Agenda – Council – March 20, 2013

Report – Alternate Service Delivery Committee – February 25, 2013

Item No. 2 Open Data Initiative

COMMITTEE RECOMMENDATION:

On March 6, 2013, the Executive Policy Committee concurred in the recommendation of the Alternate Service Delivery Committee, and submits the following to Council:

1. That the Open Data Plan outlined within this report be approved.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Agenda – Council – March 20, 2013

Report – Alternate Service Delivery Committee – February 25, 2013

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On March 6, 2013, the Executive Policy Committee concurred in the recommendation of the Alternate Service Delivery Committee, and submitted the matter to Council.

COMMITTEE RECOMMENDATION:

On February 25, 2013, the Alternate Service Delivery Committee concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

On October 22, 2012, the Alternate Service Delivery Committee granted an extension of time to its next meeting, for the Winnipeg Public Service to report back as directed by Council on May 30, 2012.

COUNCIL DECISION:

On May 30, 2012, Council concurred in the recommendation of the Alternate Service Delivery Committee and 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.

2. That in pursuit of open data the Winnipeg Public Service be directed to:
    A. Identify immediate opportunities to distribute more of its data;
    B. Develop a plan to index, publish and syndicate its data to the internet using prevailing open standards, interfaces and formats;
    C. Develop a plan to digitize and distribute suitable archival data to the public;
    D. Report back to the Alternative Service Delivery Committee in 120 days.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

ADMINISTRATIVE REPORT

Title: Open Data Initiative

Critical Path: Alternate Service Delivery Committee – Executive Policy Committee – City Council

AUTHORIZATION

Author	Department Head	CFO	CAO
M. Houston	L. Burch	M Ruta	D Joshi COO

RECOMMENDATIONS

That Council approves the **Open Data Plan** outlined within this report.

REASON FOR THE REPORT

At the May 30, 2012, City Council meeting, Council adopted the recommendation of the Alternate Service Delivery Committee directing the Winnipeg Public Service to report back to the Alternate Service Delivery Committee in 120 days with an Open Data Plan which;

- Identifies immediate opportunities to make approved data available,
- Creates and implements standards for formatting, indexing, publishing and syndicating its open data,
- Develops a plan to digitize and distribute suitable archival data to the public.

IMPLICATIONS OF THE RECOMMENDATIONS

1. The proposed Open Data Plan suggests certain data be provided free of charge, but does not seek to alter current processes or arrangements through which stakeholders pay for specific types of information.
2. Adoption of the Open Data Plan will require the reallocation of existing resources to focus on this initiative.

HISTORY

Open Data is defined as information that is widely available in a format that can be read by a computer, and thereby more easily used by others. This type of data in open, accessible formats is made available for anyone to use, transform or republish without restriction and normally only requires that the data source be cited. Essentially, Open Data is about delivering data to citizens in a user friendly manner. The practice of providing Open Data must respect all legislation and regulations regarding freedom of information and protection of privacy.

Many Canadian cities including Vancouver, Edmonton, Saskatoon, Regina, Toronto, Ottawa, Montreal, and Brandon, as well as the Manitoba provincial government have already launched open data initiatives. Later this year, the Government of Canada will launch its Open Data portal.

The City has taken preliminary steps toward Open Data. In January, 2011, the Transit Department made all of its schedule data available in machine-readable format.

The Public Service has established a plan that will create, expand and maintain a City of Winnipeg Open Data Portal. The strategy will see all new IT systems designed to fit with Open Data IT standards.

Open Data Plan highlights are as follows:

- ***Creation of the list for the first Open Data Catalogue.*** *Departments have selected the data which will become the first Open Data offerings* (See Appendix A). Sixty-nine data sets have been identified for inclusion in the City's initial offering. Criteria require the data to be in "machine readable" format, privacy compliant, and not compromise security of the organization or citizens.

- ***Establishment of Open Data IT standards, under which all data will be formatted, indexed, published and syndicated.***

  The Public Service proposes to use open source and cloud computing technology solutions to make our data available to the public, consistent with recent trends in open data deployment.

  Three open data solutions were investigated. The public service has selected the Microsoft Open Government Data Initiative (OGDI) and the Windows Azure Cloud platform. These were chosen as they were low cost, (ODGI is free, and the Azure Cloud subscription is estimated to be $200.00/month), they are low risk as we can cancel at any time, and they are easily deployed either with City "branding" or as generic products. It also leverages cloud computing efforts currently underway.

The Public Service will use the following data format options for its Open Data catalogue.

For text-based data sets:

CSV – comma separated values stored in plain text format
XLS – spreadsheets
TXT – plain text
XML – an internet format
JSON – an open standard designed for data interchange

For geospatial data sets:

KML – for use in Google Maps
KMZ – compressed KML files used for large data sets
SHP – a common GIS format describing points, lines, and polygons

For transit data sets:

GTFS – general transit feed specification developed by Google

- ***Creation of the Open Data Governance Administrative Standard*** which will communicate the decision-making/authorization structure and establish clear roles and responsibilities for the ongoing oversight, management and sustainment of the Open Data initiative within the Public Service. Key to this process will be the Corporate Open Data Coordinator role which will ensure all criteria are met prior to new data being posted to the catalogue. **Target Date – Q2, 2013**

- ***Design and Construction of the City's Open Data Portal***. Over the next year, the public service will build and deploy an Open Data Portal. A Portal provides a starting point from which a user may access a variety of information and features. An example of an Open Data Portal can be found in Appendix B. The City's Open Data Portal will be placed on the City of Winnipeg's website and be consistent with its look and feel. Initially, the Portal will consist of an Open Data Catalogue (updated as necessary with new/expanded approved data) and have functionality to search, filter and download data (see Appendix C for a sample). The Portal will also include a "Terms of Use" Agreement/Disclaimer regarding the data provided by the City. Portal development will begin immediately. The Portal's launch date will be determined as part of the Open Data Communication Strategy below. **Target date – Q3, 2013**

  Over time, the Portal may be augmented with data visuals such as maps, graphs, animations, help pages, RSS news feeds, email subscriptions, an Open Data metrics usage dashboard, an application inventory, and a feedback loop related to new data, new requests, and portal enhancements. As additional open data sets are proposed, future open data candidates will qualify for the catalogue based on availability in "machine readable" format and compliance with privacy and security regulations.

- ***Implementation of an* Open Data Communication Strategy.** This will provide education and awareness for stakeholders, including the general public. Users consume open data for different reasons; some use the data to measure accountability and transparency of their government, some for research or self-service and others for development of web applications. The City's Open Data Portal will also provide opportunities for ongoing feedback from stakeholders with a view to improving open data operations and the content of our Open Data Catalogue.

- ***Development of a plan to digitize and distribute suitable archival data to the public.*** Currently, the City Archivist can provide "machine readable" data on the inventory of collections, and the descriptions of collections. As such, these items are included as part of the first catalogue of Open Data offerings. All other archival data (film, microfilm, video, audio and other formats) at this point are not digitized. The City Archivist has responsibility for reproducing this information in the required electronic formats. As that work occurs, the archival data will be added to the City's Open Data catalogue, as appropriate.

FINANCIAL IMPACT

Financial Impact Statement

Date: October 18, 2012

Project Name:

Open Data Initiative

First Year of Program **2013**

	2013	2014	2015	2016	2017
Capital					
Capital Expenditures Required	$ -	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	-	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other -	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 2,568	$ 2,568	$ 2,568	$ 2,568	$ 2,568
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ 2,568	$ 2,568	$ 2,568	$ 2,568	$ 2,568
Less: Existing Budget Amounts	2,568	2,568	2,568	2,568	2,568
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments:

1. Direct cost represents a monthly subscription fee of $200 per month plus Provincial Sales Tax. Funding is available through existing resources of the Business Technology Services - Information Solution Branch (dept. ID 344302).

Original signed by B. Heckert for:

Radhika Abeysekera
Manager of Finance (Campus)
Corporate Finance Department

CONSULTATION

In preparing this Report there was consultation with:

City Clerk's Department, City Archivist
All City Departments, IS Leaders

SUBMITTED BY

Department:	Corporate Support Services
Division:	Business Technology Services
Prepared By:	M. Houston
Date:	November 8, 2012
File No.	

Appendix A: Open Data Catalogue

DATA SETS	
3-1-1 Service Statistics	Election Results
Arenas	Electoral Ward Map
Budget – Capital	EMS Stations
Budget – Operating By Service	Fire Paramedic Combined Stations
Building Permit Data - Aggregated	Fire Stations
Building Permit Data - Non-Aggregated	Fitness and Leisure Centres
Buildings Conservation List	Imagery Warehouse
Burial Search Records	Lane Closures
Business Improvement Zones	Libraries
By-laws	Neighbourhood Characterization Areas
Census - Aboriginal People	Planning Data Overlays
Census - Citizen & Immigration	Pools – Indoor
Census - Dwellings	Pools – Outdoor
Census - Education	Pools – Spray Pads
Census - Families	Pools – Wading
Census - Households	Public Meeting Agendas
Census - Income	Public Meeting Dispositions
Census - Inner City/Non-Inner City	Public Meeting Minutes
Census - Labour Force Activity	Recreational Complexes
Census - Languages	Residential Inventory - Building Age
Census - Marital Status	Residential Inventory - Building Size
Census - Mobility	Residential Inventory - Building Style
Census - Mode of Transportation	Residential Inventory - Market Region
Census - Population By Age	Residential Inventory - Parcel Use Code
Census - Population Density	Residential Market Regions
Census - Religion	River Monitoring Results
Census - Total Population	School Division Boundaries
Census - Unpaid Work	Skate Parks
Census - Visible Minorities	Soccer Fields - Indoor
City Archive Collection Descriptions	Streams Monitoring Results
City Archive Collection Lists	Tax Roll By Address
Community Centres	Traffic Counts
Community Character Areas	Traffic Signals
Councillor Representation Allowance Expenses	Water Quality Test Results

Appendix B: Open Data Portal & Catalogue Example

Recently Published

CityLimits	08/31/2012
TransitTrips	08/30/2012
TransitStopTimes	08/30/2012
TransitShapes	08/30/2012
TransitRoutes	08/30/2012

Most Rated

Most Viewed

AddressPoint	3080
CemeteryPlots	2178
PointOfInterest	2141
Pathways	698
ZoningAndLandUse	514

City of Regina Datasets

CATEGORY
- Administrative Boundaries
- City Facilities and Services
- Geospatial Reference
- Land Use
- Transportation

DATA SOURCE
- ReginaOpenData

DATES
from to

KEYWORDS

STATUS
- Published
- Planned

Clear Filter

NAME	CATEGORY	STATUS	DATE	RATING	VIEWS
AddressPoint Address Points contained within the City of Regina. This data is in progress and will sometimes not be complete where multiple addresses exist for a single parcel of land.	Geospatial Reference	Published	08/30/2012	not rated	3080
CemeteryPlots Occupied cemetery plot listings for the Riverside Memorial Park Cemetery and the Regina Cemetery.	City Facilities and Services	Published	08/30/2012	not rated	2178
CityLimits City of Regina's urban municipality limits.	Administrative Boundaries	Published	08/31/2012	not rated	507
CommunityAssociations City of Regina community associations.	Administrative Boundaries	Published	08/30/2012	not rated	360
Pathways Multi-use recreation pathways.	Transportation	Published	08/30/2012	not rated	698
PointOfInterest Arenas, Athletic Fields, Ball Diamonds, Basketball, Firehalls, Hospitals, Library, Malls, Neighbourhood Recreation Facilities, Police, Pools, Rinks, Schools, SIAST, Skateboarding, Spray Pads, Tennis, University of Regina, Wascana Centre and others	City Facilities and Services	Published	08/30/2012	not rated	2141

Appendix C: Open Data Catalogue Usage Example

PointOfInterest

CATEGORY	DATE	RATING	VIEWS
City Facilities and Services	8/30/2012	0 0	2347

Arenas, Athletic Fields, Ball Diamonds, Basketball, Firehalls, Hospitals, Library, Malls, Neighbourhood Recreation Facilities, Police, Pools, Rinks, Schools, SIAST, Skateboarding, Spray Pads, Tennis, University of Regina, Wascana Centre and others

BASE QUERY
http://openregina.cloudapp.net:8080/v1/OpenRegina/PointOfInterest/

FILTER EXPRESSION
Query Builder Text Query

TYPE (String) | is equal to | Arena | OR | Run | Clear

Download Formats

Data View | Bar Chart | Pie Chart

Full query URL: http://openregina.cloudapp.net:8080/v1/OpenRegina/PointOfInterest/?$filter=TYPE eq 'Arena'
(Click to view results as XML/Atom)

Download as Excel (Excel, CSV, KML, Shapefile(ESRI), Daisy)

entityid	OBJECTID	ADDRESS	NAME	LOCATION	TYPE	LATITUDE	
	132	2230 Lindsay Street	Al Ritchie Memorial - Arena	Al Ritchie Memorial	Arena	50.443671053848	-1
	177	1010 Mccarthy Boulevard	Jack Hamilton - Arena	Jack Hamilton	Arena	50.4620555818034	-1
	271	444 N Broad Street	Jack W. Staples - Arena	Jack W. Staples	Arena	50.4827558334692	-104.6072925422
	31	560 Elphinstone Street	Wheat City Kinsmen - Arena	Wheat City Kinsmen	Arena	50.4700505617515	-104.631976386766
	653	1127 N Arnason Street	Doug Wickenheiser - Arena	Doug Wickenheiser	Arena	50.4953867197587	-104.67826151431
	680	70 Massey Road	Murray Balfour - Arena	Murray Balfour	Arena	50.4140436005283	-104.610667837887
	767	222 Sunset Drive	Optimist - Arena	Optimist	Arena	50.4091446792466	-104.633373825454
	80	130 Brotherton Avenue	Clarence Mahon - Arena	Clarence Mahon	Arena	50.4528698897272	-104.555289643876

30 Items per page