



2023 Business Plan & Budget

Information Technology

Prior Year Accomplishments

Economic Prosperity & Innovation

The Information Technology department continued with the management of the SMART Northumberland initiative, the County's Digital Strategy. In 2022, the major focus was on broadband connectivity in the County. This included the announcement of 45-million-dollar funding for providing high-speed internet service across Northumberland. Additional focus was directed toward finalizing a tool for enabling digital health navigation within the Northumberland Community. And finally, we are continuing our efforts towards seeking opportunities to facilitate digital literacy in the community by conducting information sessions for residents.

Embarked on the project of upgrading our meeting room technology to leverage hybrid meetings as the world moves towards a virtual meeting space. Phase one implementation of technology to provide hybrid meeting options for Council Chambers and for the Boardroom at 600 William Street Office was completed. Also provided guidance and expertise for technology initiatives within our member municipalities

Sustainable Growth

The Information Technology department strives to ensure that backend technology supports are effective and sufficient to support ongoing organizational and community growth in a manner that is cost-effective and value driven. Examples of 2022 accomplishments in this area include:

- Network upgrades to improve performance and reliability
- Enhanced backups to strengthen security posture and disaster recovery options
- Cybersecurity enhancements to further protect County infrastructure and data
- Continued standardization of infrastructure components and alignment of best practices



- Designing and planning technology infrastructure components for the new GPL and NCAM
- Provided leadership in NCHC's Yardi Voyager upgrade
- Assumed the Records Management function, and introduced a new approach with the Information Management Position
- Continued attention to and investment in IT security and cybersecurity solutions and best practices
- Actively participated in the EOITC (Eastern Ontario Information Technology Collaborative) which aligns with the EOWC
- Participated in the ICON special interest group to discuss and resolve current challenges with the ICON infrastructure and its potential for replacement
- Community Paramedicine work – setup of 2 bases for the Community Paramedicine Program and associated IT infrastructure needs were met

Thriving & Inclusive Communities

The Information Technology department actively participates on the Ontario Health Team Northumberland Digital Subcommittee tasked with the development and implementation of a digital strategy for the health network. As part of this initiative, we have steered the implementation of Online Appointment Booking (OAB) for the four primary care partner organizations in the County.

Leadership in Change

The Information Technology department provides managed IT services to 3 member municipalities and both local police services. Through these relationships, IT chairs the Inter-Municipal IT Working Committee (IMITWC) which focuses on working closely with its member municipalities to identify opportunities to be collaborative in nature. In 2022, the IMITWC continued to explore opportunities for knowledge sharing and pursue opportunities around collaboration.

2023 Service Objectives & Initiatives

Economic Prosperity & Innovation

The Information Technology department will continue to work towards improving its internal capabilities to better support the County's lines of business with the goal of providing and demonstrating business value and identifying and implementing technology-based efficiencies. The digital strategy implementation will continue and will focus on those items that will bring economic prosperity to the community. Special focus will be given to empowering digital



navigation enablement by rolling out CareDove for Northumberland's Community Paramedicine Program. We will also continue to refine systems and processes required to facilitate remote access to technology and facilitating hybrid meeting room technologies.

Sustainable Growth

Ensuring that technology keeps pace with the demands and expectations of our lines of business and opportunities as they present themselves, the Information Technology department will continue to build a responsive, efficient and secure technology infrastructure.

Internal initiatives to be pursued include:

- Continued modernization of business processes with an eye toward efficiency and effectiveness
- Continued emphasis on securing the technology infrastructure in the organization
- Continued approach of standardization across the IT infrastructure and alignment with best practices
- Review current IT strategy and prioritize improvements that will ensure IT strategy greatly improves business operations and functions
- Raise Cyber Security Awareness among employees by offering corporate training, robust policies, and procedures and prioritizing Cybersecurity in the County's operations
- Continued coordination with the Accessible Web Content Steering Committee to ensure WCAG 2.0 AA compliance to meet legislative AODA requirements
- Continued management of our shared services partnerships in a fair and equitable manner
- Undertake an IT staffing assessment to review IT staffing levels, align resources against key service priority areas and create people plans for all levels of the department
- Policies to be reviewed and updated in 2023:
 - IT-P-02 Cybersecurity
 - IT-P-03 Security Incident Response
 - RM-01 Records Management Program
- Continue to work with all business units within the organization to support the emerging requirements that occur throughout the year



Thriving & Inclusive Communities

Continued involvement with the Ontario Health Team Northumberland towards the development of a digital health strategy will continue to be of prime importance.

Leadership in Change

The provision of managed IT services to member municipalities will continue and opportunities to work more closely with our member municipalities pursued. In 2022, the focus will shift to the development of a new Shared IT Services Model, for improvement in the delivery of Managed Services to lower-tier municipalities and to other strategically aligned partners in the County. We will also work on the SMART Northumberland initiative will continue focusing on:

- Modernizing the workplace and transforming County lines of business
- Facilitating digital literacy opportunities in the County

Long Term Plan & Strategic Objectives

Economic Prosperity & Innovation

1. To address broadband challenges in the County through a coordinated, well thought out investment strategy
2. To create a more intelligent workplace and community, a SMARTnorthumberland, by introducing and making use of newer technologies
3. To use technology as an investment vehicle to attract innovation-minded businesses and professionals

Sustainable Growth

1. To ensure that remote work technology solutions meet the needs and requirements of staff
2. To ensure that the County IT infrastructure (people, tools, and processes) are present to support and ensure organizational success
3. To continue to standardize components of IT infrastructure and follow best practice initiatives
4. To safeguard the privacy and security of County data and information

Thriving & Inclusive Communities

1. Ensure an effective omni-channel service delivery model for the County.



2. Continued emphasis on community benefit from technology initiatives and enhancements
3. Continue to support Northumberland's Health Team from a digital health perspective

Leadership in Change

1. Continue to provide, grow, and enhance the quality of the IT managed services to promote a shared service approach
2. Continue to pursue collaborative opportunities using technology for the benefit of the County
3. Manage the County's Records Management function



2023 Issue Paper

Business Systems Coordinator, IT Department

Purpose

The purpose of the issue paper is to request a new FTE Business Systems Coordinator position within the IT Department, to enhance the services of the IT Department through the improvement of organizational efficiency and improved cyber-security posture of the organization, supporting the strategic pillars of Sustainability and Excellence

Background

Digital transformation in recent years has led to a significant increase in dependence on Business Software and Systems. Northumberland County currently utilizes more than 20 separate and distinct database systems on an enterprise and departmental level to conduct operational processes and store records and information.

Many of these systems and their data lack a mechanism for centralized and consistent support, user access management, and lifecycle support and planning. Access permissions, and vendor support relationships have fallen to the operating departments in many cases. This new position will work closely with departmental staff (in varying degrees dependent on capacity within departments) to ensure security best practices and data governance are adhered to. System lifecycle management, opportunities for consolidation and thereby elimination of excess applications, as well as cost-savings opportunities, will be explored, and accordingly recommended and facilitated ongoing.

One of three focus areas of Northumberland County's Digital Strategy 2019 is 'Workplace'. This focus area includes action items such as 'Modernize the workplace' and 'Transform lines of business'. This new role is vital as we move toward the future of digital service delivery. It will enhance our capacity to further digital transformation initiatives and to facilitate data-driven decision-making, by ensuring effective stewardship of the systems and integrity of the datasets within them, thereby maximizing the worth and usefulness of the data.

In the same manner, this new role supports the main objective of Northumberland County's IT Strategic Plan 2018, which is to 'elevate the IT department's business value to the level of



Business Partner with a long-term goal of reaching the Innovator level.’ To truly bring this value, a central approach to business systems management is necessary.

Consultation/Options

The IT Department reviewed the corporate questionnaire for Business Case for Additional Staffing Request for Additional Funding.

Some key functions of the role are:

- support the IT Department’s capacity to audit and advise on privileged access management within data systems in support of the privacy and integrity of data
- where possible, effect classification and retention of data within such systems in accordance with legislative and bylaw requirements and in consultation with the Information Management Coordinator
- ensure Return on Investment for funds spent on systems and their support by ensuring that functionality is rolled out to its full capability in support of the most efficient business process
- advise on the potential consolidation of systems, to limit security exposure and reduce cost and operational support overhead through a streamlined approach to data governance, analysis, security management, and maintenance.
- Position the data systems in a way that data analysis could most effectively be performed in support of business decisions leading to efficiency in the program area

Financial Impact

The Business Systems Coordinator will be a new role within the organization. This position does not currently exist in the County and will need to be created and evaluated. It is estimated that this new position will begin in the 3rd quarter and be rated at the E wage salary grade. The anticipated total impact including salary and benefits will be \$109,366 for a full year (\$54,683 impact for 2023 budget) and will be funded through the County levy.

Risk Considerations

Access control is a key element of the NIST Cyber Security Framework. This new position will allow us to formalize a true centralized approach to account administration and ensure that the least privilege access is implemented consistently, and effectively on all platforms where County data resides, including and especially any data classified as private or confidential.



More effective systems lifecycle management will ensure that only supported platforms are in use.

Impacts to Member Municipalities/Partners

The Business Systems Coordinator will enhance the future state's capacity for a more mature and effective shared services model.

Included in 2022 Long-Term Plan: YES/NO

No. This is a request for a new position.

2023 Issue Paper

Summer Student, Information Management

Purpose

The purpose of this issue paper is to request a permanent, seasonal information management summer student position within the Information Technology department.

Background

In 2013, the Clerks department received approval for a summer student position in Records Management and Archives. In 2022, records management transitioned to the information management portfolio within the Information Technology department, while the summer student position continued with the Northumberland County Archives and Museum (NCAM), providing much-needed assistance with the Archives, but leaving a gap in support for records and information management related tasks.

In 2022, the County also recruited a full-time Information Management Coordinator. The best value of their experience, skills, and time lies in working with departments on strategies and actions to ensure the responsible stewardship of County information and adherence to legislative and policy requirements.

The summer student will primarily assist with operational tasks but will also support strategy and policy development and other small projects.

Summer student tasks may include:

- Managing physical records, including preparing eligible records for destruction, receiving records from departments, and updating and maintaining records inventories
- Assisting with the development and delivery of training and other supporting material
- Contributing to the review and development of information management-related policies and procedures, such as those related to electronic disposition and the use of cloud products such as Microsoft 365
- Contributing to updates and changes to the County's retention schedule in response to changing legislation/regulations and business practices



Consultation/Options

In consultation with the CAO, it is recommended that Council approve the hiring of this ongoing role in order to assist the County in meeting its legislated obligations with respect to records and information management while also allowing County staff to focus on strategic initiatives related to the modernization of its information management practices.

Financial Impact

The County's summer student program typically runs from May 1 to August 31.

Funding is available but not guaranteed through the Canada Summer Jobs Service Canada (Federal funding program) under HR Policy 4.19.5 Summer Students.

The total financial impact is approximately \$14,000

Risk Considerations

Under the *Ontario Municipal Act* and the *Municipal Freedom of Information and Protection of Privacy Act*, as well as existing County policy (*RM-01 - Records Management Program Policy*), the County must retain and preserve records in a secure and accessible manner.

The summer student will help the County avoid operational inefficiencies, make effective use of its information assets, and meet its legislative and policy requirements with respect to records and information management.

Introducing a student position may also assist with alleviating future recruitment challenges.

Impacts to Member Municipalities/Partners

None.

Included in 2022 Long Term Plan: YES/NO

No. This is a request for a new position.

2023 Issue Paper

IT Infrastructure Upgrades

Purpose

The purpose of this Issue Paper is to seek approval for the planned 2023 Information Technology infrastructure upgrades including:

- Geoware Server Infrastructure (Landfill and CRCs)
- Server/SAN High Availability Cluster
- Hybrid Meeting Rooms (A/V Upgrades)

Background

The Information Technology department has a 10-year technology infrastructure replacement plan based on the anticipated life expectancy of technology devices and industry standard refresh cycles. Where feasible, the Information Technology department looks at extending the lifecycle in a risk-managed approach to obtain the best monetary value for the technology. For 2023, the plan calls for 3 major technology refreshes/enhancements:

1. Geoware Server Replacements – County Geoware servers host the Geoware waste management software utilized by Brighton Landfill, Bewdley CRC, Seymour CRC, and the Material Recovery Facility. The servers have a planned 5-year replacement lifecycle. Due to the elevated levels of dust within the environment, there is an increased risk of failure resulting in a loss of revenue if we delay the scheduled replacement in 2023.
2. Server/SAN High Availability Cluster – To strengthen the County’s business continuity capabilities and reduce the business impacts of IT incidents, an additional cluster of servers is required. This change will bolster the design of the server infrastructure, mitigating the impacts of unplanned server outages by increasing resiliency, resulting in increased IT service levels
3. Hybrid Meeting Rooms – with the adoption of a telecommute policy and the growth of online collaboration platforms such as Zoom and MS Teams meetings, upgrades to existing meeting rooms will facilitate hybrid meeting attendance to provide flexibility for County staff and boost efficiency.



Consultation/Options

In consultation with the CAO, it is recommended that Council approve the 2023 technology infrastructure upgrades as detailed above and direct the IT Director to proceed with the purchase and implementation of the new equipment and/or services.

Financial Impact

The anticipated financial costs associated with this plan are as follows:

Infrastructure Component	Capital Cost
Geoware Servers	\$33K
Server/SAN HA Cluster	\$110K
Hybrid Meeting Rooms (A/V Upgrades)	\$62K
TOTAL	\$205K

The capital funds required for this issue paper will be drawn from the IT reserve. Minimal operating costs are to be absorbed into the current budget.

Risk Considerations

Out-of-date technology software and equipment, especially those that are part of the core infrastructure that supplies technology services to the County, pose a significant risk to the organization if they fail. Recovery time and unplanned purchases of new equipment pose a financial and operational risk to the organization. This includes security devices that assist in the assessment of and remediation of IT security issues in the organization. It is important that we maintain a good state of repair of our technology equipment.

Impacts to Member Municipalities/Partners

No direct impacts to member municipalities. The equipment noted here is used by Information Technology staff as part of the provision of services to managed partners.

Included in 2022 Long-Term Plan: YES

This is included in the IT 10-year Infrastructure Replacement plan.