City of Abbotsford
DIGITAL STRATEGY

2022-2025

ABBOTSFORD

May 2022

A strategy for delivering better services
for the Citizens of Abbotsford in the digital age

City of Abbotsford | DIGITAL STRATEGY

Table of Contents

Key Terms and Terminology

We have worked hard to prepare this document using easy-to-understand language. Nonetheless, the meanings of some frequently used terms should be clarified before we start.

Table 1: Key Terms and Terminology

Customer	This term has been through this document as a shorthand to refer to users of the city's technology and digital services, which includes residents, businesses, visitors, Mayor and Council, the workforce and partners.
Experience	Refers to the overall experience of a person using a city service, especially in terms of how easy or pleasing it is to use.
Digital	Refers to a mode of operating and delivering city services in a way that takes full advantage of streamlined processes and modern technologies (web, app, social, mobile, data) to deliver improved experiences, business efficiencies and insights.
Digital First	Refers to designing city services for digital and online service channels *before* counter, phone, or mail-based channels. For example, designing a new service to use a web form and online payment, not a paper form and a need to visit City Hall to pay.
Digitization	The automation of manual and paper-based processes, enabled by the digitization of information, workflows, moving from an analog process to a computerized process.

Included in Appendix A, Glossary of Terms is a complete list of acronyms used throughout this document.

1.0   Introduction

 Digital is "about using modern tools and technologies to deliver the services people want." BC Digital Government's definition of digital.

In our always-on, fast moving, 21st century world, technology has become a powerful force in society.

Using their smartphones or tablets many people choose to bank and shop, get their entertainment, navigate, connect, and communicate online in ways that fit into their busy lives.

Provinces and municipalities across the Country, as well as the Federal government, are embracing these same ideas and capabilities to deliver digital government services to their customers that better align with their expectations of service in 2022.

Providing service excellence is a priority for everyone at the City of Abbotsford, and we serve a diverse and broad customer base of more than 150,000 Abbotsford residents and businesses. From the new business owner who needs a business license, to the parent enrolling their children in recreation classes, to the developer considering an investment in our community, the City of Abbotsford serves many people every day.

 Our community's average age is 39, and 57% of the population are under 40[1]. 94% of Abbotsfordians are online[2], 76% of Canadians own a smartphone[3] and 88% of Canadians bank online[4]. Community digital expectations are high.

So, for many, but of course not all, the hallmark of customer service excellence is a digital experience.

Consequently, the Customer Culture Strategy identifies a specific and measurable goal to "increase the ratio of online/digital/mobile transactions to in-person contact".

It is in this context that the development of this Digital strategy was identified as a term of Council priority.

In preparing this strategy we have engaged and consulted widely - seeking input, ideas, and validation of our ideas and proposals from all corners of Abbotsford.

Consultees and participants in the development of the strategy have included:

- A broad array of community stakeholders and partners – members of the public, the chamber of commerce, developers and builders, and various community groups

- The mayor and council members

---

[1] https://www.abbotsford.ca/sites/default/files/2021-02/2020%20Abbotsford%20City%20Profile%20-%20spreads.pdf
[2] https://www2.gov.bc.ca/gov/content/governments/connectivity-in-bc
[3] https://www.itbusiness.ca/news/three-quarters-of-canadians-own-a-smartphone-and-other-highlights-from-statscans-latest-tech-data/96715
[4] https://cba.ca/technology-and-banking

- Council's Business, Innovation and Public Affairs advisory committee
- City leadership, management, and staff
- IT management and staff

This is a plan built with and for customers - just as we plan to design new digital services going forward.

While developing the strategy, our pandemic and flooding experiences have been instructive - showing us just how willing customers are to interact with us digitally. We have seen how quickly we can pivot and how readily customers have embraced new digital services that we have introduced. We have also learned how fast we can move as an organization to work from home, to respond to emergency needs, introduce digital approvals and reconfigure our services to be more digital.

☐ The city has seen a significant ramp up in use of our online services in recent years. 70% of summer camp registrations were made online during COVID.

There is no going back from this experience. This strategy outlines how we maintain our forward momentum to build on our recent experiences to become a digitally enabled city that consistently delivers service excellence.

In the next section, we explore our readiness to deliver digital services.

2.0 Digital Readiness

☐ "Being Digital is being of the internet and smartphone era." As we developed this strategy we asked: Are Abbotsford services designed for this era?

Before defining our future strategy, it is important we take stock, to understand where we are, and how we are positioned to take advantage of digital.

To do this we conducted a variety of assessments and evaluations.

2.1. SWOT Assessment

With input from across the organization and community, our SWOT assessment highlights strengths and opportunities:

Strengths that we can build upon as we become more digital

- We see strong Council and community support for digital

- We have positive working relationships and a strong IT team which we can build on

- We have made major investments in industry leading systems - SAP, AMANDA, Tempest, Esri, Office 365 - which are great, robust platforms to support digitization and digital delivery

- We have recently implemented a new, modern web environment

- We have valuable experience from implementing many partial online services

- COVID19 has demonstrated our ability to move fast and embrace new digital modes of working

- We have established Business Improvement Specialists, which can help our business units work on service and process design

- We have established our customer culture strategy which clearly sets the expectation of increased digital service.

Weaknesses that currently inhibit our progress in becoming more digital

- There is a lack of clarity about what our services should look like, and our commitment to digital delivery over other channels.

- We are underutilizing and under-committing to our major business systems. We still have significant continued reliance on paper for core city processes - despite having systems that could automate those processes.

- There is a somewhat low level of risk tolerance at the city along with some cultural resistance to changes that digital and digitization brings. There are also various other inhibitors including some ordinances and human factors which could slow digitization and digital adoption.

- Demand for IT, web and digital solutions far exceeds availability of internal resources to meet demand - so we must meter out the allocation of effort.

- A lack of governance and alignment of IT efforts and investments, means distributed and uncoordinated digital decision making and investment - which contributes to a more complex environment to manage.

- Limited training and education around digital and technology tools inhibits our awareness and our ability to take advantage of the tools that we have.

Opportunities

- Digitization of core business processes has the potential to save a high-level estimate of 20% of effort across the board, freeing up staff resources to work on higher value activities.

- Improved IT and Digital Governance can help us align attention, investment, and resources

- Adding capacity in various ways (internal staffing, private sector support) can help us accelerate our digital transformation

- Leveraging the broader 'digital community' of digital savvy staff across the city can help us further our digital aspirations

Threats to our ability to be more digital

- A lack of digital and IT capacity promotes individualism, divergence, and dilution of efforts, which in turn makes the environment more complex to integrate and manage.

- Major initiatives ahead are corporate-wide complex change management efforts, if we are not positioned well to deal with these opportunities, we will not achieve our goals.

- Staff and management resistance to change could inhibit our ability to drive digital change.

- Cybersecurity threats are continuous, and we must continue to be vigilant and assign resources and effort to mitigate the threat.

- While the city has invested in technology products, additional technology staffing is needed to sustain and evolve these products – otherwise investments may not reach their potential and the city would not meet customer expectations.

In terms of digital services (city services that customers can access online), while the city offers quite a range of online services (e.g., apply for a business licence, renew a business license) they are not fully end-to-end processes and still rely on staff to manage parts of the process. Our digital experiences are far from an Amazon-like service to which we aspire, and too many of our services still require customers to come into City Hall to interact with us, to sign a form, make a payment or apply.

☐ **Digital in Action**

The City of Mississauga moved its recreation guide fully online, saving $230,000 per year.

2.2. Technology Environment

Our technology environment assessment also highlights some issues that inhibit our ability to be more digital (see Figure 1 over the page).

We noted that:

- Our **technology infrastructure** is in decent shape – professionally managed, and dependable. There is some governance and policy improvement work identified and continued, ongoing and increased investment in our security program will be essential to securing our environment and meeting our obligations to protect the information under our stewardship.
- Our **business solutions** capabilities are an inhibitor to digital service delivery. While we have invested in key platforms, we have major work ahead with SAP, AMANDA, and our Information Management systems – we also have a major gap in Work and Asset Management systems.
- We have done limited work in the **integration and data space** – and this is fertile ground for new work in the data and analytics space to optimize operations and gain new insights into how to improve service delivery.
- We have a strong new **website** and a good range of initial **digital services** (recreation programs, business licenses, tax and utility billing, the city services app). However, there are some important gaps that must be addressed to be able to provide a fulsome digital experience to customers – including portal, payments, forms, and the exploration of the need for a CRM system.
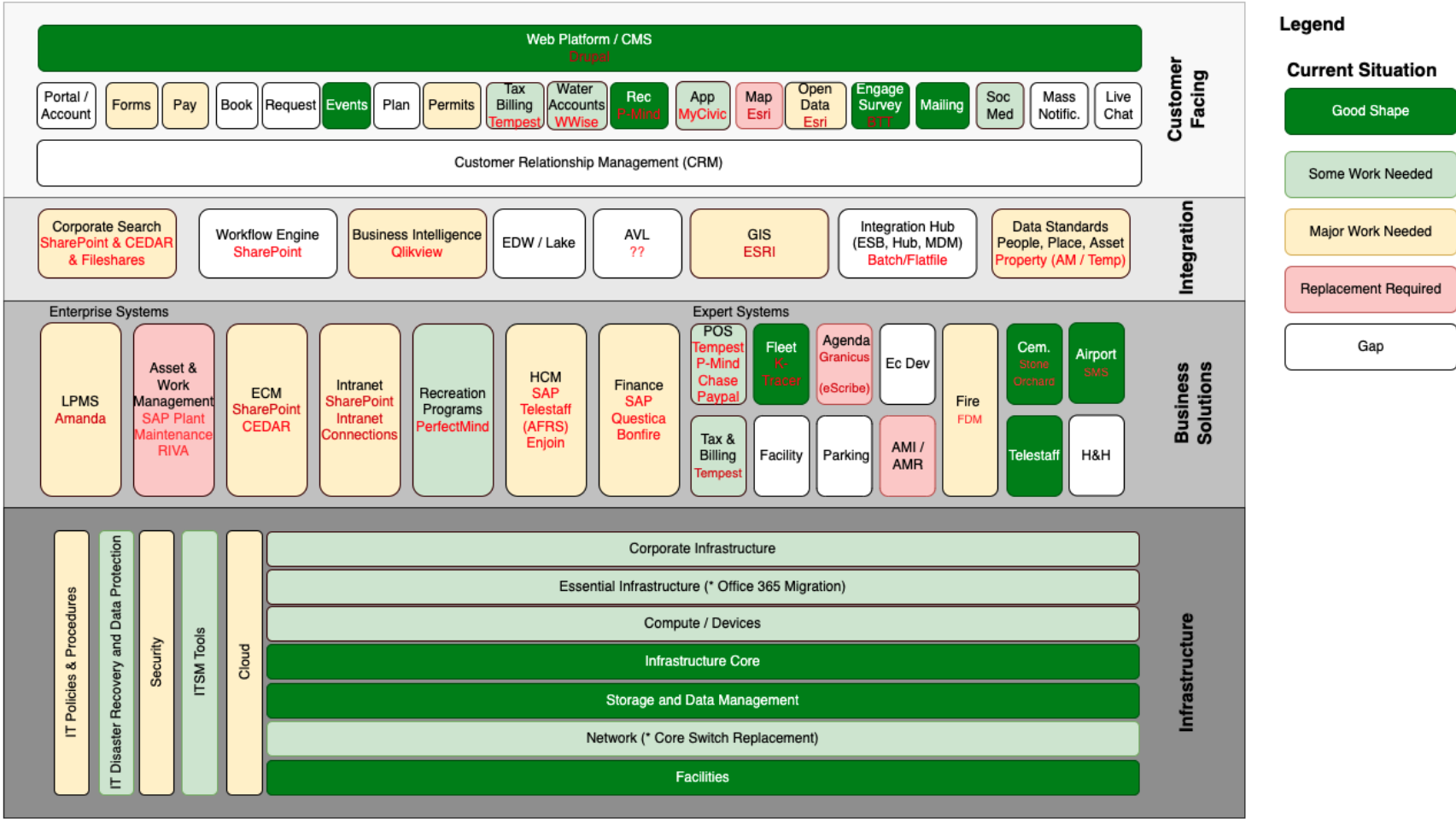
City of Abbotsford | DIGITAL STRATEGY

Figure 1: Technology Environment Assessment Results

2.3. Digital Maturity Assessment

The results of our Digital Maturity Assessment – a measure of our current capabilities and positioning to be a digital organization – indicates that we are in the early experimenter phase of our digital transformation.
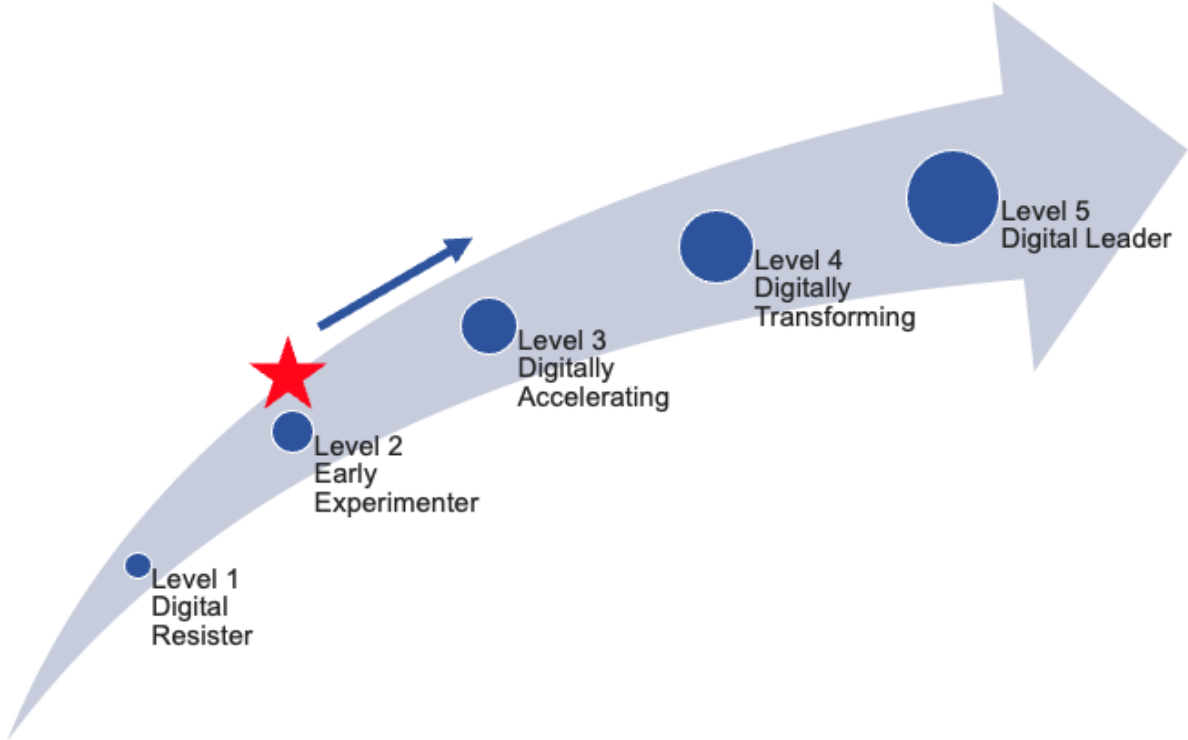
Figure 2: Digital Maturity Assessment Results

Key opportunities identified by the assessment that would enable us to progress on our digital transformation include:

- Setting a strong and sharp vision for digital with a clear commitment to digital service.
- Investing in digital education for leaders, managers, and staff.
- Establishing stronger digital governance, ensuring organizational alignment and a single digital pipeline of ideas and initiatives.
- Assigning clear and strong digital leadership.
- Hiring for digital acumen / aptitude.
- Tackling policy and practice barriers, revisiting ordinances and standards that are barriers to digital adoption.
- Defining what we mean by digital and what good digital service looks like.
- Rethinking and re-designing services internal and external services to be digital first.

- Implementing web portal technology to support end-to-end digital transactions (e.g., enabling customers to login, report a problem, apply, pay, and book through a single, user friendly and integrated interface)
- Adopting modern, rapid project delivery – embracing digital approaches including product-centric vs. project-centric, agile project delivery, iterative delivery, and the Minimum Viable Product concept.
- Investing in multi-disciplinary (cross department and divisional) teams and empowering them to solve business problems.
- Defining a target digital architecture.
- Re-using and fully utilize existing platforms and products (e.g., AMANDA, SAP, Microsoft 365).
- Implementing key missing systems (e.g., Work and Asset Management, Human Capital Management, Customer Relationship Management)
- Investing in GIS, data and analytics and democratizing skills and capabilities.
- Coordinating Internet of Things work across the city and investing in community connected-ness.

2.4. Industry Benchmarking

Our benchmarking indicates that both technology spending and staffing at the city is below industry averages and peers. The following information provided by Perry Group benchmarks our staffing and IT expenditures against their municipal specific benchmarks.
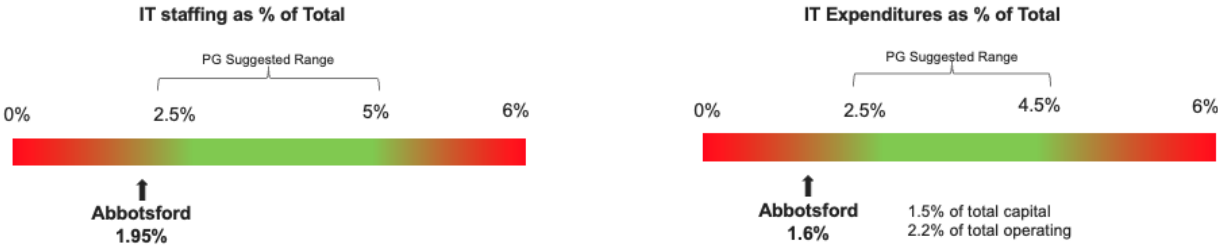
Figure 3: IT Spend and IT Staffing Comparators

We resource and spend less than peers on technology.

If we want to increase our digital capabilities and capacity, the city will need to review expenditures and staffing levels in line with our service delivery expectations. Perry Group suggests that 3% of total staffing and expenditures is a reasonable target for the city to dedicate to technology over the next few years. However, appropriate funding levels would need to be reviewed as part of budget deliberations based on priorities, resources, and available budget.

2.5. Digital Readiness Summary

Overall, while our current state assessment identifies a series of strengths, including our strong teams and collaborative culture, investment in core systems and leadership support for digital - we are comparatively early in our digital journey.

There are numerous opportunities ahead to apply digital to our services to streamline our operations and consequently deliver better, more cost-effective services to our customers.

In the next section, we lay out the key opportunities and our future trajectory.

3.0 Key Opportunities and Future Trajectory

☐ "There is no difference between digital service delivery and service delivery. Today, everything is digital. If governments do not recognize this evolution, then any service strategy is flawed at the concept stage" Alex Benay, CIO, Canadian Federal Government.

So, what are the big opportunities for Abbotsford to use technology to deliver better services to our community and to become more digital?

3.1. Opportunities

Our assessments indicate major opportunities in five areas:

1. **Digital services** - providing great, self-service digital experiences to customers over visits or calls to City Hall and other facilities i.e., recreation centres, etc.

2. **Digital workplace** - connecting all staff, using technology to make staff working lives easier

3. **Digitized business processes** - replacing paper-based, manual processes with automated, digital, real-time workflow-based processes

4. **Modern, secure and connected city** - ensuring we have the connectivity, cloud capabilities and cybersecurity to support the city and our community

5. **GIS, Data and Analytics** – managing our data well and using it to drive our practices and decision making

These become the five themes or workstreams for the strategy.

Our employee engagement strategy notes *"by regularly reviewing and considering the efficiency and accuracy of all business systems, organizations can help to ensure the effectiveness of services and reinforce the connection to the strategies of the business."*

And, as we have already noted, our customer culture strategy sets a goal to: *"increase the ratio of online/digital/mobile transactions to in-person contact."*

This digital strategy directly facilitates this strategic goal. So, of the five areas, Digital Services is our primary goal - but we need investments in the other four areas to help us get there; to enable staff and power the delivery of end-to-end digital services.

3.2. Digital Benefits

There are a raft of potential and anticipated benefits from our investment in digital, including:

- Increased staff efficiency and productivity resulting in the more cost-effective service delivery to citizens

- An increased ability to meet raised customer expectations and deliver enhanced customer experiences

- Increased staff satisfaction & improved recruitment and retention (by providing a flexible, modern workplace)
- Improved community branding and economic development opportunities (intelligent / digital community)

☐ Customers can interact with us in many ways - phone, face-to-face, using email or text messaging, online, using social or live chat. Each of these methods of interaction are referred to as **channels**.

In addition to these benefits, we believe there is a powerful financial incentive for us to pursue this strategy and drive more of our services online.

Research into service delivery costs by channel across governments in Canada, UK, and other nations is consistent, and the table below illustrates research into the cost differences across the primary service delivery channels in Canada.

Channel	Cost per Transaction (Service Canada)
Web / Online	$0.10
Phone	$4.00
Face-to-Face	$6.50

Figure 4: Transaction Cost Comparison Across Service Channels

Where it is possible to do so, delivering services online is proven to be cheaper than other channels by an order of magnitude.

So, delivering services digitally can be a significantly more cost effective for the city and taxpayers. As such, we plan to drive many of our most important services (most used and highest touch) services online.

Enabling customers to self-serve to a wide range of new services is intended to free our staff to deal with higher value tasks, more human and humane services, and more complex issues.

3.3. Our Future Trajectory

☐ "Making government work better for people in the digital age." Ontario Digital Service's mission.

The digital strategy sets us on a path to use technology, and equip our staff, to better serve our customers'.

Taking inspiration from leaders, building upon and remixing ideas in the government digital community is common and accepted practice for digital service teams across the globe.

Thus, the digital strategy for the city sets our goal as ***delivering better services for the digital age for the Citizens of Abbotsford.***

This directly supports our Mission: *We strive to continually improve the quality of life within our community by delivering key services for the current and future generations.*

The goal is to provide great digital services to our community. To take advantage of this opportunity, there are a series of important philosophies and intentions that we intend to embrace as an organization and which we have set out here.

3.3.1. We Commit to Digital

With this strategy we make a clear statement about our preference for digital service delivery over delivery via other channels (face to face, phone, mail). We prefer digital and we prefer self-service. We intend to move as many of our services (external and internal) to the digital channel as we can over the coming years.

Our goal is that 100% of our customer facing services that *can* be made available for customers to self-serve, 24x7x365, *will* be. Whether they are finding information, registering, reporting, requesting, applying, booking, paying, checking, or submitting – they will be provided with a *complete digital service* to do it.

3.3.2. Not Digital Only

We know many of our customers want online options to interact with us, and we will encourage those that want to use those channels to do so.

However, we also know there are many in our community that do not and will not use digital services. We are committed to continuing to offer all services to the community face-to-face, on the phone as well as via our digital channels. Our preference for digital service does not undermine our commitment to deliver services to all members of our community. We will also explore how we can break down barriers for those that cannot get online.

In practice, those customers that prefer to interact with city staff directly, are likely to interact with digital services that we build - but with the assistance of staff - where staff will use the digital service, for instance to report a missed garbage collection - on the customer's behalf. We refer to this as "Assisted Digital Service".

3.3.3. We Aim for Complete Digital Services

A complete digital service is one in which all the activities and tasks that comprise the service are digital. We want our digital services to be great - simple, fast, and easy to use so that customers *prefer* to use them over our other channels. With this strategy we explicitly define what great means (through the introduction of a digital service standard), and what complete, seamless, integrated, end-to-end digital service should look like - what customers can and should expect, and what capabilities we need to be

able to provide services in that way. Going forward all new and existing digital services must meet this digital standard.

Simply put, a customer should be able to complete a full transaction from start to finish - digitally.

Just as you can when you buy a plane ticket. You can search, find, select, and pay for the ticket completely online. You can receive the ticket via email. You can check in online. You can store your boarding pass in your digital wallet, and you can show your phone at the gate to board the plane. *This* is an end-to-end digital service.

Years ago, the process of booking a flight was far too complex for customers, laden with rules and restrictions. As a result, Travel Agents used to handle bookings on behalf of customers. Over time, the airline industry worked hard to simplify the booking process so that customers could self-serve online; and now millions do every day.

This is the same concept and approach that we intend to follow. So, now let's think about applying for a business license in Abbotsford.

We believe a customer should easily be able to:

- Be made aware of the fact that a license is required – perhaps using google AdWords against key terms to promote the need – (e.g., opening a business in Abbotsford, opening a restaurant in Abbotsford)
- **Find the online service using terms that the customer will use (e.g., opening a business in Abbotsford, opening a restaurant in Abbotsford)**
- **Easily find out what is needed to apply** and what the process looks like
- Understand what the service expectation is – does it take 5 minutes, 5 weeks, or 5 months to get a license? Who must review and approve? Will I be notified when they do?
- **Be stepped through the application process**, allowing them to complete their application online – with validations to ensure that a complete application is submitted. The customer should be able to pause and resume transactions if interrupted.
- **As an integrated part of the transaction, pay for their application online using their chosen payment method, debit, credit,** PayPal, Apple or Android pay etc.
- Receive acknowledgement of their request and a link to allow them to make any corrections and to monitor the status of the application. This message should reinforce next steps, expected timelines, where to go for additional questions (link to online FAQ's), and how to contact a human if necessary.
- Monitor the status of their application without needing to contact anyone at the city – subscribing to receive status alerts when the application progresses through various stages, if there are any unexpected issues or delays (e.g., missing information)

- Receive a digital license, with instructions what to do with it (e.g., print and post at business location, keep for future reference)
- When it is time to renew, respect previous customer preferences and notify of renewal timelines, requirements via previously used channel (e.g., email)

Today **items in bold** are currently available via the city's online business license service. So, while the service is online – it is not a complete service, and it does not fully meet the digital service standard that we have set.

Like this business license example, many of the online services that the city does offer, are not end-to-end. They offer the ability for the customer to start the process online, but in many cases, they cannot complete the process digitally. In other cases, the customer experience might be good, but the back-office business processes are cumbersome (relying on paper-based processes, data entry in multiple systems, etc.)

Just like the travel industry, the work ahead for the city is to simplify and design our services so that they can be conducted online. So, we must focus on re-designing services and processes so that they can be conducted digitally, end-to-end. This is what we mean by making it easy for our customers to access, learn about and use our services.

We will prioritize citizen and user needs over and above our historical, organisational, and technological needs. To do this, we must focus our efforts on designing our services and our processes with, and for our customers – and we need to equip our staff with the skills and technology to do this. We will do the hard work to make our customer and staff experiences simple, easy, and pleasant to use.

3.3.4. We Will Test and Learn

We believe strongly in digital and look to municipal peers that have realized significant benefits from their own digital investments. Nonetheless, we must be able to show our community and council, management, and staff the value that can be achieved through digital transformation.

"Show don't tell" is a commonly used mantra in the digital community. So, we intend to establish several demonstrator projects that can illustrate how a service can be transformed from a paper driven process to a complete digital end-to-end service.

We have selected development & building services as one of our first demonstrators and will focus on moving these services online, digitizing back-office processes and equipping inspectors with mobile technology. We have secured grant funding from UBCM (the Union of BC Municipalities) for the D3 project to help us accelerate work in this area.

3.3.5. We Will Move to Integrated Digital Workflows

We intend to move away from paper-based processes - checklists and forms, checks and wet signatures - to digitally driven processes and workflows that use online approvals and payments which can be acted upon from any device, anytime, and anywhere.

This is our new baseline and should be our expectation for all services. Service owners should be actively thinking about how they can move their service into a digital world.

 Moving to an updated, mobile-enabled, paperless process for Fire inspections in AFRS is projected to reduce administrative support needs from 60 days a year to 4 days per year and save up to $185,000 a year across the service.

3.3.6. We Will Build a Connected Digital Workforce

If we are to be digital, we need *all* our staff to be connected.

We aim to make it easy for staff to be connected and work from anywhere - roadside, while on a work site, on-the-move, and from home. We plan to give staff tools that make it easier to work together and collaborate on projects inside our organization and with partners. We plan to connect our field staff to back-office systems - giving them access to the information that they need in the field and thus reducing trips back and forth to offices. We plan to connect all the people that work for Abbotsford part-time, seasonally, and mobile workers to our communications systems to help them feel part of the organization and be more effective.

3.3.7. We Will Position Project Teams to be Successful

We cannot become a digital organization working off the side of our desks. This is a massive change effort, and it will take commitment from all levels of the organization.

We need to assign time and expertise to digital initiatives to be successful. We need to build teams with the right skill sets to move forward at pace. Bringing together teams with various skills and perspectives. We need to invest in change management efforts to help our teams embrace and flourish using digital tools.

3.3.8. Product Mindset, Working Iteratively

We recognize that our digital work will never be done. There are always improvements and enhancements to be done, and advancements to leverage.

We will shift our mindset to focusing on products, over projects. We intend to re-use where possible and fully leverage our core platforms, with specific attention paid to evolving these platforms (SAP, AMANDA, etc.) over time. We prefer incremental improvements to these platforms year-over-year which compound in value over adding new solutions to our technology estate.

We will, where possible avoid long running, *Big Bang* projects, preferring to work on smaller pieces of work that deliver value quicker. We will break larger pieces of work (such as Work and Asset Management System) into smaller components - to reduce risk and shorten feedback loops.

3.3.9. We Will Become Data Informed

We strive to become an organization that uses robust data and analytics capabilities to guide decision making, measure performance and identify improvement opportunities.

Abbotsford Fire and Rescue Service (AFRS) has been a pioneer in this space at the city, drawing data from various systems to get a complete picture of calls and activity

across the community so that they can direct resources to hotspots and put in place programs to address trends and themes that they see in the data.
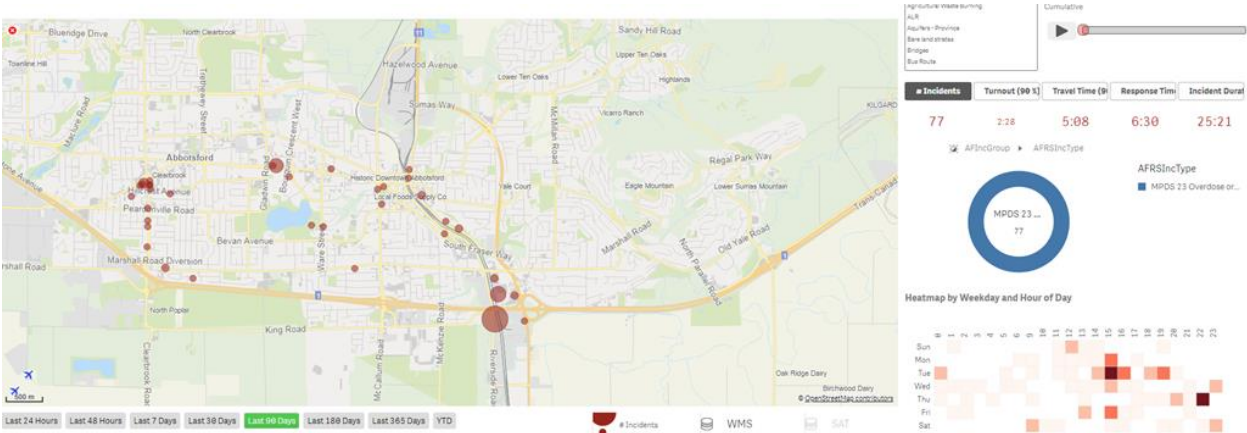
Figure 5: Analyzing call distributions by type enables the identification of hotspots

Additionally, during the floods in late 2021, our GIS tools proved invaluable in integrating data from various sources (on-the-ground inspections, hazard identifications, damage assessments and drone footage) to coordinate our assessment and response.
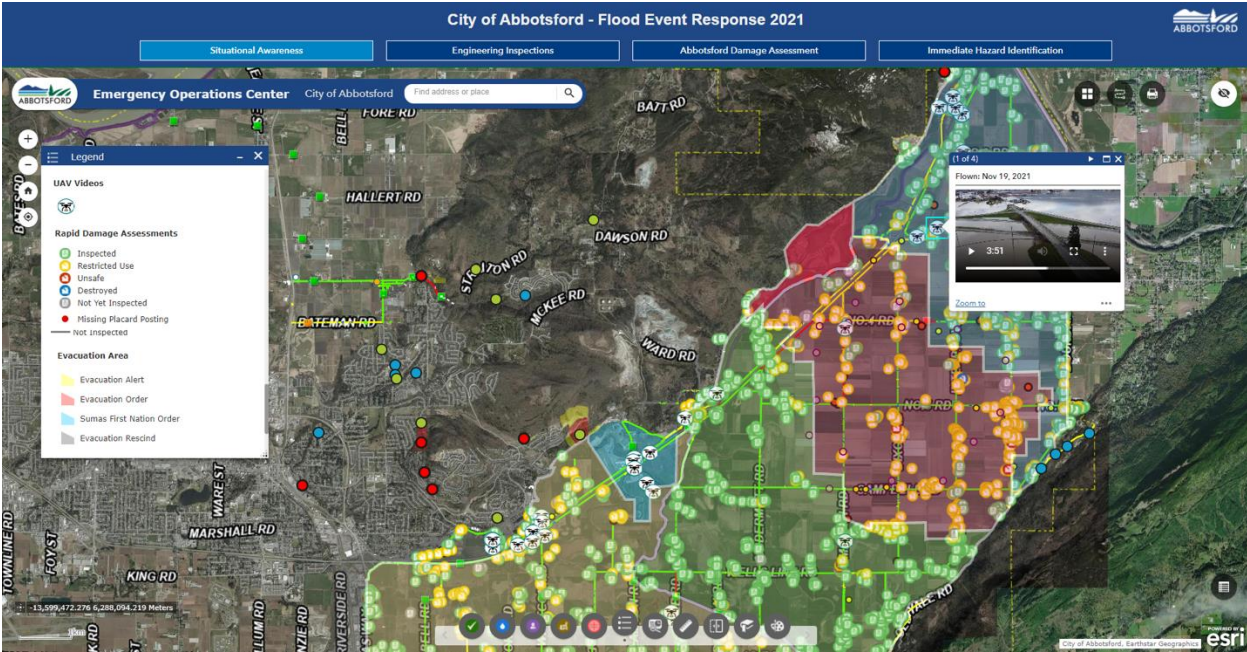
Figure 6: Situational Awareness Dashboard

We have seen strong value in both of these areas and as a result, we plan to continue to invest in growing our data, business intelligence, analytics, and GIS capabilities – and developing our organizational data literacy.

3.3.10. We Will Measure Our Success and Report Openly

In line with our intent to be Data Informed, we intend to monitor key statistics and performance measures around our digital progress to staff, management, leadership, and council. We will build a digital strategy success dashboard to openly communicate progress on this strategy and our goals.

With our strategic directions set, in the next section, we identify the major projects and initiatives ahead.

4.0   Major Initiatives

The work ahead splits across the five workstreams.

1. Digital services
2. Digital workplace
3. Digitized business processes
4. Modern, secure and connected city
5. GIS, Data and Analytics

The workstreams are intended to provide focus for management and staff. They are designed to direct attention, resources and investment towards those areas that will have the largest impact on our digital maturity – and help us avoid distraction from emergent opportunities that might not meaningfully move us forward.

4.1.   Digital Services

Providing great, self-service digital experiences to customers over visits or calls to City Hall is a top priority. As part of this workstream we plan to:

4.1.1. Implement important Web enhancements - accessibility, translation

☐ 34.8% of our Abbotsford community speak a non-official language[5] and according to the 2017 Canadian Survey on Disability[6], more than 22% of Canadians identify as having a disability, and it is expected actual numbers are likely higher

Feedback from our Digital Strategy public consultation identified some areas for improvement in the accessibility and translation of our website and web services. These are both crucially important aspects of digital delivery to which we are fully committed. Indeed, accessibility and translation are to be part of our digital service standard.

In fact, feedback that we received from the community in developing this strategy spurred us to launch new translation services for the city's website which make them more discoverable and easier to use.

4.1.2. Set and Apply Our Digital Service Standard

While all staff at the city work hard at delivering high quality services to customers, there is no common definition or measure of what constitutes high quality and modern service delivery. This leads to a different interpretation from local departments, divisions, teams, and individuals which then results in variability and inconsistency in service delivery and overall service quality.

---

[5] https://www.abbotsford.ca/sites/default/files/2021-02/2020%20Abbotsford%20City%20Profile%20-%20spreads.pdf
[6] https://www.statcan.gc.ca/en/survey/household/3251

For people that can Skip the Dishes, order an Uber, and get same day delivery from Amazon – service *is* digital. Increasingly, these services have come to define what good service means in the 2020's.

And there are a series of conventions and best practices that have evolved with these providers that define customer expectations. Incorporating these practices and conventions into the way we deliver services will be critical to success.

In her book, Good Services, Lou Downe[7] one of the original service designers from the trailblazing Government Digital Service in the UK, identifies the following 15 factors that a good digital service will get right. A good digital service:

1. Is easy to find.
2. Clearly explains its purpose.
3. Sets the expectations a user has of it.
4. Enables a user to complete the outcome they set out to do.
5. Works in a way that is familiar.
6. Requires no prior knowledge to use
7. Is agnostic to organizational structures.
8. Requires as few steps as possible to complete.
9. Is consistent throughout.
10. Is useable by everyone equally.
11. Should have no dead ends.
12. Encourages the right behaviours from users and staff.
13. Should respond to change quickly.
14. Clearly explains why a decision has been made.
15. Makes it easy to get human assistance.

The key message is that good services are consciously and methodically designed to address the 15 key factors. We will use these 15 factors, and Lou's http://good.services assessment tools as our method of assessing the quality of our existing services and ensuring that new ones meet the standard.

4.1.3. Implement New Digital Capabilities

In support of our plans to expand digital service delivery we plan to implement the following features and capabilities as part of our focus on improving web experiences and to support our delivery of digital services.

- Portal / Login

- Service requests & an online forms engine to make it faster and easier to implement new online service

- Improved, consistent online payment options

---

[7] https://www.amazon.ca/Good-Services-Decoding-Mystery-Service/dp/9063695438

- Online bookings of appointments/meetings with city staff and services

4.1.4. Build a service inventory and track % of services that are available digitally

We plan to build an inventory of services that the city provides so that we can index how many of those that we offer are digital. We will use this service inventory to prioritize the sequencing of the next services that we will deliver digitally - prioritizing those services that have the largest reach and impact. We will also use this inventory to measure and report on our overall level of digitization across city services.

☐ **Imagining a Digital Plan and Build Process**

For a moment, let's take a step back and imagine how a Digital service for Planning and Building *could* work in future.

Noah is building a new home on a lot in the city. He visits the city's website to review what is required before he starts. An easy-to-use wizard steps him through the process and he realizes he needs a minor variance before he can begin the build.

Noah starts an application online (by completing an online form which validates the data he enters) to supply the city with the required information. He attaches PDF and CAD drawings of his proposal from his architect and pays for the application with his credit card.

City Planning staff receive notification of the application, they validate that the correct details have been provided and start a series of workflows that allocates tasks to city staff required to review the application.

Details of the application are automatically published on the city's website and those that subscribe are notified of its receipt.

Noah is emailed a copy of a sign that must be printed and shown onsite. The sign has simple details of the application, a map to provide context, and a QR code that allows anyone passing by the ability to scan the code and be directed to the city's website to get more details about the proposed application.

A few days later, Noah uses his smartphone to check in on his application and sees that it is due to be discussed at the next Planning Committee meeting. He wants to be there, so he adds it to his calendar on his phone.

The Planning Committee approves Noah's application, and he is good to go.

Next, Noah needs a building permit for his new build.

He logs back into his city account on the website and initiates a building permit application – using the information that he previously submitted for his minor variance application. He adds additional drawings and information to complete the permit application, and again, pays for and submits his application.

This time, staff in the Building department are notified of the permit application and they begin the process of its review. They use the same system as the Planning team so they can easily review the details of the Development Approval.

Once all reviews and tasks are completed satisfactorily, the city issues the building permit, emailing a permit to be printed by Noah and posted onsite (also including a QR code).

A month goes by, and Noah's contractor is now onsite and has completed the footings work. They require an inspection of this work before they can proceed. The contractor uses his smartphone to login to the city's website and book the next available inspection.

Stephanie, the building inspector for that area, is notified of a new inspection for the next day.

The following day she heads to the site and conducts the inspection. She uses her connected tablet to review the details of the application and record the results of the inspection, completing a checklist of tasks, taking photos and making notes. At the completion of the inspection, she marks the inspection as completed, with a pass.

4.1.5. Demonstrator Project: Beginning to Implement the Digital Plan and Build Vision - Digital Development Delivery (D3)

Using the example above as inspiration, we intend to demonstrate how we can build a complete, end-to-end digital service that meets our digital service standard by focusing on digitizing development and building services.

We have secured funding from UBCM (Union of BC Municipalities) to help us initiate and kickstart the D3 program, which will over the next 3-4 years implement:

- Online applications and case management for building and associated permits and inspections
- Digital plans and markup for development
- Mobile technology for inspectors

We plan to deploy a set of digital approaches and techniques to this set of projects (a dedicated delivery team, product management, Minimum Viable Product deployment and iterative development, co-designing with the community), which we can re-use and scale to other digital service initiatives.

 Digital in Action

The City of Mississauga reduced the turnaround time on development approvals by 50% and saved over $1,000,000 in processing costs through the digitization of their planning process and the introduction of online planning applications.

 Digital in Action

The City of Hamilton saved an estimated $360,000 per year by implementing mobile inspection tools for their thirty-seven building inspectors.

4.1.6. Implement over thirty new end-to-end Digital Services that meet our Digital Service Standard

Over the next 3 years, in addition to the D3 program described above, we plan to introduce a series of new digital services and improve existing digital services. By doing so, we will improve access to services, the customer experience and reduce the cost to the city of delivering the service (due to the significantly lower unit costs of delivery via the web channel, outlined in Figure 4 on page 15). Our goal is thirty new and improved digital services by 2025.

4.2. Digital Tools for a Digital Workforce

Connecting all staff, using technology to make staff working lives easier is central to ensuring that we have a productive and effective staff. As part of this workstream we plan to:

4.2.1. Implement improved ways of collaborating and tools for staff

We intend to make it easier for teams to work together - eliminating the small frictions and frustrations that staff face today. This means implementing the Microsoft 365 product suite, including offering

- New tools for chat, discussions, video and voice conferencing, and project collaboration

- Improved methods and tools for collaboration on documents, presentations, and worksheets, as well as improvements to our document and records management processes

- New capabilities to create shared workspaces to facilitate easy collaboration with people across teams, departments, with partners and the community

- New tools for task and project planning and management

4.2.2. Improved Mobile Working setup

We expect many more of our staff - inspectors, enforcement officers, roads and water staff - will need mobile technology (smartphones, tablets, ruggedized and vehicle mounted devices) to work in the field. We intend to ensure that mobile staff can connect reliably, securely and in real-time to our back-office systems to access work assignments and work history, capture and access data, documents and drawings, and track and record activities.

 Digital in Action

The City of London implemented iPads for Fire inspectors. Mobile inspections are now 25% more efficient.

Another municipality that implemented a mobile work management for their field crews saw the average number of work orders closed per day increase from 11 to 18, an increase in productivity of 63%.

4.2.3. Improved access to technology for non-office-based staff

Many city staff quite reasonably do not have city issued devices and can feel excluded from accessing our internal digital services and communications tools. We plan to implement capabilities that will allow them to use a variety of methods, including Bring Your Own Device (BYOD), to optionally connect to and use our internal digital services and participate in the city's digital community.

4.2.4. Workflow and a move to online/digital approvals

We plan to move away from the requirement for physical signatures for approval and authorization, unless legally required. We will update policies, implement online workflow and approvals capabilities and digital signature tools to move us away from the requirement for physical signatures.

4.2.5. Upgraded and modernized telephony system

Our telephony systems are reaching end of life and must be replaced. This has been an opportunity for us re-think our telephony needs (we have recently conducted a study to understand our future needs), and to select and implement telephony systems that support our needs for more flexible working, reduce duplication and our dependence on physical handsets and position us to provide improved customer experiences.

4.3. Digitized Core Processes

Process digitization is the bedrock upon which great digital services are built.

 What do we mean by Digitized Processes?

Well designed, standardized and digitized processes are the foundation of a well-run municipality. Business Solutions enable the operation of these digitized processes.

A process is a series of steps taken in order to achieve a particular goal or objective. Processes codify the way that the city handles transactions like permits, requests, complaints, license applications, the issuance of bills and tax payments. Defined processes ensure that each request is handled the same way.

Ideally, processes are designed to be efficient and to take advantage of modern capabilities. Technology-based business solutions enable processes to be digitized and automated which enable staff and management to coordinate processes at scale (e.g., recreation programs, permit applications, etc.).

When processes are digitized into robust business solutions, all necessary transaction processing can be carried out digitally and can occur anywhere. Offline steps (manual interventions such as checking a paper file or getting a physical signature) are largely reduced to the point of elimination.

Business solutions are shared across departments and branches so that tasks initiated or completed in one area can automatically trigger a task in another, such as a change in a permit status (in Building) that could trigger the processing of a pre-approved payment (in Finance). In such a situation, payments can be processed faster which ultimately can improve city cash flows.

The digital process chain provides complete visibility of the process throughout the city. Authorized staff can easily check on the status, review previous actions or locate required information without needing to search for a paper file. Systems manage the routing and workflow of processes, including escalating items to senior staff and management when exceptions are encountered or where performance falls below defined levels of service.

Digitization allows management to track team and workgroup processes and monitor Key Performance Indicators that provide insights to improve process effectiveness, or to support more effective allocation of city resources.

We cannot be digital until we are digitized.

As part of this workstream, we plan to re-double our efforts around digitizing our core processes - with a focus around People and Money processes (HR and Finance), Planning, Permitting and Licensing processes, and Work and Asset Management processes.

4.3.1. Multi-year SAP roadmap

We are committed to SAP as our core People and Money process management system. We need to map out our long-term plans and execute on a series of enhancements and upgrades. A number of these initiatives are designed to enable self-service including

- Updates to fully implement the digitization of our Human Resource management processes (e.g., employee records, payroll, employee and manager self-service, progression and succession management)

- Accounts payable and expense management automation and self-service

- Time and attendance automation and self-service

We will establish a joint team, as part of our efforts to improve and align digital and technology governance, to own and oversee our SAP strategy.

 Digital in Action

The City of Guelph conducted an efficiency review of their mostly manual time and attendance processes. The process consumed an estimated 54,000 person hours each year at a cost of $2.5 million. Digitization is anticipated to halve the cost of running the process.

4.3.2. Land and property management process and systems improvements

In support of the D3 program, discussed earlier, we must implement a series of upgrades to AMANDA and Tempest the systems we use to digitize land and property-based workflows, as well as the implementation of new modules and enhancements. This will involve process redesign, software configuration, and mobile technology implementation to support digital development and permitting activity - including building, development approvals, development engineering.

4.3.3. Work management system implementation

A major undertaking to support our Asset Management requirements is the implementation of a new corporate work and asset management system.

This is central to enabling effective, real-time, and mobile management of customer service requests, work orders, work history and maintenance planning for all city assets. We expect this to be a large scale, multi-year, transformation initiative that will require significant funding and resourcing, leadership, and change management attention to be successful.

 Digital in Action

The City of Cambridge has used their Asset and Work Management system to systematically increase the roads rated good by 50% over a 3-year period, this is expected to eliminate over $71 million in repair backlogs.

4.3.4. Business Solutions Lifecycle Management

It is important that we do not lose sight of the fact that we manage a large estate of business solutions (300+) that, like any other city asset, must be maintained and renewed on a regular basis – and this takes up significant staff time.

Vendors of each of these solutions are continually evolving and advancing their products, issuing patches and mandatory updates. We must maintain the solutions, to avoid becoming unsupported, to ensure the solutions don't fail and to mitigate security risks.

4.4. Modern, Secure and Connected City

Our push for increased digital service relies on effective connectivity throughout the city for staff and citizens, an embrace of the cloud, and ensuring our technology environments are secure. As part of this workstream we plan to:

4.4.1. Develop a Citywide Network and Internet of Things strategy

A growing number of our systems, from traffic and streetlights to water treatment and distribution systems, from building automation and meter reading systems, to connected computer systems rely upon citywide IP networks to connect, to communicate and to share data.

On the Internet of Things front the city has Automated Metering Infrastructure (AMI) for water meter reading and leak detection sensors in play already. Looking forward over the coming years, we expect many new devices (for example trash cans, vehicles, pedestrian counters, environmental sensors, and refrigeration systems) to become connected to our networks - we need to be ready. Because of the high cost of implementing and maintaining networks we should coordinate, share and optimize our use of these networks - so, initially, we plan to conduct a review of our city networks to develop a 10-year capital plan for the expansion and maintenance of our networks to support our future needs.

Beyond this there are opportunities for improve coordination of smart city opportunities so we will establish an IoT working group to help us with that.

4.4.2. Conduct a Community broadband needs assessment

Feedback from the community during our consultation work indicated that there are areas in Abbotsford where internet connectivity does not meet the needs of the community (e.g., problems with speed, reliability, and consistency). This is an inhibitor - from an economic and social perspective, as well as an inhibitor to the adoption of digital city services.

Equitable access to internet services is an important issue for the community, and we plan to conduct a needs assessment to better understand the challenge and to assess opportunities for improvement and to understand the role that the city may have to play.

4.4.3. Expand public Wi-Fi in community and civic locations

As part of our commitment to providing equitable access to the internet, we plan to expand access to free public Wi-Fi at civic facilities across the city, including at Skateparks, community facilities, parks and open spaces and in the downtown core.

4.4.4. Update Cloud strategy

We expect and plan to use more cloud services in future - specifically in the areas of software and platform as a service. Our adoption of Microsoft 365 is just one example of this. We plan to review and revise our current cloud strategy, policy, and frameworks – to formalize existing guidelines and to ensure that we consistently undertake robust security, privacy, and management due diligence *before* selecting and implementing cloud solutions.

4.4.5. Mature our Cybersecurity program

Cybersecurity risks and threats are an ever-present danger, and there is a clear trend of attackers targeting municipalities. As we grow our use of technology and dependence upon digital delivery - our obligations to protect the information in our custody grow. We must remain on-guard and vigilant.

To date we have established an internal security program guided by the provincial standard. We intend to invest in expanding and maturing our security program, collaborating with peers and the partner community, and suitably resourcing the program with the addition of dedicated staffing.

4.4.6. Technology Infrastructure Lifecycle Management

Like the business solutions side, we also maintain a large estate of technology infrastructure – networks, switches, storage, servers, and devices, which we must maintain and renew on a regular basis.

This maintenance renewal work forms a substantial portion of our annual IT workplan.

4.5. GIS, Data and Analytics

We plan to become more data driven as an organization. This means using the data that we have to inform our decision making and future practices and working to improve and expand the data that collect to better support our objectives. As part of this workstream we plan to:

4.5.1. Implement GIS enhancements to enable internal self-service

GIS is a key area for us to focus. We recently moved the GIS function into IT - with the expressed intention of aligning GIS work more effectively with our systems and future data work.

We intend to democratize the use of GIS so that hundreds of staff across the city can have access to GIS solutions and services to self-serve. This means introducing tools and services that can help all staff make their own maps, visualize their own data, do their own analysis, and identify spatial patterns, clusters, and hotspots. Self-service will allow GIS team members to focus more on important modernization work and supporting major projects – such as Asset and Work Management.

4.5.2. Implement Customer facing GIS enhancements

We also plan to extend self-service GIS capabilities to the citizens of Abbotsford. We plan to introduce a collection of new location-based online tools that will allow customers to "find their nearest … " or to sign up to be notified about things that are happening in their area of interest (e.g., roadworks, development proposal, or business license).

4.5.3. Develop Data and Analytics strategy

We plan to become a data-informed organization - one that uses available data to help us optimize our management of our services and processes.

The data and analytics strategy must lay out the path to getting there. It should identify our data needs, our data and analytics technology needs, define our data priorities and work ahead to improve the quality of our most important datasets, as well as identifying a suitable governance model, roles and responsibilities, skills requirements and required data education and training.

 Digital in Action

At the City of Corpus Christi, TX, by analysing their work orders, wastewater staff found that nearly 33 percent of the department's effort was spent resolving problems at just 1.4 percent of customer sites. With this information, the city developed and implemented a repair plan that resolved these ongoing issues and ultimately significantly reduced costs.

4.5.4. Implement Demonstrator dashboards and analytics

We used dashboards and analytics to great affect during the flooding in 2021 and saw real and tangible benefits.
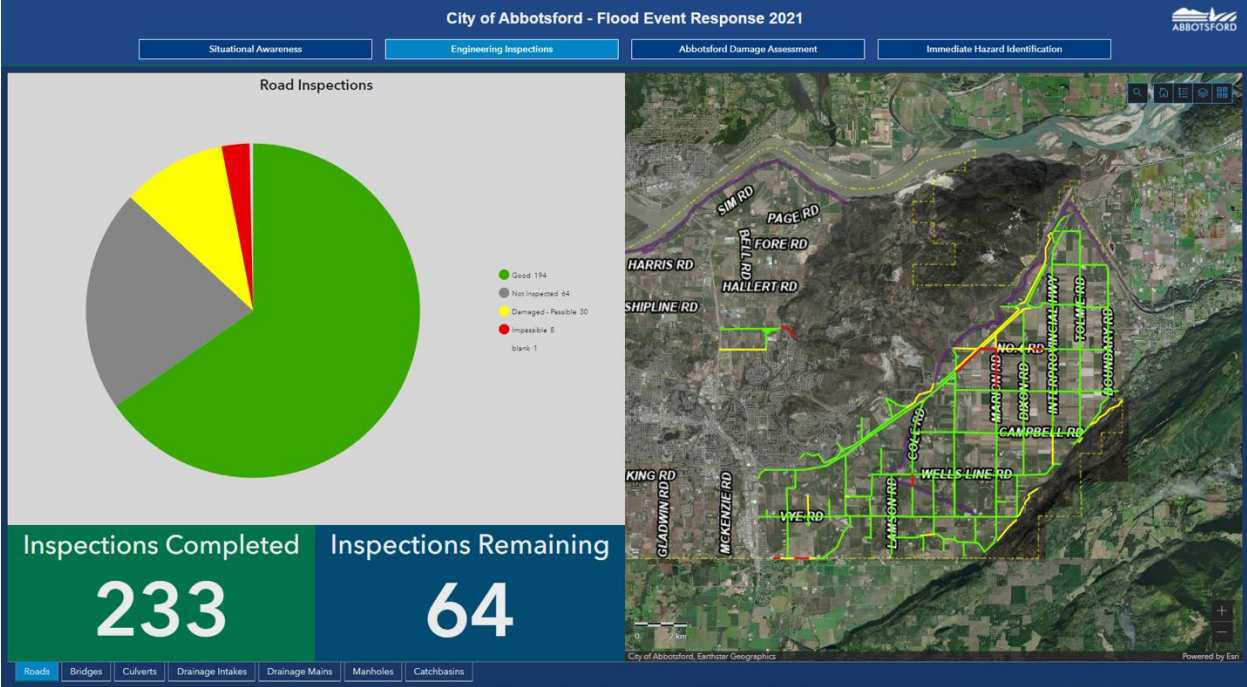
Figure 7: Sample Dashboard from 2021 Flooding Event

We plan to build on this work going forward to introduce a series of other demonstrator dashboards to illustrate the potential and power of visualizing data. This includes work on HR / Manager dashboards, as well as a Digital Strategy performance dashboard to enable the monitoring of progress and key metrics associated with this strategy.

4.5.5. Implement a Corporate Data platform

In support of our data and analytics strategy, we expect to implement a new data platform - providing data warehousing, master data management, reporting, business intelligence and predictive analytics tools - which will support our drive to become more data-driven.

 Digital in Action

The City of Edmonton has trained a Machine Learning model on a decade of data to speed safety inspections. Inspections deemed minimal risk are passed automatically, eliminating unnecessary delays in builder timelines. Since October 2019, the predictive model has reduced the number of eligible inspections by 37%. City inspectors can focus on higher risk and more complicated inspections, which pose greater threat to safety.

4.5.6. Startup a Data literacy program

As part of our broader commitment to digital education and growth, we plan to provide additional opportunities in support of data literacy - helping leaders and managers understand how they can use data to manage their services and inform decision making, as well as equipping them and their staff with the techniques and skills to be able to analyze and interpret their data.

With the what – the major projects – identified, the next section deals with the how – how will we organize and manage the work to ensure successful delivery?

5.0   Creating a Digital Culture

☐ "A digitally transformed organization is one that can operate effectively in our digital age."

We believe strongly that digital tools can modernize and streamline our processes – that we can increase our productivity, and deliver more with the same resource levels, and that we can significantly improve the customer experience.

However, we recognize that becoming a digital organization is an institutional level change in mindset and approach. Thus, this strategy is intended to herald a sea change in thinking for everyone at the city and more importantly equip us with the tools, capabilities and additional capacity we need to take action.

There is a great deal of enthusiasm across the city from staff and management about the digital opportunities ahead – but digital is about execution, delivery, action; and staff in departments are often too busy delivering service to take time to step back and design the future. We need to invest in people to help us drive this work forward.

We need to work in digital ways, and that means challenging the status quo, and acting more like a start-up – designing new services around how things *could be*, not how they *have been*.

Of course, we need everyone in our organization on board and ready to embrace digital possibilities, to be open to re-thinking delivery models, the processes, and the tools that we use to deliver city services.

Critically, this is not (just) about change in the IT Department.

It needs to be a whole organization embrace of digital thinking and approach across the entire organization.

So, while there are many specific projects that we will pursue and that we have discussed in previous sections, the *way* we think about, approach, and manage technology is as, if not more important. The speed at which we move on digital initiatives must accelerate. The way we collaborate and the partnerships we build must be stronger than ever.

The following supporting actions are meant to engender the change we imagine and equip us to execute on our vision.

5.1.   Digital commitment and declaration

We must fully commit to digital service delivery.

As such, we look for the CAO, GMs, Directors and Managers in the organization to sign on to the following digital declaration.

☐   This declaration builds on the Customer Culture Strategy, it affirms our ambition for city services in the internet age, and our commitments to realising it.

It commits us to working to:

- offer our services as end-to-end digital services that meet our digital service standard
- design services that best meet the needs of citizens
- protect citizens' privacy and security
- deliver value for money

In doing so, we are asking all leaders and owners of service in the organization, by signing the declaration, to acknowledge that our preferred and expected approach is for our services to be delivered digitally and that they commit to prioritizing the delivery of digital service in their respective areas.

Furthermore, leaders and management must work with staff to build the case for and support the realization of digital change. Ensuring consistent adoption of new digital processes must be fulsome, it cannot be variable or optional for staff.

5.2. Tackle digital inhibitors

There are various inhibitors which encumber project teams and prevent or inhibit more rapid advancement of digital capabilities. New ones emerge over time, but these currently include:

- Limitations imposed by culture, risk aversion and willingness to change (e.g., staff time recording).
- Staff concerns about future role changes associated with digital change.
- Lack of policy or guidance gaps on the adoption of new technologies / capabilities (e.g., guidance around accepting digital payments, or adoption of cloud technology, or privacy controls around data sharing).
- Availability of staff in IT and in business units to work on projects (e.g., operational service demands override project demands, leading to significant project delays).
- Uncertainty about future technology, roadmaps and replacement schedules (e.g., will we be using this system in 2 years?).
- Procurement process challenges.
- Resistance to change from leaders, within teams and across the organization.
- Perception that customers are happy with current service (e.g., "no one is asking for this" hint: they may be satisfied, but they overwhelmingly would prefer to interact digitally)

Barriers that consistently and commonly inhibit digital innovation are to be brought to SLT for discussion, debate, and recommendations to the CAO, for protocol and policy positions to be established, actions taken, documented, and communicated and thus barriers removed.

5.3. Service and Process Design First

Uber disrupted the taxi industry, Amazon the bookstore, Craigslist and eBay the classified ads industry and in turn the newspaper business, and Airbnb has done the same to hoteliers. They all did so by approaching a problem from a different angle - by thinking differently about how to solve problems for customers in a better, simpler, more efficient way.

We should take a leaf out of this disruption playbook.

When moving to digital delivery there is a once in a generation opportunity for us to re-think how we deliver the services and whether we should change our business model and/or our business processes.

In reviewing their waste management services for digitization, one municipality planned to implement an online booking service for bulky waste item collections. But they quickly realized the current complexity and overheads of running the booking service for individual bulky waste collections. So, instead of designing a slick online booking tool, they decided instead to move to a regular route-based collection program - reducing customer complexity, eliminating the cost overheads of running the booking program - freeing customer service agents and reducing the need for the digital service.

The message here is that, in moving to digital, we need to take the opportunity to review our service delivery models before we build the digital solution.

 Digital in Action

One municipality used business process mapping and re-thinking of their work to streamline their utility locates process, reducing the number of steps by 50% and eliminating over 1 hour of staff time per request.

Our business processes must be reviewed and revised before we digitize. But we need to look at the whole process and we need to be careful not to simply move workloads around. Pushing work from corporate functions may create capacity in those functions but reduce capacity in departments.

This highlights the crucial work of our Business Improvement Specialists and the need to front-end all digital projects with discovery work to understand the business problem, to map as-is customer journeys and business processes *before* designing to-be digital services and processes.

5.4. Collaborative digital leadership / communities of practice

We realize that there are many people across the organization outside the IT team who are involved in service and process design, systems management, data analysis, website publishing, change management, and providing systems training and help.

We also recognize that there are many savvy, technically-minded staff in departments and divisions that are constantly looking for better ways to do their job and use technology to do so.

Broadly speaking - this is the city's digital community. These are change agents pushing the boundaries, exploring and experimenting and learning. These people are

critical to advancing the city's digital capabilities and we want to encourage and empower them.

We think there is value in harnessing this group and aligning work across the broader digital community - including web, GIS, data, business support specialists and business managers

We intend to use Communities of Practice (CoPs) as an approach to tap into and share the experiences, skills and knowledge that already exist across the city.

We will use the CoPs to bring together people that are working in a common area (e.g., Business Solutions Support Clerks, GIS, data and analytics, project management, business process design, service improvement, mobile workers) to share learning and good practices, showcase good work, identify shared challenges and needs, share valuable information and insights and to contribute to identifying the need for standards and accelerate knowledge mobilization.

IT leaders will take the lead to actively enable and facilitate CoPs, providing groups with open digital collaboration spaces in which to collaborate easily and participating as peers – listening for opportunities for improvement and to amplify where opportunities exist.

5.5. Growing digital culture and savviness

 "Digital is something you are as an organization, not something you do." Janet Hughes, UK's Government Digital Service

While our strategy is strong and targeted, culture famously *eats strategy for breakfast*. So, culture will be a key determinant in the success of digital transformation.

To become a Digital organization, a digital mindset must become pervasive throughout our culture; one where Councillors, leaders, service owners and teams genuinely think Digital First, not digital as an afterthought.

So, we must all become more digital savvy, more curious and open to digital opportunities, as well as more ready and accepting of change.

We plan to work on our digital culture in the following ways:

5.5.1. Digital Education

We intend to establish a digital program providing targeted education courses for leadership, management and staff around important digital concepts, service design, agile project management, design thinking and other key topic areas.

5.5.2. Digital Training

We plan to ramp up our offerings of digital training for staff on new tools and capabilities as they are introduced, through projects and digital Communities of Practice.

5.5.3. Hire for Digital Aptitude and Capability

We will take the opportunity to review the digital skills requirements of all job roles, updating job descriptions to ensure that all job roles include modern digital skills and capabilities appropriate to the role.

5.5.4. Be Clear About Service Ownership Role

We have been clear that, going forward, service should be digital and in our Digital Declaration we explicitly state: We challenge all service owners – whether they provide services internally or externally – to meet our aspiration – to design your services to be Digital First. Service owners then are accountable for delivering their service digitally. As a result, the service owner has a proactive role to play – not as a figurehead but as someone who is actively guiding and evangelizing the realization of the business capabilities as well as eliminating the barriers that impede achievement.

5.5.5. Review Our Approach to Innovation

While status quo may not be as effective or as customer centric as we would like, in practice, change comes with inherent risk and so we hold onto the status quo. We need to challenge the status quo and make it easier for good ideas to flourish. We need to ensure that teams understand our readiness to change, to push the boundaries, to do things in new ways.

As a result, leaders, managers and supervisors should consciously check their biases to safety and be willing to challenge their assumptions, listen to customer feedback and encourage teams to be bolder and to challenge the status quo. We should also consciously encourage innovation by becoming a culture that rewards and recognizes new ideas. Innovative organizations provide safe environments where it is acceptable to challenge the status quo and have pathways where ideas can be catalyzed, assembled, tested and deployed.

Our policy review should also help create an environment within which we can experiment and try new things.

5.5.6. Empower Teams – Push Decisions Down, Not Up

Our approach will intentionally push decision making to specific groups with the required expertise and delegated authority.

We should also trust our project and delivery teams – empower them to do the right thing, to challenge the status quo and enable them to be successful.

5.5.7. Embrace Agile and Iterative Ways of Working

Agile is an iterative approach to projects and software delivery that helps teams faster and with fewer headaches. Some of our projects are suited to more agile delivery modes. An agile approach is suited to various digital, GIS, data and systems projects and creates fast, tangible minimum viable products for staff to react to as teams work in short sprints that are more flexible and responsive to change.

We adopted these practices on several projects during COVID and during the 2021 floods which led to outcomes that would have otherwise been unattainable. We plan to expand our use of agile methods to a larger range of initiatives going forward.

6.0   Workplan

The initiatives identified here are the projects which at this time will move the needle on the city's digital capabilities. Of course, technology moves at a rapid pace, so new ideas and opportunities will appear and this workplan will need to adjust and flex to accommodate.

6.1. Key Activities for 2022

Our 2022 budget includes funding for the projects identified below and in several cases work has already begun. If necessary, budget amendments will be brought before council for any additional funding requests to support 2022 initiatives.

Key Activities
• Microsoft 365 – Email and Calendar migration • Microsoft 365 – Teams • Amanda 7 Upgrade • GIS Enterprise Software Upgrades • Time and attendance self service • Long-term Fibre Network strategy • Digital Service Standard • Municipal Service Inventory and Digital Service Priorities established • New digital capabilities (forms, booking, payments, etc.) • Digital Development Delivery (D3) Project • SAP Accounts Payable Automation • SAP Multi Year Review • Information management strategy • Data and Analytics strategy • Cloud strategy • Cybersecurity review • Cybersecurity Improvements • AFRS Service/Technology Review

Figure 8: Activities for 2022

In addition, the Digital Strategy contemplates the following key initiatives in future years.

• MyAbbotsford (online portal)
• Thirty new digital services
• D3 Project – digital permitting
• Digitized corporate HR processes

- SharePoint Online (Information, Document and Records Management system)
- Expansion of Microsoft 365 for collaboration
- Work and Asset Management system
- Community broadband needs assessment
- Data governance and data platform
- New internal web maps (internal GIS updates)
- Webmap / Find my nearest / what's happening here (public facing GIS updates)
- Telephony systems replacement
- Replace Intranet (SharePoint Online)
- CRM system
- Amanda / document and records management systems integration

6.2. Implementation Planning and Budgeting

The previous section outlines our planned activities for 2022 and beyond.

The Digital Strategy team is currently preparing a detailed implementation plan, a resource needs assessment and other recommendations required to support the implementation of the strategy.

We currently fund digital and technology investments through capital and operating dollars and an IT reserve. New sources of funding to accelerate Digital work may be required – and the UBCM grant funding for the D3 project is one example.

In future years we plan to submit funding requests through the usual budget process to secure funding and resourcing for implementation of the strategy.

7.0   Conclusion

Post-pandemic there really is no better time for us to come forward with a digital strategy. We have learned just how willing customers are to interact with us digitally and seen how quickly we can pivot to delivering services in new ways.

Our strategy builds on this learning and our previous work and commitment to service excellence through the Customer Culture strategy. It is designed to usher in a new era of customer-centred digital service at City Hall.

As with any strategy, follow through and execution is the critical component of realizing the vision and achieving the digital culture within City Hall that we are striving for.

We have strong foundations with our new website, core systems are in place and we have a strong team at the city ready to champion digital modes of working. Work is already underway on our demonstrator D3 digital transformation initiative, on the modernization of our collaboration systems, and in the automation and streamlining of various internal processes.

We believe that this strategy provides the framework we need to maintain our forward momentum, to build on our recent experiences, and to become a digitally enabled city that consistently delivers service excellence.

Glossary of Terms

Term	Description / Explanation
ADKAR	Awareness, Desire, Knowledge, Ability, Reinforcement: A change management framework that defines the five outcomes an individual must achieve for any change to be successful.
AMANDA	The city's planning and permitting system
Architecture	In the context of a technology architecture, is a framework of information technology standards, specifications, models, and guidelines for the enterprise.
Assisted Digital Service	Where a customer service agent uses a digital service on behalf of a customer that doesn't have access or would prefer not to use the digital service.
BI (Business Intelligence)	A technology-driven process for analyzing data and presenting actionable information to help executives, managers and other corporate end users make informed business decisions.
Broadband	An always-on, high-speed connection to the Internet with at least 50 Mbps for downloads and 10 Mbps for uploads.
Business Transformation	Meaningful change (in this document, enabled by new technology) that modifies the fundamental model of *how* or *what* services are delivered.
BYOD (Bring Your Own Device)	A practice of allowing employees of an organization to use their own computers, smartphones or other devices for work purposes.
CAD	Computer Aided Design – software used for engineering design
Cloud, Cloud-Based, Cloud Solution	Cloud-based is a term that refers to applications, services or resources made available on demand via the internet from a remote service provider.
COBIT (Control Objectives for Information and Related Technologies)	A best practice framework created by international professional association ISACA for information technology management and IT Governance.

Term	Description / Explanation
CRM (Customer Relationship Management)	A category of software designed to help businesses manage customer data, requests and interaction.
D3	A series of projects focused on the digitization of development approvals and building processes.
Digitization	Digitization is referred to in this document as the conversion of traditional manual or paper-based business processes to technology and data driven form.
Drones	An aircraft without a human pilot aboard, controlled from a ground-based controller.
ECM (Enterprise Content Management)	A series of tools and processes that manage storage, security, version control, process routing and retention of corporate information.
ERP (Enterprise Resource Planning)	A system to aid the flow of internal business processes and allow for communication between a business's departments and its internal functions and data. ERP systems include functions such as human resource management, financial management, supply chain management and enterprise performance management.
ESRI	An international supplier of geographic information software (GIS) applications and services.
FTE	Full Time Equivalent employee.
Geospatial, Spatial	A term used to indicate that data has a geographic component to it. As of recently, the term is picking up popularity in the industry as a substitute for the term GIS.
GIS (Geographic Information System)	A framework where geographic information is stored in layers and integrated with geographic software programs so that spatial information can be created, stored, manipulated, analyzed and visualized (mapped).
Google (G-Suite)	A Cloud-based set of productivity (word processing, spreadsheets, etc.) and collaboration tools offered by Google.
Hot Desking	Enabling multiple workers to use a single physical workstation or surface during different time periods.

Term	Description / Explanation
Integration	In the context of a technology integration, is the use of technology tools to allow multiple systems, processes, or datasets to be combined to produce a common output.
ITIL (Information Technology Infrastructure Library)	A set of detailed practices for IT Service Management (ITSM) that focuses on aligning IT services with the needs of business.
LPMS (Land Planning Management System)	A system to manage and automate workflows associated with building, planning, engineering, permitting, inspections, code enforcement and other land management activities.
Microsoft 365 (formerly known as Office365)	A Cloud-based set of productivity (word processing, spreadsheets) and collaboration tools offered by Microsoft and replacing the previous versions of Microsoft software installed locally.
Microsoft Exchange	A mail server and calendaring service developed by Microsoft, typically bundled with Microsoft Outlook.
MTM (Municipal Technology Architecture)	A model developed by Perry Group Consulting Ltd. identifying the technologies that a municipality should have in place and providing a framework for assessing a municipality's technology environment.
Municipal Benchmark Network (MBN)	A network of Canadian municipalities collaborating to share detailed information and metrics on services and practices to help reduce costs and improve quality of service. MBN was used in this Digital Strategy as a comparative to assess current levels of investment in information technology.
Omni Channel Services	A service that can be accessed through multiple tools, processes and approaches, e.g., requesting a new blue box can be done in-person, online, through a mobile application or over the phone.
Open Data	The idea that some data should be freely available to everyone to use and republish as they wish, without restrictions from copyright, patents or other mechanisms of control.
PM (Project Manager)	A role assigned overall responsibility for overseeing the planning and execution of a particular project.

Term	Description / Explanation
PMBOK (Project Management Body of Knowledge)	A set of standard terminology and guidelines for project management as published by the PMI (Project Management Institute).
PMI (Project Management Institute)	Industry leading professional membership association for the project management profession.
Retention / Data Retention	The continued storage of an organization's data for compliance or business reasons.
SAP	The city's ERP system.
Telco (Telephone Company)	Telephone service provider or telecommunications operator.
Tempest	City's revenue management / processing system
TOGAF (The Open Group Architecture Framework)	A framework for enterprise architecture that provides an approach for designing, planning, implementing and governing an enterprise information technology architecture.
UBCM	Union of BC Municipalities
Wi-Fi	The facility allowing computers, smartphones or other devices to connect to the internet or communicate with one another wirelessly within a particular area.