The Corporation of the City of Windsor

Internal Audit Summary Report

December 1 2021 to April 30 2022

Prepared as of May 6, 2022

pwc

Contents

1. Performance and status summary

Planned projects	Percent complete		Report issued
Risk Assessment and Annual Plan Development 2022-23	▬▬▬	100%	✔
IA Attendance at City Meetings a) Periodic Status & Reporting b) Periodic Status & Reporting	▬▬ ▬▬	100%	✔ ✔
Management Action Plan Validation (Annual)	▬▬▬	100%	✔
Hotline Administration	▬▬▬	100%	NA
Auditor General Complaint Handling	▬▬▬	100%	NA
Road Infrastructure Maintenance Processes	▬▬▬	100%	✔
Smart City Cyber Risk Mitigation	▬▬▬	100%	✔
BIA Operational Review	▬	10%	◯
Annual Performance Review	▬▬▬	100%	✔
Unallocated	▬▬▬	100%	NA

Legend			
	✔ Issued in current period	✔ Issued in prior period	◯ In progress/ Not yet issued

IA plan completion

49.0% Progress in period
41.0% Reported previously
Pending completion

- Progress in period
- Reported previously
- Pending completion

Deliverables progress

6
1
1

- Issued in period
- Previously issued
- To be completed

Observation count

■ In Period ■ YTD

Findings: 7, 7
Advisory: 5, 5

SME information

- Road Infrastructure
- Cybersecutiy and Privacy

Items under investigation		
Source	In progress	Reported in period
CCEP	0	0
AG Route	0	0

1.1 Amendment to Current Plan

Under the approved Auditor General Charter "The AG shall have the authority to stop, delay or postpone active/ongoing or planned work in order to redirect efforts to conduct projects and analysis when a complaint/allegation is lodged which may have merit. Any such changes will be reported to City Council for approval of the Audit Plan change or alternatively for allocation of additional resources to avoid such changes to the plan."

As a result of information provided to the Auditor General, which is now under analysis, the proposed Ransomware project has been postponed for future consideration in order to investigate specific allegations. The Ransomware efforts and and the remaining Unallocated efforts are being redirected to this analysis.

The conduct of the Ransomware review is still considered a high risk area for the City but would require additional effort and funding allocation of $40,000 to $50,000 to complete should Council which the Auditor General to proceed with that project.

2. Reports issued in period

2.1 Road Infrastructure Maintenance Processes

Road maintenance overview

The City of Windsor (the City) is responsible for the maintenance of road infrastructure throughout the municipality. The City has developed an inspection and condition rating program to assess the pavement condition of the various road assets. The results aid in identifying, prioritizing, and planning for road rehabilitation, reconstruction, and maintenance needs. Planned road maintenance is accounted for in the City's capital budget. Smaller short term repairs such as pothole patching are accounted for in the operating budget.

Road assets noted

Metric	2018 Asset Management Plan (AMP) (m)	2018 Asset Management Plan (AMP) Replacement Value ($K)
C1 Arterial	9,847	$80,920
C1 Collector	96,504	$183,109
C2 Arterial	126,141	$593,772
C2 Collector	78,530	$133,326
Expressway	56,275	$198,698

Project purpose

We conducted a Value for Money (VFM)/Performance Audit of road infrastructure maintenance processes. Our approach was based on both Internal Audit and Performance Auditing approaches and frameworks in accordance with the Auditor General Charter. For the VFM audit, we focused on:

- a set of key performance indicators evaluated as part of this internal audit.

- internal controls and processes over the three key areas: regulatory compliance, road maintenance strategies/capital budget, and people, governance and technology.

Specific scope, objectives and exclusions are described in Appendix B.

What we did

To conduct our work we completed various activities including, but not limited to:

- Examined the progress made to comply with Table 4 in Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure since March 31, 2019 as it specifically relates to maintenance for road classifications which are in-scope on this project (effectiveness).

- Conducted a gap analysis of the road maintenance strategy documented in the 2018-2019 AMP against processes developed to implement those strategies to determine areas of improvement.

- Conducted a peer comparison analysis to determine if the spend for roads and the condition of roads is consistent among peers. Municipalities for comparison were selected based on their ability to fall within a defined range regarding population, weather conditions, level of government, inflation, city size and city density.

- We evaluated the road maintenance strategies that CoW included in their 2018-2019 AMP as compared to common practice guidelines from Federation of Canada Municipalities to determine if any key elements were missing.
- Performed a comparison of key job descriptions involved in road maintenance at CoW to current job descriptions of municipalities/relevant comparables to determine if the qualifications required are adequate.
- We conducted walkthroughs with key stakeholders in the road maintenance lifecycle to uncover any areas of concern regarding people, governance and technology.
- Data analysis was completed in regards to the KPI's agreed upon during scope finalization based on the level of data granularity that the City was able to provide.

Overall assessment	**VFM/Performance Metrics**: Although the original four performance measures were Not Assessed as originally agreed upon, we were able to obtain alternative data from the City to conduct an analysis for four Revised KPI's. Of these four revised performance measures, three were Attained and one was Partially Attained. A total of **four findings** were **identified** in the operational area whereas three considerations for improvements are raised over the review of the 2018-2019 AMP road maintenance strategies, lack of 2025 SCI projections and an apparent decline in road conditions of C1 arterials and expressways during 2016-2020.
Management comments	Management appreciates the findings and considerations for improvement contained in the report as it relates to improving the efficiency of the overall road maintenance process and are pleased with the results showing that we have an effective and efficient service. We agree as you noted that controls are properly designed and are operating effectively and no internal control weaknesses were noted as a significant control deficiency. That being said, Management continually strives to improve its road maintenance process so as to ensure the effective and efficient use of City resources. Detailed Management Action Plans and timelines to address the four findings identified in the report are presented below.
Name:	Chris Nepszy
Title:	Office of the Commissioner of Infrastructure Services
Date:	March 24, 2022

2.2 Smart City Cyber Risk Mitigation

SmartCity Context   The City of Windsor has been undergoing restructuring including the introduction of a new role within its Corporate Leadership Team, the Commissioner, Economic Development & Innovation. This new role and portfolio was created to support the City of Windsor's "progressive and forward thinking vision of growth and diversification." This role will provide leadership and strategic direction to the departments of Economic Development, Information Technology, Planning and Building Services while championing innovation across the Corporation. It is expected that many of the elements and initiatives under "SmartCity" would align with the new division.

The above information is recent however at time of planning and our review, we noted that the City of Windsor (the City) did not specifically track SmartCity initiatives and we could not locate a published City definition of SmartCity initiatives. Given the advancement of technology and the escalating need for digital engagement with public, Internal Audit used the following context for the purposes of the project:

> A smart city uses information and communication technology (ICT) to improve operational efficiency, share information with the public and provide a better quality of government service and citizen well-being.

> The main goal of a smart city is to optimize city functions and promote economic growth while also improving the quality of life for citizens by using technology and data analysis. The value lies in how this technology is used rather than how much technology is available.[1]

Based on the above external definition Internal Audit worked with management to identify some projects which align to the definition (not a complete list). The City has planned and implemented several IT / SmartCity initiatives / projects. Such projects are assessed via conducting a security assessment considering the IT, Cyber, and privacy risks. The City's communications department informs citizens about new initiatives / SmartCity initiatives via various media sources,

A SmartCity/IT initiative includes various components including, but not limited to,: project governance, project management, performance measurement, concept, design/ development/acquisition, testing/validation, user experience etc. The scope of this internal audit was focused on cyber and privacy elements and did not assess the myriad of practices and controls in place to address these other key elements of a SmartCity Initiative.

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[1] https://www.twi-global.com/technical-knowledge/faqs/what-is-a-smart-city

SmartCity Numbers

Given that management does not currently track, or have an identifier for, SmartCity Initiatives providing information such as:

- Departments impacted
- SmartCity Initiatives Completed
- SmartCity Initiatives in Progress
- SmartCity Initiatives Projected
- Budget for in progress SmartCity Initiatives

is not readily possible.

Project purpose

We conducted an assessment of the internal controls and processes management has implemented to enable systematic approach to SmartCity risk mitigation as it relates to cybersecurity and privacy. We considered the City practices related to:

- approach to considering security and privacy risks for SmartCity initiatives
- the use of a consistent framework to ensure that privacy and cyber security risks are assessed and managed for Smart City initiatives
- monitoring mechanisms to indicate if the privacy and cyber risk mitigation plans have been or are being implemented for SmartCity initiatives.

Specific scope, objectives and exclusions are described in Appendix B.

What we did

To conduct our work, we completed various activities including, but not limited to:

- Worked with management to identify a selection of City projects that align to the definition of SmartCity provided above for use in our evaluation of internal controls (see Appendix A).
- Inquired of management regarding the roles and responsibilities related to privacy and security of information for SmartCity initiatives (Projects).
- Reviewed cyber and privacy risk assessment processes and controls. This included Security Assessments and Privacy Impact Assessments.
- Considered management's data protection and privacy processes and controls and management's mechanisms for assessing adherence thereunto.
- Understood how cyber and privacy risks are considered through the project lifecycle.
- Considered if a risk register is maintained for specific projects including cyber and privacy risks.

Overall assessment

Overall, our assessment of SmartCity Cyber & Privacy Risk Mitigation at the City is one of **Some Improvement Opportunities**. We identified no findings rated as significant internal control weaknesses.

A total of three findings have been identified and two considerations for improvement have been provided as well.

Management comments

"Smart City" is a broad term with multiple definitions but all includes the use of technology, and as such the City of Windsor uses its IT Project Management Framework to manage any project that would fall under all definitions of a "Smart City" project.

The City's IT Project Management and Security Framework used for IT projects has built in components to assess Cyber and Privacy risk.

However, we do acknowledge there is always room for improvement.

Norm Synnott, CIO/Executive Director of IT
Date: March 25, 2022

Management offers comment considering PwC's definition that "the main goal of a smart city is to optimize city functions and promote economic growth while also improving the quality of life for citizens by using technology and data analysis. The value lies in how this technology is used rather than how much technology is available." Acknowledging that the City of Windsor does not necessarily label modernization initiatives under a "Smart City" category, the corporation does maintain a project list and each project considers a variety of risk factors, which may include cyber and IT security.

That being said, to further identify and promote these city initiatives, and to align and support those being undertaken in the community, City Council has approved the creation of the new Economic Development and Innovation portfolio. This new division will pursue improved methods of communicating such initiatives and other successes publicly. While we endeavor to "improve operational efficiency, share information with the public and provide a better quality of government service", we strive to do so in a purposeful and clear manner.

Jelena Payne, Commissioner, Economic Development & Innovation
Date: March 25, 2022

2.3 Management Action Plan Validation Report

1. Executive summary

Key measures:	All findings	Significant findings
Average age of open findings :	3.3 years	4.1 years
Average age of past due findings:	3.4 years	4.1 years
Age of oldest past due finding:	6.6 years	6.6 years
Number of Past Due Findings:	16	5

Current score
(as of Dec 31, 2021)
45%

Prior Year End ratings:
2020 - Not Controlled
2019 - Not Controlled
2018 - Well Controlled

REPORT CLASSIFICATION

Not controlled   Opportunity exists   Well controlled   Strong

In the above, ratings consideration is also given to the number of retargeted observations with a rating reduction for every 2% of action plan dates retargeted for the **second time or more in this period.** See Appendix E for ratings scale.

Rating	Opening balance (as of December 31,2020)	Additions in the year	Expected to be closed by Dec 31, 2021	Validated as closed by IA	Formally Accepted risk (No validation)	Open at end of period (A+B-D-E)	Open – on track	Open & delayed
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Details included in				Appendix A	Appendix B		Appendix C	Appendix D
Significant	6	0	5	1	0	5		5
High	1	0	1	0	0	1		1
Moderate	15	0	10	7	1	7		7
Low	7	0	7	5	0	2		2
Not Rated*	6	2	7	6	0	2	1	1
Total	35	2	30	19	1	17	1	16

Scope Period: January 1, 2021 through December 31, 2021

Approach: For validating management action plan, the activities undertaken by internal audit included:

- Requesting status updates and contact information from management;
- Testing/validating evidence of management's resolution/disposition of the original finding for items expected to be closed and/or indicated as closed by management;

- Preparing a report on the outcomes of the management action plan internal audit activity.

Conclusion: In total 20 (67%) management action plans were closed in the period, 1 was retargeted for the first time, and 11 were retargeted for the second time or more (22% penalty) resulting in an overall final conclusion of 45% - "Not Controlled".

- *Closed as planned and closed in advance*: In the period 20 items were closed versus an expected 30, a total closure rate of 67%:
    - 18 management action plans were closed, out of the 30 due in the period
    - 1 management action plan was closed ahead of schedule
    - 1 management action plan was closed via formal risk acceptance
- *Additions*: 2 management action plans were added during the period
- *Retargeted Items:* 12 management action plans were retargeted in the period:
    - 1 was retargeted for the first time
    - 11 were retargeted for the second time or more (11*2% penalty = 22%)

Management is showing strong progress on most open action plans as this year the total open action plans is the second lowest it has been in 9 years; however, the proportion of "Open & Delayed" management action plans is also the highest it has been in those 9 years.

The past 2 years have been unique and challenging for society, business and government. In the face of this pandemic, management was able to progress and close 20 management action plans of the intended 30 action plans originally expected in the period. However, it is important to also note that the majority

(16 out of 17 or 94%) of the prior internal control findings are past due (Open & Delayed). Of these 16 Open & Delayed findings, 11 relate directly to City departments (69%) and 5 open findings relate to Agencies, Boards and Commissions (31%).

While it is important to consider the fact that management made progress in resolving more than half of the issues that were previously open, it is also important that management and City Council understand that risk exposures remain until known gaps are mitigated. For the Open & Delayed findings 100% (16) are anticipated to be resolved in the next 12 months.

Given the state of the world, the pandemic situation, and local initiatives City Council and Management should ensure that the timely resolution of open actions is considered, prioritized and the risk understood amidst the City's other initiatives and operational requirements.

Management's report on open findings will provide additional detail and rationale whereby management believes that many of the open action plans have made significant progress and that there is a reasonable basis to complete the actions on time. We have not audited this management report, nor the underlying statements of action, but the information provides a plan and context.

It is important that management and City Council understand that these specific risks are implicitly being accepted, or tolerated, in the medium and long term. As such management should consider either:
1. Risk accepting the Open & Delayed Findings with City Council agreement or

2. Implementing a mechanism by which the CLT/Commissioners are able to ensure that the management action plans outlined in Appendix D are completed in the revised timeframes.

Note: Subsequent to the report closing date we noted findings 205, 207 and 209 related to YQG were addressed early in 2022. As such will be included in the closed count of next year's report.

Open and delayed trends as at December 31, 2021
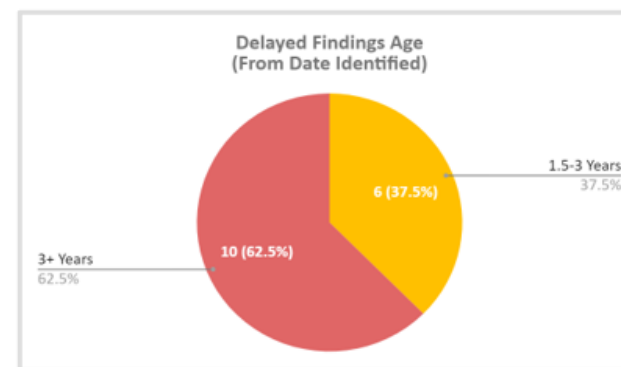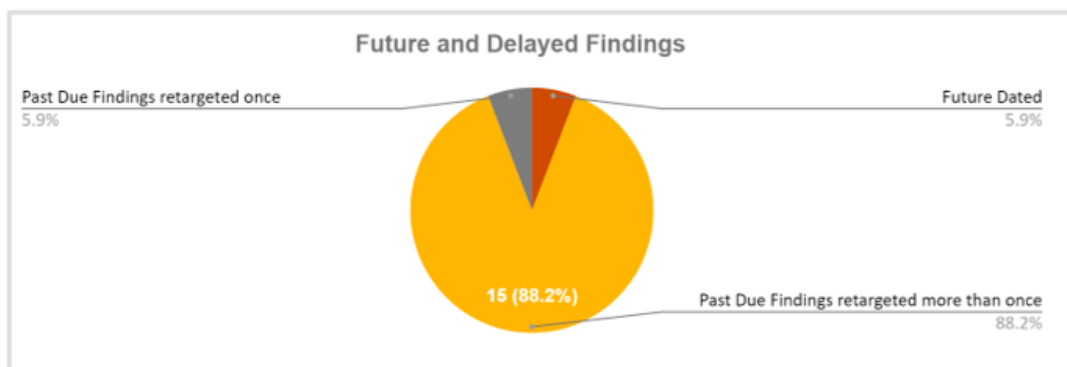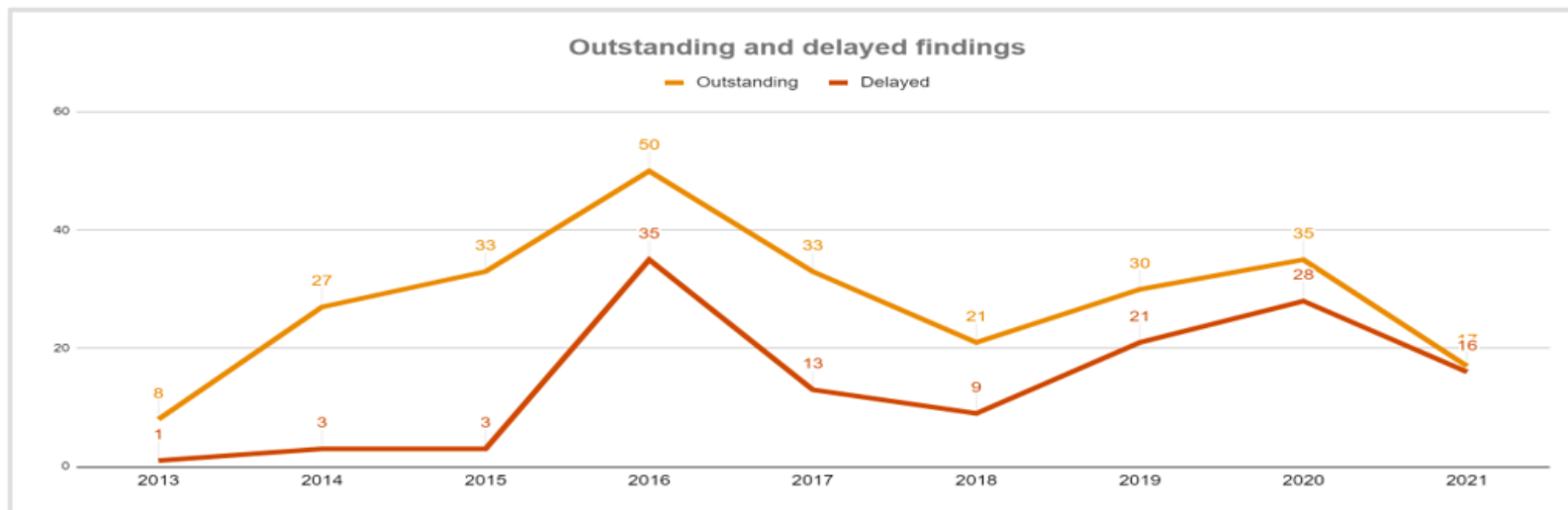
Overall the number of open management actions plans is the second lowest it has been in 9 years; however, the proportion of "Open & Delayed" management action plans is the highest it has been in those 9 years.

2.4 Annual Performance Report

Internal auditing is an independent, objective assurance, and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (Source: The Institute of Internal Auditors).

The purpose of this annual performance report is to summarize and highlight the achievements and how the City Auditor General (AG) and the Internal Audit (IA) team delivered on its mandate.

We have completed 90% of our 2021-22 Internal Audit Plan. The IA projects this year ranged in scope and included testing over: performance audit procedures, assessment of internal controls, testing the efficiency and effectiveness of processes and procedures. During the period, IA conducted findings follow-up for management actions to address internal audit findings/recommendations and also administered the Concerned Citizen & Employee Hotline.

IA work was conducted using PwC's Global Internal Audit Manual, which is aligned with the International Standards for the Practice of Internal Auditing as outlined in our contract. We also leveraged performance audit/value-for-money auditing standards in selected projects where applicable.

The remainder of this report highlights how:

● the AG charter was fulfilled,

● how we leveraged 13 team members, including 5 specialists, to conduct our work program;

● an overview of management's closure of 251 our of 268 findings raised since 2014;

● areas where we may be of further assistance to management;

● an overview of potential fraudulent activities we have been informed of;

● a summary of the Concerned Citizen and Employee Hotline activities in the year;

● our progress against the agreed to performance measures; and

● a summary of emerging trends for your information.

Appendices

Appendix A - Summary of use of unallocated effort

Unallocated Effort			
Activity	**Requested by**	**2021-22 effort hours**	**Result**
IA met with City's Finance and Legal team to confirm and agree on the various categories each City's ABC would qualify for. Subsequently, IA prepared letters for such ABCs which outlined some key information regarding the Auditor General ("AG") role and the entity's participation in the potential scope of the AG.	Management	32	We have sent the letters to the entities representing the respected categories i.e., Local Board, Municipally Controlled Corporation, Grant recipient, and Optional Participants. See Appendix C for listing of entities issued letters. An updated listing with responses received from Grant recipients and Optional Participants will be provided upon receipt of all responses due in mid-January 2022. This auditable universe will inform the annual risk assessment and project plan development.
Total		**32**	

Appendix B - Complaints & Investigations

Complaints & Investigations							
Activity in the period	**Checked within required time frame**	**# of Contacts Received**	**# of hang ups**	**# of handoffs to management**	**# of items under analysis**	**# of items under investigation**	**# of items investigated**
Concerned Citizen and Employee Hotline Channel	Yes	20	3	16	0	1	0
Auditor General Channel	-	-	-	-	-	-	-

Item under analysis/investigation		
Description of item	**Activities to date**	**Results**
Complaint allegation of misuse of authority or circumvention of process controls	Initial analysis completed. Further consideration and review warranted.	Pending