

**Report to  
Rapport au:**

**Information Technology Sub-Committee  
Sous-comité de la technologie de l'information  
21 September 2020 / 21 septembre 2020**

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**Submitted by  
Soumis par:**

**Valerie Turner, General Manager, Innovative Client Services / Directrice générale  
des services novateurs pour la clientèle**

**Contact Person  
Personne ressource:**

**Kendall Gibbons, Manager, Service Analytics & Planning, Innovative Client  
Services / Gestionnaire, Planification et Analyse des données, Direction générale  
des services novateurs pour la clientèle  
613-580-2424 Ext/poste :16131 / Kendall.Gibbons@ottawa.ca**

**Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE      File Number: ACS2020-ICS-ST-0003**

**SUBJECT: Open Data Update**

**OBJET: Mise à jour des données ouvertes**

#### **REPORT RECOMMENDATIONS**

**That Information Technology Sub-Committee receive this report for information.**

#### **RECOMMANDATIONS DU RAPPORT**

**Que le Sous-comité de la technologie de l'information prenne acte du présent  
rapport, à titre d'information.**

## BACKGROUND

Open Data is a philosophy and practice requiring that certain data is made freely available to the public, in machine readable format without restrictions from copyright, patents or other mechanisms of control. The Open Data Program was formally launched at the City of Ottawa on May 12, 2010 with Council's approval of the ***Open Data Report*** ([ACS2010-COS-ITS-0005](#)). As part of the report, Council adopted the Open Government principles and declared the City of Ottawa data to be "Open".

Over the past ten years the City has focused its efforts on the release of data, public engagement, inter-jurisdictional collaboration and using data to improve the lives of the residents of Ottawa. Open data has evolved as a significant component in facilitating Smart City solutions with enhanced access to datasets and community interaction with City data in real-time. This work has led to the launch of an open data catalogue, an expansion in the number of datasets available to the public, the hosting of two Apps4Ottawa development contests, and numerous other public events.

Ottawa's Smart City Strategy, Smart City 2.0, was approved by the Finance and Economic Development Committee on November 7, 2017 and Ottawa City Council on November 22, 2017 ([ACS2017-PIE-EDP-0042](#)). The Open Data Program is a key initiative of the Smart City 2.0 Strategy that falls under the Innovative Government pillar. The progression of the Smart City 2.0 Strategy has allowed the Open Data Program to grow into its current state, which this report will discuss further.

In 2018, the [Open Data Policy](#) & [Procedures](#) were implemented to provide additional governance to the program and outline the principles, roles and responsibilities by which City data is made available to the public as valuable, machine readable datasets. The policy applies to all City staff and to all data in the custody and under the control of the City of Ottawa. Personal information must be removed from all datasets before publication. The City actively disseminates open data while adhering to applicable legislation including the privacy, security, and confidentiality provisions of the *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA).

## DISCUSSION

### OPEN DATA PROGRAM 2019-2022

The City has engaged with the open data community stakeholders in various ways to gather feedback and suggestions to enhance the platform, understand the community's data needs better and gain insights into how the community is leveraging open data to

develop innovative solutions to make Ottawa better. The online community engagement tool [Engage Ottawa](#) was leveraged to capture feedback from the community. This plan has been developed based on the community feedback received to continue to evolve the Open Data Program.

The vision for the Open Data Program during this term of Council is:

**To better engage and empower the Ottawa community in utilizing City data assets through the establishment of community relationships and supporting open analytics capabilities**

A part of supporting civic innovation is investing in supporting and developing the human potential of the entire community. Ottawa is committed to enabling such innovation by focusing on the following three (3) areas over this term of Council:

1. **Expand & Optimize Open Data Offerings:** The City will identify additional datasets suitable for open data, prioritize and publish additional datasets as open data, and optimize current open data offerings based on public demand to fuel digital solutions.
2. **Grow & Support the Open Data Community:** The City will find opportunities to promote open data and open analytics across Ottawa, identify community needs, and foster partnerships that will enable digital innovation.
3. **Implement an Open Analytics Platform:** The City will implement an Open Analytics platform that provides Ottawa residents with the ability to perform analytics on City data assets to support innovation and City-wide problem solving.

The following sections will further expand and outline the activities to be taken across the three focus areas of the Open Data Program for this term of Council.

**Expand & Optimize Open Data Offerings**

In support of becoming a more open, transparent government and to better deliver valuable information to residents on City operations, the City is committed to expanding upon and optimizing its open data offerings.

- Continue to review public data requests received through [Engage Ottawa](#) on a quarterly basis to align departmental open data release plans with public demand
- Review existing datasets to improve metadata content and data quality standards as part of the departmental open data release plans

- Continue to benchmark against what data other municipalities are releasing using the [Open Cities Index](#) as a guide to expand the data offerings and establish data standards across the country
- Develop de-identification processes, where appropriate, to make confidential and private data suitable for publishing to open data
- Publish several additional open datasets that are aligned with the strategic priorities of the City to grow the open data offerings with a focus on data quality and releasing data that will fuel digital innovation
- Expand community outreach efforts to identify net new open data requests by residents and businesses
- Continue to automate open data offerings where possible to increase usability, data quality and the number of application programming interfaces (APIs) to power digital solutions

### **Grow & Support the Open Data Community**

The City recognizes that in order to fully support the innovative potential of the Ottawa community, residents need to be engaged and made aware of open data and open analytics offerings. In support of open data and open analytics awareness, innovation and collaboration, the City is committed to growing the open data community.

- Establish relationships and foster strategic partnerships with open data community (academia, civic tech groups, non-profit organizations, residents, businesses and other levels of government) to encourage open data utilization, data sharing agreements and develop solutions collaboratively using open data offerings to enable digital solutions
- Engage in marketing, promotion, notification and awareness campaigns to best ensure Ottawa is made aware of open data and open analytics offerings, desired outcomes, as well as the benefits to utilization
- Enhance existing City of Ottawa public outreach campaigns by providing data and interactive tools to enrich the overall client experience and provide opportunities to gamify the interactions
- Maintain relationships with the Ottawa open data community, working actively to monitor and publicize open data success stories through the City of Ottawa's social media channels
- Initial outreach will focus on working with the community on the following:
  - identify new open dataset requests
  - receive user feedback about the new platform

- build greater awareness of the data offerings and latest releases
- foster strategic partnerships for digital innovation

### **Implement an Open Analytics Platform**

The City recognizes that for Ottawa residents to be truly empowered, it is not enough for them to simply have access to municipal data. True empowerment comes from putting analytics tools directly into the hands of residents, providing the ability for all members of the Ottawa community to derive meaningful insights from the data.

To continue to support community innovation, transparency and collaboration regarding data analytics, the City is committed to implementing an Open Analytics platform which can be accessed online by all.

- Engage with the open data community to gather requirements for the Open Analytics platform based on public beta testing
- Leverage an agile platform development approach where requirements and solutions evolve through collaboration between cross-functional stakeholders throughout the development cycle
- Map and integrate open data assets including datasets, maps, and applications to prepare them for use with open analytics functionality such as interactive maps and dashboards
- Conduct a pilot of the platform to prove functionality and concept in partnership with Information Technology Services
- Customize the platform based on outcomes of the pilot
- Continue to measure client satisfaction of the Open Analytics platform
- Implement methods to better communicate the latest data offerings to the residents
- Launch of the Open Analytics platform
- Post City challenges on Open Analytics platform to encourage collaboration of the community to find innovative solutions to problems
- Integrate the platform with other data analytic tools to further the dashboard capabilities offered
- Make data offerings easier to find by residents
- Engage in discussions with both the provincial and federal government on data integration opportunities

This plan for the Open Data Program and associated actions will help Ottawa residents and businesses to access, leverage, and better utilize City data assets to work in conjunction with the City towards solving problems and ultimately enhancing quality of

life through data-driven solutions. Effective open data and analytics offerings and related community engagement will empower residents to participate in City-wide innovation, develop data-driven apps, conduct citizen data science, and develop solutions that work alongside City service delivery.

## **2019 YEAR IN REVIEW**

In 2019, the City conducted public beta testing and engaged with the open data community to gather requirements and enhancements for the Open Analytics platform ([Open Ottawa](#)). The beta pilot of the platform was conducted in partnership with Information Technology Services to prove the functionality and concept. Open data assets were mapped and integrated to prepare them for use within the new platform. The platform was customized for City-wide rollout, based on outcomes of the pilot and was put into production in September of 2019. The [Open Ottawa](#) platform was launched to provide the foundation to further evolve the Open Data Program. The platform provides more visualization tools in order to make open data more easily available for public consumption. Key features include digital storyboards, applications that use City data, interactive maps and application program interfaces (APIs) to access City data.

As part of the launch of the new platform, the City participated in a number of public outreach and speaking engagements including Carleton University's Data Day, University of Ottawa Telfer Forum on How Organizations Use Data for Social Good, the Go Open Data Conference in Toronto, and hosted a number of Ottawa Civic Tech meetings at City Hall. In partnership with the Government of Canada's Open Government team, the City hosted a local side event at City Hall as part of the 2019 Open Government Partnership Global Summit.

The City released 28 additional datasets in 2019 bringing the total number of datasets to 303 on the open data platform (see [Open Datasets Released 2019](#)). Some of the new datasets included street-lights, rental market analysis, Ottawa Public Library's most requested titles, crime statistics from the Ottawa Police Service and data related to the 2019 Rideau-Rockcliffe By-Election.

In 2019, the City established a new data-sharing partnership with the Waze Connected Citizens Program, joining other cities like Toronto, Montreal, New York and San Francisco, who have all benefitted from similar initiatives. Waze is a crowd-sourcing, GPS navigation app where users can submit anonymously where they encountered high-traffic congestion, slower-than-usual traffic speed, collisions, stalled vehicles and closures. The combination of the City's traffic information and user submissions

provides users more comprehensive and up-to-date information, such as road and lane closures, collisions, construction and detours.

The City of Ottawa's open data efforts were recognized by the Public Sector Digest through their annual [Open Cities Index](#) benchmarking initiative, which ranked Ottawa's Open Data program as the Third Most Open City out of 51 Canadian and four United States cities evaluated. The index was launched in 2015 and was Canada's first benchmarking study for municipal open data initiatives and serves as a tool for public sector organizations to measure the maturity of their open data programs. Receiving the ranking of third place in 2019 represented a significant improvement for the City of Ottawa's Open Data program from previously having been ranked tenth in 2017. The Public Sector Digest did not run the benchmarking survey in 2018. The Open Cities Index has been a key tool that has allowed the City to identify gaps in the program, benchmark against other leading municipal open data programs and support the development of departmental open data release plans.

## **2020 UPDATE**

In an effort to increase transparency and public awareness, the [Daily COVID-19 Dashboard](#) was developed in partnership with Ottawa Public Health, Information Technology Services, and Service Transformation. The dashboard provides up-to-date information on COVID-19 in Ottawa, including indicators for local monitoring and information re-opening decisions. Data in this dashboard are based on information extracted from the COVID-19 Ottawa Database (The COD).

The Open Data team worked closely with Ottawa Public Health to also release the data associated with the dashboard as open data. This data is updated regularly and is a valuable source to keep the public and media informed, assist in research efforts and fuel digital innovations. As of August 31, 2020, OPH has released seven related to COVID-19 with over 224,000 downloads:

- COVID-19 Cases and Deaths in Ottawa
- Data Tables for Public COVID-19 Maps
- COVID-19 Outbreaks in Ottawa Healthcare Institutions
- COVID-19 Cumulative Rates by Age in Ottawa
- COVID-19 Source of Infection
- COVID-19 Hospitalization Data for Ottawa Residents
- COVID-19 Hospitalization Data for Ottawa Hospitals

In addition to these dataset releases, the Open Data team has also taken a number of steps to enhance our existing data catalogue in order to help residents navigate new COVID-related requirements or restrictions. This includes adding COVID test sites and traffic restrictions (particularly as it relates to interprovincial travel with Gatineau) to the City's traffic map and navigation app, including partner apps at Waze and Apple Maps, as well as updating the city parks dataset to include COVID-related rules and restrictions.

As of August 31, 2020, the City has released 46 datasets in 2020 bringing the total number of datasets to 349 on Open Ottawa (see [Open Datasets Released 2020](#)). Some of the new datasets in addition to the COVID-19 datasets included:

- Marriage Licenses, Death Registrations and Commissioner of Oaths
- Kilmorie House Levy Affected Addresses
- E-Scooters Availability
- Adult School Crossing Guard Locations
- Green Fleet Initiatives Tracking
- Licensed Child Care Providers
- Bicycle Theft
- Red Light Camera Violations
- Shooting Incidents by Ottawa Neighborhood Study (ONS) Neighbourhood (2016-2019)
- 2020 Cumberland By-election – Nominated Candidates

The open data team continues to engage with the community and 2020 outreach activities have included partnering with the Treasury Board for consultations related to their Open Government Action Plan, presentation at the Canada Science & Technology Museum on Smart Cities and acted as mentors / judges for over 300 incoming engineering students at the University of Ottawa as part of the virtual Design Week 101 event hosted by the Faculty of Engineering.

## **CONCLUSION**

The open data team will continue to release data to the public that is aligned with the public demand and the strategic priorities of Council.

1. **Economic Growth & Diversification:** Encourage economic growth and diversification by supporting business investment and expansion, talent attraction and retention, showcasing the city's bilingual and multicultural character, and branding Ottawa as a place to be.

2. **Integrated Transportation:** Enable effective mobility through a sustainable, accessible and connected city transportation system.
3. **Thriving Communities:** Promote safety, culture, social and physical well-being for our residents.
4. **Environmental Stewardship:** Grow and protect a healthy, beautiful, and vibrant city that can adapt to change.
5. **Service Excellence Through Innovation:** Deliver quality bilingual services that are innovative and continuously improve to meet the needs of individuals and diverse communities.
6. **Sustainable Infrastructure:** Ensure sustainable infrastructure investment to meet the future growth and service needs of the city.
7. **Thriving Workforce:** Promote bilingual Service Excellence by supporting a workforce that is healthy, diverse, adaptive and engaged.

The team will continue to foster strategic partnerships with the open data community (academia, civic tech groups, non-profit organizations, residents, businesses and other levels of government) and leverage digital public outreach tools to continue to engage with the community while respecting current public health restrictions related to COVID-19. The overall goal is to encourage open data utilization, data sharing agreements and develop solutions collaboratively using open data offerings to enable digital solutions that help to improve the lives of the residents and businesses of Ottawa.

Over this Term of Council, the open data team will continue to evolve the Open Ottawa platform and provide residents and businesses with more tools to consume City data so that residents may gain greater insight into City services and programs.

## **RURAL IMPLICATIONS**

There are no rural implications associated with this report.

## **CONSULTATION**

The Open Data Program 2019-2022 was developed based on community feedback received from stakeholders including academia, civic tech groups, non-profit organizations, residents, businesses, and other levels of government. The online community engagement tool Engage Ottawa was launched in April 2019 to capture feedback from the community. The website remains active to encourage discussion and

suggestions around data the public would like the City to post and ways to leverage existing data for community benefit.

### **ADVISORY COMMITTEE(S) COMMENTS**

No advisory committee comments were collected for the purposes of this report.

### **LEGAL IMPLICATIONS**

There are no legal impediments to receiving this report for information.

### **RISK MANAGEMENT IMPLICATIONS**

There are no risk management implications associated with this report.

### **FINANCIAL IMPLICATIONS**

There are no financial implications associated with this report.

### **ACCESSIBILITY IMPACTS**

Applicable accessibility standards will be adhered to during the implementation of initiatives identified with the Open Data Program 2019-2022.

### **TECHNOLOGY IMPLICATIONS**

All technology implications are being executed within existing budgets and in conjunction with Information Technology Services under the Smart City governance structure.

### **TERM OF COUNCIL PRIORITIES**

This report and the supporting documentation falls under the 2019-2022 Term of Council Priority, Service Excellence through Innovation. The Open Data Program is an initiative of the Smart City 2.0 Strategy within the Innovative Government pillar.

### **SUPPORTING DOCUMENTATION**

- [Open Datasets Released 2019](#)
- [Open Datasets Released 2020](#)

### **DISPOSITION**

Service Transformation will continue to closely monitor and report progress on the status of the Open Data Program to the Information Technology Sub-Committee.