Agenda – Executive Policy Committee – December 5, 2023

REPORTS

Item No. 9 2023 Open Data Annual Report

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That this report be received as information.

DECISION MAKING HISTORY:

COUNCIL DECISION:

On September 30, 2020, Council concurred in the recommendation of the Executive Policy Committee, which included the following recommendation:

3. That the Winnipeg Public Service be directed to submit an annual report to Council detailing the progress of the City's Open Data program, to advise on the progress and successes of the preceding year.

ADMINISTRATIVE REPORT

Title: 2023 Open Data Annual Report

Critical Path: Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
A. Burton	T. Gooch	N/A	M. Jack

EXECUTIVE SUMMARY

On September 30, 2020, Council requested the Public Service submit an annual report to Council detailing the progress of the City's Open Data program, to advise on the progress and successes of the preceding year.

Key achievements of the past year include:

- Seven new datasets and maps released to the public.
- One new Open Data powered application to provide the information in a more user-friendly manner.

RECOMMENDATIONS

1. That this report be received as information.

REASON FOR THE REPORT

On September 30, 2020, Council adopted the following recommendation:

That the Winnipeg Public Service be directed to submit an annual report to Council detailing the progress of the City's Open Data program, to advise on the progress and successes of the preceding year.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications of the recommendations.

HISTORY/DISCUSSION

History

On May 30, 2012, Council adopted the following:

1. That the City of Winnipeg endorse the principles of:

    A. Open and Accessible Data - the City of Winnipeg will share with citizens, businesses and other jurisdictions the greatest amount of data possible while respecting privacy and security concerns.

    B. Open Standards - the City of Winnipeg will move as quickly as possible to adopt prevailing open standards for data, documents, maps, and other formats of media.

On March 20, 2013, Council adopted an Open Data Initiative which endorsed the principles of providing Open and Accessible Data that could be shared with citizens, businesses and other jurisdictions the greatest amount of data possible while respecting privacy and security concerns.

On June 25, 2014, Council adopted the "Open Government Initiative - Improvements to the Freedom of Information and Protection of Privacy Act Process" which directed the Winnipeg Public Service to implement a new process for Freedom of Information and Protection of Privacy Act (FIPPA) requests. This process would focus on the concepts of openness and transparency in providing government data, while ensuring privacy and security of data for citizens and businesses, in keeping with the Open Data Initiatives adopted by Council.

On September 16, 2015, Executive Policy Committee requested that the Public Service conduct a review of all City data sharing and identify opportunities to apply machine readable format along with a review of security and privacy considerations and report back within 90 days.

On October 26, 2015 the City Clerk's office prepared a report outlining leading open government initiatives in other jurisdictions and broad recommendations on next steps for the City of Winnipeg in implementing open government.

On June 6, 2016, the City hired a full time Open Data Administrator to manage and promote the City's Open Data program. Having a dedicated staff member accelerated the City's Open Data program by focusing on new datasets, new collaborations and new projects built with Open Data.

In 2015, the Public Sector Digest launched Canada's first Open Data benchmark – the Open Cities Index. This index measures the maturity of municipal Open Data programs by evaluating their readiness, implementation and impact. With no specific guidelines for what an Open Data program should be, the City used this survey as a rubric to develop the program. For 2015, the City of Winnipeg placed 20th. In 2016, the rank improved to 10th, relative to other Canadian cities. In 2017, Winnipeg jumped to third across Canada. After the Public Sector Digest paused the index survey in 2018, the 2019 score pushed Winnipeg to 2nd place. Finally, in 2020, the Index was expanded to all North American cities, and while Winnipeg ranked back down to third, the overall score improved 22 percent year to year to 96.30 percent, a near perfect score.

On September 30, 2020, Council adopted the International Open Data Charter. The Charter represents a globally agreed upon set of principles for publishing Open Data that is:

1. Open by Default;
2. Timely and Comprehensive;
3. Accessible and Usable;
4. Comparable and Interoperable;
5. For improved Governance and Citizen Engagement;
6. For Inclusive Development and Innovation.

In 2020, The Open Data Administrator position was eliminated to make up for IT budget shortfalls in the four-year budget cycle. The work of Open Data continues through the addition of new datasets and other advocacy projects when resources are available.

Over the last seven years, the core priority of the Open Data program has been the release of new City of Winnipeg datasets. Since September 2022, the Open Data team has released seven new datasets and maps: a Map of the 2020 LiDAR (Light Detection and Ranging) data, Detailed Development Permit data, Estimated Daily Passenger Activity, the Public WIFI locations, Active Vacant Building By-law Compliance Orders, City of Winnipeg Energy use and greenhouse gas emissions, and the posted speed limits.

Discussion

On September 30, 2020, Council concurred in the recommendation of the Executive Policy Committee and adopted the following:

1. That the International Open Data Charter be adopted, to update the endorsement made in 2012.

2. That the City of Winnipeg continue to expand the Open Data program by releasing additional departmental data as outlined in the International Open Data Charter, while respecting privacy and security concerns.

3. That the Winnipeg Public Service be directed to submit an annual report to Council detailing the progress of the City's Open Data program, to advise on the progress and successes of the preceding year.

The Open Data Annual Report provides a summary of the activities and work that has been done with the City's Open Data over the last twelve months, and to highlight upcoming initiatives and goals.

<u>Open Cities Index</u>

The Public Sector Digest publishes a report on the state of municipal Open Data programs, and the City of Winnipeg has used this as a rubric for developing a successful Open Data program. In 2020 the Public Sector Digest opened the survey to all North American cities. Winnipeg placed third in North America, with an overall score of 96 percent, just behind Ottawa and Edmonton. The Public Sector Digest has adjusted the reporting cycle of the Open Cities Index to every three years, and as the next report is not compiled until 2024, the City will remain third in North America on the index until that time.

New Datasets

The core priority of the Open Data program is the release of new City of Winnipeg datasets. Over the last 12 months, the Open Data team has released seven new datasets and maps for a total of 217 now available on our open data portal (data.winnipeg.ca). The following are all the datasets that have been released since September 2021.

Dataset	Release Date	Description
Map of 2020 WWD LiDAR	2022-11-16	This dataset is an index for City of Winnipeg LiDAR files created by the Water and Waste Department. Each file contains a point cloud detailing the location, elevation and surface type at each location point. Rows with a file type of "Tile" link to a file containing a 1km x 1km section of the City, while rows with a file type of "Full" link to a zipped collection of every tile available for the year.
Detailed Development Permit Data	11/14/2022	City of Winnipeg development permits issued since November, 14, 2022, containing most information about the permit.
Estimated Daily Passenger Activity	3/27/2023	Approximately 20% of Winnipeg Transit buses are equipped with automated passenger counting sensors at each door that count the number of people entering (boarding) and exiting (alighting) the bus along with the relevant bus stop information. This dataset provides an approximation of daily passenger activity on City buses.
Public Wifi Sites	4/3/2023	This dataset contains geographic locations of the Public WIFI sites available to residents of the City of Winnipeg.
Active Vacant Building By-law Compliance Orders	7/6/2023	The City of Winnipeg regulates the conditions of vacant buildings through the enforcement of the Vacant Building By-law. This by-law outlines the obligations on how vacant buildings should be maintained and secured by the owners of these buildings and Community By-law Enforcement Officer's will issue compliance orders that communicate these obligations to the owners. Compliance Orders remain open and active until such time that all violations

		listed on a compliance order have been addressed.
City of Winnipeg Energy Use and Greenhouse Gas Emissions	6/23/2023	This data set contains the results of energy use and greenhouse gas (GHG) emissions inventories for 2015 to present. This data supports the City's efforts to meet climate mitigation and adaptation goals found in the Winnipeg Climate Action Plan and the Community Energy Investment Roadmap.
Winnipeg Posted Speed Limits (Bylaw)	6/28/2023	This Map displays the City of Winnipeg posted speed limits in a geospatial format.

Table 1. Released datasets since September 2022

Community Engagements

Hackathon

The City has previously partnered with private organizations to assist with and manage Open Data Hackathons, taking place annually on Open Data day. In 2023, the previous partners opted out of the organizational duties and, lacking other viable partners, the City paused the Hackathon activities for 2023.

Analytics

Below are the top five datasets for site views, programmatic usage and download count for the period of September 2022 to September 2023. Also included below are figures for published datasets per year, and year over year comparison of web traffic.

DATASET NAME	VIEWS
Survey Parcel	17,274
Map of Assessment Parcels	14,599
Assessment Parcels	14,375
WFPS Call Logs	4,254
City Limit	1,669

Table 2. Top datasets by site views on data.winnipeg.ca

DATASET NAME	API READS
311 Call Wait Times	3,581,271
Burial Records	312,339
Municipal Election Candidates	274,868
Lane Closure	182,279
Addresses	153,653

Table 3. Top datasets by programmatic usage, meaning automatic computer to computer usage and interaction with the Open Data through the Application Programming Interface (API)

DATASET NAME	DOWNLOADS
Public Notices	3014
Assessment Parcels	1353
Aggregate Building Permit Data	1190
Capital Expenditures	600
Library	545

Table 4. Top datasets by download count of all file downloads in the various export formats.

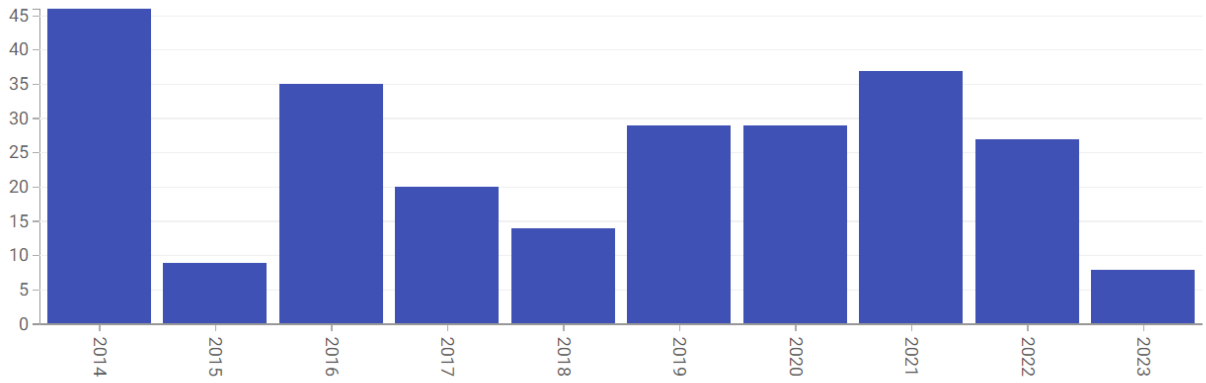

Figure 1. Datasets and Maps added to the Open Data portal by year – the portal launch in 2014 and was immediately loaded with the largest number of datasets.

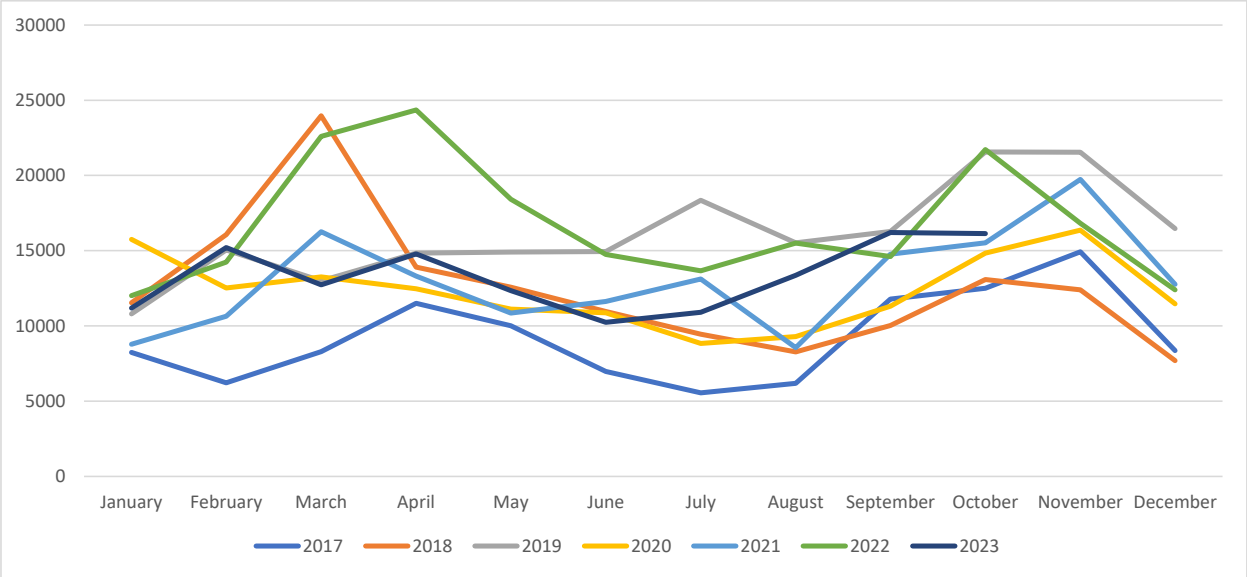

Figure 2. Page View Traffic on data.winnipeg.ca - broken down by month. Traffic is steady, with peaks in October, November, February and March. The peaks in these times correspond well with student activity, as Open Data is used in a variety of courses across Manitoba colleges and universities.

Open Data based applications

One new application based on Open Data was launched since September 2022. This application uses the API available for datasets and displays the information in a user-friendly manner.

Burial Search

On December 16, 2022, the City launched the **online Burial Search,** a replacement search-based application for locating graves based on keyword searches, powered by an Open Dataset. This application combined the records from all three Cemeteries to allow users to the site to search all locations in one spot. The search application uses all the fields known about the gravesite locations to quickly filter to relevant results.

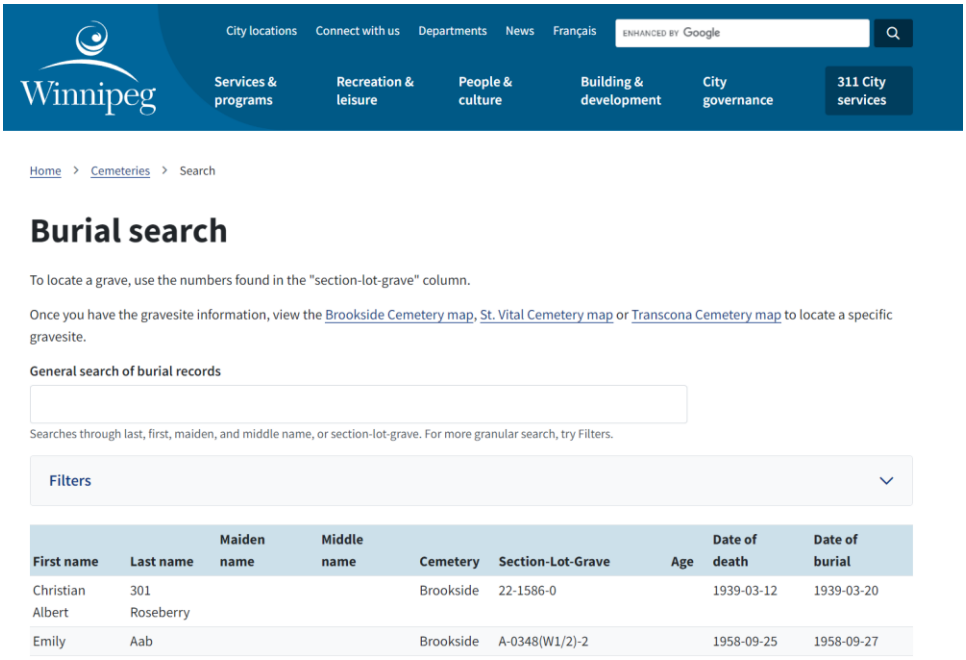

Figure 3. The Burial Search uses the dataset from the Cemeteries branch to help users locate information about gravesites

This application also uses additional filters such as age, date of death, and name fields to help users narrow their results to assist with their search. This application replaced a legacy application which was difficult for non-technical users to navigate. By focusing on an improved User Experience, more inquiries will be satisfied using web technologies, and less time used by critical staff.

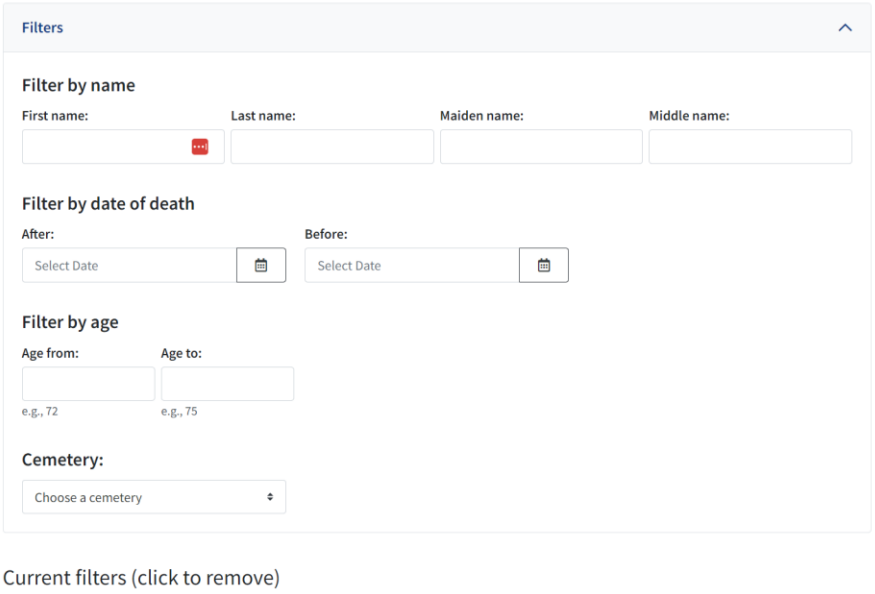

Figure 4. Additional filters for advanced searching

Future Plans

With the near perfect score (96.3 percent) on the Open Cities Index, the breadth and depth of the City of Winnipeg Open Data catalog is world class.

The Public Service will continue to sustain the current catalog, publish additional datasets as they become available, and improve the quality of published data while containing costs to provide the service and continuing its leadership role in the North American Open Data landscape.

FINANCIAL IMPACT

Financial Impact Statement **Date:** November 1, 2023

Project Name:

2023 Open Data Annual Report

COMMENTS:

There are no financial implications in receiving this report as information.

Randy Bernard

Randy Bernard, CPA, CMA
Manager of Finance & Administration (Campus)
Corporate Finance Department

CONSULTATION

In preparing this report there was consultation with:

- City Clerk's
- Customer Service and Communications

OURWINNIPEG POLICY ALIGNMENT

Our Winnipeg 1.5 - Evidence-Informed Decisions: Invest in data and technology in order to support objective, evidence-informed decision-making; support open government and open data principles for collection and sharing; help coordinate records and information management; and improve process efficiency and results-based service delivery and accountability.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Climate Action Plan (CAP), and it was determined that the CAP is not applicable to this specific report.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Innovation and Technology
Division: Data and Applications
Prepared by: A. Burton
Date: November 1, 2023