

August 8, 2017

**To:** Sadhu Johnston - City Manager  
Paul Mochrie - Deputy City Manager  
Patrice Impey - General Manager, Finance, Risk & Supply Chain Management  
Francie Connell - Director, Legal Services

**From:** Tony Hui - Chief of Internal Audit

**Subject:** July 2017 Follow-Up of Audit Recommendations

As part of the annual Internal Audit plan, a follow-up of open audit recommendations is conducted every 6 months for all audit reports issued. The objective is to determine the extent to which audit recommendations have been implemented and whether any significant internal control weaknesses remain outstanding.

We corresponded with key individuals responsible for implementing recommendations and reviewed supporting evidence to newly completed recommendations. 106 open recommendations were followed up on and 23 of the recommendations are now completed.

A summary is shown below:

Open recommendations at beginning of period	85
<u>Add:</u> Recommendations now due	21
Total open recommendations followed up	106
<u>Less:</u> Recommendations completed	(23)
Open recommendations at end of review period (July 2017)	<u>83</u>

A breakdown of open audit recommendation by the year of the initial target completion date follows below. A detailed listing of open items is provided in Appendix A.

<u>Initial Target Completion</u>	<u># of Recommendations</u>
2011	1
2013	2
2014	5
2015	9
2016	54
2017	12
Total	<u>83</u>

### **Three Significant Items based on Risk Priority Ranking**

Based on our risk priority ranking (Appendix B), there are three open significant items. Two of these items relate to the 2015 Business Continuity Audit: An interim BCP guide is to be created for interim use, and a business continuity plan should be completed for the IT department (see Appendix A Audit 135, F.1.1 & F.2). Risk Management has indicated that the

interim BCP guide has been drafted and is pending approval from the Risk Management Committee.

The third item relates to the 2016 Cyber Security audit: it is recommended that comprehensive penetration testing be completed (see Appendix A Audit 144, F.1). The Chief Technology Officer has indicated that high risk vulnerabilities have been addressed and this item is a deliverable for 2018 as part of the revised Security operating model and roadmap.

**Items outstanding prior to 2015**

Recommendations outstanding prior to 2015 are close to completion and primarily relate to: Non-Market Housing Operations, IT, and Parks Restaurant Revenue. The item from 2011 is a recommendation for a reporting process for financial and operational results of the Mountain View Cemetery. This item has been delayed due to various organizational changes affecting the department. This item has been revisited during the 2017 Mountain View Cemetery audit and management has indicated that they will address this issue during 2017.

Please contact me at extension 86393 if there are any questions.



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Tony Hui, CPA, CA, CRMA  
Chief of Internal Audit



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Carmen Fuellbrandt, CPA, CMA, CIA, CRMA  
Senior Internal Auditor

# Details of Current Open Audit Recommendations

## Appendix A

Details of Current Open Audit Recommendations										
#	Audit Report Name	Departmental Owner	GRAND TOTAL (F)=A+B+C+D	(A) Not Due	(B) Completed	(C) Open: Significant	(D) Open: Non-Significant	Open Audit Recommendations (* significant items)	Risk Priority Ranking for significant items	Expected Completion
92	2009: Mountain View Cemetery	Community Services	4	0	3	1	0	G.1* - A reporting process should be established to ensure that City Council receives financial results and operating status of the cemetery operations.  Due to various organizational changes affecting the department this item has been delayed. Progress has been made and this item has been carried forward to a similar recommendation resulting from the 2017 Mountain View Cemetery audit.	G.1: Low	2017
110	2012: Non-Market Housing Operations	Community Services	6	0	4	2	0	F.1.1* A Service Level Agreement for maintenance at NMO buildings should be established. F.1.2* Service levels should be regularly reviewed.  Paul Hsu, Associate Director, Facilities Maintenance & Operations and Jim de Hoop, Managing Director, Housing Delivery & Operations: Work is underway to define a janitorial baseline.	F.1.1: Medium F.1.2: Low	2017
122	2014: Capital Project Management Audit	Finance, Risk and Supply Chain Management	4	0	2	1	1	F.1.1* - Establish a citywide project control framework to ensure all capital projects are effectively and efficiently managed and stated objectives delivered in an economical manner. F.4.1 - Ensure that the citywide project control framework focuses on risk assessment and risk management, scope management and project communication management.  The Project Management Framework for Engineering has been implemented, next phase will be rolled out to REFM.	F.1.1: Medium	2017
123	2014: Parking Operations and Enforcement Audit	Engineering Services	9	0	8	0	1	G.7 - Review with Parking Operations - Maintenance staff to assess the performance of each meter type and determine the viability and feasibility of reducing parking meter product lines that will facilitate effectiveness and efficiency.  Cathy Palmer, Manager, Parking Operations & Enforcement: New product (Mackay) has been sourced for trial to potentially replace CALE and IPS meters over the next 12 months.		2017
124	2014: Park Board Restaurant Revenue Sharing Review	Park Board	7	0	5	0	2	F.3.1 - The City Accounting Clerk managing restaurant lease payments must be updated on all lease amendments. F.5.1 - Reminder letters should be sent to lessees before the due date of the annual report.  Sev Araujo, Manager Commercial Operations, Park Board: These recommendations are on the Park Board workplan, pending the implementation of a Facility and Document management system.		2017
128	2014: Cloud Computing Audit	Corporate IT	5	0	0	2	3	F.1.1* - Establish a cloud computing framework and strategy. F.2.1* - Educate City employees on cloud solutions and privacy requirements. F.3.1 - Establish tools and standard templates for use by business units for cloud computing solutions. F.4.1 - Monitor vendor performance against Service Level Agreements. F.5.1 - Preapprove file hosting solutions.  Jessie Adcock, Chief Technology Officer: Work is underway for these items, with target completion later in 2017.	F.1.1: Medium F.2.1: Medium	2017
131	2015: VFRS Operational Audit	VFRS	11	0	1	1	9	F.2 Redistribute management staff to better support Field Operations. F.3* Trip inspections not properly done. F.4 Inventory of fire equipment not regularly completed. F.5 Training support system needs to be enhanced. F.6 Address adequacy of fire training centre and vehicle maintenance service area facilities. F.7 Dedicated team needed to test and accept new fire apparatus. F.8 Establish an Information Technology steering committee. F.9 Improvements required to staff scheduling system. F.10 Formalized succession planning is required. F.11 Effective use of Fire Prevention Officers.  Brian Goddington, Deputy Chief Operations Support: Progress has been made on these recommendations, target completion by end of 2017.	F.3: Low	2017
132	2015: P2P Audit	Finance, Risk and Business Planning	10	0	9	1	0	F.2.2* Improve processes related to vendor checks and vendor performance tracking and strengthen conflict of interest assurance  Nick Kassam, Chief Procurement Officer: SCM will be addressing this item in 2017 as it develops and enhances its contract management processes. Expected completion would be December 2017.	F.2.2: Med	2017

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133	2015: Mobile Devices Audit	Information Technology	5	0	0	2	3	F.1* Update and finalize mobile device policies and procedures. F.2* Strengthen monitoring controls for extra charges of usage. F.3 Ensure latest security software updates are installed. F.4 Ensure proper Bluetooth settings. F.5 Ensure radio system interoperability.  Jessie Adcock, Chief Technology Officer: Expected completion in Q3, 2017.	F.1: Med F.2: Low	2017
134	2015: Building Permit and Inspection Services	Development Services, Building & Licensing	8	0	4	2	2	F.1* Enhance and formalize value and risk-based approach to inspections. F.2* Reassess the use of Inspections Division's resources. F.4 Formalize staff training program. F.7 Improve coordination of the building bylaw enforcement operations.  Pat Ryan, Chief Building Official: Progress has been made including a staff re-organization and some items are pending the 2018 budget.	F.1: Med F.2: Low	2018
135	2015: Business Continuity Audit	Risk Management	6	0	3	2	1	F.1.1* Create a simple "how-to" BCP Guide for use in the Interim. F.2* Complete Business Continuity Plan for IT Department. F.4 Data centre strategic plan to support continuity of operations.  Jessie Adcock, Chief Technology Officer: This work is now part of the IT Resiliency flagship and will have resources to complete this in 2017.	F.1.1 High F.2 High	2017
136	2015: Social Media	Corporate Communications	4	0	0	2	2	F.1* Improve monitoring of inappropriate posts. F.2* Improve password requirements. F.3 Implement a social media incident response plan. F.4 Ensure consistent branding and updating across social media channels and accounts.  Rena Kendall-Craden, Director, Communications: Progress has been made on these recommendations with target completion by Q4.	F.1: Low F.2: Low	2017
137	2015: Major Exhibiting Institutions	Cultural Services	8	0	0	2	6	F.1.1* Strengthen record management processes for collections. F.2.1 Ensure that the Collection Policies for all major exhibiting institutions are updated and approved by the City if required. F.2.2 Ensure that the City approval levels are clearly defined and documented for Collection Policies. F.3.1* Establish inventory management controls at Museum of Vancouver and Vancouver Maritime Museum. F.4.1 Strengthen record management at Vancouver Maritime Museum. F.5.1 Strengthen physical security at Vancouver Maritime Museum facility. F.6.1 Implement environmental hazard screening procedures. F.7.1 Harmonize security policies for Museum of Vancouver and Space Centre.  (Status update pending review of the audit recommendations by the new Managing Director, Cultural Services)	F.1.1 Med F.3.1 Low	2018
138	2015: PNE Internal Controls	PNE	10	0	7	2	1	F.1.1* Establish a business continuity plan. F.1.2* Implement formal risk management process. F.3.1 Establish a procurement policy.  Sandra Ruff, VP, Finance, PNE: Continuity plans in place for some core business functions. Risk management processes and procurement policy will be under review in 2018.	F.1.1 Med F.1.2 Low	2018
140	2016: CCTV Compliance Spot Audit	City Clerk REFA	9	0	1	2	6	F.2* Training operator on FIPPA and CCTV protocols. F.3 Complete CCTV systems inventory. F.4 Revise CCTV operating procedure and complete all Privacy Impact Assessments. F.5 Create an easy to follow CCTV application process on CityWire. F.6 Clarification and revision of CCTV System Policy AE-003-02 required. F.7 Delegation of By-Law No. 11451 responsibility should be in writing. F.8 Completing and signing-off of the Director, Access to Information job description. F.9* Review security arrangements at Tactical Training Centre.  Barbara van Fraassen, Director, Access to Information: Progress has been made with some items awaiting final sign-off. Corporate Security is also engaged to address systems inventory issue.	F.2 Low F.9 Low	2017

A	Audit Report Name	Departmental Owner	(F) - A+B+C+D	(A) Not Due	(B) Completed	(C) Open Significant	(D) Open Non-Significant	Open Audit Recommendations (Significant Items)	Risk Priority Ranking for Significant Items	Expected Completion
141	2016: YPD-CCTV Compliance Spot Audit	VPD	6	0	1	3	2	F.1* Training operators on CCTV protocols and completing PIAs. F.2* Increase hard drive capacity for YPD CCTV cameras. F.3* Re-assess backup power system capacity. F.4 Clarification and revision of CCTV System Policy AE-003-02 required. F.6 Operational and related security of CCTV systems.  (Status update pending review by new Senior Director Information Services, YPD)	F.1 Med F.2 Low F.3 Low	2017
142	2016: Stanley Park Mini-Train Operational Review	Park Board	6	0	5	0	1	F.6 Change access to ticket booth's camera feed.  Rosemary Yip, Train Operations Team Lead: Items are in progress; will work with Corporate Security regarding camera access.		2017
144	2016: Cyber Security Audit	Information Technology, Finance, Risk and Supply Chain Management	6	0	1	1	4	F.1* Complete penetration testing. F.3 Establish cyber security awareness program. F.4 Ensure confidentiality of sensitive data. F.5 Formalize process documentation for IT equipment repairs. F.6 Review cyber insurance options.  Robert Bartlett, Chief Risk Officer: The Deloitte IT Security report has been provided and the suggested action items regarding departmental responsibilities, segregation of duties and work plan items has been approved. Implementation has begun.	F.1 High	2017
148	2016: Surprise Cash Handling & Management Oversight Audit - VanDusen & Bloedel	Park Board	6	0	5	0	1	F.3.1 Conduct assessment on CCTV equipment.  Ema Tanaka, Business Team Lead: Corporate Security has conducted a preliminary review of the Van Dusen Garden buildings, with recommendations forthcoming.		2017
149	2016: Surprise Cash Handling & Management Oversight Audit - Kitsilano Pool	Park Board	4	0	3	0	1	F.2.1 Conduct assessment on CCTV equipment.  Sean Healy, Aquatics Supervisor: A request has been placed with Corporate Security for the review/evaluation of a CCTV camera system.		2017
151	2016: Surprise Cash Handling & Management Oversight Audit - Golf Courses	Park Board	4	0	0	0	4	F.1a Clarify revenue reconciliation process. F.1b Implement a management review process including tracking of cash overages and shortages. F.2 Review security camera requirements and current operating condition of equipment. F.3 Ensure Moneris Point of Sale terminals are labelled and locked or tethered.  Joan Probert, Supervisor Business Services: This is being reviewed under Revenue to Cash project underway.		2017

## Risk Priority Ranking of Significant Recommendations

### Appendix B

Priority	Criteria
3 - High Priority Risk	<p>Immediate management attention is required. This is a serious internal control or risk management issue that if not mitigated, may lead to:</p> <ul style="list-style-type: none"> <li>• Substantial losses over \$5,000,000 , possibly in conjunction with other weaknesses in the control framework.</li> <li>• Serious violation of corporate strategies, policies, or values.</li> <li>• Serious reputation damage, such as negative publicity in media.</li> <li>• Significant adverse regulatory impact, such as material fines.</li> </ul> <p>Timely management attention is warranted. This is an internal control or risk management issue that could lead to:</p> <ul style="list-style-type: none"> <li>• Financial losses (stipulate levels \$250k-\$5M).</li> <li>• Loss of controls within the organization.</li> <li>• Reputation damage, such as negative publicity in media.</li> <li>• Adverse regulatory impact, such as public sanctions or immaterial fines</li> </ul>
2 - Medium Risk	<p>Routine management attention is warranted. This is an internal control or risk management issue, the solution to which may lead to improvement in the quality and/or efficiency of the organizational entity or process being audited. Risks are limited.</p>
1 - Low Risk	<p>Losses under \$250K</p>

Risk Priority	Number of Significant Open Recommendations
3 - High	3
2 - Medium	5
1 - Low	18