

Subject: Open Data Update 2021

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Report to Information Technology Sub-Committee on 29 November 2021

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Ward: Citywide

Objet : Mise à jour des données ouvertes 2021

Dossier : ACS2021-ICS-ST-0001

Rapport au Sous-comité de la technologie de l'information

le 29 novembre 2021

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Quartier : À l'échelle de la ville

REPORT RECOMMENDATION(S)

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

RECOMMANDATION(S) DU RAPPORT

Que le Sous-comité de la technologie de l'information reçoive ce 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".

The vision for the Open Data Program during this Term of Council 2019-2022 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.

To deliver this vision, the City will focus 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 citywide problem solving.

This plan and associated actions will help Ottawa residents to access, leverage, and better utilize City data assets and to work in conjunction with the City towards solving problems and enhancing quality of life. Effective open data and analytics offerings and related community engagement will empower residents to participate in citywide innovation, develop data-driven solutions, conduct data science, and develop solutions that work alongside City service delivery.

DISCUSSION

Highlights of Open Data activities in 2021

Over the course of the past year, we witnessed a sharp increase in demand for timely, relevant, and accessible data, and this led to innovative solutions from both the City and

community stakeholders. Open Data was used by both internal and external stakeholders to explore data from different angles that informed decisions that helped us all.

Release of COVID-19 and Vaccination Data

On March 31st, Ottawa Public Health launched its [COVID-19 Vaccination Dashboard](#). The dashboard includes information on the number of vaccinations administered in Ottawa, as well as demographic information about the people being vaccinated. The data is extracted from the provincial system COVax-ON and is updated on the Open Data portal every Monday, Wednesday and Friday.

The Open Data team worked closely with Ottawa Public Health to release the data associated with the dashboard as open data. As of November 1st, 2021, the City had released ten vaccination datasets which breakdown the data by day, vaccine type, and age. In total, these datasets have been downloaded over 400,000 times.

Vaccination Rates in Ottawa Neighbourhoods

Throughout the COVID-19 crisis and subsequent vaccination response, the Ottawa Neighbourhood Study (ONS) played a key role in monitoring the impact of COVID-19 on communities in Ottawa. For example, Ottawa Public Health partnered with the ONS to map COVID-19 vaccination rates in communities across Ottawa. This exercise uncovered disparities in terms of vaccination rates in different areas of the City.

The Open Data team supported this effort by releasing all neighbourhood-level data on vaccinations for download through Open Ottawa.

University of Ottawa and CHEO

Additionally, the University of Ottawa and CHEO leveraged Open Data to create projection models as part of their innovative initiative to analyze [COVID-19 in wastewater](#). Ottawa was one of the first communities in North America to conduct daily wastewater readings, which acted as a valuable confirmatory data source for COVID-19 levels and potential community outbreaks.

Temporary Emergency Accommodations Dashboard

In June 2020, Councillor Mathieu Fleury put forward a motion directing the Community and Social Services Department (CSSD) to work with the Open Data team to publish key statistics about people experiencing homelessness in Ottawa.

In response to this motion, CSSD launched Ottawa's new [Temporary Emergency Accommodations Dashboard](#) on September 23rd, 2021. The dashboard includes information about people who are experiencing homelessness and using temporary emergency accommodation services. The source of the data is HIFIS - Homeless Individuals and Families Information System, a web application developed by Employment and Social Development Canada (ESDC) that tracks the use of homeless shelters, including why the service is needed and for how long.

In conjunction with the release of this dashboard, the Open Data team released all related datasets, including yearly and monthly counts of clients and families in the shelter system and the total length of their stays, on the Open Ottawa portal.

In line with many North American cities, the data points in the dashboard will inform efforts to end homelessness, including research and policy development, system monitoring, service planning and operations.

Additional Data Sets on Open Ottawa

With the addition of the vaccination data, the City released 44 datasets in 2021 (as of November 1st, 2021), bringing the total number of datasets on Open Ottawa to 403 (see [Open Datasets Released 2021](#)). Some of the other new datasets released this year:

- Paid Public Parking Listing (Transportation Services)
- Cultural Asset Inventory (Recreation, Cultural & Facility Services)
- Hate and Bias Motivated Crime (Ottawa Police Services)
- Shootings and Firearm Discharges (Ottawa Police Services)
- 2020 Contracts Awarded greater than \$25,000 (Innovative Client Services)

Virtual Data Club

In support of increasing data literacy within the City and to build a community of practice for staff interested in data, a virtual "Data Club" was launched in 2021.

Throughout 2021, the Data Club met monthly to discuss topics such as business intelligence, data governance, open data, data strategies, analytics, data collection techniques, and data visualization in a municipal context to share best practices, lessons learned and promote further innovation.

The club featured speakers from Recreation, Cultural and Facility Services, Ottawa Public Health, the Ottawa Neighbourhood Study, Emergency Protective Services, Innovative Client Services and Community and Social Services. Data Club sessions were always popular, with an average of 60-70 staff attending each session.

Hub Open Data Portal

The City of Ottawa uses Esri's ArcGIS Hub to publish and share its open data. The Hub Open Data Portal was originally designed to provide developers with fast access to downloadable files and APIs with little functionality geared toward general, non-technical audiences. On May 25th, Esri redesigned how [ArcGIS hub](#) handles the content we share, making data easier to access, explore and use. Updates include immersive, full-screen displays of maps, options to quickly visualize trends and patterns, and the ability to handle multiple content types including PDF's, Dashboards and Word documents.

Open Cities Index Award

In March 2021, 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 Second Most Open City in Canada in 2020 (up from tenth place in 2017, and third place in 2019; there was no benchmarking survey in 2018).

The index, which was launched in 2015, 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. The Open Cities Index 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.

Conclusion

The biggest takeaway from our work this past year is that Open Data is valuable when the data is reused, shared, and integrated into information products that support decision-making processes. This was apparent when both City and community partners were able to quickly repurpose COVID-19 datasets to develop dashboards, which in turn, helped to improve our public health response to the pandemic. Looking ahead to the coming year, the Open Data Team will continue to promote the Open Data Program, within the City and community, and release data that supports public service

improvement and innovation.

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 use digital public outreach tools to make connections. We will also expand the Open Data Catalogue and offer new ways for people to interact, experience and leverage City data more effectively.

For the remainder of the 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.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

LEGAL IMPLICATIONS

There are no legal impediments to receiving the information in this report.

COMMENTS BY THE WARD COUNCILLOR(S)

This is a Citywide report.

ADVISORY COMMITTEE(S) COMMENTS

No advisory committee comments were collected for the purposes of 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 sets the public would like the City to post and ways to leverage existing data sets for community benefit.

ACCESSIBILITY IMPACTS

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

RISK MANAGEMENT IMPLICATIONS

There are no risk management implications associated with this report.

RURAL IMPLICATIONS

There are no rural implications associated with this report.

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](#)

[Open Datasets Released 2021](#)

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.