

Subject: Q1 2019 Follow-up Status of Audit Recommendations

Report to: Audit Committee

Report date: Monday, February 4, 2019

Recommendations

That report AC-C 3-2019 regarding the current status of audit recommendations **BE RECEIVED.**

Key Facts

- The purpose of this report is to provide Audit Committee with a status update on the degree of implementation of audit recommendations made since 2015.
- This report will cover all audits completed and issued up to the previous Audit Committee meeting, September 10, 2018.
- As part of the annual audit business cycle, the follow up process will be completed and reported to Audit Committee on a quarterly basis.
- A total of 34 audit recommendations were detailed in this audit report.
- Between 2017 and 2018, Internal Control and Organizational Performance (ICOP) has completed 14 internal audit reports.

Financial Considerations

There are no immediate budgetary considerations associated with this report. The audit recommendations and subsequent Management Action Plans (MAPs) had budgetary implications associated with their implementation and which are accommodated within current operating budgets.

Analysis

This report is intended to be an update on the status of Management's implementation of the audit recommendations since 2015. All recommendations that have not been fully implemented within the management approved timeframe will be highlighted in this report for Audit Committee's attention.

In total, Niagara Region has 74 audit recommendations brought forward through past completed audits. Details of these 74 recommendations are as follows:

• ICOP is satisfied that 51 of the recommendations have been fully implemented,

- In addition, nine of the recommendations are in progress and proceeding with satisfactory implementation plans in place,
- One of the recommendations put forth by ICOP is listed as not started. This recommendation will commence following Council decision points,
- Three recommendations remain on hold,
- Finally, ten recommendations are in progress, late.

The attached appendix provides a detailed status of all recommendations, including expected completion dates.

This type of follow up report is considered best practice as per the Institute of Internal Auditors guiding principles, which ICOP adheres to. The quarterly follow up process ensures that Management is held accountable for the implementation of action plans which it has committed to. The follow up provides valuable information to members of Audit Committee in the execution of their oversight and governance role.

Alternatives Reviewed

No other alternatives were reviewed at this time.

Relationship to Council Strategic Priorities

Value-For-Money audits were identified and approved as the previous Council's Strategic Priority – Advancing Organizational Excellence. The goal of this Strategic Priority was to "Build a strong internal foundation for Niagara Region to enable a more prosperous Niagara."

Following completion on the 2015 and 2016 audits, Council approved having a permanent Internal Audit function situated within the renamed Internal Control and Organizational Performance division.

Other Pertinent Reports

AC-C 8-2017 Annual Follow Up Status of Audit Recommendations

AC-C 15-2018 Management Action Plan and Follow-up Status Report

AC-C 21-2018 Q1 2018 Follow up Status of Audit Recommendations

AC-C 34-2018 Q2 2018 Follow up Status of Audit Recommendations

Prepared by:

Maciej Jurczyk, CPA, CMA, CIA Director Internal Control and Organizational Performance

Recommended by:

Todd Harrison, CPA, CMA Commissioner Enterprise Resource and Management Services

Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

This report was prepared in consultation with Frank Marcella, Internal Auditor and Henrik Gao, Internal Audit Analyst.

Appendices

Appendix 1 AC-C 3-2019 Appendix 1 - Final

Page 1

INTERNAL CONTROL & ORGANIZATIONAL PERFORMANCE FOLLOW UP STATUS REPORT Current Status as of January 24, 2019

_			Not S	tarted		In Pro	gress		On I	lold	Fully Imp	lemented	
		Total # of	Previous	Current	Previou	s Report	Current	t Report	Previous	Current	Previous	Current	Percentage Completion
	Audit Name	Recommendations	Report	Report	On Schedule	Behind Schedule	On Schedule	Behind Schedule	Report	Report	Report	Report	r oroomago compresson
2015	Burgoyne Bridge	8	-	-	1	4	-	1	2	2	2	5	63%
2016	Fleet Management	4	-	-	1	-	-	1	-	-	3	3	75%
Γ.	Purchasing Card (Pcard)	3	-	-	1	1	-	-	-	-	1	3	100%
2017	Fleet Parts Inventory and Fuel	9	1	1	1	3	-	3	-	1	4	4	44%
	Mobile Telecommunications	8	-	-	-	5	-	2	-	-	3	6	75%
	Waste and Recycling Drop-Off Depot Agreement	2	-	-	2	-	-	1	-	-	-	1	50%
_ ∞	Payroll 1 - Timekeeping	3	n/a	-	n/a	n/a	2	-	-	-	n/a	1	33%
2018	Grants and Incentives	4	-	-	-	-	4	-	4	-	-	-	0%
	Information Technology Security and Data Backup Controls	20	-	-	9	-	3	2	-	-	11	15	75%
	Total	61	1	1	15	13	9	10	6	3	13	38	62%

Audit: Burgoyne Bridge (2015)

Summary of Follow up Status:

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 28, 2018	Status as of January 11, 2019	Comments
1	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C-21-2018
2	In progress	In progress	In progress	On Hold	
3	On Hold	On Hold	On Hold	On Hold	
4	In progress	In progress	Fully implemented	Fully implemented	
5, 6, 7	In progress	In progress	In progress	Fully Implemented	
8	On Hold	In progress	In progress	In Progress	

Recommendation #2	On Hold		
Recommendation	Management Action Plan	Follow Up Comments	
The Region should develop a policy and define criteria for sole and single sourcing.	Review of the existing policy (and newly implemented EFMS system) for sole and single sourced procurement to ensure that system controls are functioning as expected (Validate compliance & controls, report back on review). Undertake a best practice review of awarding contract administration on significant projects.	As per Bart Menage (Director, Procurement & Strategic Acquisitions) on 01/8/2019: No change from the previous report. Developing and defining criteria for sole and single source procurement will be reviewed upon the completion of the Single/Sole Sourced Procurement audit included on the 2019 Audit Plan. Procurement Office is currently working on a revision to the overall Procurement Bylaw that is expected to be presented to Council in late 2019. These revisions will include updates to the Single/Sole Source provisions. As per Bart Menage (Director, Procurement & Strategic Acquisitions) on 01/10/2018: The Procurement Advisory Committee endorsed a work plan in November 2017 which includes a broad review of all policies and procedures. This includes review of single/sole sourcing contracts. In addition, ICOP will be completing an assurance audit on Single/Sole Source projects within 2018. The recommendations of that audit will be considered by the Procurement Advisory Committee for implementation. Anticipated close date: 2018	

Recommendation #3		
Management Action Plan	Follow Up Comments	
Large construction projects: Provide estimates at various project stages utilizing the Services of qualified cost consultant's/quantity surveyors. Lifecycle renewal projects: Use structured estimating as applicable for the particular project.	As per Kashif Siraj (Manager, Project Management Office) on January 11, 2019: Estimates for Capital Initiatives are developed as part of the business cases for budget approvals. PMO will be looking into standardizing Validation of these Estimates early on in the capital projects. Once the Asset Management Office is in place the PMO will collaborate and align with it on Estimation.	
3. Structured cost estimating: Different cost estimating should be applied based on the type of capital project. Large projects should engage qualified cost consultants at various stages. 4. Job order contracting: Pilot in progress for facilities lifecycle renewal projects and maintenance projects. Provides unit pricing for projects on an ongoing basis for a set term.	As per Maciej Jurczyk (Director, Internal Control and Organizational Performance) on August 20, 2018: Discussions with Senior Management in PW and Finance in May 2018 resulted in ICOP taking a leadership role in cost estimating. Pending the creation of the project management office (PMO) on September 10, 2018, this unit will be accountable for this work going forward. Previously reported as of May 7, 2018: No change from the previous report. Due to staff leave of	
	absence, special projects related to his recommendation have been put on hold until the department has hired a new Director. As per Richard Pankratz (Acting Director, Construction Energy & Facility Management) on 01/15/2018:	
	Implementation Status Summary The project charter has been developed and approved. Information has been gathered including the commencement of the SWOT analysis. A cost estimating Roster of prequalified Cost Estimators/Quantity Surveyors is now in place. The Job Order Contracting (JOC) Pilot has been underway for over a year. This innovative new procurement method helps to expedite projects and gives accurate project pricing based on the construction task catalogue. This minimizes or eliminates project change orders for JOC projects. The initial project schedule has been revised to adapt to the other initiatives such as the project management initiative and, as a result, this project has been temporarily put on hold. This will allow for better integration of the VFM initiatives. Once the Asset Management initiative (initial phase) is	
	1. Large construction projects: Provide estimates at various project stages utilizing the Services of qualified cost consultant's/quantity surveyors. 2. Lifecycle renewal projects: Use structured estimating as applicable for the particular project. 3. Structured cost estimating: Different cost estimating should be applied based on the type of capital project. Large projects should engage qualified cost consultants at various stages. 4. Job order contracting: Pilot in progress for facilities lifecycle renewal projects and maintenance projects. Provides unit pricing for	

reached the milestones of having completed the tiering, the manual and the templates, the Cost estimating project could start again. Implementation Completion Status The anticipated reinitiating date is Q2 2018 (based on the state of the other initiatives that will feed into the Cost Estimating Initiative). Any delays in the completion of the project management initiative will impact the re-initiation date of the project cost estimating initiative.
Note that the timeline now looks like this: - Project initiation - August 2016 (complete) - Project charter- August 2016 (complete) - Data collection - in progress - Preliminary development - on hold pending PM initiative (Re-initiation anticipated for Q2, 2018) - Final development - on hold pending PM initiative - Rollout- on hold - Post rollout - on hold Anticipated close date: On hold

Recommendation # 5, 6, 7	Recommendation # 5, 6, 7		
Recommendation	Management Action Plan	Follow Up Comments	
5. The Region should develop a PM Manual which defines key processes, and the associated roles and responsibilities.	Region to engage professional services to help develop an integrated approach for project Management. The project scope of work will include the following: - PM Manual for top two tiers.	As per correspondence with Kashif Siraj (Manager, Project Management Office) on Jan 11, 2019: This initiative is now complete. The PM manual has been created and approved. Updates to the manual will happen as part of the operational work of the PMO as required.	
		As per Maciej Jurczyk (Director, Internal Control and Organizational Performance), August 20, 2018 A corporate re-organization will take place on Sept 10, 2018 resulting in the creation of a dedicated Project Management Office (PMO). The PMO will be responsible for rolling out the PM Manual created by the CIMA consultants. A degree of customization of this manual and toolkit will be required, including a strong emphasis on reporting and risk management.	
		As per correspondence with Dheeraj Paul (Senior Corporate Project Manager) on 04/19/2018: A standardized manual to assist with processes and frameworks surrounding project management (tiering, communications, reporting, risk assessment, documentation, and close-out) is ready to be published. PM Manual planned publish date: May 18, 2018	
The Region should develop and implement a formal risk Management process for large capital projects.	Region to engage professional services to help develop an integrated approach for project Management. The project scope of work will include the following: Staff training for relevant project staff.	As per correspondence Kashif Siraj (Manager, Project Management Office)) on Jan 11, 2019: Region launched a PMO that is rolling out a toolkit shortly along with the templates to introduce consistent practices & documentation on capital projects. As part of these standards a consistent approach to formal risk management on capital projects is also being developed and rolled out.	
		As per Maciej Jurczyk (Director, Internal Control and Organizational Performance), August 20, 2018: A corporate re-organization will take place on September 10, 2018 resulting in the creation of a dedicated Project Management Office (PMO). The PMO will be responsible for rolling out a best-in-class PM methodology that	

7. The Region should develop and implement standardized project reporting, which provides relevant, accurate and timely information, and is scalable according to the project.

- 7. Review of current corporate processes to:
 - Determine immediate actions required to have all Burgoyne Bridge records brought into compliance
 - 2. Develop document Management best practices
 - compare against lead/best practices and identify areas for improvement
 - ensure implementation of the process across the organization
 - 3. Report back on this review and any proposed recommendations and actions.

includes among other things: a risk management tools and templates.

As per correspondence with Dheeraj Paul (Senior Corporate Project Manager) on 04/19/2018:

The general process related Enterprise Risk Management process and best practices is covered in the PM manual planned publish date: May 18, 2018 44 Regional staff has undergone standardized PM training for globally recognized certification for project managers; training for ISO 9001 certified Project Management Professional (PMP) designation through Project Management Institute (PMI). Region has now 18 recent PM certifications out of 44, who went through the training.

As per Dheeraj Paul (Senior Corporate Project Manager) on 01/11/2018:

A Regionalized PM manual that reflect each departmental and divisional unique project delivery needs, further respect to project's complexity and size will be made available to better manage projects and related delivery. Anticipated close date: Q2 2018.

A well defined and regionally integrated risk management plan, a level at which risk management will be performed on all Region's capital projects. The frequency of risk management meetings, and risk updates process will be applied on a project as an on-going task through the lifetime of the project to proactively and collectively deal as risk arises.

As per correspondence with Todd Norton (Senior Business Analyst) on Jan 11, 2019:

This initiative is now complete. Standard project and portfolio reporting processes and artifacts for capital projects have been created. Processes templates and artifacts will be revised from time to time as part of the operational functions of the PMO

As per Maciej Jurczyk (Director, Internal Control and Organizational Performance), August 20, 2018:

A corporate re-organization will take place on September 10, 2018 resulting in the creation of a dedicated Project Management Office (PMO). The PMO will be responsible for among other things developing standard project and portfolio reporting across all capital projects. This will involve the investigation of a dedicated PM software to enhance project reporting.

As per correspondence with Dheeraj Paul (Senior Corporate Project Manager) on 04/19/2018: An external project management consultant (CIMA+) retained to assist with the internal resource management and creation of an enterprise-wide PM methodology. A standardized PM manual has been developed (yet to be published) which addresses standardized project reporting, that provides relevant, accurate and timely
information, and is scalable according to the Project. PM manual planned publish date is May 18, 2018 A pilot project is currently underway to test the viability for integration of processes, workflows and techniques to assist with the reporting, project documentation and management of capital project lifecycle.
As per Dheeraj Paul (Senior Corporate Project Manager) on 01/11/2018: A formal standardized project communications and reporting plan which, though standardized, will be adaptable and suitable to all project stakeholders, allowing them to successfully operate in a complex business operations. The plan is to: To improve communication of information within project and across Region To simplify the processes of gathering and disseminating project information.
 To ensure that stakeholders receive necessary information To communicate key messages about project progress To improve Regional support for the project

Recommendation #8	In progress		
Recommendation	Management Action Plan	Follow Up Comments	
The Region should develop and implement a formal document Management process for all projects.	Review of current corporate processes to: 8a. Determine immediate actions required to have all Burgoyne Bridge records brought into compliance	As per correspondence with Tom Jamieson (Associate Director, Application and Information Services) on 01/11/2019: To address gaps around process, management and information governance an audit of information and	
	8b. Develop document Management best practices - compare against lead/best practices and identify areas for improvement	content has been scheduled for Jan. and Feb. This will entail sessions with each Department or Division to inventory key information (including documents) supporting their business, the processes around it and	

- ensure implementation of the process across the organization

8c. Report back on this review and any proposed recommendations and actions

any risks or improvement opportunities. The information gathered through these sessions will support both the Business Intelligence and Enterprise Content Management (including document management) projects. Once this information has been analyzed, it will be used to create requirements for an Enterprise Content Management system which will be included in an RFP. It is anticipated that this RFP will be released in March.

As per discussion with Tom Jamieson (Associate Director, Application and Information Services) on 08/24/2018:

After researching best practices and on the advice of peer organizations who have undertaken similar projects, the team has determined that prior to going to RFP for a technology solution, it would be prudent to evaluate the Corporation's readiness and to develop a strategic roadmap to guide the project.

In June 2018, a vendor with extensive expertise in assessing readiness for government organizations was engaged to facilitate a series of workshops to capture current state for the Region, as well as to assess the maturity of the organization.

It is their recommendation, that the Region has some deficiencies to address before we are able to release an RFP, and that doing so prematurely would be a significant risk for the organization. The areas the Region must focus on prior to RFP are process management and information governance. By addressing these issues, the Region will increase our level of maturity (in information governance and process management). IT Services and the Office of the Regional Clerk, are working jointly on these items.

Therefore, the project members recommend the Region focus on the priority areas identified by the vendor in the short-term prior to issuing an RFP for a technology solution.

The Team also recommends contracting a Project Director using the capital budget for this initiative to oversee and coordinate the various streams of work and to manage deliverables and risk. The team will be bringing this information back to the Project Sponsors to endorse the proposed change of direction and to adjust timelines accordingly.

As per discussion with Tom Jamieson (Associate
Director, Application and Information Services) on
04/20/2018:
Work will commence shortly on an RFP for a document
and information management system with the release of
the RFP targeted for end of June. In the interim and in
parallel with RFP creation, leveraging synergies with the
Business Intelligence project, we will be gathering
requirements, and collecting information to inform the
RFP and the foundational governance and cleanup work
that will be required prior to system implementation.
Anticipated completion date: June 30, 2018
Authorpation define and action define out, 2010
As a ser Tarry Lauries on (Information Technology)
As per Tom Jamieson (Information Technology
Services) on 01/12/2018:
Due to staffing restructuring within Clerk's Office and
Corporate Services, special projects related to document
Management have been transferred to IT Services. This
project will commence once resources and a workplan
are finalized.
Anticipated close date: On hold

Audit: Fleet, Equipment Management and Replacement Process (2016)

Summary of Follow Up Status:

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 28, 2018	Status as of January 08, 2019	Comments
1	In progress	In progress	In progress	In progress	
2	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C-21- 2018
3	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C-21- 2018
4	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C-21- 2018

Recommendation #1	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
1a. Formalize the Fleet Strategy and set priorities or areas of focus to provide direction to fleet services. 1b. The strategy could be supported by a life cycle costing framework or align to the enterprise wide asset Management planning initiatives. 1c. Performance and value metrics should be set to align to strategic directives and should be periodically tracked. 1d. Council approval should be sought once the fleet strategy is documented.	1a. Develop a Fleet strategy statement to be presented to Public Works Committee for approval, prior to seeking approval from Regional Council (update report to Audit Committee to follow). 1b. Fleet strategy will be incorporated into overall Asset Management Plan 1c. Performance measures should be developed and tracked to align with the overall Fleet Strategy. 1d. Review Fleet policies and procedures as required.	As per correspondence with Shawn McCauley (Associate Director, Transportation) on 12/19/2018: 1a. As part of restructuring a new division was created to run this area in 2019, once the new Associate Director is in place the division will finalize the statement. On target to complete this by end of Q1, 2019 As per Shawn McCauley (Associate Director, Transportation) on 08/10/2018: 1a. Missions statement has been finalized and is under review by senior staff. Estimated completion date: 03/31/2019 2 - 4. Previously completed As per Shawn McCauley (Associate Director, Transportation) on 04/03/2018: 1a. Management has reached out to staff regarding the mission statement but the mission statement has not yet been formalized. The winter season was busier than usual which prevented Management from formalizing the mission statement. Anticipated completion date: June, 2018

AC-C 3-2019 February 4, 2019 Appendix 1

	As per Shawn McCauley (Associate Director, Transportation and Ken Williams, (Supervisor, Fleet Operations) on 01/08/2018: Mission statement was drafted but finalization was put on hold due to a reorganization of positions within the department. Management has indicated that they would like to involve staff within the department to get their feedback to fine tune the mission statement ahead of finalization. Anticipated close date: Q1 2018
	1b. Ongoing
	1c. Ongoing
	1d. Ongoing

Audit: Purchasing Card (2017)

Summary of Follow Up Status:

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as August 24, 2018	Status as January 08, 2019	Comments
1	In progress	In progress	Fully implemented	Fully implemented	
2	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C15- 2018
3	In progress	In progress	In progress	Fully implemented	

Recommendation #3		Fully Implemented
Recommendation	Management Action Plan	Follow Up Comments
3a. Procurement and Finance should coordinate activities to improve the monitoring, training, administration of the PCard program.	3a. The procurement and finance team have developed robust training materials for the PCard program. There are modules specific to cardholders and card approvers. All new leaders in the organization are contacted by our Education and Communication Advisor and asked to attend the PeopleSoft for Leaders course which includes a review of the PCard program and the responsibilities of card approvers. Self-paced online training, Purchasing with a Corporate Credit Card, is available to all cardholders on the Regions internal my Finance site. When new cards are issued, cardholders are required to sign and return a cardholder agreement. Management will add a clause to this agreement mandating that cardholders complete the self-paced online training	As per correspondence with Bart Menage on 01/05/2019: Under Training, there is a link to the old Corporate Purchase Card Online Course. Of note, both online courses, PCard training for Cardholders and Preparers and Pcard training for Approvers, have been updated and will be posted on the MyLearning website on Tuesday January 8th. The courses will be in an Adobe Captivate format, allowing Niagara Region to capture stats and both training packages will include some form of a quiz/multiple choice. As per Bart Menage (Director, Procurement &
3b. Procurement and Finance should update the Procurement Card Policy to reflect current conditions and re-communicate the Policy to all cardholders and their respective approvers.	course available on myFinance as part of their responsibilities. 3b. As previously shared with Internal Control and Organizational Performance, as part of the information sharing kick-off session, Management acknowledges the need for amendments to the PCard policy, specifically to split the policy into two documents; the policy itself and a procedural manual. Management had already commenced this review and commit to completing this process by December 2017.	Strategic Acquisitions) on 08/20/2018: PCard Policy and Procedure was approved by ERMS SLT, Niagara Region, CLT, Corporate Services and culminating with Regional Council Approval on July 26, 2018. All current training material is located on The Vine but mandatory purchase card training has not yet been implemented through the Regions eLearning module. Procurement continues to work with Communication Learning staff on the training package and implementation into the module and course calendar. As per Bart Menage (Director, Procurement & Strategic Acquisitions) on 04/21/2018:

3c. Procurement and Finance should expand their usage of available data to analyze cardholder and vendor trends to determine usage levels and identify potential opportunities for improvement and efficiencies.	3c. With a revised policy in place, Management would then endeavor to assess data/spend analytics to identify opportunities for improvement, efficiency and cost savings by leveraging spend and facilitating competitive procurements.	A clause concerning Niagara Region's mandatory purchase card training has been drafted and is under review by the Director of Procurement and Strategic Acquisitions. Once approved, the clause will be added to the Cardholder Agreement form.
		As per Bart Menage (Director, Procurement & Strategic Acquisitions) on 01/15/2018: With regards to Central Corporate Control Improvements, specifically item 2, Procurement has taken great strides in updating the current policy from 2005. This process included engaging in a best practice investigative process and working collaboratively with many departments to ensure the best result for the policy and complimentary procedural manual. Final preparations are ongoing to present the new policy and procedure to ERMS SLT, Niagara Region CLT, and through both Corporate Services Committee and Council. It is anticipated that this process of senior level review and consultation will extend the completion date for this item out to April 2018. Pursuant to the aforementioned assessment of spend and data analytics (already identified on the Procurement Advisory Work Plan) will commence with regards to PCard spend. Anticipated close date: Q2 2018

Audit: Fleet Parts Inventory and Fuel (2017)

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 24, 2018	Status as of January 08, 2019	Comments
1	In progress	In progress	In progress	On Hold	
2	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C 21-2018
3	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C 21-2018
4	Not Started	Not Started	Not Started	Not Started	
5	In progress	In progress	In progress	In progress	
6	In progress	In progress	In progress	In progress	
7	Fully implemented	Fully implemented	Fully Implemented	Fully Implemented	Refer to AC-C 21-2018
8	In progress	In progress	In progress	In progress	
9	Fully implemented	Fully implemented	Fully Implemented	Fully Implemented	Refer to AC-C 21-2018

Recommendation #1	On Hold	
Recommendation	Management Action Plan	Follow Up Comments
1. Fuel dip tests should be conducted two times a week in order to monitor fuel levels and perform reconciliations. The twice-weekly dip tests should be conducted at the start of the work week, first shift Monday morning, and then the end of the work week, last shift Friday evening.	1. As per recommendation 1, Niagara Region staff to conduct manual dip test twice weekly to reconcile fueling transactions throughout the week. Dip stick ordered and received on Nov 22nd. Implementation starting week of November 27, 2017.	As per Jennifer Wilson (Supervisor, Waste Management) on 01/22/2019: Action plan is awaiting to be presented and approved by Council. No data has been provided when it will be presented at this point. As per discussion with Jennifer Wilson (Supervisor,
2. Fuel reconciliations should be completed on a daily basis. The reconciliations should account for opening fuel levels, deliveries and consumption for the day. This amount should be compared and reconciled to the twice-weekly fuel dip tests. Variances should be examined.	2. As per recommendation 2, Niagara Recycling staff will complete fuel reconciliations on a daily basis. Niagara Region's Contract Manager will be responsible for reviewing tracking spreadsheet every month to look for variances/discrepancies. First monthly review scheduled for January 2018. Daily reconciliations start date November 13, 2017.	Waste Management) on 08/10/2018: 1. Fully implemented 2. Fully implemented 3. Dependent on Council's direction and will be implemented once a decision is known 4. Fully implemented
3. Assuming that the Niagara Region will retain ownership and continue to operate the Recycling Centre, Niagara Region staff should research the cost associated, and if feasible, install automatic fuel pumps in correlation with an automated fuel management system (such as the CoenCorp system utilized by Public Works).	3. As per recommendation 3, and dependent on Council's direction on Niagara Region's role in recycling processing operations as part of the Waste-Free Ontario Act, Niagara Region's Contract Manager will research automated systems used at Regional facilities, and, depending on cost, will procure and install automatic fuel pumps in correlation with an automated fuel management system.	As per correspondence with Jennifer Wilson (Supervisor, Waste Management) on 04/04/2018: 1. Fully implemented 2. Fully implemented 3. Dependent on Council's direction 4. Fully implemented
4. In the interim, the Recycling Centre should continue and/or begin the following: a. Implement and enforce a policy whereby circle checks are not allowed to be turned in with nil values. The employee is required to fill out the circle check, indicating the amount of fuel they pumped into their unit or they are required to indicate that nil fuel was pumped and initial the box. Each form should be signed by the operator on a daily basis in order to improve and foster accountability.	4. Implementation of a ticket based system for all fueling transactions. Staff will no longer be documenting information on circle checks, as circle check is complete at beginning of shift and fuel transactions occur throughout the day.	
b. A ticket system should be implemented for any fueling transactions not completed at the time of the circle check. The ticket system will ensure that there is a tracking system in place for all fuel transactions which will improve record keeping, reporting and directly affect the ability to complete reconciliations.	Alternatively, as per recommendation 4b, ticket information includes the following: date, unit number, fuel usage, odometer reading and signature of operator. Complete - started Nov 13, 2017.	

Recommendation #4	Not Started	
Recommendation	Management Action Plan	Follow Up Comments
Public Works should research the cost and, if feasible, implement the CoenCorp automated fueling system at the Smithville yard.	Staff are in the process of reviewing the recommendations from a consultant report on Niagara Patrol Yards Retrofit, Smithville and Pelham Patrol Yards completed in 2013 that has been on hold while we completed an external audit on Snowplowing, Road Maintenance and Landscaping Services. Based on the recommendations in these reports and the condition of the fueling system at the Smithville Yard, staff are not recommending installing the CoenCorp fuel system at this time. If staff follow through with the recommendation to consolidate both yards into one facility, the fueling system at Pelham was built to be transferable to the new consolidated yard location. The current fuel storage system as Smithville is undersized and was built only as a temporary measure. If a final decision is made to keep Smithville Patrol Yard open than the costs of installing new tanks with the CoenCorp fuel system will be incorporated within the capital budget.	As per correspondence with Shawn McCauley (Associate Director, Transportation) on 12/19/2018: Delayed until restructuring of the division is complete. Estimated completion date: June 30, 2019 As per correspondence with Shawn McCauley (Associate Director, Transportation) on 08/10/2018: A consultant is going to be hired to conduct a yard rationale study in 4th quarter of 2018. Reported as per May 7, 2018: Dependent on decision to consolidate the yards or not.

Recommendation #5	In Progress		
Recommendation	Management Action Plan	Follow Up Comments	
Inventory cycle counts should continue to be conducted on a quarterly basis. Staff working at each respective yard should be informed of the count results and required to follow up with Management on variances.	Inventory cycle counts are part of our current inventory process guideline manual in Cityworks, this document will be updated to include the M5 inventory.	As per discussion with Shawn McCauley (Associate Director, Transportation), on 12/19/2018: 1-3. Process updated and utilized to conduct year end counts. 4. Previously completed. 5. Upgrade required as part of the division's mobile	
Management should develop an internal guideline as to how many variances are considered to be an acceptable variance	2. Current Cityworks internal inventory process identifies a variance reporting mechanism and a process for recounts if there are any unusual variances. The manual will be updated to include the M5 inventory including identifying acceptable variance limits.	solution strategy. Currently waiting on IT. 6. Delayed until the restructuring of the division is complete Estimated completion date: June 30, 2019	
		As per discussion with Shawn McCauley (Associate Director, Transportation) on 08/10/2018:	

3. When unacceptable variances are noted on more than one occasion, Management should conduct cycle counts on a more frequent basis (bi-monthly) in order to ensure inventory existence and accuracy until counts are within acceptable variance limits 4. The Smithville inventory storage room should be reorganized using the bin location format applied at the	The update manual will include a section on a procedure to handle unacceptable variances including recommending bimonthly counts where required Staff will reorganize Smithville into bin locations after the 2017 year end inventory reconciliation	 In progress In progress In progress Complete In progress Consultant to be hired to conduct yard rationale study in 4th quarter of 2018.
5. Management should implement a system, whereby staff taking an inventory item off the shelf, he/she uses the hand held scanner to scan the barcode affixed to the shelving to add the item to the work order rather than manually adding the item, mitigating the risk of an incorrect item being added to the work order 6. If Public Works decides to consolidate the current yard locations, they should investigate the incremental cost of adding a stock clerk to the remaining location(s)	5. Current scanners are not capable of adding items directly onto a work order. Staff will review and determine if this functionality can be programmed into our current scanners or will an upgrade be required 6. Staffing levels will be reviewed once a decision on the yard locations is made, including adding an additional staff member to deal with the stock at the Patrol Yards. Currently there are only two Road Operations Clerk for the four Patrol Yards. These positions have stock responsibility in their job descriptions, adding a third in a three yard model will help control both fleet and road inventory levels	As per correspondence with Shawn McCauley (Associate Director, Transportation and Fleet Operations) on 04/05/2018: 1. In progress due to staffing. There has been a vacancy in the Traffic Manager position and as a result, have not been able to fully implement management action plan. Anticipated completion date: 09/30/2018 2. In progress due to staffing. See comment above. Anticipated completion date: 09/30/2018 3. In progress due to staffing. See comment above. Anticipated completion date: 09/30/2018 4. Fully implemented 5. In progress due to staffing. See comment above. Anticipated completion date: 09/30/2018 6. Dependent on determination on whether or not to consolidate yards

Recommendation #6	In Progress		
Recommendation	Management Action Plan	Follow Up Comments	
Management should continue to encourage the use of the key fobs and the follow up of employees when it is noted that the key fob was not used at the respective gas station	We observe approximately a 30% utilization of the key fob vs. Visa card. We will communicate with staff to use key fob or Visa Card with key fob vendor as first choice, and use alternate fuel providers if key fob vendor is not available. We will set up a meeting involving upper management, fleet and our Operation's team to discuss the best course of action to increase the use of the key fob	As per conversation with Ralph Paolini (Manager, EMS and Support Services) on 12/19/2019: Procurement is in the process of completing the work. As per conversation with Ralph Paolini (Manager, EMS and Support Services) and Bart Menage (Director, Procurement and Strategic Acquisitions) on 08/20/2018: Procurement is in the process of completing the work.	
2. Management should inquire with the key fob provider if	We will reach out to Corporate, ICOP and key fob		
there are any increased savings plans based on volume	vendor sales representative to see if further discounts		
of fuel they are purchasing on an annual basis	can be gained or if there are other incentive programs		

	Appendix i
available since we adopted the use of the key fob. Our	As per correspondence with Ralph Paolini (Manager,
Pcard is used approximately 70% of the time and	EMS and Support Services) on 03/27/2018:
reconciling the monthly statement is time consuming and	1. Fully implemented.
lends itself to risk of human error. We will be seeking out	
advice from our Region IT dept. to see if they can come up with an electronic solution to automatically populate our current internal spread sheets to mitigate human error.	2. EMS has found 2 providers that would meet all of their requirements (volume discounts, store hours, security aspects when dealing with PCard of fob, recoding keeping, user friendliness). EMS is currently working with Procurement on completing this MAP.

Recommendation #8	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
1. Management should discuss with the key fob provider if there is a capacity in which they can receive the statement electronically and download them into their vehicle operation data report or online platform in order to save time and mitigate the risk of human error 2. Management should download PCard transactions and download the transactions into their vehicle operation data report or online platform in order to save time and mitigate the risk of human error. EMS may want to discuss with the IT department a spreadsheet in which the PCard data can be downloaded, sorted and summarized based on their requirements for the vehicle operation data report.	1. We will meet with Corporate and fuel provider to investigate any software upgrades (mileage, vehicle call sign ID, signature, cost and litres used) of their system for reconciling monthly statements 2. Our Pcard is used approximately 70% of the time and reconciling the monthly statement is time consuming and lends itself to risk of human error. We will be seeking out advice from our Region IT dept. to see if they can come up with an electronic solution to automatically populate our current internal spread sheets to mitigate human error.	As per conversation with Ralph Paolini (Manager, EMS and Support Services) on 12/19/2019: Procurement is in the process of completing the work. As per conversation with Ralph Paolini (Manager, EMS and Support Services) and Bart Menage (Director, Procurement and Strategic Acquisitions) on 08/20/2018: Procurement is in the process of completing this work. As per correspondence with Ralph Paolini (Manager, EMS and Support Services) on 03/27/2018: For both Management Action Plan 1 and 2, EMS has found 2 providers that would meet all of their requirements (volume discounts, store hours, security aspects when dealing with PCard or fob, recording keeping, user friendliness). EMS is currently working with Procurement on completing this MAP.

Audit: Mobile Telecommunications (2017)

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 24, 2018	Status as of January 08, 2019	Comments
1	In progress	In progress	In progress	Fully implemented	
2	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C-21-2018
3	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Refer to AC-C-21-2018
4	In progress	In progress	In progress	Fully implemented	
5	In progress	In progress	In progress	Fully implemented	
6	In progress	Fully Implemented	Fully implemented	Fully implemented	Refer to AC-C-21-2018
7	In progress	In progress	In progress	In progress	
8	In progress	In progress	In progress	In progress	

Recommendation #1	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments
IT should reconcile the AirWatch listing with the Rogers listing and investigate all differences.	AirWatch is a configuration management tool. IT will review the difference between AirWatch and Rogers listing and reconcile.	As per correspondence with Julie Max (01/07/2019): The smartphone refresh has been completed and all telecom assets have been captured and recorded with our Incident Monitor
The reconciled inventory listing should ne updated and regularly maintained for all distributed and redeployed devices. Additionally, IT should develop their own internal tracking	IT will incorporate a workflow within the Servicedesk tool to ensure AirWatch database is maintained and updated with any moves, adds, or changes. The Servicedesk tool will also serve as asset management repository.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/10/2018: A corporate refresh will be starting September 10, 2018 and is expected to last 4 to 6 weeks. All new inventory will be put into Incident Monitor system as assets that will be formally tracked. This will be in place for all Telecom assets that have appropriate value and are identifiable by a serial number/IMEI number moving forward. Expected completion date: October 31, 2018. As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on
		1. Currently underway Anticipated completion date: 09/30/2018 2. Internal processes are underway to ensure
		inventory lists are updated and maintained Anticipated completion date: 09/30/2018

Recommendation #4	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments
The Region should capitalize on the functionality within current operating systems and future reporting tools being considered to better identify, monitor and report on excessive usage in order to improve overall compliance rates.	Currently invoices are distributed to the relevant departments and there is no easy way to review overages and trends.	As per correspondence with Julie Max (01/07/2019), Corporate Usage and controllership oversight – Telecom Expense System Pilot is complete and we will be rolling it out in the fall. Pilot in IT was successful. Waiting on Rogers VOR to be signed before we can proceed with implementation. Est completion date Q4 2018 –
2. IT should develop the competencies within their staff complement to provide corporate oversight to the mobile device program and improve reporting to local managers.	IT will continue to negotiate the acquisition of a 3rd party mobile billing management tool. The mobile billing tool should have the ability for reports to be auto	Finalizing legal agreement. Estimated completion for Telecom Expense system will be end of Q1 2019.
	generated for distribution to staff, accountable managers and senior management for review and approval of cellular invoices. This will assist supervisors and	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/10/2018:
	managers in identifying excessive usage, usage trends and provide better transparency and accountability.	The Telecom Expense System Pilot is complete and it will be rolling out in the fall, 2018. Pilot in IT was successful. Waiting on Rogers VOR to be signed before the implementation can proceed. Estimated completion date: 12/31/2018
		As per discussion with Julie Max (Associate Director, Infrastructure and Operations) on 04/24/2018: A proof of concept is currently underway to assess 3 rd
		party billing with reporting capabilities. Anticipated completion date: 09/30/201

Recommendation #5	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments
1. All phones retrieved from staff no longer employed at the Region should be given back to IT to redeploy corporately to new mobile applicants. 2. An email group that includes IT staff managing the active directory and mobile telecommunications should be set up. When an employee leaves the organization, HR will email the group of the employee so that the mobile IT staff can run a search on Rogers to identify if they are a mobile user. If they are, IT can contact the local manager to retrieve the device for redeployment or to drop to a voice plan only.	1. IT will be implementing a new process to ensure that all hardware (PC's and smartphones) is collected by IT for redeployment. 2. IT will be modifying its workflow process to ensure Telecom staff is notified of any moves, adds, changes or terminates for collection and disabling of smartphones.	As per correspondence with Julie Max (01/07/2019): Process modifications – IT has collected and continues to collect smartphones from staff. With the Telecom Expense system that will be put in place, managers will get notice of active and inactive phones in their Dept ID. IT will be communicating the expectation that phones no longer in use will be made aware to us via servicedesk so that Telecom will be able to arrange cancelations and redistribution of hardware where necessary. Est completion date Q4 2018. IT has created an IT asset form for staff to request and Dept ID owners to approve Completed As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/10/2018: IT has collected and continues to collect smartphones from staff. With the Telecom Expense System that will be put in place, managers will get notice of active and inactive phones in their Dept ID. IT will be communicating the expectation that phones no longer in use will be made aware to us via service desk so that Telecom will be able to arrange cancelations and redistribution of hardware where necessary. Estimated completion date: 12/31/2018 As per discussion with Julie Max (Associate Director, Infrastructure and Operations) on 04/24/2018: Currently underway. Anticipated completion date: 06/30/2018

Recommendation #7	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
IT staff should research the benefits of 3rd party mobile management software further and consider implementation	IT staff is currently assessing Telecom Expense Management (TEM) solutation to assist with management of devices and to achieve great transparency for the IT staff, managers and end user. Costs associated with a TEM solution run in the range of a \$3-\$10/device/month.	As per correspondence with Julie Max (01/07/2019): TEM system POC just completed – Q4 likely for prod deployment once we get VOR signed. – end of Q1 2019 As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/10/2018: TEM system POC has been completed. Product deployment will likely be Q4, 2018 once the VOR is signed. Estimated completion date: 12/31/2018
		As per discussion with Julie Max (Associate Director, Infrastructure and Operations) on 04/24/2018: Currently underway. Anticipated completion date: 09/30/2018

Recommendation #8	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
The Region should reach out to Rogers and draft and formalize a written contract.	Report DCAO01-2017, Cellular Devices & Services Contract was approved at Corporate Services Committee on April 19, 2017. The recommendation was to leverage the existing VOR agreement. This was approved. Procurement and Legal are in the process of formalizing the agreement with Rogers.	As per correspondence with Julie Max (01/07/2019): VOR – Should be completed soon. Legal currently signing it and we are waiting on them – Q4 likely for completion - end of Q1 2019 As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/10/2018: The VOR should be completed soon. Currently awaiting signatures from legal. Estimated completion date: 12/31/2018 As per discussion with Julie Max (Associate Director, Infrastructure and Operations) on 04/24/2018: Currently underway. Anticipated completion date: 05/30/2018

Audit: Waste and Recycling Drop-Off Depot Agreement Audit (2018)

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 24, 2018	Status as of January 08, 2019	Comments
1	N/A	N/A	In progress	In progress	
2	N/A	N/A	In progress	Fully Implemented	

Recommendation #1	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
1. Waste Management staff at Niagara Region should discuss with the vendor the possibility of including tipping fee as one of the selected data fields on the daily transfer of information. Waste Management should request that the pre-tax tipping fee amount, tax amount and gross tipping fee amount be reported on a daily basis so that monthly and quarterly reconciliations may be completed easier.	Niagara Region holds quarterly meetings with the vendor. The next meeting is to be scheduled in late Q2. The issue will be brought forward to see if tipping fee can be a selected data field. The Region will investigate if the quarterly report can be done on a monthly basis showing pre-tax tipping fee amount, tax amount and gross tipping fee amount.	As per correspondence with Andrew Winters (Waste Disposal Operations Program Manager) on 01/09/2019: 1. The vendor currently are unable to select this data field. Next time they have to upgrade their program they will look at feasibility if they can implement this request. 2. The vendor agreed that they would add the tonnages to the quarterly report. They will start in Q4 report.
2. Waste Management staff should discuss with the vendor, the possibility of enhancing the reporting process so that both tonnage and revenues are reported on a quarterly basis. As a result of the enhancements, Waste Management staff may be able to reconcile the systems, compute royalty amounts and monitor information with increased ease and efficiency.	2. Niagara Region hold quarterly meetings with the vendor. The next meeting is to be scheduled in late Q2. The issue will be brought forward to see if tonnage can be added to the quarterly report. If the vendor is in agreement to supply this information.	As per discussion with Andrew Winters (Waste Disposal Operations Program Manager) on 08/16/2018: A meeting was held with the Vendor on June 4, 2018 in which items #1 and #2 were raised. The Vendor is going to go back to their IT department for validation but Vendor didn't think it would be an issue. MAP#1 is still on target to be completed for the original September 30, 2018 completion date. The Vendor indicated that item #2 would be completed at the same time.

Recommendation #2	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments
Waste Management staff, with the help of necessary subject matter experts, should review the capabilities of the system in order to determine if it is possible to correct the system so that all transactions associated with a ticket are uploaded into the Region's system. As a result, the Region would be ensuring the completeness of the data in the system on a daily basis.	Niagara Region will put a request into IT to review the program and identify what options are available.	As per correspondence with Andrew Winters (Waste Disposal Operations Program Manager) on 01/09/2019: The action plan has completed As per discussion with Andrew Winters (Waste Disposal Operations Program Manager) on 08/16/2018:

	The request has been submitted to the IT department. It is expected to de dealt with in Q3/Q4 2018 due to other projects Waste Management is working on with IT. Expected completion date: 12/31/2018

Audit: Grants and Incentives Audit (2018)

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 24, 2018	Status as of January 24, 2019	Comments
1	N/A	N/A	On Hold	In progress	
2	N/A	N/A	On Hold	In progress	
3	N/A	N/A	On Hold	In progress	
4	N/A	N/A	On Hold	In progress	

Recommendation #1	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
1. Regional Council needs to reaffirm the alignment of current programs with Council objectives and/or priority projects at least once during each term of Council. 2. Regional Council needs to rationalize the number of programs that it manages and funds and ensure that new or remaining programs have direct alignment to the Region's core mandate. The Region should develop an exit strategy to terminate its participation in the following programs: Building and Facade; Heritage Restoration and Improvement; Environmental Assessment; Planning Studies; Residential Grant/Loan 3. Regional Council needs to reconsider its participation in the following programs given the limited client uptake: Agricultural Buildings and Facilities Revitalization Grant/Loan; Agricultural Feasibility Study Grant; and Affordable Housing Grant/Loan Program 4. The Region needs to re-evaluate its role as the administrative lead in Niagara Investment in Culture and consider either providing block funding to Local Area	Representatives from Economic Development, Finance and Planning and Development have reviewed the observations and associated comments provided in Phase 1 and 2 of the Grant and Incentives Programs audit. The implementation of the observations as proposed needs to be carefully considered as there would be significant impact on: - the delivery of grant and incentives programs - resources allocated within Regional Departments and Local Area Municipalities; and - the applicants of the grant and incentive programs In order to adequately assess the observations and make considered recommendations on grant and incentive programs moving forward, it is recommended that a Working Group is established consisting of representatives from Economic Development, Finance, Planning and Development and ICOP. The Working Group will report to CLT.	As per correspondence with Marian Bannerman (Program Manager, Grants and Incentives) on 01/24/2019: As outlined in the Management Action Plan, an interdepartmental Incentive Review Working Group met several times during Q4 2018 to develop recommendations regarding potential incentive target areas and options for program resourcing and delivery. An education session for Regional Council on existing Regional incentive programs and the status and next steps of the Incentive Review is anticipated in February 2019, with a similar session anticipated to be provided for interested Local Area Municipal staff in March. Following leadership review of the Working Group recommendations, a report will go forward (likely in May-June 2019) to Planning and Economic Development Committee and Regional Council for consideration. As per Doug Giles (Director, Community and Long Range Planning) and Marian Bannerman (Grants and Incentive Program Manager) on 08/24/2018:

Municipalities or transfer full administrative responsibility to an external agency (i.e.: Niagara Prosperity Initiative, Prokids).	A report will be going go Planning and Development Committee that highlights the result of a survey of Local Area Municipalities. A full strategy on how to implement the recommendations will be developed in Q1 2019
5. The Region should consider repurposing budgets and resources from any programs it is no longer financially supporting to those programs that have high strategic alignment to ensure these programs are being delivered at the appropriate financial scope and scale.	following an orientation to the various programs delivered for the new Regional Council.

Recommendation #2	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
1. Regional staff needs to develop foundational documents such as a Master Agreement and Standard Operating Procedures in conjunction with its LAM partners. Some items to be included within the master agreement are: a. Details of the program objectives from a Regional perspective b. Regional criteria to be considered during application evaluation/approval and post-award monitoring phases, i.e. jobs created, minimum external investment threshold. c. Enforcement of Regional standards and approval procedures 2. Regional staff, along with LAMs, should define its optimal business model, such as a delegated authority model. This will establish the parameters around the business relationship and support the description of roles and responsibilities for all parties in the delivery of grant and incentive programs. a. If the Region continues with Type B and Type C program models, whereby the LAMs provide post-award monitoring or verification, then a right to audit clause should be developed and enforced. b. As an alternative, if a right to audit clause cannot be agreed upon within the master agreement, the Region should consider implementing an indemnity clause to protect the Region from exposure to legal or financial liability. 3. Following the drafting of a Standard Operating Procedure for all the programs, the Region should develop flow charts and work descriptions that detail the following service levels: a. Appropriate level of due diligence required from each party	Representatives from Economic Development, Finance and Planning and Development have reviewed the observations and associated comments provided in Phase 1 and 2 of the Grant and Incentives Programs audit. The implementation of the observations as proposed needs to be carefully considered as there would be significant impact on: - the delivery of grant and incentives programs - resources allocated within Regional Departments and Local Area Municipalities; and - the applicants of the grant and incentive programs In order to adequately assess the observations and make considered recommendations on grant and incentive programs moving forward, it is recommended that a Working Group is established consisting of representatives from Economic Development, Finance, Planning and Development and ICOP. The Working Group will report to CLT.	As per correspondence with Marian Bannerman (Program Manager, Grants and Incentives) on 01/24/2019: As outlined in the Management Action Plan, an interdepartmental Incentive Review Working Group met several times during Q4 2018 to develop recommendations regarding potential incentive target areas and options for program resourcing and delivery. An education session for Regional Council on existing Regional incentive programs and the status and next steps of the Incentive Review is anticipated in February 2019, with a similar session anticipated to be provided for interested Local Area Municipal staff in March. Following leadership review of the Working Group recommendations, a report will go forward (likely in May-June 2019) to Planning and Economic Development Committee and Regional Council for consideration. As per Doug Giles (Director, Community and Long Range Planning) and Marian Bannerman (Grants and Incentive Program Manager) on 08/24/2018: A report will be going go Planning and Development Committee that highlights the result of a survey of Local Area Municipalities. A full strategy on how to implement the recommendations will be developed in Q1 2019 following an orientation to the various programs delivered for the new Regional Council.

	/ Appoindix 1
b. Communication requirements and frequency,	
c. Documentation to support application approval and	
payment processing	
d. Ongoing and post-award monitoring to ensure	
application criteria have been satisfied; and	
e. Timeliness and quality of project, program and	
performance reporting.	

Recommendation #3		In Progress
Recommendation	Management Action Plan	Follow Up Comments
1. Regional staff needs to further develop performance measures for all of its grant and incentive programs along with templates to support the LAMs in the collection, verification and reporting on the program successes. As a foundation the Region should develop performance measures categorized by volume, outputs, and performance and qualitative as described in Appendix X. 2. Regional staff needs to develop an effective postaward monitoring methodology, especially for Type C programs, those administered by the LAMs and funded by the Region. 3. Regional staff needs to conduct regular comprehensive program evaluations (i.e. once per Council term) to ensure program objectives are continuously satisfying its original and intended goals. For all programs the Region should develop a sunset clause that defines the timing of when to conduct program evaluations.	Representatives from Economic Development, Finance and Planning and Development have reviewed the observations and associated comments provided in Phase 1 and 2 of the Grant and Incentives Programs audit. The implementation of the observations as proposed needs to be carefully considered as there would be significant impact on: - the delivery of grant and incentives programs - resources allocated within Regional Departments and Local Area Municipalities; and - the applicants of the grant and incentive programs In order to adequately assess the observations and make considered recommendations on grant and incentive programs moving forward, it is recommended that a Working Group is established consisting of representatives from Economic Development, Finance, Planning and Development and ICOP. The Working Group will report to CLT.	As per correspondence with Marian Bannerman (Program Manager, Grants and Incentives) on 01/24/2019: As outlined in the Management Action Plan, an interdepartmental Incentive Review Working Group met several times during Q4 2018 to develop recommendations regarding potential incentive target areas and options for program resourcing and delivery. An education session for Regional Council on existing Regional incentive programs and the status and next steps of the Incentive Review is anticipated in February 2019, with a similar session anticipated to be provided for interested Local Area Municipal staff in March. Following leadership review of the Working Group recommendations, a report will go forward (likely in May-June 2019) to Planning and Economic Development Committee and Regional Council for consideration. As per Doug Giles (Director, Community and Long Range Planning) and Marian Bannerman (Grants and Incentive Program Manager) on 08/24/2018: A report will be going go Planning and Development Committee that highlights the result of a survey of Local Area Municipalities. A full strategy on how to implement the recommendations will be developed in Q1 2019 following an orientation to the various programs delivered for the new Regional Council.

Audit: Information Technology Security and Data Backup Controls Audit (2018)

Recommendation Number	Status as of January 29, 2018	Status as of May 7, 2018	Status as of August 24, 2018	Status as of January 15, 2019	Comments
1	N/A	N/A	Fully Implemented	Fully Implemented	
2	N/A	N/A	Fully Implemented	Fully Implemented	
3	N/A	N/A	Fully Implemented	Fully Implemented	
4	N/A	N/A	Fully Implemented	Fully Implemented	
5	N/A	N/A	Fully Implemented	Fully Implemented	

6	N/A	N/A	In progress	Fully Implemented	
7	N/A	N/A	Fully Implemented	Fully Implemented	
8	N/A	N/A	Fully Implemented	Fully Implemented	
9	N/A	N/A	In progress	Fully Implemented	
10	N/A	N/A	Fully Implemented	Fully Implemented	
11	N/A	N/A	In progress	In progress	
12	N/A	N/A	In progress	Fully Implemented	
13	N/A	N/A	In progress	In progress	
14	N/A	N/A	Fully Implemented	Fully Implemented	
15	N/A	N/A	In progress	In progress	
16	N/A	N/A	In progress	In progress	
17	N/A	N/A	Fully Implemented	Fully Implemented	
18	N/A	N/A	In progress	In progress	
19	N/A	N/A	In progress	Fully Implemented	
20	N/A	N/A	Fully Implemented	Fully Implemented	

Recommendation #6	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments
A big number of users were granted access to various HR and payroll related tasks such as update the employee Pay data, and update employee pay sheets. Review the current list of users that have these roles to determine if access is required for each user for all permissions within the roles.	Management has undertaken a review of all user and corresponding roles. Access and security was updated to reflect functional roles both within and outside of HR, and restricted based on job role requirements. A significant reduction was achieved, and a process was implemented to review on a regular go forward basis.	As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 12/21/2018: Completed. Final security role prepared for production in first pay in January 2019. Quarterly review in place. As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 08/23/2018: All security was updated to role based security, with the exception of one role still requiring a profile edit. Additionally, a standard operating procedure was completed to maintain security profiles, and a quarterly review is now in place to ensure ongoing compliance. Furthermore, all report access was updated to reflect new security profiles, and updates to security request form is completed to reflect new standard. Estimated completion date: 09/30/2018

Recommendation #9	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments

Review conflicting components and associated pages within the roles to determine if any conflicting functions may be removed and included as part of another role. For most SOD conflicts identified, management confirmed the existence of additional compensating controls that address the risk or that access is required as is. We recommend management to revisit the rule and role designs to validate the possibility to address the risk at the access rule and role design level.

Management has reviewed this issue and already completed several changes to conflicting Security profiles based on role. In addition, management is working with 3rd party support provider to create additional

Profiles to further accommodate an appropriate level of segregation where existing profiles are limited.

As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 12/21/2018:

Final security role has been completed.

As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 08/23/2018:

One role profile is still under development to ensure appropriate access and segregation. Estimated completion date: 09/30/2018

Recommendation #11	In Progress	
Recommendation	Management Action Plan	Follow Up Comments
A. It is recommended to limit the access from the branch locations to the Region's network by placing the branch locations into a separate security zone and only allow the bare minimum required for business operation. B. The branch location's network is to be segmented; separating the managed from the unmanaged devices and only allow access to the Region's network to managed devices. - Segment end-user devices, included managed devices, into controlled zones treated as semi-trusted to limit exposure to critical infrastructure as application and database servers.	A. Non Corporate internet is currently on separated network segmentation with no communication to the corporate network. We are implementing physical security to the ports (network port locks) on the non Corporate internet ports of the switch at the branch office locations to reduce risk. B. The Region will be implementing segmented security zones through Corporate firewall for critical servers to reduce exposure.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: A. The network locks have been purchased and are scheduled to be installed in Regional facilities. Completed B. The current firewall migration is underway, and upon completion the segmented security zones will be in place as indicated. Security Zones have been configured and scheduled for implementation in Q1 2019. As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018: A. The network locks have been purchased and are scheduled to be installed in Regional facilities. B. The current firewall migration is underway, and upon completion the segmented security zones will be in place as indicated.

Recommendation #12	Fully Implemented	
Recommendation	Management Action Plan	Follow Up Comments
No vetted configuration hardening has taken place on the firewall devices. A hardened configuration has insecure services disabled and does not allow for insecure network protocols (i.e., source based routing, ICMP redirect, ARP poisoning).	A. Current initiative is underway to replace the end of life firewalls.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: The current firewall migration is underway, and upon completion the security hardening will be completed as indicated. Completed.
A. Apply hardened configurations to the firewalls [1-4].		As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018:
B. Identify which hardened configuration guides are available for the next firewall setup project.	B. Hardening configuration guides will be implemented by the vendor as part of the new firewall project.	

Appendix 1
The current firewall migration is underway, and upon
completion the security hardening will be completed as
indicated.
Estimated completion date: 12/31/2018

Recommendation #13		In Progress
Recommendation	Management Action Plan	Follow Up Comments
Identify operating systems in use on each ASA in use by the Region and identify all the latest versions available for installation.	Currently underway	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: 1. Completed
2. Install the latest version available for all Cisco ASA firewalls.	2. Currently underway	Budget has been allocated in 2019 for the purchase of new ASA's as the current ones have memory limitations. Currently procuring hardware. Anticipated completion Q3 2019
3. Replace firewalls for a more recently released firewall system which is expected to be supported for the intended lifecycle of the firewall.	3: ASA firewall replacements will be budgeted for in 2019.	3. Completed
4. Use a vulnerability assessment solution to identify old versions of firmware and software. A vulnerability assessment solution generally provides information on new releases of firmware and software for monitored devices.	4: The Region regularly conducts security assessments with 3rd party vendors to help identify these areas. The most recent being January 2018. We will be assessing a vulnerability assessment solution further.	4. SAS product will need further investigation.
5. To limit exposure to known vulnerabilities in unsupported firmware and software releases, ensure equipment in use is running firmware and software which	5: It should be noted that mitigation solutions have been put in place to deal with unsupported firmware and software to limit vulnerabilities. Staff have enrolled to receive vendor notifications for hardware and software	5. Completed
is still supported by the vendor.	updates and do review and assess notifications for exposure and risk. We will be looking at enhancing our processes with a vulnerability assessment solution.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018: 1. Completed 2. Budget has been allocated in 2019 for the purchase of new ASA's as the current ones have memory limitations. Estimated completion date: 03/31/2019 3. Completed - Budget has been allocated in 2019 for the new hardware replacements of the current asa5505's with PA220's and support. 4. SAS product will need further investigation Estimated completion date: 03/31/2019 5. Completed

In Progress

Recommendation #15		In Progress
Recommendation	Management Action Plan	Follow Up Comments
Disable insecure management and authentication mechanisms on networking devices and in particular the firewalls and force the use of secure mechanisms like SSHv2.	We have set SSHv2 and disabled SSHv1 and have modified the configuration to telnet access. This has been confirmed and verified. No further action is required.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: 1. Completed
Implement centralized authentication for management of networking devices to prevent credential reuse and sharing, allow for password requirements enforcement,	2: Will be implemented with the new firewall implementation and remainder of infrastructure devices by end of year.	This project is currently underway as ClearPass in being setup and configured by the vendor. Completion Q1 2019
and auditability of administrator actions.		As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018: 1. Completed
		2. Will be completed as part of the Aruba ClearPass implementation.
		Estimated completion date: 12/31/2018

Recommendation #16		In Progress
Recommendation	Management Action Plan	Follow Up Comments
Formalize and agree with the CAB which changes need to be run by the CAB before implementing.	It should be noted that a formal CAB process currently exists. Updates will be added to CAB terms of reference to include a more comprehensive list of standard changes needs along with preapproved SOP's.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: 1. Completed
Keep track of all changes, regardless of their importance or impact, in a formalized change management system storing at least the purpose, executor, approver, rationale, and request and execution date.	2: This will be addressed with changes to CAB processes.	Currently investigating a CMDB tool - Change Management Database
uale.		As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018: 1. Current CAT policy is being revised to include the new processes identified in response, certain SOP's have been created for standard changes. Estimated completion date: 12/31/2018
		Currently investigating a CMDB tool - Change Management Database Estimated completion date: 06/30/2019

Recommendation #18

Recommendation	Management Action Plan	Follow Up Comments
A1. Create a patch management policy that outlines the objectives of patching, roles and responsibilities, steps to evaluate criticality, testing and handling of exemptions.	A 1: There is currently an SOP in place to implement operating systems securities patches. We will be looking at enhancing current practices.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: A 1. SOP for OS and security patches completed.
A2. The patch management policy should include procedures when patches are not applied, risk is assessed, and mitigation or acceptance is documented and approved by the appropriate level.	A 2: We will be implementing a Risk Assessment Framework supported by documented approvals.	A 2. Risk Framework is being developed. As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018: A 1. Currently underway Estimated completion date: 12/31/2018 A 2. Currently underway Estimated completion date: 12/31/2018

Recommendation #19		Fully Implemented
Recommendation	Management Action Plan	Follow Up Comments
A. Recommendations for Finding A: 1. Identify communication channels used by vendors to subscribe to. This enables the Region to identify firmware or operating system updates in a more proactive manner and reduces the chances of missing a critical update.	A 1, 2 & 3: Currently underway. Will be implemented as part of the firewall replacement initiative. B 1: An SOP will be developed documenting processes for firmware or operating systems updates with reference the Risk Assessment Framework.	As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 01/15/2019: Completed
2. Identify communication channels publishing new vulnerabilities for vendors and equipment in use by the Region. This enables the Region to assess the risk change introduced by a new vulnerability and determine whether or not to take mitigating actions.		As per correspondence with Julie Max (Associate Director, Infrastructure and Operations) on 08/20/2018: A1, 2 & 3 are currently underway. Will be implemented as
3. Define a formalized and measurable process around identification of new firmware, operating system updates, and vulnerabilities. This provides the Region with a solid structure on patch management for network security systems and reduces the chance of missing a critical patch or severe vulnerability.		part of the firewall replacement initiative.
B. Recommendations for Finding B: 1. Introduce a formalized and documented policy describing the decision process around installing newly		

released firmware or operating system updates. This allows the Region to make solid and repeatable decisions on installing firmware or operating system updates for network devices		
---	--	--

Audit: Payroll Audit 1 - Timekeeping (2018)

Summary of Follow Up Status:

Recommendation Number	Status as January 08, 2019	Comments
1	In progress	
2	Fully implemented	
3	In progress	

Recommendation #1		In Progress
Recommendation	Management Action Plan	Follow Up Comments
1a. Supervisors/Managers should be given Kronos user logins.	1a. Management is conducting a cost benefit review of adding additional manager timekeeping licenses, allowing for manager level approvals, against the cost/risk of potential payroll errors.	As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 12/21/2018: This review is expected to be completed by the deadline.
1b. The HR Division, in consultation with business units, should develop an approval/sign off business process whereby Supervisors/Managers are reviewing and signing	1b. Management fully supports the need for appropriate manager level oversight on all payroll costs in a consistent fashion. Some operational areas (i.e.: Children's Services) have a well documented manager	

off on the timecards of the staff that they supervise in a consistent manner.	level approval process for timekeeping sign off developed by HR, as well as manager licenses to electronically support this work. Depending on the outcome of item 1 above, HR will provide a documented corporate wide business process that supports manager electronic approval, or a suitable alternative to ensure manager level oversight.	
1c. In the longer term, HR Division should investigate the feasibility of designing a process which consolidates the Supervisor/Manager's approval of time entries and the encoding of time entries into one step.	1c. Management acknowledges the benefits of the time entry and approval being consolidated into one step. While there are technical constraints in implementing this today, HR has included this items as part of their broader HRIS review project currently underway.	

Recommendation #2		Fully Implemented
Recommendation	Management Action Plan	Follow Up Comments
In order to achieve a segregation of duties, Encoders should not be able to sign off on their own timekeeping in Kronos. An effective segregation of duties can be achieved by one of the following approaches: - The Supervisor/Manager of the respective staff should review and signoff on payroll - Encoders in different business units should be paired together and be responsible for signing off the payroll for each other	Management fully supports the need to have appropriate segregation of duties. To achieve this, a communication will be provided to all timekeepers and their managers outlining this requirement and the risks with noncompliance. Where a manager is not licensed and dependent on the review to license all managers (as per Observation 1.1), the alternative required approval will be the timekeepers back up support in all cases. This will prevent approving one's own timecard and decrease risk with greater segregation. Additionally, HR will audit each timekeeper's final entry on a biweekly basis to ensure that in no circumstance an individual has approved their own timecard.	As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 12/21/2018: Completed. Review occurs biweekly to ensure that in no circumstance a timekeeping encoder has approved their own time entry.

Recommendation #3		In Progress
Recommendation	Management Action Plan	Follow Up Comments
3a. Manuals that detail step-by-step procedures should be updated to include Niagara Region business		

procedures. This will allow for time keeping tasks to be
completed consistently throughout the corporation.

- 3b. The HR division should develop training modules for Kronos users. The training should educate the user on the task associated with their specific role(s) within the timekeeping process. The format of training (on-line, in person, etc.) should be decided upon by the HR division in order to effectively suit the corporation.
- 3c. A Champion for each collective agreement should be decided upon and communicated to the encoder group so that when questions arise, Encoders have the necessary resources.
- 3d. Management from respective business units should develop backup/coverage plan for instances when their main Encoder is away from the office or otherwise unable to complete the encoding.

- 3a. Management fully supports updating training materials to include Niagara Region business procedures.
- 3b. Management supports the delivery of timekeeping training and is developing online tools to create greater effectiveness, consistency, timeliness and access in comparison to the prior classroom provided training.
- 3c. Management has considered this. Escalated questions from timekeepers are managed by HR, and recommends that any additional supports in a specific operating area can be determined within the division.
- 3d. Management supports this recommendation and will continue to encourage adequate back up support amongst timekeepers in each operating area. The requirement to utilize a back up resource for one's own encoding will reinforce this need. as per Observation 2.

As per correspondence with Linda Gigliotti (Associate Director, Employee Services) on 12/21/2018:

This review is expected to be completed by the deadline.