Section III – Items for the Information of the Board

TO: Chair and Members of the Board of Directors
              Friday, March 21, 2025 Meeting

FROM: Linda Charlebois, Director, Corporate Services

RE: **ANNUAL REPORT ON THE INFORMATION TECHNOLOGY STRATEGY AND ROADMAP**
              2024 Annual Report

KEY ISSUE

An annual report and progress update on the implementation of Toronto and Region Conservation Authority's (TRCA) 2023-2026 Information Technology Strategy and Roadmap.

RECOMMENDATION:

IT IS RECOMMENDED THAT the 2024 Annual Report on the Information Technology Strategy and Roadmap, be received;

AND THAT IT Strategy and Roadmap priority items continue to be included in TRCA's Unmet Needs List to inform TRCA and municipal partner budget processes.

BACKGROUND

In 2023, the Information Technology and Records Management (ITRM) business unit of Corporate Services published its 2023-2026 IT Strategy and Roadmap. This document was designed to guide technology initiatives and investments over the next four years and support TRCA's digital and transformation efforts. The IT Strategy and Roadmap serves as an enabling strategy to advance the goals outlined in TRCA's Strategic Plan.

The IT Strategy seeks to deliver on five key goals identified by the organization:

- Modernize legacy systems;
- Modernize customer service and engagement;
- Become a data powered organization by leveraging data assets;
- Build organizational agility through innovation and coordinated planning; and

- Address human capital challenges in service delivery through access to technology.

The IT Strategy and Roadmap consists of five strategic priorities covering both business-centric and technology-centric needs:

Strategic Priority	Description
Data Insights	Developing the capabilities of the organization to make data-driven, science-based decisions to better support its goals.
Business Modernization	Increasing organizational capabilities to deliver services through the modernization of business solutions.
Digital Services and Engagement	Supporting stakeholder engagement and the organizational transparency through the adoption of digital technologies.
Technical Modernization	Supporting foundational technology services for the organization through effective lifecycle management and service planning.
Information Management & Data Security	Building organizational resiliency through an effective cybersecurity and information asset management program.

Table 1 - IT Strategy: Strategic Priorities

These priorities form the foundation for grouping business and technology initiatives, enabling focused resource planning and improved measurement of outcomes and success.

Supporting Themes & Actions
To support the delivery of these priorities, the IT Strategy and Roadmap outlines three key action areas aimed at enhancing the organization's overall digital maturity.

Supporting Theme	Description
Digital Readiness	Developing the digital maturity of the organization to better adopt transformative technologies through: • Skills development and technical training; • Adopting a customer-centric approach; and

	• Promote innovation and experimentation.
Resource Capacity	Optimizing the use of resources to implement and support technology through: • Encouraging collaboration and the adoption of common platforms; • Developing effective support models to manage technology platforms; and • Identifying roles and staffing needs to meet digital service needs.
Architecture and Standards	Optimizing technology investments across the organization through: • Establishing a program for technology lifecycle planning; • Defining technology standards and policies to guide investment decisions; and • Developing an IT audit program to monitor and evaluate services.

Table 2 - IT Strategy: Supporting Themes & Actions

These themes focus on the policy and planning activities of the ITRM business unit. They are also a key focus of the Information Technology & Information Management Working Group (IT&IM Working Group), which provides governance and oversight for the IT Strategy and Roadmap and helps promote continuous improvement in our digital capabilities. These supporting themes will continue to require a broader collaboration across divisions on processes and governance.

At Executive Committee Meeting held on April 14, 2023, Resolution #B 24/23 was approved as follows:

> IT IS RECOMMENDED THAT the 2023-2026 Information and Technology Strategy and Roadmap, be received.

RATIONALE

The following chart provides a summary of key accomplishments related to the workplan items in 2024. These accomplishments are the result of the efforts of many staff across TRCA's divisions.

Strategic Priority	2024 Accomplishments
Data Insights	• Completion of the ArcGIS Portal platform migration • Completion of LiDAR data processing and release of updated data for 2023 Leaf-Off collection • Streamlined collection of data for the Rouge River Watershed Plan land use updates and analysis • Adoption of data transformation tools for enriching and automating data resources • Completion of a pilot project for an analytics dashboard of planning, permit and enforcement data • Development of a data asset lifecycle strategy to streamline the provisioning and budgeting for critical data resources
Business Modernization	• Completion of the PARES implementation for a modernized planning application review and enforcement system • Completion of the technical update of TRCA's financial management system, and user training for reporting development • Deployment of new financial services, including EFT payments • Upgrades and enhancements of the Centralized Planning and Reporting system (CPR)
Digital Services and Engagement	• Initiated a project to modernize Parks and Education Customer Management Systems • Initiated a pilot project for PARES Customer Self Service Portal • Completed architecture design for modernizing the Stream, Erosion and Infrastructure Database system (SEID) • Developed Parks facility reservation permit

	enhancements to verify bookings and arrivals • Implemented pilot for virtual desktop services
Technical Modernization	• Upgraded and replacement of legacy data centre equipment • Migration of the core data centre and internet services to the new head office • Implemented new Virtual Private Network (VPN) platform to replace legacy services • Migration of SEID to Azure cloud infrastructure • Completion of upgrades and patching of core infrastructure services
Information Management & Data Security	• Implementation of new firewall services • Implementation of modernized back-up and recovery services • Pilot evaluation of Web Application Firewall products • Engagement with the City of Toronto to participate in the Executive Cyber Risk Management Group (ECRMG) • Completed the technical architecture and initial testing for the corporate Electronic Document and Records Management system upgrade

Table 3 – 2024 Accomplishments: Strategic Priorities

In addition to these completed projects, TRCA made substantial advancements in several other initiatives, including:

- Released a Request for Proposal for a new solution to modernize Parks and Education Customer Management Systems;
- Initiated a pilot project for the PARES Customer Self Service Portal;
- Initiated a consulting assessment to develop a roadmap and budget estimate to modernize TRCA's financial systems; and
- Initiated a digitization project for historical engineering drawings and flood plain maps.

The IT&IM Working Group continued to meet quarterly through 2024 to review the progress of the strategy workplan, as well as the supporting themes and actions. Each meeting provides an opportunity to collaborate on one of the themes and to seek ways to advance TRCA's digital

capabilities.

The following chart provides a summary of 2024 accomplishments in this area:

Supporting Theme	Description
Digital Readiness	- Expanded training opportunities to leverage municipal partner resources for GIS training - Evaluated cybersecurity awareness programs through the City of Toronto partner support offerings - Initiated workshop discussions on promoting innovation and identifying barriers - Continued development of a multi-year Total Cost of Ownership workbook to support a technology project costing and planning.
Resource Capacity	Continued discussions on shared technology support resourcing for core business applications, such as PARES, a new Parks and Education Customer Management System, as well as divisionally managed technologies.
Architecture and Standards	- Completed divisional meetings to consult on the new IT Policy framework - Began draft policy updates for review and adoption in 2025 - Mobilized new collaboration teams reporting to the IT & IM Working Group to investigate special interest topics: - The use of artificial intelligence tools - Data assets and governance - Business automation and workflow

Table 4 – 2024 Accomplishments: Supporting Themes & Actions

Continuing Challenges and Pressures

Mid-way through the roadmap and plan, TRCA has made significant progress in reaching the goals of the IT Strategy. However, several longstanding challenges remain, particularly regarding legacy systems that impact efficiency and service delivery. TRCA's continued use of Lotus Notes for certain business functions is a key example. While the platform has supported operations over the years, it presents limitations in workflow efficiency, enterprise reporting, and seamless integration with modern cloud-based solutions. As TRCA moves toward more agile and data-driven processes, updating these systems will be an important focus.

To support this transition, the Information Technology and Information Management Working Group is developing an approach to modernizing legacy applications, ensuring minimal disruption to operations. In the interim, efforts are focused on exploring enhancements and integrations that improve workflow efficiency while longer-term solutions are developed. Additionally, this group is coordinating investments in staff training, resource planning, and innovation projects in automation, data insights, and artificial intelligence.

Outlook for 2025

TRCA will continue to build on the accomplishments of the past year and meet the goals of the organization through the upcoming year. The following is a summary of key projects and workplan activities to be delivered in 2025:

- Modernize legacy systems:
  - Continue to work to address workflows and investigate alternatives to reliance on aging corporate systems including Lotus Notes.
  - Rollout of the Customer Self-Service portal for PARES to enable online planning and permit applications, file collaboration and payments;
  - Deployment and staff training for the upgraded Corporate Records Management System;
  - Financials system replacement business case and project roadmap;
  - Acquire and implement Cybersecurity and Data Protection roadmap priorities; and
  - Continue to match licensing and asset requirements with organizational and staff user requirements to ensure cost

efficient service delivery.

- Modernize customer service and engagement:
  - Selection of a new Parks and Education Customer Management System and initial phased implementation;
  - Implementation of the new SEID system; and
  - Event calendar consolidation and enhancements for websites.
- Become a data powered organization:
  - Consolidation and improvements to Open Data services;
  - Continue the development data asset lifecycle plans and integrated budgets;
  - Enhanced data management for Watershed Plan initiatives
  - Develop corporate and program data marts to improve access to organizational data; and
  - Continue to develop corporate and program analytics dashboards.
- Build organizational agility:
  - Complete IT Policy updates and baseline technology standards;
  - Continue the design and deployment of project costing/Total Cost of Ownership toolkit; and
  - Continue to develop and deploy project intake and review process, with integration into the ITRM service desk systems.
- Address Human Capital challenges:
  - Continue technology support planning with Divisions; and
  - Expand technology and project management training for TRCA staff.

The IT&IM Working Group will also continue in 2025 to collaborate on building TRCA's digital readiness through its support of the various activities of the strategy.

Relationship to TRCA's 2023-2034 Strategic Plan
This report supports the following Pillars and Outcomes set forth in TRCA's 2023-2034 Strategic Plan:

Pillar 4 Service Excellence:

4.1 A strong and skilled workforce

Pillar 4 Service Excellence:

4.2 Provide and manage an efficient and adaptable organization

Pillar 4 Service Excellence:

4.4 Transparent decision making and accountable results

FINANCIAL DETAILS

The IT Roadmap and Workplan encompass several projects designed to modernize how TRCA engages with customers and stakeholders, leverages data, and ensures the continuous improvement of its technology assets. These initiatives will provide transformative changes in TRCA's administrative and customer services, delivering operational efficiencies and new marketing opportunities to deliver programs to our customers.

These initiatives will require significant investments in both staff and financial resources. Beyond the initial investments, some projects may involve ongoing operational costs to sustain services. TRCA has included some of our early estimates of costs in the Unmet Needs List that is reported on to the Board of Directors and will continue do so. The Unmet Needs List will also inform discussions on required operational and capital investments with participating municipalities as part of the budget process. In addition, TRCA will continue to pursue grant opportunities from senior levels of government, where applicable, to offset capital costs.

Business cases and Statement of Interest (SOI) will be developed for planned investments for the approval of the Board and managed as part of the Unmet Needs List. These requests will follow a similar model to the Permit Application, Review and Enforcement System (PARES), which was approved in March 2021, and will outline the project and annual operating needs, as well as a funding and payback schedule where required.

Key priorities include:

- Financial Systems modernization project, following the Roadmap project identified above. This project is currently on the Unmet Needs List with an estimated budget of $3.5M;
- Cybersecurity and Data Protection services to increase the capabilities of TRCA to prevent cybersecurity incidents and data loss. This initiative is currently being reviewed to incorporate shared service opportunities with the City of Toronto;
- Capital Project Costing and Management system will require similar investments to the PARES initiative; and
- Network Infrastructure and Capacity Upgrades, which will increase network services to meet long term needs of TRCA properties and businesses. A ten-year upgrade plan is anticipated to include capital improvements of approximately $500-600K, and service upgrades of $60-80K annually.

Business case development is ongoing, and these estimates will be

updated with more detailed projections.

Managing Operational Costs

Technology costs will continue to create pressures for the organization, generated by market increases, growth pressures along with the modernization projects. Critical services are seeing significant cost increases, substantially above inflation, impacting our base costs. TRCA's Microsoft Enterprise Agreement has seen increases of 20-30% across products, and updated vendor of record agreements are also seeing similar increases. ITRM will continue to leverage enterprise agreements and other public procurement arrangements to stabilize costs as much as possible for the organization. ITRM will also continue to monitor relevant trade agreements and potential tariffs for their impact on existing contracts.

TRCA is also seeing growth pressures related to technology, as the organization continues to expand its staff and services, and as it continues to expand its use of new cloud services for storage and computing services. The requirements of the cybersecurity program are also continuing to grow due to the increased threat activity and complexity in mitigating cybersecurity risks. ITRM will monitor the growth and usage of technology products and work with the organization to consolidate services to optimize the use of past investments and migrate storage to lower cost services.

ITRM will continue to work with TRCA business units to plan new technology initiatives to drive value in our services, develop effective support models to maximize their returns, as well as to develop lifecycle plans for technology assets and systems.

TRCA will continue to discuss operational and capital investments with participating municipalities, such as the collaboration with the City of Toronto on cybersecurity services. The organization will also pursue grant opportunities from senior levels of government, where applicable, to offset capital costs.

DETAILS OF WORK TO BE DONE
Over the remaining two years of the IT Strategy, ITRM will work with divisional stakeholders to continue to monitor progress and adapt the workplan to deliver on the key priorities and projects. The Strategy will also continue to be reviewed annually to ensure it continues to support and enable progress on the pillars of TRCA's corporate strategic plan.

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Attachments: 1

Attachment 1: 2023-2026 IT Strategy and Roadmap Report