

# *The Corporation of the City of Windsor Fire Rescue Compliance (FRC)*

*Final Internal  
Audit Report*

**June 6, 2018**

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Andrea Dejong, Deputy Chief of Support Services, WFRS

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# *Table of Contents*

<b>Internal Audit Context</b>	<b>2</b>
Background Information	2
Scope	3
Internal Audit Objectives	3
<b>Summary of Internal Audit Results</b>	<b>5</b>
Report Classification	5
Summary of Positive Themes	7
Summary of Findings	8
Summary of Significant Findings	10
Management Comments	10
<b>Detailed Observations</b>	<b>11</b>
<b>Considerations for Improvement</b>	<b>19</b>
<b>Appendix A: Basis of Findings Rating and Report Classification</b>	<b>21</b>
<b>Appendix B: Limitations and responsibilities</b>	<b>24</b>
Limitations inherent to the Internal Auditor's work	24

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# Internal Audit Context

## Background Information

Fire Rescue Compliance (FRC) internal audit is part of the Council approved 2017/18 Internal Audit Plan. Internal Audit had been tasked to perform a review of the Apparatus Division and Training Division.

**Apparatus Division:** The Apparatus division is responsible for the maintenance and repair of all vehicles (25 Large Fleet vehicles and 33 Small Fleet vehicles) within the Fire Department, as well as approximately 95% of the equipment carried on them. The Apparatus division is also responsible for the maintenance of 120 Self Contained Breathing Apparatus (SCBA) packs.

The Apparatus division has a target to perform maintenance on the vehicles and the SCBAs once every year. The division was led by the Director of Apparatus and had employed four Technicians. However, the current structure has three Technicians since the Director retired in April 2018 and one of the technicians has been promoted as the new Director of Apparatus. The department also provides maintenance service to fire departments of neighbouring counties which is a source of revenue for the division. The Apparatus division maintains its documentation in paper form and summary details are entered in the Fleet Focus System. Management is currently working on a Request for Proposal (RFP) for a tailor made system which shall cater to the documentation requirements of the Apparatus Maintenance and Inspection activities from planning through execution to completion and performance monitoring.

**Training Division:** Windsor Fire and Rescue Service (WFRS) had a strength of 264 fire fighters in the scope period of 2017. The Training division is tasked with the development and facilitation of the necessary training curriculum required by firefighters and staff to enable safe, efficient and professional delivery of emergency services to our community with an emphasis on safety and customer satisfaction. Training Division has two training officers working with the Acting Chief Training Officer. In the scope period, training division also conducted an 11-week new recruit class for 11 new recruits.

The Training division uses different methods and systems to provide training to new recruits as well as the fire fighters for their ongoing development. The division is currently using LMS (Auxilium) system and Crisis system to record training details along with the use of paper based records.

WFRS is working towards meeting the recommended guidelines of best practices and standards for firefighting; Following are the three key authorities that issue best practices for firefighters and fire departments which are being followed by the WFRS:

- National Fire Protection Association (NFPA) issues best practices for firefighting and fire departments;
- Canadian Standards Association issues standards for breathing apparatus; and
- Jones and Bartlett develops curriculum for firefighter training in line with NFPA recommendations.



NFPA standards pertaining to the training of Firefighters are under consideration for implementation as a mandate in Ontario by January 2019 as per the Office of the Fire Marshall.

Occupational Health and Safety Act (OHSA) requires employers to provide occupational health and safety awareness training to workers. Further, OHSA requires documentation to be retained for the trainings conducted and in the event of an incident OHSA inspectors are authorized to obtain the relevant training records. WFRS follows practices to meet the training and documentation requirements set out by OHSA. WFRS practices assist in maintaining the required standard of firefighter safety.

## ***Scope***

For the purposes of this internal audit, we considered controls over the Apparatus division and the Training division. The internal audit surrounding apparatus included regular review, maintenance and repair of assets. For training, we reviewed the controls over implementation of internal and external standards for training programs.

The scope of our work considered management's attainment of the control objectives spanning the following areas (see Internal Audit Objectives for a list of all in-scope control objectives):

- Apparatus division; and
- Training division.

The scope of this internal audit included an assessment of the controls in effect for the period January 1, 2017 through to December 31, 2017.

## ***Internal Audit Objectives***

In conducting this internal audit, we considered the process and control mechanisms management has in effect to achieve the following control objectives:

### **1. Policies and Procedures for Apparatus/Equipment and Training:**

- 1.1 Documented procedures and policies surrounding training function and apparatus/equipment maintenance exist.
- 1.2 Documented policies and procedures are reviewed periodically by the management.
- 1.3 Compliance/awareness is ensured with the policies and procedures set in place.

### **2. Training for New Recruits and Annual Training Requirements**

- 2.1 Training for new recruits is performed in accordance to the 11 week recruit training program and subsequent three-year probationary to 1st class firefighter promotional process.
- 2.2 Curriculum and annual training requirements are periodically reviewed and updated.
- 2.3 Annual training schedule is prepared and relevant staff are duly notified of annual training requirements which are monitored for completion.
- 2.4 Records for trainings are maintained in light of the requirements of the Occupational Health and Safety Act (OHSA).

### **3. Maintenance and Repairs of Equipment and Apparatus**

- 3.1 Annual maintenance schedule is prepared, reviewed and implemented.
- 3.2 Maintenance work is performed in accordance to the standard work orders.
- 3.3 Progress is monitored in relation to the annual maintenance schedule.
- 3.4 Repaired equipment is tested and approved prior to deployment for active use in a live environment.

#### 4. Compliance with regulatory requirements

- 4.1 Section 21 Guidelines (Ministry of Labor), MTO (Ministry of Transportation) and CSA (Canadian Standards Association) applicable mandatory regulation requirements are adhered to and records are being maintained in accordance to the requirements.
- 4.2 Training officer and Technician training certification requirements are annually assessed for compliance with the applicable regulatory requirements.

### *Specific Scope Exclusions*

Consistent with commonly accepted practices, our work will be dependent on the following management activities which are excluded from the scope of this review:

1. The design, implementation and operation of the Information and Technology (IT) environment and IT general controls, end user computing controls, IT application controls, data integrity of reports used in IT dependent manual controls;
2. Conducting fire safety education programs and smoke alarm checks;
3. Fire fighting services and quality of service delivery;
4. Complaint management and response; and
5. Recording and accounting for assets.

### *Scope Limitations*

During the course of the review the following process characteristics limited our ability to test or validate operating effectiveness of a specific controls:

- **Records Management:** In some cases, completeness or timeliness of work orders and training records could not be validated by internal audit as associated files were either not retained or not available at the time of fieldwork.

# *Summary of Internal Audit Results*

## *Report Classification*

The overall results of the internal audit have indicated a need to formalize management evidence of formal internal controls such as policies, procedures, plans, evidence retention and monitoring controls; however, the reader should be aware that the nature of the management roles and operating protocols of the Fire Services is such that many of these controls exist informally or are highly people dependent. As such, it is difficult for an independent third party, such as internal audit, to concur that evidence of the controls implementation and operation exist. As such controls may not be absent but may prove challenging for an independent party to validate.

## *Control Environment*

Operations of the Training division and the Apparatus division are being carried out by experienced team members who are aware of the activities that are to be performed for completing the day-to-day activities of the functions. The control environment needs to be improved through the introduction of formalized policies and procedures along with defining the roles and responsibilities. The imperative role of well trained and properly equipped team members is evident in WFRS overall culture.

## *Risk Assessment*

WFRS Apparatus and the Training division follows a set of practices to achieve the objectives of the functions. The Apparatus division works towards the achievement of Canadian Standards Association and National Fire Protection Association's (NFPA) defined standards for maintenance of vehicles and breathing apparatus. Maintenance work is performed to mitigate the risk of apparatus and equipment breakdowns in live situations. The Apparatus division creates an annual schedule for maintenance of apparatus and work is performed in accordance to standard work orders. Work performed is documented for record keeping however, there are opportunities of improvement in the record keeping practices as well as the planning for maintenance activities. Training division uses the Jones and Bartlett curriculum designed in accordance to the NFPA guidelines for firefighter training, for the training of new recruits and firefighters. The training content is designed to equip the firefighters with necessary training for safety and technical skills also meeting the requirements of Occupational Health and Safety Act. Training division also follows a set of practices for planning and execution of trainings along with the documentation of trainings conducted. However, there is the opportunity to formalize the practices in the form of documented policies and procedures to enable consistent application of controls and achievement of desired outcomes.

## *Control Activities*

WFRS has implemented/followed various informal controls/protocols for management its operations. However, the key measures that WFRS should focus on enhancing are:

- Annual maintenance plan for vehicles and equipment needs to be formally devised incorporating maintenance for small fleet, unscheduled repairs and Self Contained Breathing Apparatus (SCBA);
- A training plan considering Annual and Recruit training requirements needs to be documented along with procedures for tracking and monitoring progress;
- The Record Management System for Training division should be enhanced to digitize the training records and enable efficient retrieval of information; and
- The Fleet Management System for Apparatus division should enable planning, execution and tracking of work through the system along with maintenance of records.

WFRS does not have a documented set of policies and procedures for the Apparatus division and the Training division. Without policies and procedures, key objectives and processes are not reviewed, and roles, responsibilities and segregation of duties matrix are not defined. A policy manual should be aligned to established strategic direction for such divisions and to create a baseline for future regulations, guidelines and expectations of the department.

## Information and Communication






A well-defined communication strategy entailing communication frequency, medium and appropriate channel is imperative for the success of two-way communication and free flow of information which supplements the decision making within any organisation. WFRS divisions have personnel which work efficiently and effectively as a team. Active communication and informal information sharing exists amongst the team members. Current structure helps in the achievement of the operational tasks of the function however, there is a need to define formats and frequency for summarized periodic management reporting. WFRS should also consider to continue having an independent review of the processes on a periodic frequency. Further, the implementation of a set of policies and procedures to monitor the progress against training and maintenance plans, might also assist in achieving the objective of information and communication controls. WFRS should also work to devise records management procedures in tandem with the City’s record retention policy/schedule specifically focusing on certain records which are not covered under the City policy/schedule e.g. Firefighter and new recruits training files and Apparatus work orders.




## Monitoring

Monitoring is a crucial element to determine whether the divisions are following their strategic direction and contributing to overall vision and objective of WFRS. Owing to the nature and vitality of work being performed by Apparatus and the Training division, regular monitoring is of key importance. Management has practices in place to monitor the progress of key activities, however, there is a need to formalize the monitoring controls and work towards consistent implementation of such controls.

Through discussion with management, there are ongoing plans to implement a record management system which should help in continuous monitoring. Further, the design and implementation of a policy and procedure manual shall also assist in implementing monitoring procedures.

Based on the controls identified and assessed for design as part of the internal audit of the FRC Apparatus division and Training division, we have determined that there is reasonable evidence to indicate that:

	No or limited scope improvement	No major concerns noted	Cause for concern	Cause for considerable concern
<b>For the objectives related to 1. Policies and Procedures for Apparatus / Equipment and Training</b>				
Controls over the process are designed in such a manner that there are:				
Sample tests indicated that process controls were operating such that there are:				
<b>For the objectives related to 2. Training for New Recruits and Annual Training Requirements</b>				
Controls over the process are designed in such a manner that there are:				
Sample tests indicated that process controls were operating such that there are:				
<b>For the objectives related to 3. Maintenance and Repairs of Equipment and Apparatus</b>				
Controls over the process are designed in such a manner that there are:				

Sample tests indicated that process controls were operating such that there are:				
For the objectives related to <b>4. Compliance with regulatory requirements</b>				
Controls over the process are designed in such a manner that there are:				
Sample tests indicated that process controls were operating such that there are:				

Management has provided comprehensive action plans, which we believe will address the deficiencies noted.

### ***Summary of Positive Themes***

Based on the fieldwork conducted by Internal Audit, the following positive themes were noted:

#### **Training for New Recruits and Annual Training Requirements**

- New recruit training is performed in accordance to the 11-week training program and evaluations are performed on a weekly basis to evaluate achievement of learning objectives.
- Training is provided using different approaches, including both practical and theoretical learning, designed to meet learning objectives which are in line with National Fire Protection Association (NFPA) standards.

#### **Maintenance and Repairs of Equipment and Apparatus**

- Asset replacement schedule for fire trucks, small fleet and generator trailers is maintained in accordance with the replacement timelines defined as per the City Council decision.

#### **Compliance with regulatory requirements**

- Technicians in the Apparatus division team are certified mechanics ensuring that they have the necessary knowledge to perform vehicle repair and maintenance.
- Apparatus division has a valid certification to perform Commercial Vehicle Inspection (CVI) which allows the division to perform in-house CVI certifications for WFRS fleet and perform CVI for nearby counties for additional revenue.
- Training is provided using different approaches including both practical and theoretical learning.

## Summary of Findings

Finding #	Topic	Rating <sup>1</sup>			Management Action Plan
		Significant	Moderate	Low	
<b>1. Policies and Procedures for Apparatus / Equipment and Training</b>					
1	Establish policies and procedures for Apparatus and Training division ( <i>Design Effectiveness</i> )	-	X	-	Administration will work to define the roles and responsibilities of divisional staff. Additionally, formalized procedures and work schedules will be developed to ensure consistent work practices and productivity are achieved.
Please refer to consideration for improvement # 1					
<b>2. Training for New Recruits and Annual Training Requirements</b>					
2.	Enhance annual training planning and documentation for monitoring ( <i>Design Effectiveness</i> )	-	X	-	NFPA certification will be considered in developing an overall departmental training plan. Subject to budget approval, WFRS is working with an IT Department to obtain a Records Management System that will consolidate records and assist with scheduling.
Also refer to Finding 1.					
3.	Improve documentation structure and consistency for training ( <i>Operating Effectiveness</i> )	-	X	-	Administration will implement a written procedure that ensures records are kept in accordance with the Records Retention Policy and files are kept in accordance with best practices.
Please refer to consideration for improvement # 1 and 2					
<b>3. Maintenance and Repairs of Equipment and Apparatus</b>					
4.	Enhance apparatus maintenance annual planning and documentation for monitoring ( <i>Design Effectiveness</i> )	X	-	-	Administration will work to develop a reliable annual preventative maintenance plan and certification schedule for all equipment and vehicles.
Also refer to finding #1.					
5.	Clarify expectations for documentation of exceptions pertaining to asset replacement targets ( <i>Operating Effectiveness</i> )	-	-	X	Included in the annual apparatus schedule will be time allocated for the development of vehicle specifications and RFP documents 12-18 months prior to the replacement date. Deviations will be reported to the Finance Department and reasons for the delay will be clearly documented and easily accessible.

<sup>1</sup> See Appendix A for Basis of Finding Rating and Report Classification

Finding #	Topic	Rating <sup>1</sup>			Management Action Plan
		Significant	Moderate	Low	
<b>4. Compliance with regulatory requirements</b>					
6.	Incorporate practices for selected inspection and firefighter certification into policies and SOPs. <i>(Design Effectiveness)</i>	-	-	<b>X</b>	WFRS will assume the tracking and scheduling of certifications for each technician, ensuring that technicians maintain EVT certification over and above the Provincial requirement to be a licensed Heavy Truck mechanic.
Please refer to consideration for improvement # 3					
<b>Total</b>		<b>1</b>	<b>3</b>	<b>2</b>	

## ***Summary of Significant Findings***

Internal audit identified one (1) significant finding related to the design effectiveness of controls, specifically:

- 1) Enhance apparatus maintenance annual planning and documentation for monitoring: Annual plan for Apparatus should be formally documented, reviewed, approved and communicated to relevant stakeholders. The plan should incorporate small fleet, SCBA and consider unscheduled repairs along with technician trainings and availability. Plan should be monitored and tracked; deviations should be appropriately documented and approved with rescheduling details.

## ***Management Comments***

Management agrees with the observations contained within the report particularly the need for formalized processes and enhanced record keeping. The report documents a number of positive themes which demonstrate the department's effectiveness in training its recruits, firefighters and staff members. Asset replacements occur on schedule and staff in the training division and apparatus are trained and certified in accordance with regulatory requirements where necessary.

A comprehensive Records Management System (RMS) will provide the apparatus and training divisions the necessary tools to schedule preventative maintenance and annual certification as well as maintain the records associated with each. Management is already working with the Information Technology (IT) department in researching RMS and a project has been established. Initial research has shown that deviation or alterations to schedules can be tracked with RMS along with notations capturing the reasons for amendments to the schedule. The implementation of any system of controls, particularly those that involve the migration from paper based processes to electronic require the training of staff. This will be included during the implementation period so that staff are not only aware of how to maximize system efficiencies but are cognizant of the importance of doing so.

Name: Steve Laforet  
Title: Fire Chief  
Date: May 28, 2018

# Detailed Observations

<b>1. Establish policies and procedures for Apparatus and Training division - (Design Effectiveness)</b>			<b>Overall Rating:</b> Moderate
<b>Impact:</b>	Medium	<b>Likelihood:</b>	Likely
<b>Observation:</b> As part of our review of in-scope processes, we noted that Windsor Fire & Rescue Services does not have a formally documented policy manual:  Policies covering the Apparatus division and the Training division related following key areas are currently not defined: <ul style="list-style-type: none"> <li>• Overview of processes and objectives;</li> <li>• Roles and responsibilities;</li> <li>• Annual Maintenance Plan and its contents;</li> <li>• Annual Training Plan and its contents;</li> <li>• Process flow/SOP for operations;</li> <li>• Adopted best practices and applicable regulatory requirements; and</li> <li>• Policy review frequency, ownership, approval and version control.</li> </ul> <p><i>Please refer consideration for improvement #1 as procedures may need to be devised in light of the implementation of the records management system to streamline record maintenance and retention protocols.</i></p>			
<b>Implication:</b> People-dependent processes increase the risk of a process failure or inefficiency when personnel with experience or documented procedures are not accessible.			
<b>Possible root cause:</b> Policies and procedures (or sub-components thereof) have not been formally defined and approved.			
<b>Recommendation:</b> Management should develop and implement a formal set of procedures to address the following:  Apparatus division: <ul style="list-style-type: none"> <li>• Annual Maintenance Definition, Responsibilities and Plan (Schedule);</li> <li>• Standard Work Orders tailored for each asset and periodic review procedure;</li> <li>• High level principles and rules regarding segregation of duties;</li> <li>• Prioritization of Repairs Schedule, Unplanned maintenance and Field breakdowns;</li> <li>• Warranty Repairs;</li> <li>• Asset replacement targets;</li> <li>• Asset decommissioning and disposal;</li> <li>• Protocol for documenting deviations from plan and replacement targets;</li> <li>• Management and Mechanic Training;</li> <li>• Mechanics' required tools and equipment;</li> <li>• Record maintenance for planning and work orders;</li> <li>• Usage of Information Management System (Fleet Focus);</li> <li>• Progress and performance monitoring and periodic management reporting; and</li> <li>• Adopted best practices and applicable regulatory requirements.</li> </ul> Training division: <ul style="list-style-type: none"> <li>• Annual Training Requirements, Responsibilities and Plan (Schedule);</li> <li>• Prioritization of Training requirements considering Trainer and Trainee availability;</li> <li>• Training curriculum and content review;</li> <li>• Record maintenance for planning and training files;</li> </ul>			

- Performance Monitoring and Periodic Management Reporting;
- Usage of Information Management Systems (Learning Management System and CRISIS System); and
- Adopted Best Practices and Applicable Regulatory Requirements.

Further, policies and procedures should be reviewed, updated and / or re-endorsed on a periodic frequency. Each policy should indicate the associated review cycle requirements, ownership, approval and version control.

***Management Action Plan***

<p><b>Action Plan:</b> Management agrees with the findings and recommendations listed above. Administration will work with the heads of each division to define the roles and responsibilities of divisional staff. Additionally, formalized procedures and work schedules will be developed to ensure consistent work practices and productivity are achieved. It is expected that these efforts will be completed in 2019.</p>	<p><b>Responsible Party:</b></p>	<p>Deputy Chief of Support Services. Director of Apparatus Chief Training Officer</p>
	<p><b>Due Date:</b></p>	<p>Q4 2019.</p>

<b>2. Enhance annual training planning and documentation for monitoring</b> <i>- (Design Effectiveness)</i>		<b>Overall Rating:</b> Moderate	
<b>Impact:</b>	Medium	<b>Likelihood:</b>	Likely
<p><b>Observation:</b></p> <p>In our review of the process controls we noted two control elements for consideration:</p> <ol style="list-style-type: none"> <li>1. Training plan does not take into consideration the availability of key personnel and is not designed collectively for recruit, annual and Human Resource (HR) training requirements; and</li> <li>2. Training progress is not monitored effectively; division is currently using three unintegrated tools/methods for training record keeping and tracking including manual paper based documentation, Learning Management System (LMS) and CRISIS System.</li> </ol> <p><i>For recommendations on formalizing controls through introduction of a records management system, please refer to consideration for improvement #1.</i></p>			
<p><b>Implication:</b></p> <p>Training plans might be rendered ineffective due to non-availability of personnel and overlaps with high-priority activities. Management is unable to demonstrate achievement of learning objectives due to ineffective documentation for monitoring progress against the plan.</p>			
<p><b>Possible root cause:</b></p> <p>Practices have evolved based on need without a strategic direction. Common procedures for planning and monitoring have not been defined to be applied consistently.</p>			
<p><b>Recommendation:</b></p> <p>Management should develop and implement a training plan, designed in light of recommended best practices, which is approved by the Chief Training Officer. Training plan should consider the following:</p> <ul style="list-style-type: none"> <li>• Training learning objectives and requirements;</li> <li>• Priority of individual trainings;</li> <li>• Availability of key personnel including Trainers and Trainees;</li> <li>• Flexibility to reschedule trainings based on emergency situations; and</li> <li>• Review frequency and ownership.</li> </ul> <p>Further, management should develop and implement a procedure for review of training progress against the plan. The procedure shall consider all means of training delivery and provide guidance for documentation preparation and retention to assist in substantiating that the learning objectives are being met. The documentation should be structured and readily accessible.</p>			
<b>Management Action Plan</b>			
<p><b>Action Plan:</b> Management agrees with the findings and recommendations.</p> <p>Newly approved regulations regarding mandatory NFPA certification will be considered in developing an overall departmental training plan. WFRS is working with IT to obtain a Records Management System (RMS) that will consolidate records and assist with scheduling. The successful implementation of such a system requires approval from City Council to bring forward funds for RMS which are currently approved in principle for 2021. Budget Dependent.</p>	<b>Responsible Party:</b>	Fire Chief Chief Training Officer	
	<b>Due Date:</b>	Q2 2020	

<b>3. Improve documentation structure and consistency for training - (Operating Effectiveness)</b>		<b>Overall Rating:</b> Moderate	
<b>Impact:</b>	Medium	<b>Likelihood:</b>	Likely
<p><b>Observation:</b></p> <p>As part of our review to assess whether the training has been provided in light of the learning objectives and the documentation for training is adequately maintained, it was noted that a procedure for filing and record keeping is not defined.</p> <p>A sample of 15 firefighter files was requested out of which only 11 were made available. Management mentioned that the training files were either sent for archiving or were with the firefighters for completion of on the job trainings. During the review of 11 sample files received it was noted that the trainings were conducted and the following was noted:</p> <ul style="list-style-type: none"> <li>• Training files do not follow structured and consistent indexing system or table of contents hence information is not readily accessible.</li> <li>• Training files contained evidence of training and evaluations conducted; however, it was noted that four files did not contain training completion certificate and another four did not contain the incremental certificates.</li> </ul> <p><i>For recommendations on implementing a system for training and records management, please refer to consideration for improvement #1.</i></p>			
<p><b>Implication:</b></p> <p>Inconsistent documentation might make it difficult for WFRS to substantiate that training was delivered to firefighters.</p>			
<p><b>Possible root cause:</b></p> <p>Procedures for record management and retention have not been defined to be applied consistently.</p>			
<p><b>Recommendation:</b></p> <p>Management should work towards adherence to the City record retention policy/schedule, and also design and implement a policy for records management and retention specific to the training division areas which are not addressed by the City policy/schedule. Training files should be monitored and tracked through an indexing system to allow ready retrieval, as and when required. Files should have a standardized label containing the fire fighter name and year of joining. Files can be sorted on the basis of the year of joining. The maintenance responsibility and ownership of records shall be allocated to one of the training officers. Training files should be structured in a standardized manner following a standard table of contents to assist in retrieval of required information.</p> <p>Further, it is suggested that on a periodic frequency the Training division should perform an internal assessment by selecting a sample of training files to be reviewed for completeness and consistency of information retained.</p>			
<b>Management Action Plan</b>			
<p><b>Action Plan:</b> Management agrees with the findings and recommendations.</p> <p>Records retention is governed by the Corporate policy; administration will implement a written procedure that ensures records are kept in accordance with the Records Retention Policy and files are kept in accordance with best practices.</p> <p>Management will explore the feasibility of utilising a college co-op student enrolled in a business or office administration program to help expedite the action plan.</p>		<b>Responsible Party:</b>	Administrative Assistant
		<b>Due Date:</b>	Q4 2019

<b>4. Enhance apparatus maintenance annual planning and documentation for monitoring - (Design Effectiveness)</b>			<b>Overall Rating: Significant</b>
<b>Impact:</b>	Medium	<b>Likelihood:</b>	Highly Likely
<p><b>Observation:</b> Internal Audit reviewed the annual maintenance activity details for Apparatus division and noted an official maintenance plan is not documented or approved as per a defined format or approval requirements have not been implemented. A mechanism to monitor/approve changes to maintenance plans is not formalized. Internal Audit also noted that the schedule does not take into consideration maintenance for Self Contained Breathing Apparatus (SCBA), Small Fleet, unscheduled breakdowns and training requirements / availability of technicians.</p> <p>In a sample of 15 work orders related to Apparatus we noted the following:</p> <ul style="list-style-type: none"> <li>• 5 work orders were not received out of a sample of 15 records requested and for two others, timeliness of completion (in accordance with schedule) could not be validated due to undocumented dates.</li> <li>• 8 work orders were not signed either by the technicians executing the work or the by the person reviewing the work of the technician.</li> <li>• 9 work orders contained sections which were not completed, including but not limited to annual pump maintenance tests, engine tests. It is not clear whether more tests performed than that of which is reflected on the work order.</li> </ul> <p><i>For recommendations on formalizing controls through introduction of a records management system, please refer to consideration for improvement #1.</i></p>			
<p><b>Implication:</b> Maintenance might not be performed in line with recommended guidelines which might result in apparatus and equipment not performing up to the safety standard. Firefighter safety might be at risk due to malfunction or breakdown of apparatus and / or equipment in a live situation.</p>			
<p><b>Possible root cause:</b> Protocols are understood by the key staff which include some required steps. Common procedures for annual maintenance plan have not been defined to be applied consistently.</p>			
<p><b>Recommendation:</b> Management should develop and implement an annual maintenance and inspection plan designed in light of the recommended best practices. Annual Maintenance and Inspection Plan should consider the following:</p> <ul style="list-style-type: none"> <li>• Self Contained Breathing Apparatus (SCBA);</li> <li>• Small Fleet;</li> <li>• Unscheduled breakdowns and critical maintenance;</li> <li>• Training requirements for Technicians;</li> <li>• Commercial Vehicle Inspection and Maintenance work for other counties and towns; and</li> <li>• Periodic checks for recommended certifications.</li> </ul> <p>Further, management should develop and implement a procedure for review of maintenance progress. The procedure should consider that the documentation prepared and retained helps in ascertaining whether all maintenance requirements have been fulfilled, reviewed and approved. The documentation should be structured and readily accessible.</p> <p>Management should work towards adherence to the City record retention policy/schedule and also enhance document retention practices specific to Apparatus maintenance related documentation which is not covered under the City policy/schedule, to improve accessibility of required information. Further, required work order fields should be completed or marked not applicable, as required; and the details of the preparer should be noted along with approval by the Director of Apparatus. Management might also consider performing periodic checks to ensure the documentation is appropriately maintained.</p>			

**Management Action Plan**

<p><b>Action Plan:</b> Management agrees with the findings and recommendations.                  In addition to the implementation of a comprehensive RMS and record retentions solutions noted in the previous action plan, management will work with the Director of Apparatus to develop a reliable annual preventative maintenance and certification schedule for all equipment and vehicles. Procedures ensuring regular monitoring of the plan and consistent practices for completing and submitting work orders and inspection reports will be developed and implemented.</p>	<p><b>Responsible Party:</b></p>	Director of Apparatus Deputy Chief of Support Services
	<p><b>Due Date:</b></p>	Q4 2019

<b>5. Clarify expectations for documentation of exceptions pertaining to asset replacement targets - (Operating effectiveness)</b>		<b>Overall Rating:</b> Low	
<b>Impact:</b>	Low	<b>Likelihood:</b>	Likely
<p><b>Observation:</b>                  WFRS has defined replacement targets for apparatus and the replacement process is executed upon the direction of the Director of Apparatus. Upon review of the replacement targets within the scope period, it was noted that two vehicles were not replaced as per the defined target and management was unable to provide documented evidence of the review and approval of deviation from the planned dates. Upon inquiry management mentioned that in the scope period the Director of Apparatus was not available due to certain emergencies and hence the replacements were not processed in a timely manner; however, the replacement process was initiated subsequently and is currently in progress.</p>			
<p><b>Implication:</b>                  Using an asset beyond its recommended replacement target date might result in the asset not meeting the safety standards and result in excessive repair and maintenance costs.</p>			
<p><b>Possible root cause:</b>                  Procedure is not defined to guide the staff to document deviations from planned targets.</p>			
<p><b>Recommendation:</b>                  Recommendation is dependent on the development of policies and procedures as noted in finding #1. However, for an immediate resolution of the concern, management should design and implement a procedure for documenting, reviewing and approving any deviations from planned replacement targets. Further, it is recommended to separately define the replacement targets and maintenance schedule for spare/training vehicles along with defining the acceptable use of such assets.</p>			
<b>Management Action Plan</b>			
<p><b>Action Plan:</b> Management agrees with the findings and recommendations.                  Included in the annual apparatus schedule will be time allocated for the development of vehicle specifications and Request For Proposal (RFP) documents 12-18 months prior to the replacement date.                  As some projects can be delayed due to circumstances beyond the control of WFRS; deviations will be reported to the Finance Department; particularly the individual responsible for tracking Capital assets. Reasons for the delay will be clearly documented and easily accessible.</p>		<b>Responsible Party:</b>	Fire Chief
		<b>Due Date:</b>	Q4 2018

<b>6. Incorporate practices for selected inspection and firefighter certification into policies and SOPs - (Design Effectiveness)</b>		<b>Overall Rating:</b> Low	
<b>Impact:</b>	Low	<b>Likelihood:</b>	Likely
<p><b>Observation:</b> Internal Audit reviewed the maintenance performed on a randomly selected sample of SCBA units and also reviewed the training records for technicians for recommended Emergency Vehicle Technician (EVT) Training. Internal Audit noted the following:</p> <ul style="list-style-type: none"> <li>• 15 out of 25 SCBA units were overdue for annual maintenance and testing in line with the recommended best practice.</li> <li>• EVT training renewal for 4 out of 5 technicians was overdue by six months to a year.</li> </ul> <p><i>For recommendations on formalizing controls into policy/ procedures, please refer to finding #1.</i></p>			
<p><b>Implication:</b> Maintenance performed by technicians with outdated EVT certifications and/or maintenance not performed in line with recommended guidelines might not meet the requirements of safety standards.</p>			
<p><b>Possible root cause:</b> Common procedures, with minimum standards of adherence, have not been defined to be applied across operational areas.</p>			
<p><b>Recommendation:</b> Management should:</p> <ul style="list-style-type: none"> <li>• Define, approve and implement policy and SOPs around maintenance of SCBA units;</li> <li>• Incorporate training requirements for technicians in the annual plan for maintenance and design protocols for periodic monitoring and review of training certifications for technicians; and</li> <li>• Define a process for identification and review of new regulatory requirements and their incorporation in the operations and reporting protocols of relevant functions.</li> </ul>			
<b>Management Action Plan</b>			
<p><b>Action Plan:</b> Management agrees with the findings and recommendations. WFRS will assume the tracking and scheduling of certifications for each technician. It should be noted that due to the availability of recertification opportunities periods may exist from time to time where an EVT certificate lapses while the employee is waiting to recertify. EVT certifications are not mandatory, however; WFRS sees the value in ensuring that technicians maintain their EVT certification over and above the Provincial requirement to be a licensed Heavy Truck mechanic which all technicians possess.</p>		<b>Responsible Party:</b>	Deputy Chief of Support Services Director of Apparatus.
		<b>Due Date:</b>	Q4 2018

# Considerations for Improvement

## 1. Implement Records Management System (Apparatus and Training)

### Observation:

#### *Apparatus division:*

Following key activities for the Apparatus division are manually performed:

- Planning for Annual Maintenance;
- Standard Work Orders; and
- Records for maintenance work performed.

This affects the ability of the division to analytically review the performance for previous years in order to enhance the planning for future maintenance. It is time consuming and a resource intensive activity for the management to incorporate changes in the standard work orders and for the technicians to fill in the details of work performed. Manual records also result in documentation inconsistencies to arise and statistical data cannot be derived readily to assist in optimizing operations.

Management is planning to introduce a records management system which would help with the planning through to execution and reporting of maintenance work performed by the function.

#### *Training division:*

Following key activities for the Training division are manually performed:

- Planning for Recruit and Annual Training;
- Evaluations and Examinations; and
- Records retained for training.

This affects the ability of the division to analytically review the performance for previous years in order to enhance the planning for future training. It is time consuming and a resource intensive activity for the management to conduct and evaluate training examinations. Manual records show inconsistencies in documentation and statistical data cannot be derived readily to assist in optimizing operations.

Management is currently using Learning Management System and CRISIS system for recording details of some of the trainings; however, there is a need to implement a system which can integrate the information from both these systems, HR training and manual trainings performed, which enables the management to introduce performance monitoring processes.

### Recommendation:

Management should consider performing a needs assessment and cost benefit analysis to develop a request for proposal (RFP). Management might consider incorporating the following requirements for the solution, to cater to the needs of asset/equipment management and training, as a part of the RFP:

- Planning with access to historical information;
- Progress Monitoring and alerts/notifications;
- Standard work orders creation and update;
- Maintenance work documentation;
- Approval hierarchy;
- Record maintenance;
- Trainings execution;
- Conduct training evaluations;
- Monitor key performance indicators;
- Generate management reporting; and
- Integration with Peoplesoft corporate HR system.

## 2. Establish procedure for periodic review of training content

**Observation:**

During review of the Training division, Internal Audit noted that there is no periodic review process in place for training curriculum updates. Currently, updates are incorporated to the training material on an ad-hoc basis.

**Recommendation:**

Management should put in place a process for periodic review of curriculum updates. This shall enable the management to update the curriculum regularly with the latest enhancements and updates.

## 3. Incorporate periodic review for achieving CVI annual renewal requirements

**Observation:**

Ministry of Transportation (MoT) requires the Commercial Vehicles Inspection (CVI) to be performed for each vehicle on an annual frequency. It has been noted that timely CVI for 2 out of 10 vehicles was not performed (i.e. within one year anniversary of previous CVI date); however, both were completed within a month of the target. Management indicated that the vehicles identified were taken out of service at the time of expiry of the CVI, however, the decision to take the vehicles out of service was not documented.

**Recommendation:**

It is recommended that management should devise a procedure to identify vehicles which are out of service and do not require adherence to the regular maintenance and certification procedures. Further, the annual maintenance plan should incorporate periodic review procedure for certification and inspection requirements. Management may consider incorporating an identified within the annual maintenance plan for each apparatus and equipment asset which is due for certification/inspection as per best practices within the following month.

# Appendix A: Basis of Findings Rating and Report Classification

## Findings Rating Matrix

Audit Findings Rating		Impact		
		Low	Medium	High
Likelihood	Highly Likely	Moderate	Significant	Significant
	Likely	Low	Moderate	Significant
	Unlikely	Low	Low	Moderate

## Likelihood Consideration

Rating	Description
Highly Likely	<ul style="list-style-type: none"> <li>History of regular occurrence of the event.</li> <li>The event is expected to occur in most circumstances.</li> </ul>
Likely	<ul style="list-style-type: none"> <li>History of occasional occurrence of the event.</li> <li>The event could occur at some time.</li> </ul>
Unlikely	<ul style="list-style-type: none"> <li>History of no or seldom occurrence of the event.</li> <li>The event may occur only in exceptional circumstances.</li> </ul>

## Impact Consideration

Rating	Basis	Description
HIGH	Dollar Value <sup>2</sup>	Financial impact likely to exceed \$250,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	<p><b>Internal Control</b>                      Significant control weaknesses, which would lead to financial or fraud loss.</p> <p><b>An issue that requires a significant amount of senior management/Board effort to manage such as:</b></p> <ul style="list-style-type: none"> <li>· Failure to meet key strategic objectives/major impact on strategy and objectives.                             <ul style="list-style-type: none"> <li>· Loss of ability to sustain ongoing operations:                                     <ul style="list-style-type: none"> <li>- Loss of key competitive advantage / opportunity   <ul style="list-style-type: none"> <li>- Loss of supply of key process inputs</li> </ul> </li> </ul> </li> </ul> </li> <li>· A major reputational sensitivity e.g., Market share, earnings per share, credibility with stakeholders and brand name/reputation building.</li> </ul> <p><b>Legal / Regulatory</b>                      Large scale action, major breach of legislation with very significant financial or reputational consequences.</p>
MEDIUM	Dollar Value	Financial impact likely to be between \$75,000 to \$250,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	<p><b>Internal Control</b>                      Control weaknesses, which could result in potential loss resulting from inefficiencies, wastage, and cumbersome workflow procedures.</p> <p><b>An issue that requires some amount of senior management/Board effort to manage such as:</b></p> <ul style="list-style-type: none"> <li>· No material or moderate impact on strategy and objectives.</li> <li>· Disruption to normal operation with a limited effect on achievement of corporate strategy and objectives                             <ul style="list-style-type: none"> <li>· Moderate reputational sensitivity.</li> </ul> </li> </ul> <p><b>Legal / Regulatory</b>                      Regulatory breach with material financial consequences including fines.</p>
LOW	Dollar Value	Financial impact likely to be less than \$75,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	<p><b>Internal Control</b>                      Control weaknesses, which could result in potential insignificant loss resulting from workflow and operational inefficiencies.</p> <p><b>An issue that requires no or minimal amount of senior management/Board effort to manage such as:</b></p> <ul style="list-style-type: none"> <li>· Minimal impact on strategy</li> <li>· Disruption to normal operations with no effect on achievement of corporate strategy and objectives                             <ul style="list-style-type: none"> <li>· Minimal reputational sensitivity.</li> </ul> </li> </ul> <p><b>Legal / Regulatory</b>                      Regulatory breach with minimal consequences.</p>

<sup>2</sup> Dollar value amounts are agreed with the client prior to execution of fieldwork.

## Audit Report Classification

Report Classification	The internal audit identified one or more of the following:
Cause for considerable concern	<ul style="list-style-type: none"> <li>• Significant control design improvements identified to ensure that risk of material loss is minimized and functional objectives are met.</li> <li>• An unacceptable number of controls (including a selection of both significant and minor) identified as not operating for which sufficient mitigating back-up controls could not be identified.</li> <li>• Material losses have occurred as a result of control environment deficiencies.</li> <li>• Instances of fraud or significant contravention of corporate policy detected.</li> <li>• No action taken on previous significant audit findings to resolve the item on a timely basis.</li> </ul>
Cause for concern	<ul style="list-style-type: none"> <li>• Control design improvements identified to ensure that risk of material loss is minimized and functional objectives are met.</li> <li>• A number of significant controls identified as not operating for which sufficient mitigating backup controls could not be identified.</li> <li>• Losses have occurred as a result of control environment deficiencies.</li> <li>• Little action taken on previous significant audit findings to resolve the item on a timely basis.</li> </ul>
No major concerns noted	<ul style="list-style-type: none"> <li>• Control design improvements identified, however, the risk of loss is immaterial.</li> <li>• Isolated or “one-off” significant controls identified as not operating for which sufficient mitigating back-up controls could not be identified.</li> <li>• Numerous instances of minor controls not operating for which sufficient mitigating back-up controls could not be identified.</li> <li>• Some previous significant audit action items have not been resolved on a timely basis.</li> </ul>
No or limited scope for improvement	<ul style="list-style-type: none"> <li>• No control design improvements identified.</li> <li>• Only minor instances of controls identified as not operating which have mitigating back-up controls, or the risk of loss is immaterial.</li> <li>• All previous significant audit action items have been closed.</li> </ul>

# ***Appendix B: Limitations and responsibilities***

## ***Limitations inherent to the Internal Auditor's work***

### ***Internal control***

Internal control systems, no matter how well designed and operated, are affected by inherent limitations. These include the possibility of poor judgment in decision-making, human error, control processes being deliberately circumvented by employees and others, management overriding controls and the occurrence of unforeseeable circumstances.

### ***Future periods***

Our assessment of controls is for the period specified only. Historic evaluation of effectiveness is not relevant to future periods due to the risk that:

- The design of controls may become inadequate because of changes in operating environment, law, regulation or other; or
- The degree of compliance with policies and procedures may deteriorate.

## ***Responsibilities of management and Internal Auditors***

It is management's responsibility to develop and maintain sound systems of risk management, internal control and governance and for the prevention and detection of irregularities and fraud. Internal audit work should not be seen as a substitute for management's responsibilities for the design and operation of these systems.

We endeavour to plan our work so that we have a reasonable expectation of detecting significant control weaknesses and, if detected, we shall carry out additional work directed towards identification of consequent fraud or other irregularities. However, internal audit procedures alone, even when carried out with due professional care, do not guarantee that fraud will be detected.

Accordingly, our examinations as internal auditors should not be relied upon solely to disclose fraud, defalcations or other irregularities which may exist.



This document has been prepared only for The Corporation of the City of Windsor and solely for the purpose and on the terms agreed with The Corporation of the City of Windsor in our agreement dated June 9, 2016. We accept no liability (including for negligence) to anyone else in connection with this document, and it may not be provided to anyone else.

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