

Driving Innovation and Civic Engagement with Open Data

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"Openness in government strengthens our democracy, promotes the delivery of efficient and effective services to the public, and contributes to economic growth."

– Presidential Executive Order on Open Data, Section 1.

Introduction

The City of Philadelphia is embarking on a groundbreaking strategy to drive innovation in government built upon the sharing of valuable city data in highly usable formats with outside users and engaging technical and creative classes in our city to help turn this raw data into valuable solutions to improve the lives of citizens.

Philadelphia's efforts are part of the larger "open data" movement that has been adopted by other cities across the country and in other parts of the world. But there are some characteristics to what is happening in Philadelphia that make it unique among large cities and that can produce lessons for other cities to follow.

Philadelphia's Open Data History

Philadelphia has a long history of sharing government data, dating back to 2003. Since that time, the city has shared geospatial data through the State of Pennsylvania's Statewide Geospatial Data clearinghouse (PASDA), one of the largest cities in the country to do so at the time (Pennsylvania Spatial Data Access, n.d.).

In early 2011, the City of Philadelphia took another important step in its open-government efforts through its initial engagement with Code for America. This San Francisco-based nonprofit devoted to transparency in government started its first year of work with the city by organizing a series of civic hackathons, culminating in a "data camp" event in late February of 2011. This event focused attendees (including city employees, private software developers and others) on the development of useful software applications and maps built with data made available by the City of Philadelphia (Vadala, 2011).

This event, and the continued presence of Code for America fellows in the City of Philadelphia over the succeeding year and half, helped raise awareness of the value of the city's data and the strong interest in using that data on the part of external consumers.

These factors were part of the impetus for the creation of an open data portal for Philadelphia: OpenDataPhilly (OpenDataPhilly, n.d.). This site has served as a centralized directory of data available from the City of Philadelphia and other data producers in the Philadelphia

region.

OpenDataPhilly is an open source website that was governed by a consortium of stakeholders from government, the private and nonprofit sectors, higher education, community groups and others under the auspices of the OpenAccessPhilly initiative. Since the beginning of Philadelphia's open government efforts, this site has served as the central hub around which civic software development and open data activities have coalesced.

The software behind OpenDataPhilly has also been adopted in several other cities as the basis for their open data initiatives, successfully exporting the approach used in Philadelphia for open data and government transparency to other parts of the country (Code for America Brigade, n.d.).

Philadelphia is now home to one of the most mature and robust systems for using open government data for civic software applications, maps, statistical analysis and other uses. The city is widely regarded as a leader in the open government movement, and a number of important accomplishments have been realized over the past year.

Open Data Policy Enacted

Executive Order 1-12, signed by Mayor Michael Nutter in April 2012, established a formal open data policy for the

City of Philadelphia (Open Data and Government Transparency, 2012). The order established specific requirements for city departments to release valuable data sets to the public and established a new position in city government—chief data officer (CDO).

Since the signing of the order, the city has released over 50 new high-value data sets, some never before available to the public in an open format, like Part 1 crime data, assessed value information for all city properties and complaints against police officers filed with the Police Advisory Commission.

In December 2012, the city's Part 1 crime data release was cited by *The Atlantic Cities* magazine as one of the top open data releases in the country in 2012 (Badger, 2012).

In fall 2013, the city will release a host of budget and expenditure data. In addition, the release schedule for specific city data sets has been shared publicly and is updated by city staff as work on new data releases continues (City of Philadelphia, n.d.-a).

Philadelphia is not treating the repository for newly opened data sets like simply an extension of its existing website. Instead, the city is releasing its data using an independent website developed by the local technology community and managed by a nonprofit journalism organization with roots in Temple University's Center for

Public Interest Journalism.

The city has designated the community-built OpenDataPhilly website as its official open data directory. City departments and offices are directed to list all new open data releases on this site. Philadelphia is the only large city in the country with an official open data repository managed in collaboration with outside stakeholders.

Fostering an Open Data Culture

The chief innovation officer and CDO have established an Open Data Working Group comprising representatives from city departments and other large public sector data producers in Philadelphia, including SEPTA, the School District of Philadelphia, the Philadelphia Parking Authority and PGW (Philadelphia Open Data Working Group, n.d.).

This group spearheaded the development of the city's first ever Open Government Plan (City of Philadelphia, 2012), to guide transparency efforts citywide, and helped develop the Open Data Guidebook (City of Philadelphia, n.d.-b), which provides practical guidance to departments on how to identify data for release and to communicate with outside consumers.

The city is engaging with outside consumers of public data through its many technology events—particularly during Philly Tech Week—and by encouraging public input

through channels like the public Open Data Forum.

Driving Innovation through Civic Engagement

The City of Philadelphia's efforts to build the infrastructure, bureaucratic processes and culture to support open data are part of a strategy of engagement with the technical and creative classes in the city to coproduce applications and solutions that can be used by citizens.

This approach to the coproduction of government IT solutions and software applications is typically referred to as "government as a platform," and was first articulated by Tim O'Reilly of O'Reilly Media (2010). This approach envisions a variety of actors outside government, armed with a toolset for working with data that becomes more powerful by the day, building new solutions on top of open government data that benefit both themselves and others.

The most immediate example of this dynamic at work comes from the world of transit. Several years ago, Google worked with a partner transit agency in the Pacific Northwest to develop what came to be known as the Google Transit Feed Specification (now known as the General Transit Feed Specification) (General Transit Feed Specification, 2012). Originally designed to make it easy to integrate transit information into Google's search results, the data specification sparked the development of

a cottage industry of transit apps that can be used by anyone to consume transit information.

This dynamic has considerable value for the entity publishing open data, in this example, public transit agencies. It makes it easier for such entities to focus their limited technical resources and IT staff on the area where they have the most expertise: their data. It de-obligates these entities from being the sole providers of finished applications that provide service and information to citizens. This can be a huge boon to public sector entities that might otherwise struggle to keep pace with ever-changing technologies and platforms used to consume data and information. In fact, many of the most innovative and useful applications are developed by outside parties in jurisdictions that have mature open data programs.

This same dynamic is at work around the many valuable data sets that have been released by the City of Philadelphia under Mayor Nutter's executive order. The city's Part 1 crime data release—mentioned above—has spawned a number of innovative new services that let Philadelphia residents consume crime data in a way that is more understandable, more immediate and more useful to them (for an example, see [HYPERLINK "http://www.phlcrimemapper.com/"](http://www.phlcrimemapper.com/) `\hhttp://www.phlcrimemapper.com/`). Similarly, data on property valuation and vacant land have spawned a number of new services aimed at encouraging the reuse of vacant property—a particularly acute issue in

Philadelphia (for an example, see [HYPERLINK](#)

"<http://groundedinphilly.org/>"

[\http://groundedinphilly.org/](http://groundedinphilly.org/)).

Future data releases by the City of Philadelphia will be prioritized based on the level of engagement and the value of derived applications that can be generated with each release.

The Future of Open Data in Philadelphia

One of the primary objectives of Mayor Nutter's executive order on open data is to create a lasting culture within city government that embraces openness and collaboration with outside data consumers to generate innovation and value.

Philadelphia's efforts to do this have become a model for the nation, and a number of independent organizations have remarked on the rapid progress made here. In a recent survey of cities with open data policies, the Sunlight Foundation observed: "Although we have yet to find our proverbial 'white whale,' we're inspired by cities like Philadelphia which are actively trying out new ideas for policy and implementation, such as sharing a public calendar of upcoming data releases and hosting the city data portal on a semi-independent site run as a public/private partnership" (McCann, Green, & Howell, 2013).

Moving into the final years of the Nutter administration, and beyond, the City of Philadelphia will continue to strive for leadership in the developing open data movement, inspiring other cities across the country and around the world.

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