
School Redbook Audits	Testing of certain Redbook procedures including those related cash receipts, expenditures, accounting and reporting for 15 schools deemed high priority - approximately 24 hours per school for 15 schools.	Jan	360	JCPS Staff
Credit Cards	Verify/test procedures and controls for credit cards including signing out of cards and physical security of credit cards. Test a sample of credit card transactions at various locations to determine if controls and procedures are working effectively and in accordance with JCPS policies.	Feb-Mar	200	Greg Crump
To Be Determined	Additional audits to be completed in the Spring after the Risk Assessment is completed.	Feb-May	552	TBD
Grants and Grant Management	Test sample of costs and reporting requirements for various grants.	March	340	Sonya Miller
Warehousing	Observe inventory count and validate count procedures.	May	84	JCPS Staff
Hotline and Special Investigations	Address and investigate hotline reports and perform special audits as requested. Estimate 16 hotline investigations at 20 hours each and 12 special investigations at 40 hours each. Time has also been budgeted to oversee hotline calls not requiring internal audit to investigate. Estimate of 160 total calls.	Various	980	All
			<u>4,680</u>	

Audit	Jodi Renn	Sonya Miller	Greg Crump	JCPS Staff	Dean Dorton	Total
Payroll			320		20	340
Travel & Other Business Expenses		60			20	80
Fundraising and Boosters	40	100	100			240
Risk Assessment	180	40	40		60	320
Attendance Audits		336	336			672
Information Technology	12				200	212
Human Resources	140	40	40		80	300
School Redbook Audits	100	80	100	80		360
Credit Cards	20		180			200
Audits - TBD	120	140	92	160	40	552
Grants and Grant Management	20	80		240		340
Warehousing	4	40	16	24		84
Hotline Administration and Investigations	120	160	160		40	480
Special Requests/Investigations	120	100	100	100	80	500
Total audits	876	1,176	1,484	604	540	4,680
Other Time	Jodi Renn	Sonya Miller	Greg Crump	JCPS Staff	Dean Dorton	Total
Personal development / training	60	40	60	120		280
Bookkeeper training	20	20	20			60
Bookkeeper assistance		284				284
Administrative duties	100	100	100	100		400
Vacation, sick time and holidays	200	352	312	136		1,000
External audit assist/coordination		20	20			40
Follow-up on findings	40	40	40	40		160
New Director-related items*	160	40	40	40	16	296
Internal audit plan	24	8	4		20	56
Board and management meetings	80				24	104
	684	904	596	436	60	2,680
	1,560	2,080	2,080	1,040	600	7,360

* New Director-related items include:

Hiring of one staff and clerk

Revising/updating IA Charter, policies, procedures, hotline protocols, etc.

Gaining an understanding of current reporting structure and systems

Meeting with various individuals regarding expectations and needs of Internal Audit Department

Summary of Approach for Information Technology

Based on many recent assessments conducted by our Internal Audit team and other third-party organizations, IT Security Risk is a recurring finding and priority for Jefferson County Public Schools (JCPS) to address. As such, we are proposing to allocate a portion of our existing Internal Audit contract funds to Dean Dorton's Cybersecurity team to assist JCPS in addressing these critical needs and concerns. While we will not be able to fully remediate and address all identified concerns, we believe we can perform some initial procedures that will deliver tangible results for JCPS. We will also lay out our proposed long-term solution for helping JCPS address IT Risk on an ongoing basis. Once management and the Board have had an opportunity to review our initial progress, we can discuss the long-term approach and the possibility of expanding our contract to cover these needs.

Background

In our experience, we find that many organizations struggle with hiring and retaining Information Security professionals: it was recently reported that there is a negative unemployment rate in the field of Cybersecurity and offering a long-term career path for these individuals can be challenging for any organization.

Security compliance requirements are increasingly complex. In the meantime, cyber-threats continue to evolve and organizations are not well prepared to handle sophisticated cyber-attacks. Organizations that host or maintain valuable information, such as Personally Identifiable Information (PII), are often specifically targeted by cyber criminals for financial gains. Knowing that the average cost per each lost or stolen record containing confidential and sensitive data is well above \$150, Information Security is now a key business risk that needs to be addressed.

Dean Dorton Allen Ford, PLLC's (Dean Dorton) Information Security Office's (ISO) unique approach to this challenge is to understand JCPS's specific Information Security needs. This dialog will lead to a Security Roadmap that is developed in collaboration with your team and is supported by best practices and industry specific experience.

Dean Dorton's ISO provides a team of experienced Information Security professionals who can augment organizations' Information Security team or take the lead in designing, implementing, and maintaining a strong Information Security program on your behalf.

In addition, Dean Dorton ISO offers a variety of optional services to assist as little as organizations want or as much as they need to continuously strengthen their Information Security program, so they can focus on their core business.

Scope and Objectives

Dean Dorton is proposing to deliver a comprehensive IT security risk assessment that also includes external and internal vulnerability and penetration testing services. We will also define optional security projects to strengthen JCPS's information security posture and to assist with the remediation of specific audit findings.

Initial Projects

1. *IT Security Risk Assessment* – Dean Dorton will perform a districtwide IT security risk assessment. The goal will be to identify the key IT security risks and to present a report to JCPS with actionable and prioritized findings based on the risk to the organization.
2. *Penetration Testing and Vulnerability Assessment* – Dean Dorton will perform a technical security assessment of JCPS' network. The engagement will be divided into three phases:
 - *Penetration Testing* – Dean Dorton will simulate an adversarial cyber threat and will attempt to gain privileged access on the JCPS network from the Internet.
 - *External Vulnerability Assessment* – Dean Dorton will identify systems and network vulnerabilities of JCPS systems that are accessible from the Internet (up to 50 live IP addresses).
 - *Internal Vulnerability Assessment* – Dean Dorton will identify systems and network vulnerabilities of JCPS systems that are on the internal network. Servers, administration, and configuration assessment of critical systems to include domain controllers, file servers, Active Directory, GPO, virus/malware protection, backup systems, and other critical infrastructure components will be in scope (up to 100 servers, up to 100 sampled workstations, up to 50 network devices).

Dean Dorton will finalize all its assessment activity and documentation of the security assessment into a final deliverable for JCPS that includes remediation recommendations. In January, Dean Dorton will discuss the results of this work as well as the long-term approach with the Audit Committee and the Board.