



REPORT FOR ACTION

Progress Report on Open Data Strategic Plan

Date: November 17, 2016

To: Executive Committee

From: Deputy City Manager and Chief Financial Officer and Chief Information Officer

Wards: All

SUMMARY

Open Data is a key strategic pillar in the delivery of open and transparent government. Open Data is also a foundation that will help drive innovation and new opportunities for both the delivery of City services and the communities and people that the City serves. The City of Toronto is one of the Canadian pioneers of municipal Open Data and consistently ranks high in Open Data municipal assessments.

Earlier in 2016, both the Executive Committee and Government Management Committee approved several motions to improve and further extend the effectiveness of the City's Open Data initiative and move towards the development of an Open Data Strategic Plan.

The City of Toronto has subsequently made incremental progress to improve Open Data. This report summarizes recent accomplishments and the planned development of an Open Data Strategic Plan in 2017.

RECOMMENDATIONS

The Deputy City Manager and Chief Financial Officer and Chief Information Officer recommend that:

1. City Council receive this report for information.

FINANCIAL IMPACT

There is no financial impact associated with this report.

DECISION HISTORY

At its February 5, 2016 meeting, Government Management Committee requested the City Clerk and the Chief Information Officer to report back on Open Data in the City.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.GM10.4>

At its May 24, 2016 meeting, Executive Committee adopted motions for the City Manager, in consultation with the Chief Information Officer, City Clerk and City Solicitor to develop an Open Data Strategic Plan.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX15.25>

COMMENTS

Open Data is a key strategic pillar in the delivery of open and transparent government. Open Data is also a foundation that will help drive innovation and new opportunities for both the delivery of City services and the communities that municipal governments serve. The City of Toronto is one of the Canadian pioneers of municipal Open Data.

Since 2009, the City of Toronto has partnered with Vancouver, Edmonton and Ottawa in developing a framework for Open Data across Canada. This engagement has led to shared experiences through the Public Sector Open Data community of practice including the Province of Ontario and Ontario municipalities, the adoption of a Canada-wide Open Government licence and the development of the City's Open Data Policy as part of its Information Management Framework.

With over 226 datasets published representing 1052 data files, the City's Open Data program has maintained a respected place among Canadian municipalities. In a recent 2016 ranking of Canadian Municipalities on Open Data, the Canadian Open Cities Index (<http://publicsectordigest.com/2016-open-cities-index-top-20-results>) noted that "the City of Toronto continues to be a national leader in the publication of diverse high-quality data sets" and ranked high (second overall) in Open Data implementation. Despite these achievements, there are opportunities for further growth to attract public engagement in solving civic problems and fully realize the potential of Open Data.

The Open Data community has reached out to Members of Council and Standing Committees to express their concerns about the limitations of the Open Data initiative at the City. This has presented an opportunity for the City to engage the community as well as other stakeholders, and take actions to revitalize our Open Data initiative.

Earlier in 2016, both the Executive Committee and Government Management Committees approved several motions to improve and further extend the effectiveness of the City's Open Data initiative and move towards the development of an Open Data Strategy. City staff have developed an Open Data work plan and conducted a preliminary assessment as detailed below.

Open Data Usability

The public has limited ability to find, access and understand posted data sets. We are in the process of exploring options to implement a Toronto Open Data Portal and enhance the Open Data website. This would help provide the public with user-friendly technologies in data browsing, data visualization, data analytics and catalog searching.

Developer Needs

Application developers from the public find it difficult to use Open Data as-is, which can limit opportunity for the development of applications that benefit the public. The Information & Technology Division is considering providing an Open Data specific Application Program Interface (API) to support application developers, which will significantly reduce efforts for developers to interface with the City.

Public interest and demand for Open Data

Channels for the public to request or suggest new Open Data sets are limited to social media, email or surveys. The City's Open Data work plan has identified the need for a public engagement and community consultation strategy to ensure more effective public participation in Open Data and to address demands for new data.

City Divisions Support of Open Data

There has been an increase in interest by City divisions and agencies to leverage Open Data to improve their service offerings, business analytics and public engagement. Through collaboration with communities and the public, Open Data has generated many insights on program delivery, service planning and policy development. Beyond this though, further work is required to help City divisions and agencies embrace the culture of "Open by Default" through effective change management, including education, communication and active engagement in the Open Data initiative.

Open Data Support

In an effort to accelerate the deployment and utilization of Open Data, additional support is required to meet the anticipated increase in demand. Current staff capability and capacity to track, fulfil and monitor public requests for Open Data is not sufficient to meet the demands and opportunities Open Data presents. The City also has limited capacity to provide meaningful dashboards, data analytics and insights on public participation, job creation, civic engagement and internal City benefits that are realized through Open data. Our current end to end Open Data publishing process has limited automation which impacts lead times to post data to the Open Data website. Through the Open Data work plan, a business case is being developed to acquire technologies to improve the City's capability in data cleansing, data quality, data publishing and reporting.

Data Governance

A City-wide data governance initiative is already underway to ensure the effective and accountable management of City data as an enterprise asset. This includes data ownership, policies and processes on data standards and access.

Open Data Standards

The City will develop an Open Data Metadata Standard in 2017 based on the Canadian Federal government's model to enhance data tagging, search and findability. This will ultimately make it easier for the public to find, access and use Open Data.

Open Data Committee

In response to the need for City divisions and agencies to be more engaged and committed to the City's Open Data initiative, direction and principles, an Open Data Committee was established in early 2016 with senior members of staff representing divisions across the City. This is a complement to the City's already existing Open Government Committee. The Open Data Committee has a mandate to enhance the Open Data initiative with objectives to increase the City's profile as an Open Data leader locally, nationally and internationally.

The Open Data Committee is the decision-making governing body responsible for setting strategic direction, approving the City's Open Data work plan and objectives and being accountable for monitoring the delivery of the Open Data Initiative.

An Open Data work plan has been established with actions categorized across four themes: (a) Information Sharing and Culture, (b) Open By Design, (c) Technology and Tools and (d) Broaden Awareness and Engage the Public.

Open Data Strategic Plan

The Open Data Committee has endorsed the development of an Open Data Strategic Plan as part of the Open Data work plan for 2017.

The Information and Technology Division will take the lead in the development of the Open Data Strategic Plan, in collaboration with the City Manager's Office, the City Clerk's Office and other City Divisions. The Strategic Plan will also be aligned to the Office of the Chief Transformation Officer's initiatives.

In addition, a business case to implement an Open Data platform to improve the City's ability to perform data analytics will be submitted for the 2018 City capital budget. . . . The Open Data platform will be a tool to improve the support and management of the City's Open Data, and enhance access by developers and the public to City data.

An Open Data communications plan will be developed in in 2017 which will further bring internal and external awareness and engagement to the City's Open Data initiative.

See the Appendix for status of motions from Government Management Committee and Executive Committee regarding the City's Open Data Policy and development of an Open Data Strategic Plan.

CONCLUSION

The development of an Open Data Strategic Plan in 2017 will focus key priority actions to improve and drive the effectiveness of Open Data for the City of Toronto. The strategy will be developed through a collaborative process and will consider best practices, standards, key goals and objectives. The strategic plan will also ensure the engagement of divisions and agencies and support for ongoing Open Data monitoring, management and engagement requirements. Incremental improvements through the establishment of the Open Data Committee and Open Data work plan will be expanded to ensure a holistic strategy in alignment with City strategic actions and priorities.

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ATTACHMENTS

APPENDIX

This appendix provides status further to motions approved at the February 5, 2016 Government Management Committee GM10.4 and May 24, 2016 Executive Committee EX15.25.

MOTION	PROGRESS
<p>GM10.4 The Government Management Committee requested the City Clerk and the Chief Information Officer to:</p> <p>Motion 1: Report to the Government Management Committee regarding the possible incorporation of the following (points a-t) into the City of Toronto Open Data Policy:</p>	
<p>a. Include adopting and enforcing the OPEN BY DEFAULT standard similar to the Province of Ontario.</p>	<p>The City of Toronto Open Data Policy will be amended in 2017 to include an OPEN BY DEFAULT standard similar to the Province of Ontario.</p>
<p>b. Set specific targets and deadlines within a 4-Year Plan.</p>	<p>The Open Data Committee has developed a work plan framework identifying key targets and deliverables. An Open Data Strategic Plan has been identified as a 2017 key priority and deliverable.</p>
<p>c. Require Data Quality – not just Quantity counts.</p>	<p>The Open Data process currently requires that all datasets meet standard quality checks. Data quality will be enhanced with the implementation of the Open Data platform and an enhanced workflow.</p>
<p>d. Continue to identify and promote a staff member as the Open Data Champion.</p>	<p>The City Clerk is the chair of the Open Government Committee. The Open Data Policy identifies the City Clerk and the Chief Information Officer as the corporate leads for Open Data. The Open Data Committee comprises divisional representation who are ambassadors of the Open Data initiative.</p>

MOTION	PROGRESS
<p>e. Make Open Data deliverables part of all RFPs for Software and Services.</p>	<p>The Open Data Committee will consider in the Open Data Strategic Plan development and 2017 work plan. In addition, currently the Project Review and gating process for all IT projects screen for Open Data capacity at the design stage.</p>
<p>f. Make Open Data deliverables part of all the Management Performance Reviews, implemented through the City Manager and/or Executive Director, Human Resources, as part of the Management Control Checklist.</p>	<p>Specific program delivery tasks and deliverables are included in Management Performance Reviews. The Management Control Checklist already requires all management staff to strengthen efforts to make information open and accessible through reviewing what data will be made available as Open Data.</p>
<p>g. Provide progress updates every 6-months to the Government Management Committee.</p>	<p>The Open Data Strategic Plan, once developed, will address reporting requirements to the appropriate committees.</p>
<p>h. Assess the City's open data maturity level using the Open Data Institute's Pathway tool.</p>	<p>The Open Data Committee will consider in the Open Data Strategic Plan development and 2017 work plan.</p>
<p>i. Build a proper open data portal by implementing user friendly technologies like CKAN/DKAN or Socrata.</p>	<p>The implementation of an open data portal is a key deliverable for the Open Data Committee. The Committee will look at all options for the best publishing platform that meets the requirements of the Open Data publishing process.</p>
<p>j. Include the name and contact information for the maintainer of each dataset.</p>	<p>At this time, the relevant divisional web pages, with contact information for the program that generated the dataset is being included. Additional contact information at the dataset level will be considered.</p>
<p>k. Publish datasets using common standards which are in use in other jurisdictions.</p>	<p>The City of Toronto currently has adopted a common standard in which to publish open data sets. The Open Data Strategic Plan will consider</p>

MOTION	PROGRESS
	common standards used in other jurisdictions as well.
l. Negotiate the right to publish any original data collected or created by third parties.	The Open Data Committee will work with Purchasing and Materials Management Division to explore the possibility of including this as part of the RFP process.
m. Review all IT systems and identify any which cannot currently output open data, and either fix it or replace it with one that can.	The I&T Division is currently undertaking an assessment that will identify IT systems that cannot output open data and will consider this in the development of the Open Data Strategic Plan.
n. Datasets should always be posted as open data before they are used to enable City built apps or websites.	The Open Data Committee will explore the possibility of doing this, being cognizant of the City's operational requirements and potential impact on service delivery.
o. Make community outreach and event participation part of the job description for staff involved with open data and open government.	All job descriptions for staff involved in Open Data and Open Government have key responsibilities, such as effective communication, event planning and facilitation and community outreach.
p. Allocate funds to enable and support community open data and civic tech initiatives.	The Open Data Strategic plan will consider the various opportunities for civic engagement and budgeting requirements for civic initiatives.
q. A dedicated Civic Tech Advocate.	The Open Data Strategic Plan will consider the requirements for civic engagement.
r. Create an advisory board for open data.	The Open Data Committee has identified this as a key priority and deliverable in 2017.
s. Implement a mechanism to allow access to historical data for any open datasets currently provided only as snapshots.	The Open Data Committee is exploring platform tools that will address access to historical data provided as snapshots. Currently, in accordance with the permanence principle, all data

MOTION	PROGRESS
	published remain archived online for trending purposes, unless there is a clear justification for doing otherwise.
t. Release as many of the large number of datasets in demand as possible, as they would be valuable additions to the open data portal.	The Open Data Committee sets targets for publishing datasets on an annual basis. The focus on releasing high-value datasets that are in demand by the community is a priority in the work plan.
GM10.4 Motion 2 as below	
2. Hold a community consultation and information meeting on the Open Data in the City Policy and opportunities for public engagement and participation.	<p>The Open Data Committee continues to explore public consultation opportunities for public engagement and participation in the development of the City's Open Data Policy and initiative. This will be targeted in 2017.</p> <p>The City of Toronto also participated in the first Toronto Open Government Celebration at Toronto Metro Hall on September 12, 2016. This was an open and free public event that provided an opportunity for citizens to learn about Open Government and Open Data and engage with Toronto's senior public service, their elected representatives, and the rich community of civic leaders.</p>
EX15.25 Motion 1: Requested the City Manager, in consultation with the Chief Information Officer, the City Clerk and the City Solicitor to develop an Open Data Strategic Plan, such plan to:	
a. adopt the Open By Default Standard for all City and Agency data;	<p>The City of Toronto Open Data Policy will be amended in 2017 to include an OPEN BY DEFAULT standard similar to the Province of Ontario.</p> <p>The Open Data Strategic Plan will consider application to agencies.</p>

MOTION	PROGRESS
<p>b. address the Open Data challenges and opportunities identified in Items GM10.4 (Open Data in the City) (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016), CD10.8 (Toronto Fire Services Open Data) (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016), CD10.9 (Toronto Paramedic Services Open Data) (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016), including issues of staffing, City Policies, costs and privacy; and</p>	<p>To be addressed in the development of the Open Data Strategic Plan.</p>
<p>c. include timelines for implementation and regular progress reports every six (6) months.</p>	<p>The Open Data Strategic Plan, once developed, will address implementation and reporting requirements.</p>
<p>EX15.25 Motion 2: Requested the City Manager, in the development of the Open Data Strategic Plan:</p>	
<p>a. review the Digital City/Open Data programs of major global cities for the purposes of developing benchmarks to accelerate the City of Toronto's implementation steps over the next 4 years.</p>	<p>To be addressed in the development of the Open Data Strategic Plan.</p>
<p>b. give consideration to the establishment of a mechanism for continuing enforcement and implementation of the Open Data Strategic Plan.</p>	<p>To be addressed in the development of the Open Data Strategic Plan.</p>
<p>c. explore consolidating the Chief Information Officer and City Clerks open data responsibilities into one role to be administered through the office of the City Manager with the possibility of creating a Chief Data Officer (CDO) role.</p>	<p>To be addressed in the development of the Open Data Strategic Plan.</p>

MOTION	PROGRESS
EX15.25 Motion 3 as below	
3. Requested the City Manager to submit a progress report on the above to the Executive Committee at its meeting on October 26, 2016.	Addressed through this Progress Report on the Open Data Strategic Plan.