

Overview of the  
City of Thunder Bay

# DIGITAL STRATEGY



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CITY OF  
**Thunder Bay**  
Superior by Nature



## **A Digital Strategy to Drive the City Forward**

In the always-on, fast moving, 21st century world, digital technology has become a powerful force in society. Using smartphones or tablets, many people choose to bank and shop, buy and book, access entertainment, navigate, connect, and communicate online in ways that fit better their busy lives.

The City of Thunder Bay Digital Strategy was developed to embrace our digital era. The events of the COVID-19 pandemic have demonstrated that citizens are willing to interact with the City digitally, and City leaders and staff have learned how quickly they can pivot to a digital environment – working remotely, introducing digital approvals, and reconfiguring services to be more digital.

While the 2019 Grant Thornton Program and Services Review was the impetus to initiate this work, it is in this broader context that the development of this Digital Strategy was identified as a Council priority.



## The Importance of Technology for Municipalities

Today, most municipalities are massively dependent upon technology to operate. Though often invisible to citizens, technology is a critical service – the glue that keeps the City running 24/7.

Services as diverse as tax billing, dispatching fire trucks, coordinating transit services, safely treating water, and managing recreation program registration, all rely on information technology working quietly in the background to operate effectively and safely.

While email, messaging and smartphones keep every part of the organization connected, it is the back-office business solutions that manage the flow of work – allowing staff to track development applications, run payroll, collect taxes, manage customer requests, or monitor budgets. It is this digitized platform that makes the City work efficiently. Additionally, municipalities are employing “Smart City technologies” and more connected City-wide sensors are being used to monitor critical infrastructure.

Data and information is expected to become increasingly more important, providing insights about service delivery that allow City officials to improve efficiency and improve services.



## The Vision

A collaborative approach to delivering customer-centred, digitally-powered City services.

The vision for the City's information, technology and digital programs, includes some important ideas.

- Collaboration is at the heart of digital success.
- City services to the community are the core of the City of Thunder Bay.
- Providing efficient, accessible, easy-to-use, cost effective and digitally-powered services is of core importance.
- The City should design its services around customers, not around internal needs.
- The City intends to modernize how it delivers services by taking advantage of digital technologies for both internal and customer facing services.

## Customer-Centred, Digitally-Powered City Services

What does this mean?

In a future in which services are digitally-powered, interacting with the City should be **simple, straightforward** and designed around being convenient for customers and staff alike.

Consider the following example that showcases the general trajectory of the Strategy.

Mary witnesses a stop sign being knocked over. Using her smartphone, she takes a photo and uploads it to report the problem. The notification is received and automatically recorded, categorized, located, and a request dispatched to a crew in the area who receives it on a laptop in their work vehicle. They immediately erect a temporary stop sign. Mary gets an update to let her know that a temporary fix is in place. Mary feels reassured the City is working hard and smart to keep citizens safe. When a permanent sign is in place Mary receives a notification that the issue has been resolved and is asked to rate her interaction with the City.

**Integrated technologies** such as telecommunications, networks, mobile devices and business systems are working in concert to allow simple access to services .

**Multiple transactions from different departments** doesn't happen by accident. It has to be planned, processes must be designed, and systems implemented and integrated.

**End-to-end, real-time transactions** are becoming common in the private sector and are increasingly expected (think about airline bookings or interactions with your bank). Moreover, significant efficiencies are achieved such as the reduction in paper, elimination of unnecessary in-person visits, and reduced costs and delays from mail outs.

It is not just customers who appreciate **efficient, simple, and easy-to-use processes**. Staff within the City are often frustrated by inefficient, slow, paper-based internal processes. Modernizing the employee experience so that frequent tasks are streamlined, increases productivity and reduces frustrations.

Communities throughout Ontario are using technology in many ways to provide innovative and cost-effective services, for example:

- Guelph citizens can submit and track building permits and drawings online.
- Burlington staff handle their time and attendance processes via an employee app.
- Barrie residents monitor their water consumption via an online dashboard.
- Richmond Hill field crews receive automated requests on their mobile devices.
- Oakville citizens can search and review planning applications and associated drawings online.
- Brampton Fire Department uses GIS to identify hot spots and focus their fire prevention and education work.

## Our Digital Mission

The City will follow the '15 Principles of Good Service Design' (by Lou Downe) and 'Guidelines for Good Digital Practice' (the Ontario Digital Service Standard) to move the City's Digital Strategy forward.

### The 15 Principles of Good Service Design – Lou Downe



## The Value of Process Digitization

The best run organizations rely on a combination of people, processes and technology, working together in a synchronized fashion, to deliver exceptional services to customers. When processes are digitized, all necessary transaction processing (workflows and tasks, notifications and quality checks, validations and approvals) can be carried out digitally, using a computer and can happen anywhere and anytime. Offline steps related to tracking and planning of work activity (e.g. paper file or getting a physical signature) are removed.

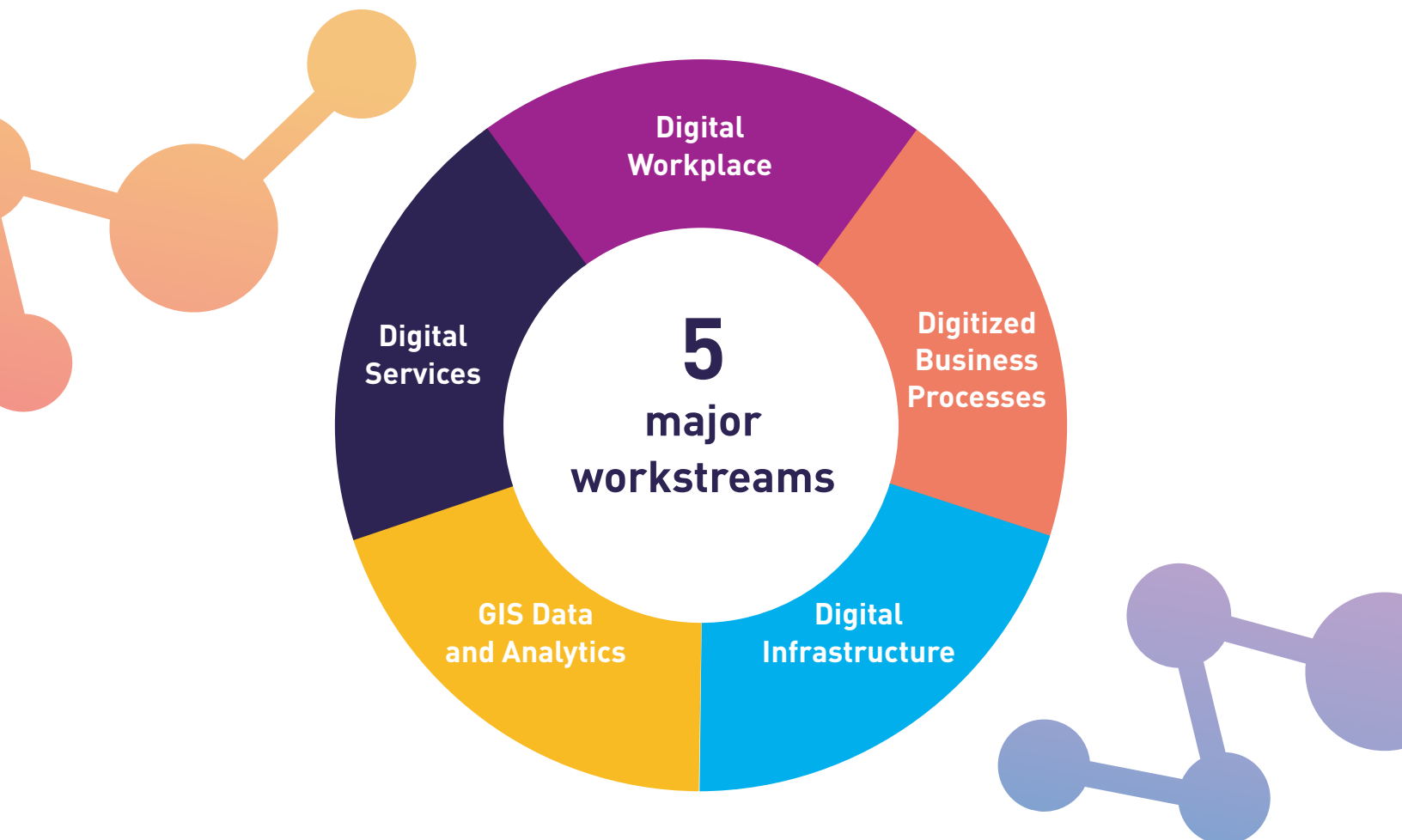
Common business solution platforms integrated in ways that allow tasks initiated or completed in one team or one system to automatically trigger a task for another team to be completed in another system. The digital process chain provides complete visibility and the ability to audit the process throughout the organization.

Systems can manage the workflow of processes and the assignment of activities, including escalating items to senior staff and management when exceptions are encountered or where performance falls below defined levels of service.

Digitization allows the tracking of team and workgroup processes and monitoring of key performance indicators that provide insights to improve process effectiveness, allowing for a more effective allocation of organization resources.

## The Work Ahead: Major Projects

There are five major work streams and their associated key activities recommended in the Digital Strategy where the City will focus its digital and technology investments. Additionally, there are smaller initiatives that the Digital Strategy has identified which are not covered here but have been laid out in a separate internal work plan.





## The Work Ahead: Major Projects

\*Some of the major projects for each work stream are represented here. Additional details and projects can be viewed in the detailed work plan (appendix d) of the full [Digital Strategy](#).

Work Stream	Key Activities*
<b>Digital Workplace</b>  Connecting all staff, using technology to make staff working lives simpler and easier.	<ul style="list-style-type: none"> <li>• Microsoft 365 Implementation</li> <li>• Information Management Strategy and Enterprise Document and Records Management System</li> <li>• Device Review</li> <li>• Connecting All Staff (in office and out in the field)</li> <li>• Expanded IT Support Service</li> </ul>
<b>Digitized Business Processes</b>  Replacing paper-based, manual processes with automated, digital, real-time, workflow-based processes.	<ul style="list-style-type: none"> <li>• Asset and Work Management Systems</li> <li>• Land and Property Management Systems (AMANDA)</li> <li>• SAP Multi-Year Plan, Upgrade and Finance Enhancements</li> <li>• Comprehensive HR Process Management System</li> <li>• Water and Tax Billing Replacements</li> </ul>
<b>Digital Infrastructure</b>  Ensuring we have the connectivity, Cloud capabilities and cybersecurity to support the City and our community.	<ul style="list-style-type: none"> <li>• Network Improvements and Long-Term Network Strategy</li> <li>• Public Wi-Fi Expansion</li> <li>• Automated Meter Reading (AMR) and Traffic Signaling</li> <li>• Cybersecurity Program</li> <li>• Regional Partnerships</li> </ul>
<b>GIS Data and Analytics</b>  Managing data well and using it to drive our practices and decision-making.	<ul style="list-style-type: none"> <li>• GIS Strategy</li> <li>• GIS Upgrades</li> <li>• Internal and External GIS Self-Serve Solutions</li> <li>• Integration Technology</li> <li>• Data Strategy and Governance</li> <li>• Automated Vehicle Location (AVL) and GPS Review</li> </ul>
<b>Digital Services</b>  Providing great, self-serve, digital experiences to customers over visits or calls to City Hall.	<ul style="list-style-type: none"> <li>• Digital Services First (deliver services digitally first vs. other channels)</li> <li>• Digital Declaration (affirms our ambition for services in the internet age and our commitments to it)</li> <li>• Digital Service Standard (see standards outlined in our Digital Mission)</li> <li>• Forms Digitization Program</li> <li>• Payments, Billing and Online Payments</li> <li>• Building Permits, Licences, Planning</li> <li>• Expansion of Recreation Programming, Marina and Campground Online Booking Management</li> </ul>



## Measuring Success

Moving forward, we need to build momentum by beginning to action the work identified here. In fact, work has already begun on several of the initiatives. Each work stream has a detailed work plan and dedicated staff responsible for reporting on progress – based on key data and set of shared indicators.

The Strategy outlines specific tracking metrics in order to measure success. These fall under the areas of the Strategy itself, the digital work place, digitized business processes, digital infrastructure, GIS / data / analytics, digital services, CIT measures, and annual reporting. The detailed list of metrics can be found in the full Digital Strategy report.

We have already started to move forward and we are energized to keep moving ahead. We will provide updates as we make progress on this important project for our community and organization.

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