

**2009 RECOGNITION AWARDS FOR OUTSTANDING ACHIEVEMENT IN
THE FIELD OF INFORMATION TECHNOLOGY**

Title: **Apps for Democracy**

Category: **Digital Government: Government to Citizen (G to C)**

State Nominating: **Washington, DC**

B. Executive Summary

The District of Columbia Apps for Democracy contest launched on October 14, 2008, invited software developers to compete to create new applications to make DC government data more accessible and useful for the public.

The competition, open to the general public, asked developers to create mashup applications (a web application that combines data from more than one source into a single integrated tool) for the District's data using popular consumer technologies like the iPhone, Facebook, Google Maps and others. Contest entries were required to use open source programming. Entries were judged by an appointed jury based on criteria including usefulness to citizens, usefulness to government and originality.

The District collects and maintains vast stores of data on every aspect of government operations, from government contracts to crime statistics to economic development and much more. The District has already organized and published this data in a real-time data catalog with more than 270 data feeds at <http://data.octo.dc.gov>. Applications for Democracy solicited the best and most cost-effective ways to package and present this data for easy viewing, analysis, and repurposing by the public.

While the immediate goal of the Applications for Democracy contest was to develop innovative software to present District data, its long-term goals are broader. By making government data easy for everyone to access and use, the District hopes to foster citizen participation in government, drive private-sector technology innovation and growth, and build a new model for government-private sector collaboration that can help all governments address the technology challenges of today and tomorrow.

The contest resulted in 47 innovative applications, all licensed as open source and freely available to government and the public.

Innovative use of technology to meet society needs allowed us to achieve a new level of government transparency, showed new ways to increase government's efficiency with citizen interaction, and to leverage citizens participation to produce applications in the most cost-efficient way (the total investment into the contest is \$50,000.)

C. Description of the Business Problem and Solution

Often citizens are viewed merely as recipients of government services. What is needed is a way for citizens to engage directly with the process of government, to enable true participatory democracy. By 2008, the District of Columbia already pioneered in several government transparency and accountability initiatives, including the release of the country first data catalog to provide access to government operational data in multiple formats. However, most of the data provided were still not utilized to its full potential. By 2008, most users of the government data were internal, and just a few public applications using government operational data were built. Most of these applications were built by government agencies using traditional approach that in some cases unfortunately included long procurement time, costly development, no clear understanding of what information and in what form should be presented to constituents to allow them to make decisions directly affecting their quality of life. None of the applications built by that time were released as open source, making it impossible to reuse the solutions already implemented.

The traditional solution would be to produce yet another government application or a bunch of them. To do it right, district agencies would first need to spend time on researching citizens' needs and formalizing the requirements, then going through all the phases of development. Applicable in other situations, this approach doesn't seem to be a solution to the existing problem.

In October of 2008, Office of the Chief Technology Officer of the District of Columbia started a contest called Apps for Democracy. The idea was simple: let the software developer community build applications using our data, and we'll award prizes to the best ones. The OCTO Data Catalog application used by all Apps for Democracy participants has 4-tier architecture: Presentation Tier provides User Interface (the Data Catalog website) to access data available through the Data Catalog application; Business Logic Tier is responsible for processing and delivering data in the requested format using certain business rules and processes; Data Access Tier is responsible for interacting with the Data Tier and handling manipulations with data; Data tier is a data storage that contains two Oracle databases.

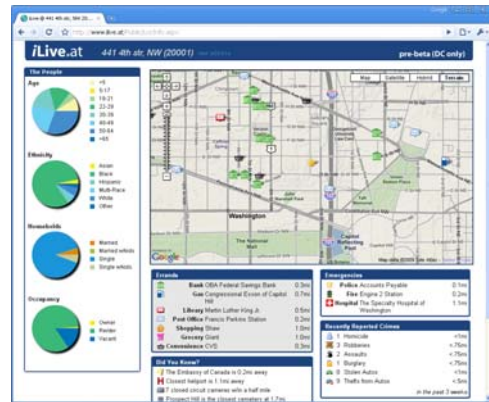
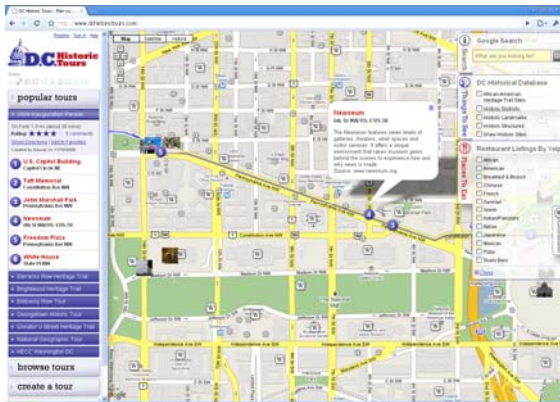
The contest was designed, managed and controlled by the Office of the Chief Technology Officer. We applied agile project management approach to executing this initiative. The contest budget of \$50,000 were spent on prize money given out to developers and on paying to the vendor selected through the competition process to handle outreach to the community (using Twitter, blogs and other social tools along with traditional outreach approach) and creation of the Apps for democracy website. We

actively leveraged social media to promote awareness, adoption and to encourage participation in this contest.

For an investment of only \$50,000, the District's Apps for Democracy contest challenged residents to utilize information available from DC's Data Catalog to develop consumer-based applications. Local developers produced 47 applications that were conceived, developed, and delivered in 30 days. All of the applications are available as open source. These applications cover all sorts of interests, from crime to biking to historic buildings to trying to find a parking space. Applications produced through the Apps for Democracy contest have been in operation since November 2008 providing District residents and numerous visitors of the nation's capitol with creative tools that offer customized information on government activities and DC attractions.

Winning applications include a DC biking guide, government purchases over \$2,500, parking meter locations, community garden sites, and more.

Examples of applications



The project is not just accomplished its original objectives, but grew in to something bigger including similar contest started or planned in other cities and countries (Finland and Belgium).

D. Significance of the Project

Apps for Democracy contest conducted by the District's Office of the Chief Technology officer demonstrated a new way to improve government operations by leveraging citizen's participation.

The District of Columbia was the first to provide access to the government operational data and engage citizens in creating innovative applications to present District data. By treating citizens as co-creators of government, the District secured software worth

millions of dollars that the government alone would not have been able to create, particularly in this economic climate.

This innovation is already adopted by other agencies, states, and on the federal level (<http://www.data.gov/> and Apps for America contest). The project aligns with the Presidents' call for government Transparency.

Key beneficiaries included the residents, visitors and businesses of the District of Columbia.

E. Benefit of the Project

Apps for Democracy contest provided both tangible and non-tangible benefits.



Usually development of software applications took too long and cost too much and the final product might not be useful to the public. By our estimate traditional development may required \$2.35M and 1-2 years. By holding Apps for Democracy contest and inviting developers to compete for the best new application using government data feeds we implemented 47 application for \$50K in just 35 days.

Beyond immediate benefit of 47 new applications being build that visualize and make government data more accessible, the District anticipates ongoing benefit of innovation and digital democracy. By requiring all 47 application's source code to be released under open source license other jurisdictions including DC will be able to reuse those applications and build new applications on top of current once. District hopes to foster

citizen participation in government, drive private-sector technology innovation and growth, and build a new model for government-private sector collaboration.

As part of Apps for Democracy contest we received a lot of useful feedback such as what applications may be build in the future, what particular data presents most interest to residents, opened new technology that can be potentially used by government in the future initiatives.

The benefits impacted multiple stakeholders including Office of the Chief Technology Officer, Office of Contracting and Procurement, residents and the visitors of the District of Columbia and technology community at large.