



Office of the City Manager

CONSENT CALENDAR
April 25, 2017

To: Honorable Mayor and Members of the City Council
From: Dee Williams-Ridley, City Manager
Submitted by: Savita Chaudhary, Director, Information Technology
Subject: Contract No. 9655A Amendment: Socrata, Inc. Open Data Portal (ODP) Website Hosting

RECOMMENDATION

Adopt a Resolution authorizing the City Manager to execute an amendment to Contract No. 9655A with Socrata, Inc., for hosting the City’s Open Data Portal (ODP) website, increasing the amount by \$82,028, for a total contract amount not to exceed \$167,681 and extending the term through June 30, 2019.

FISCAL IMPACTS OF RECOMMENDATION

This amendment will extend the hosting and operations support through June 30, 2019. Appropriation of funding is subject to the council approval of the proposed city-wide Fiscal Year 2018 and Fiscal Year 2019 Budget and Annual Appropriation Ordinance. Funding for additional hosting and professional services in the amount of \$82,028 is available in the Department of Information Technology’s FY 2018 and FY 2019 General Fund as follows:

	FY 2018: Software Maintenance
\$ 39,514	Budget Code: 010-2702-410-3047 (General Fund, Information Technology, Software Maintenance)
	FY 2019: Software Maintenance
\$ 42,514	Budget Code: 010-2702-410-3047 (General Fund, Information Technology, Software Maintenance)
\$ 82,028	Total FY 2018 and 2019 Software Maintenance

This amendment has been entered into the City’s Contract Management System and assigned CMS No. BZAT1.

CURRENT SITUATION AND ITS EFFECTS

The City of Berkeley's Open Data Portal (<http://cityofberkeley.info/opendata/>) is a web based presence established to serve as a single point of access for Open Data. Open Data is non-confidential, public data provided in searchable formats for unrestricted use to increase transparency and civic engagement. The portal is loaded with datasets directly from city systems, ready for download in numerous formats. The portal also provides a set of basic tools to create charts, graphs, maps and other visualizations so visitors who do not want to download the data can explore it in place.

The Department of Information Technology (IT) manages the City of Berkeley's Open Data Portal. Staff throughout the City, in coordination with IT and the City Manager's Office, upload city business data to the portal for public consumption. City information is now easily accessible without requiring a Public Information Act request. Information that was regularly requested is now online on the City of Berkeley Open Data Portal, freeing staff to do other tasks.

The City of Berkeley Open Data Portal hosts 43 datasets and 20 map layers, listed below, on various City functions and operations, including crime incidents, 311 service requests, salaries, parcels and energy use.

311 Cases	Municipal Energy & Water Maps
Bicycle Boulevards	Municipal Energy & Water Consumption
Business Licenses	Operating Budget 2014
Car Share Totals	Parcels
Census Blocks 2010	Parks
Census Block Groups 2010	PG&E Metered Energy
Census Tracts 2010	PG&E Energy - CO2 Coefficients
Census Data 2000 and 2010	Restaurant Inspections
Census, Housing, 2012	Police Beats
City Trees	Police Stop Data
Community Energy	Police Arrest Log
Council Districts	Police Jail Booking Log
Crime Incidents	Roofprints
Employee Salaries 2011-2013	Sanitary Sewer Mains & Manholes
Green Businesses in Berkeley	Storm Drains
Land Boundary	Streets Network
Monthly Residential Energy Use	Tree Gain – Annual Totals
Water Consumption, Residential	Zoning Districts
Zip codes	

In October 2016, the Department of Information Technology issued a Digital Strategic Plan

(http://www.ci.berkeley.ca.us/IT/Home/IT_Digital_Strategic_Plan_Roadmap.aspx), which schedules an expansion of the Open Data Portal in FY 2019. To prepare for this expansion, this amendment will add 125 datasets to the City's Open Data Portal.

In April 2016, the Open Data Portal had 815,794 views. As of March 17, 2017, the Open Data Portal saw a 30% increase in views totaling 1,076,681.

BACKGROUND

In August 2013, staff began researching and testing open data platforms to determine which would most efficiently support a pilot program for the City of Berkeley in Fiscal Year 2015, given existing citywide fiscal and staff constraints. This included Open Data Portal research, design, and documentation by interns of the Presidio Graduate School (<http://www.presidio.edu/>).

In November 2013, Council issued a referral requesting the creation of an Open Data Policy, citing the Federal Memorandum for Transparency and Open Government.

In June 2014, the Department of Information Technology executed a contract with Socrata, Inc. (<http://www.socrata.com/>) to provide an Open Data platform and cloud hosting. At the time, Socrata, Inc. was the only company whose primary focus was providing open source data services to the public sector in the United States. Also in June 2014, the Department of Information Technology partnered with UC Berkeley's School of Information (<http://www.ischool.berkeley.edu/>) to identify and onboard a volunteer intern Team Lead.

In November 2014, Staff provided an update to Council in City Council Information Report #45 (Attachment 2). In December 2014, the Open Data Portal pilot project went live after more than 1,500 hours of combined staff, intern, and student volunteer work. The core objective of the pilot program was to collect metrics around ODP performance, community use, and feedback from both community members and staff. During this pilot program, the City prioritized publishing datasets that community members frequently requested via Public Records Act requests, resulting in 24/7 access to this data, improved service to our community, and improved government transparency.

ENVIRONMENTAL SUSTAINABILITY

By publishing the most frequently requested Public Record Act Requests, community members can now access this information at home and electronically, thereby decreasing contributions to global warming emissions and waste, respectively.

RATIONALE FOR RECOMMENDATION

Socrata, Inc. offers user friendly and cost-effective solution for sharing the city's business data across departments and with the public. This amendment will enable the Department of Information Technology to continue to offer this valuable tool for an additional two years. The increase in yearly fee is necessary to acquire an education bundle and additional dataset storage.

ALTERNATIVE ACTIONS CONSIDERED

Staff considered not renewing Socrata's licenses, but doing so would yield operation inefficiencies that would affect the quality of service delivered to City staff and the community.

CONTACT PERSON

Savita Chaudhary, Director, Information Technology, 510-981-6525

Attachments:

1: Resolution

2: City Council Information Report #45 "Open Data Portal Pilot – December 15, 2014 to June 30, 2015", November 18, 2014

RESOLUTION NO. ##,###-N.S.

CONTRACT NO. 9655A AMENDMENT: SOCRATA, INC. FOR OPEN DATA PORTAL
(ODP) WEBSITE HOSTING

WHEREAS, the City of Berkeley's Open Data Portal provides community members with access to data that is non-confidential and public provided in searchable formats for unrestricted use; and

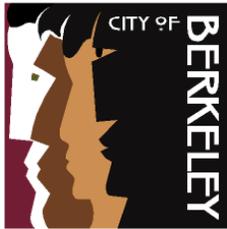
WHEREAS, in August 2013, staff researched and tested multiple open data platforms and in November 2013, Council issued a referral requesting the creation of an Open Data Portal; and

WHEREAS, in June 2014, the Department of Information Technology executed a contract with Socrata, Inc. to provide professional and hosting services for an Open Data Portal; and in November 2014, Staff provided an update to Council with Information Report #45; and in December 2014, the Open Data Portal went live; and

WHEREAS, more City information is now easily accessible without requiring a Public Information Act request; and government transparency is improved because the portal provides members of the public with the same access to raw data that governments have; and

WHEREAS, funds for the additional hosting services in the amount of \$82,028 is allocated in 010-2701-410-3047, and is subject to council approval of the proposed city-wide Fiscal Year 2018 and Fiscal Year 2019 Budget and Annual Appropriation Ordinance; and the contract amendment has been amended in the citywide Contract Management System as CMS No. BZAT1.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that the City Manager is authorized to amend Contract No. 9655A with Socrata, Inc. for website hosting, increasing the amount by \$82,028, for a total contract amount not to exceed \$167,681 through June 30, 2019.



Office of the City Manager

INFORMATION CALENDAR
November 18, 2014

To: Honorable Mayor and Members of the City Council

From:  Christine Daniel, City Manager

Submitted by: Donna LaSala, Director, Department of Information Technology

Subject: Open Data Portal (ODP) Pilot: December 15, 2014 – June 30, 2015

INTRODUCTION

The purpose of this report is to provide a brief update on the City's Open Data Portal (ODP); it also responds to a Council referral submitted on November 19, 2013. Another update, including pilot program performance metrics, community feedback, and recommendations for next steps, will be presented to Council on May 26, 2015.

Open data is non-confidential, public data provided for unrestricted use. *The Open Data Handbook* at www.opendatahandbook.org offers a detailed discussion, but three key characteristics of open data are:

- A. "Open data must permit reuse and redistribution." Members of the public can download, reuse, and redistribute open data and as often as desired.
- B. "Open data must be available with no discrimination against fields of endeavor." For example, there are no restrictions against commercial use; members of the public can use open data to create for-profit goods and services.
- C. "Open data must be available in convenient and modifiable form." This means published online, in an open and 'machine-readable' format, so that members of the public can use any standard software to import, analyze, and otherwise use the data. For example, a customized Microsoft Excel spreadsheet with data would not be considered 'open', but a data file that can be imported into any spreadsheet program could be.

An Open Data Portal (ODP) is a web presence established to serve as the single point of access for open data. Most ODPs include a framework for requiring 'metadata' (information about each data set, including who collected it, when it was collected, and when it will be updated). In addition, ODPs provide a set of basic tools to create charts,

graphs, and other ‘*visualizations*’, so that visitors who do not want to download the data can explore it in place.

CURRENT SITUATION AND ITS EFFECTS

After more than 1,500 hours of combined staff, intern, and student volunteer work, the ODP pilot will go live December 15, 2014 and run through June 30, 2015.

A core objective of the pilot is to collect metrics regarding ODP performance and community use, as well as service requests (SRs) and feedback from staff and members of the public. These metrics will help inform recommendations for next steps, including estimates of the staffing needed to expand and sustain the ODP.

On one hand, many cities report that ODPs lead to efficiency gains. For example, as data is extracted from back-office systems and loaded to the ODP, fulfilling Public Records Act (PRA) requests becomes an increasingly self-service activity. This reduces the amount of staff time spent extracting and formatting data. For this reason, most municipal ODPs, including Berkeley’s, are initially launched with the data most frequently requested through PRA requests.

On the other hand, a number of cities also report that ODPs lead to significant increases in requests for City staff to explain data anomalies and statistics, to review independent analyses performed by members of the public, and to collect more data. Some organizations experienced such intense spikes in these types of requests that they had to hire additional staff; other organizations reported that these requests were minimal and did not require additional staff.

There is no foolproof way to predict the number, depth, and pace of community inquiries that an ODP will generate in Berkeley. However, metrics collected during the pilot will help staff estimate the resources needed to support the ODP as an ongoing community service. In the meantime, each department will continue working with the 311 Call Center to clarify SR routing guidelines and estimated response times within current staffing constraints, and make adjustments as necessary throughout the pilot program.

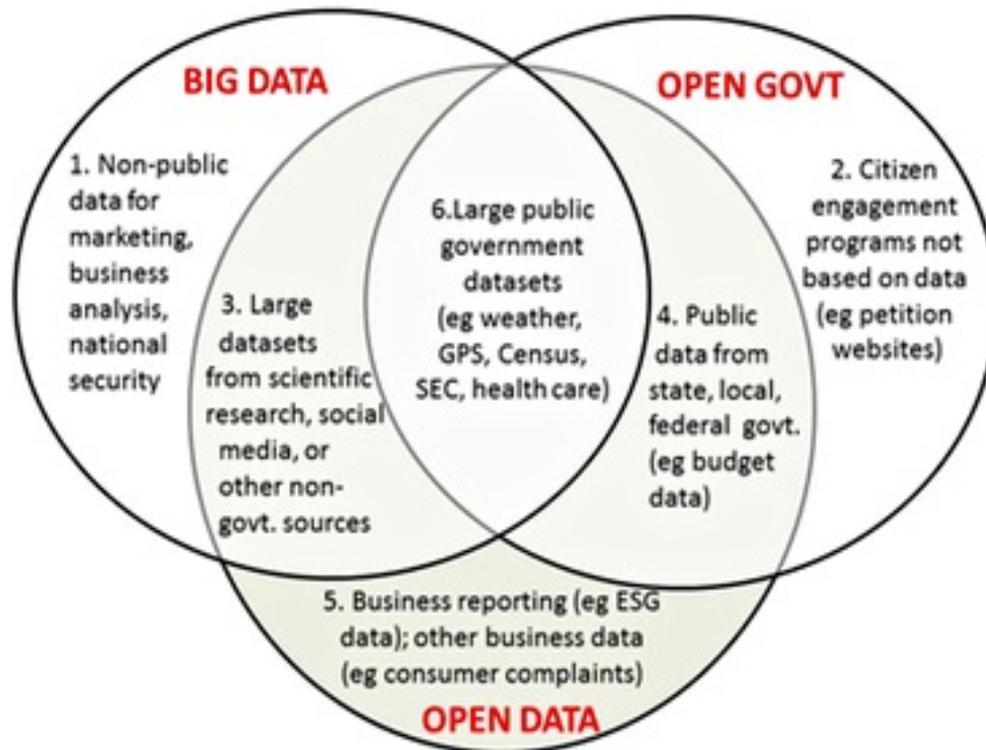
BACKGROUND

A. Open Data, Big Data, and Open Government

The goals of open data are similar to those of other ‘open’ movements, such as open source, open access, and open government. Open Government aims to increase transparency and civic engagement, so that public officials are held accountable by the communities they serve. For many open government advocates, open data is core to transparency because it provides members of the public with the same access to raw data that governments have.

Big Data refers to large, complex, and rapidly-changing datasets in both the private and public sectors. Open data is defined by its unrestricted use; big data is defined by size. New York University’s Open Data 500 (www.opendata500.com/) offers the

following diagram to illustrate the relationship between open data, big data, and open government.



Source: Joel Gurin, Senior Advisor at NYU's GovLab (<http://thegovlab.org>)

B. Pilot Program Development

In August 2013, staff began researching and testing open data platforms to determine which could most efficiently support a pilot program for Berkeley in Fiscal Year 2015, given Citywide fiscal and staffing constraints.

In September 2013, the Department of Information Technology (DoIT) partnered with the Presidio Graduate School (<http://www.presidio.edu/>) to create an experiential learning program for advanced Masters of Public Administration (MPA) and Masters of Business Administration (MBA) candidates interested in researching, designing, documenting, and implementing an ODP.

In May 2014, the City contracted with Socrata (www.Socrata.com) to provide an ODP platform and cloud hosting; later that same month, DoIT partnered with UC Berkeley's School of Information (<http://www.ischool.berkeley.edu/>) to identify and onboard a volunteer Intern Team Lead.

From May 2014 to November 2014, City staff, interns, and student volunteers devoted a combined total of over 1,500 hours to building, testing, and tuning the ODP. The most difficult technical challenge has been extracting data sets from aged legacy systems into the City's data warehouse and transforming them to a modern format, then loading them into the ODP. Automating this process (known as Extract/Transform/Load or 'ETL') for the first time, for each data set, is complex, idiosyncratic, and labor intensive.

From August 2014 through November 2014, students enrolled in the Presidio's Research Methods and Policy Evaluation course assisted Berkeley's ODP pilot by comparing and contrasting regional, state, national, and international Open Data initiatives. Thanks to this research, DoIT received consultation, templates, and other reference material from the following agencies:

City and County of San Francisco	https://data.sfgov.org/
City of New York	https://nycopendata.socrata.com/
City of Oakland	http://data.openoakland.org/
City of Boston	https://data.cityofboston.gov/
Alameda County	https://data.acgov.org/
The White House	https://www.data.gov/
State of California Comptroller's Office	https://bythenumbers.sco.ca.gov/
California State Board of Equalization	http://www.boe.ca.gov/dataportal/
California Department of Public Health	https://health.data.ca.gov/

From September 2014 through December 2014, students enrolled in the Presidio's Public Finance course surveyed best practices in Open Budget data and applications, to help develop educational material for City staff and community members. This material is being refined during staff training sessions from October through December 2014; when completed, they will be published with the ODP and offered as part of the pilot program.

ENVIRONMENTAL SUSTAINABILITY

The potential for open data to support environmental sustainability in Berkeley is broad. For example, the City's office of Energy and Sustainability is planning to publish data that can be used by community members to encourage and support conservation efforts. As another example, the Office of Economic Development is working with local businesses to determine which data would most likely support the technology sector's interest in creating sustainability-oriented, Smart Cities software applications to encourage better recycling, walking/biking, carpooling, donations and reuse, et cetera.

POSSIBLE FUTURE ACTION

The ODP pilot program will run from December 15, 2014 to June 30, 2015. Another update, including pilot program performance metrics, community feedback, and recommendations for next steps, will be presented to Council on May 26, 2015.

CONTACT PERSON

Donna LaSala, Director of Information Technology, 981-6541

Attachments

1. "Benefits, Adoption Barriers and Myths of Open Data and Open Government"
Open Access Author Version: M. Janssen, Y. Charalabidis & A. Zuiderwijk (2012)
2. "How Open Data Is Transforming City Life"
Joel Gruin (September 12, 2014)
3. "Personalising Climate Change Through Open Data and Apps"
Rachael Post (September 11, 2014)
4. "Open Data: Unlocking Innovation & Performance With Liquid Information"
McKinsey Global Institute (October 2012)
5. FUND\$ Status Report, March 25, 2014 (including Attachment 1)