

REPORT

Council

Meeting Date: April 26, 2021

FROM: Strategic Initiatives and Communications Department

DATE: April 20, 2021

SUBJECT: Digital Oakville 2021 Plan

LOCATION:

WARD: Town-wide

Page 1

RECOMMENDATION:

That the report dated April 20, 2021 from the Strategic Initiatives and Communications department be received.

KEY FACTS:

The following are key points for consideration with respect to this report:

- Oakville's digital strategy was approved by Council in 2017 and aims to make Oakville the most digitally connected community
- The strategy focuses on achieving a connected community in the areas of online services; partnerships and data management; and digital infrastructure
- The 2021 roadmap concentrates on the delivery of excellent customer service through anytime, anywhere online service delivery and generating operational efficiencies. This contributes to Council's commitment to budget increases that are in line with inflation
- Significant progress has been made to date and residents and businesses will continue to see improvements in various areas in 2021
- Ongoing digital transformation is vital to future business and employment growth and sustainability, improves customer service and directly supports the town's vision as the most livable town in Canada
- COVID-19 has accelerated demand for on-line services and increased expectations to operate in a safe, responsible and resilient way

- Technology continues to rapidly evolve and the Town has adopted a pilot-based approach to improvements that can be tested and modified based on user feedback

BACKGROUND:

On December 21, 2020, Council requested that staff prepare a summary of the digital/innovation plan for 2021.

In preparing the 2021 plan, the town continues to build on the planned and thoughtful investments made to date. This has resulted in a well-established infrastructure on which to continue to grow.

In 2013, an audit of online services resulted in the implementation of many improvements over the next several years, including the town's first citizen portal to submit online service requests/report a problem, a new mobile-friendly website design, and an open data pilot project that led to today's open data portal where users of our datasets can interact with and download a variety of town data. This also set the stage for shifting customer service to a convenient 24/7 self serve delivery model.

In 2017, Council approved a Digital Strategy to guide the digital transformation of the Town. It aims to make Oakville the most digitally connected community. The strategy focuses on achieving a connected community in the areas of online services; partnerships and data management; and digital infrastructure, along with ongoing continuous improvement.

Also in 2017, the town enhanced the online customer experience through a more robust customer relationship management platform and a new community portal. The self-serve offerings through the portal continue to expand and residents and customers currently have a variety of online services available. Examples of online usage in 2020 include:

- 427 Report a Problem tickets per month regarding a variety of services
- 28 property survey requests each month
- 258 tax certificates each month
- 5,891 searches and 1,287 downloads of open data sets
- 21,714 specialized trips booked through the specialized transit trip mobile app (2019)*
- 5,888 downloads of the transit real-time bus tracking mobile app (2019)*
- 79% of recreation and culture program registration

- 69% of ticket purchases for the Oakville Centre for the Performing Arts (2019 average)*
- 100% of procurement bids and tenders
- 46,460 on-line parking ticket payments (2019)*
- 172,705 Honk Mobile street parking transactions (2019)*
- A variety of mapping services, e.g., trails and cycle ways, active permits, coyote sightings, accessibility features, etc.

* 2019 data used due to COVID-related impacts on usage or provision of free parking in 2020

Along with the above service-focused improvements made, the town continues to build its underlying digital infrastructure to support ongoing citizen engagement and well-being, environmental sustainability, capacity building and value for money. This includes managing its \$3.6B (current value) in assets within a digitized system that treats assets as inter-related components, rather than isolated parts. Examples of this foundational infrastructure include:

- A state of the art Building Automation System (BAS) installed in 16 town facilities, controlling over 71% of the total square footage owned by the town
- Digital video management systems for over 1,000 facilities cameras, two roadside cameras and a transit fleet onboard camera system
- 160 kms of town-owned high speed fibre optic cable
- 275 public Wi-Fi access points across town
- 16,600+ streetlights managed through the Light Grid streetlight control system
- 152 signalized intersections controlled by the town's traffic signal control systems, including emergency vehicle priority, and 89 accessible pedestrian signals
- 14 public electric vehicle charging stations
- Six digital next bus arrival signs at major transit hubs
- A 900MHz land mobile service using three local towers
- Automatic vehicle location and fuel management system for 232 fleet vehicles (excludes transit fleet)
- Transit control centre that monitors, manages and communicates with 127 conventional and specialized transit fleet vehicles
- Eight data centre-connected rain gauges across town
- Five solar-powered self-compacting trash receptacles connected to town mobile devices
- Pedestrian counters at 12 town facilities
- Over 85 open data sets available to the public
- Field operations staff (parks, roads and works, fire prevention and suppression) are equipped with tablets that improve work order management and allow for real-time data analytics

In 2020, with the onset of the COVID-19 pandemic and subsequent lockdowns and/or service restrictions, the town transitioned more services and back office functions to an online format to ensure service continuity in a safe and accessible way. This included supporting provincial exemptions that allowed aspects of the economy to continue, promoting the physical and mental wellbeing of our community, and ensuring a transparent and accountable government. Examples include:

- 98% of engineering permits and 87% of planning applications are now received electronically
- Introduced a virtual inspection procedure
- Use of e-signatures for the timely completion of legally binding documents
- New recreation and culture virtual program offerings, such as fitness, crafts, cooking, meditation, senior services and more
- 100% of council and committee meetings and public information sessions are being conducted virtually for the duration of the pandemic
- Cashless payments at the Service Oakville counter
- Issued 53,930 courtesy temporary on-street parking permits in 2020 and, since November 2020, 540 paid temporary on-street parking permits

As Halton Region progresses through the province's recovery stages and Oakville implements its COVID recovery program, services are brought back in a safe and responsible way. Ensuring service resilience against future disruption is also a key consideration.

COMMENT/OPTIONS:

The 2021 Digital Oakville plan continues the town's achievements towards being the most digitally connected community. Outcomes are focused on the areas outlined below.

Connected Community through Online Services

Improvements in 2021 will focus on the areas of: applications, permits and licenses; and registrations and bookings.

Applications, Permits and Licenses

- Anytime, anywhere service. An end-to-end, online solution for the full suite of applications, permits and licenses in the areas of planning, development, building and municipal enforcement services. Customers can apply, pay for and update their requests electronically.

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- Improved clarity and transparency. Clear information and instructions, ability to track an application, permit or license, improved collaboration with staff and an easier and more streamlined process.
 - Coordinated and concurrent reviews. Behind the scenes processes will be streamlined and coordinated, allowing for strengthened collaboration and information sharing with customers and other town departments.
 - Paperless inspections. Inspectors will manage their schedules, route their travel, view/download information, complete the inspection, upload data captured in the field and submit inspection reports electronically.
 - Improved data analytics. Ability to showcase successes, diagnose challenges and identify opportunities for improvement.
 - Increased user feedback. Using a pilot approach and relying on user experience and feedback to make ongoing improvements, the program will continue to mature and become more sophisticated in its service offerings over time.
 - Examples of applications, permits and licenses this applies to includes: building permits; planning applications; Committee of Adjustment applications; engineering permits; utility permits; zoning certificates; private tree removal permits; business licenses; parking and community-related permits (e.g., sign permits; noise exemptions), and more.

Registrations and Bookings

- New online recreation and culture registrations. Residents and user groups will have an improved customer experience, increased self serve options, and a more seamless registration process for both seasonal and drop-in programs.
- Online recreation memberships and facility booking. Membership purchases for program offerings, such as fitness, swimming, drop-in sports, skating and senior services will be available. Last minute ice rentals will be the first online facility rental service to be introduced, with additional facility rentals planned.
- Transit ride-hailing. For designated areas in Oakville that do not have rider volumes to support a conventional transit service model, a real-time ride-hailing mobile app will allow customers to book, schedule and track their requested ride. Similar to an “uber-like” experience, this service will significantly improve the quality and capacity of services provided. It will even enable a more sophisticated level of service by offering direct door-to-door service within designated zones and door-to-hub service if travelling beyond.

Connected Community through Partnerships and Data Management

Learning from the community, increasing our data analytics abilities and sharing best practices and data are critical to keeping pace with changing expectations and technology advancements. Work in 2021 will include:

Engagement and Partnerships

- Community engagement. The town will actively engage the community through user/participant feedback and the business community (for example, the Chamber of Commerce, Business Improvement Areas) to ensure continuous improvement and measure key performance indicators.
- Solution testing and pilot partnerships. This involves both the testing of solutions in the town and the potential to co-develop products. Benefits and lessons learned from investments made in the Downtown reconstruction project and the town's Building Automation System will be reviewed and duplicated elsewhere in the town. An office lighting pilot to test the functionality and benefits of a lighting system that learns from its environment and exploring potential electric energy storage solutions are also underway.
- Regional cooperation. A joint effort of the Halton CAOs is underway to improve internet access across the region and will establish digital access objectives, identify gaps in both the rural and urban area, consider mobile and fixed technologies and identify strategies, roles and partnerships required for implementation. In addition, the GTHA Recovery and Prosperity Alliance is a group of municipalities working together to identify and advance shared priorities in the context of recovery and rebuild from the COVID-19 pandemic. Five areas have been identified for focus: transit, housing, digital infrastructure, procurement and sustainable finance.

Data Management

- One resident approach. Update the town/region data sharing agreement to ensure data collection isn't duplicated and data analysis includes complete data sets available.
- Use of non-traditional data sources. Consider new sources of data from non-traditional sources that can provide real-time information and allow better and timelier decisions.
- Predictive modelling. A maturing data analytics capacity at the town includes the ability to do enhanced predictive modelling in the management of the town's assets. The town will deploy an Energy Management System, an add-on to the Building Automation System, to provide better data management capabilities.

- Program Planning. The Town has licensed data from Environics Analytics, providing staff access to several variables including demographics, consumer behaviour, lifestyles and social values. Insights gained by using anonymized customer data assists with program planning, development and communications.

Connected Community through Digital Infrastructure

Continued investment in the town's digital infrastructure supports livability, climate change initiatives and economic development. 2021 will see the completion of digital infrastructure in the Downtown Lakeshore area and expansion into other areas of town, as well as customer experience improvements for online and counter service delivery.

- Public Wi-Fi expansion. Visitors to the downtown core will enjoy free public Wi-Fi along six blocks on Lakeshore Road, as well as, some coverage on north/south streets. Starting in 2021, onboard public Wi-Fi will be available on Oakville Transit, allowing greater rider convenience when using mobile devices and improving overall system safety across the transit fleet by enabling live streaming of the onboard video surveillance camera system.
- Improved network connections. The town is working with regional partners and telecommunication providers collaboratively to expand 5G implementation. This, in addition to expanded Wi-Fi, will result in an extensive network throughout the town.
- Increased cellular data transmission and speed. Pending wide-spread proliferation of the 5G network, the town is actively researching the transition from 2-way radio services to cellular services. This will provide immediate and improved communications, data collection and technology deployment in the field while offering cost reduction opportunities.
- Electric vehicle infrastructure. Town-wide expansion of electric vehicle charging stations will occur with 46 stations implemented by the end of 2021. Town-wide sites include Downtown Oakville, Kerr Village, Bronte Village, Town Hall and each of the community centres across town.
- Parking space availability. Parking space sensors will show available parking in the downtown area allowing for easier access and support data analytics for predictive modelling.
- Improved information and wayfinding. Digital display boards at Towne Square, Centennial Square and Lakeshore/Trafalgar will support wayfinding, general information sharing and promotion of events.
- Expanded pedestrian and vehicle counters. Understanding the number of pedestrians and vehicles in the downtown area will identify trends to assess the health and vibrancy of the area.

- Single payment process. Improving the customer experience through one common payment process that is consistent, easy and convenient. Implementation will begin in 2021 and will also support the introduction of a customer profile identity.

Continuous Improvement

As noted above, the town has been investing in digital service delivery and infrastructure for years. How to leverage those systems to drive the greatest benefit is an ongoing consideration. Examples for 2021 include:

- Additional benefits from the town's GE LightGrid streetlight control system
- On equipment telematics for service management improvements
- Improved management and maintenance of facilities through building automation systems
- Advancing artificial intelligence capabilities in road patrol software for 'auto-detecting' and 'auto-logging' of Municipal Maintenance Standard deviations
- Introducing a public facing 'leafing program tracker' for the fall 2021 bulk loose leaf program

The opportunities for technology investment are broad ranging and solutions are changing rapidly. As a result, the town has adopted a pilot approach to solutions. Rather than develop a set solution that can take months or years to develop, the town is focused on launching simple, yet functional, solutions. This allows a "build-measure-learn" process where the initial service launch meets core needs but gradually matures based on user feedback.

In addition, the transformation of service into a digital form goes beyond the technological solution. The benefit to overall customer experience is generally driven by process and service improvements enabled through technology. Streamlined processes that focus only on what is required, providing staff with tools and training and nurturing a culture of data analytics and continuous improvement, ultimately allow the town to improve response times, better manage service volumes and improve the quality of service delivered.

Preparing for the next wave of service improvements will also require a master data management plan that outlines data standards and management. This master plan will consider privacy, security, distribution, productivity, safety, and vendor requirements to ensure the town is organized and ready for future advancements.

Beyond 2021

Looking forward, the town is working on a number of planned improvements, for example:

- Oakville.ca rebuild. A new town website will result in an updated look and feel, a modern content management system to better serve as a gateway to account sign-in and self-serve options, an enhanced mobile experience, simpler navigation and dynamically driven content that reflects customer interests in a secure manner.
- New Service Oakville features. Customers using Service Oakville will experience improved usability in a variety of areas, including more self serve options, an improved intake process when reporting a problem, and the ability to view other cases and their current status.
- Online property tax information. Ability to view property account information, payment status, tax documents and the online processing and receipt of payments.
- Pilot partnerships. Recognizing the knowledge and experience that many local companies have in digital innovation, the town will explore potential opportunities to engage, learn and test.

The town's commitment to a connected community through digital service delivery and underlying infrastructure, along with ensuring an engaged community, data management and ongoing continuous improvement, well positions the town to take advantage of economic, social and environmental opportunities. In doing so, these initiatives directly support the town's vision of being the most livable town in Canada.

CONSIDERATIONS:

(A) PUBLIC

The public and business community will be consulted on an ongoing basis through user focus groups and feedback on new solutions implemented.

(B) FINANCIAL

Funding of projects noted above have been approved as part of Oakville's capital plan.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

Departments are responsible for leading digital improvements in their respective areas in support of the Digital Oakville Strategy.

(D) CORPORATE STRATEGIC GOALS

This report addresses all five of the corporate strategic goal(s). Digital Oakville improves:

- Livability through economic development opportunities generated from digital availability and services that are available anytime/anywhere
- An engaged community through program offerings, data availability and opportunities to influence solution development and improvement
- Accountable government through a thoughtful and planned approach to digital investments
- Mobility through a connected transportation and pedestrian network and a responsive transit system
- Environment through decreased energy consumption in town facilities and traffic management solutions to reduce congestion

(E) CLIMATE CHANGE/ACTION

Supports the Community Energy Strategy through the use of digital infrastructure in reducing energy consumption in town facilities. Moving to greater online services will reduce the town's reliance on paper-based and in-person service requirements.

Prepared by:
Julie Clarke
Director, Strategic Initiatives and Communications

Submitted by:
Julie Clarke
Director, Strategic Initiatives and Communications