OPENGOV

Boston Delivers "Cutting-Edge" Next Generation Open Data Portal with OpenGov

AGENCY TYPE
City Government

POPULATION
673,000

ANNUAL BUDGET
$3.2 Billion

One of America's oldest cities, Boston, Massachusetts sits on centuries of history. The Freedom Trail leads visitors along miles of Revolutionary War sites, and landmarks intertwined with the nation's formation commingle with modern skyscrapers, top universities, and public art and cultural offerings. Logan International Airport, one of the nation's busiest, serves as the gateway to all of New England.

The City was tasked with maintaining substantial infrastructure and a great deal of operational information. Yet, an unorganized collection of hosted datasets largely failed to engage users despite significant public interest in the data. Consequently, the City sought to revamp its entire open data platform, including replacing its old open data site with a more user-friendly, next generation open data solution.

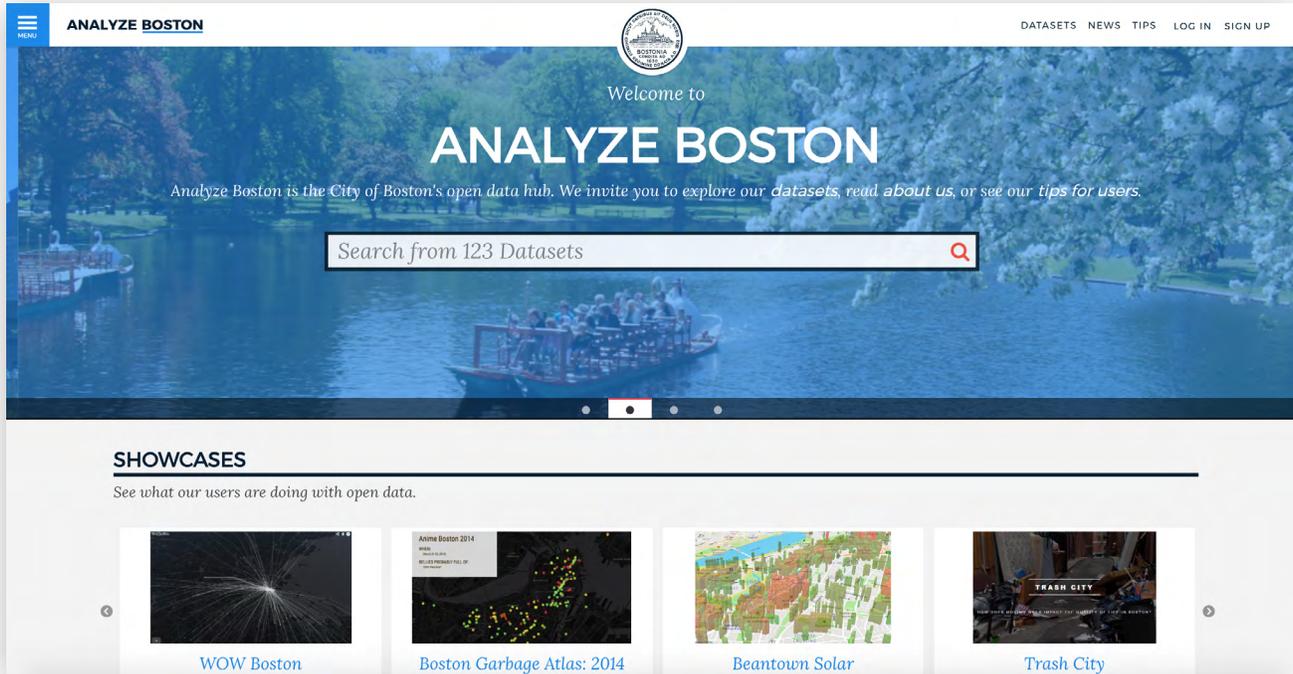## Initial Transparency Efforts Receive Boost from Grant

Boston's first open data portal debuted in 2012 with an off-the-shelf platform that focused on moving data online from offline storage. Boston's Chief Data Officer, Andrew Therriault, noted that the City added data sets and saw usage increase accordingly over the years, but key functionalities never emerged. The site was not easy to navigate, was not mobile-friendly, and was not customizable. Furthermore, because the data sets were updated only periodically, the available information could grow stale.

"Our old open data portal was just a repository of open data sets," he said. "Essentially, the open data was being measured in terms of quantity, not quality. And, as a result, it made it harder for our site to be useful. Downloading raw data for most people was the end of the interaction. It was a good first step, but only a first step."

> *"Our old open data portal was just a repository of open data sets. Essentially, the open data was being measured in terms of quantity, not quality. And, as a result, it made it harder for our site to be useful."*
>
> **ANDREW THERRIAULT**
> **Chief Data Officer, Boston, Massachusetts**

The City of Boston replaced its old off-the-shelf open data platform with OpenGov's, cutting-edge, next generation open data solution.

The City sought to reimagine its open data portal as a strategic initiative undertaken in conjunction with public libraries. They received a grant from the Knight Foundation to support the initial platform development and launch. The result was Analyze Boston, which was not only a beautiful platform but also a strategic initiative undertaken as a sustainable partnership, using librarians as ambassadors of open data. "Hundreds of librarians interact with the public every day," Therriault explained. "Just as they can help someone find a book, they can connect people to existing data through new mediums – in this case, our open data website."

For the portal's redevelopment, Boston chose OpenGov's CKAN-powered open data solution. CKAN's open source community is comprised of developers – including OpenGov engineers – from across the globe who are always building and improving open data technology infrastructure. OpenGov's usability-centered open data solution leverages CKAN's infrastructure, making data easier to upload, maintain, and use.
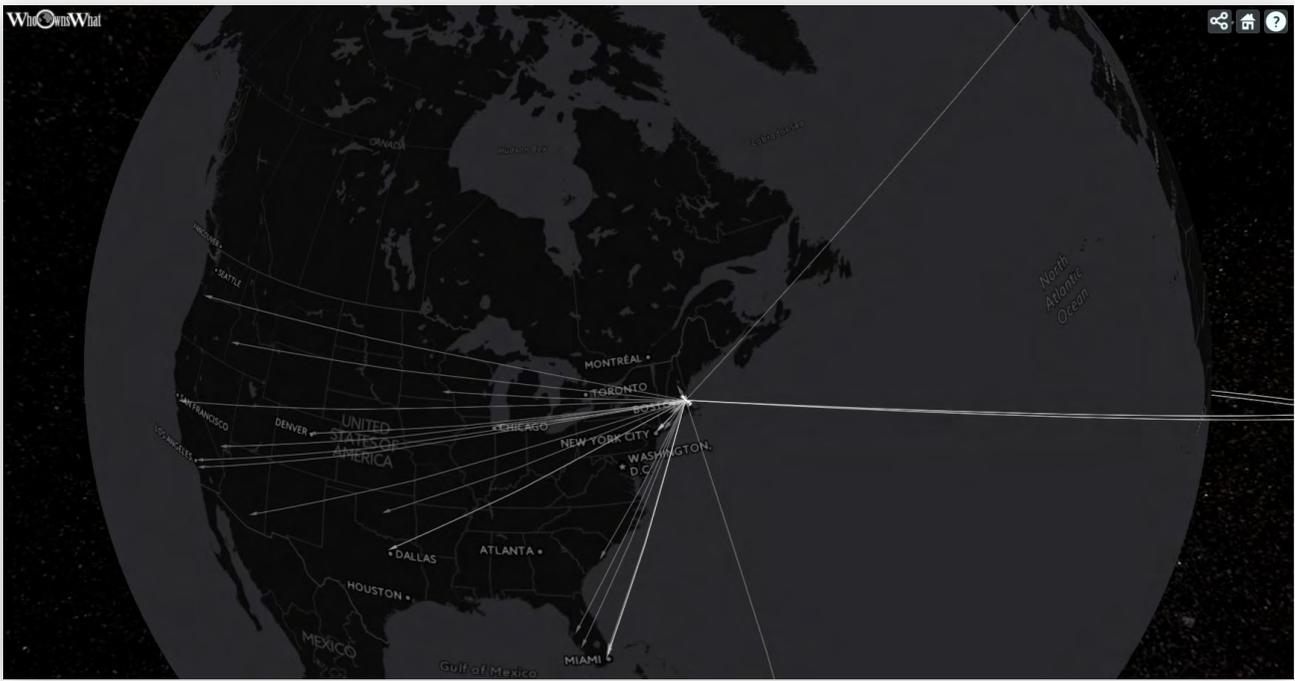
Furthermore, OpenGov's next generation open data solution offered the customization and mobile-friendliness the City sought, and Therriault appreciated the platform's flexibility. Unlike off-the-shelf open data solutions, OpenGov's tailored, but scalable, approach eliminated constraints and allowed for modification and innovation.

New Functionality Provides Insights, Real-time Access to Data

Analyze Boston represents the next generation of open data, highlighting what cities can do to make their important information useful, useable, and used by stakeholders. As the Sunlight Foundation's open data project lead said, the Analyze Boston open data portal "is on the cutting-edge of what we're seeing cities do."[1] Once launched, the platform demonstrated key

---

1   Wood, Colin. "Analyze Boston cranks up civic engagement on open data." State Scoop. http://statescoop.com/analyze-boston-cranks-up-civic-engagement-on-open-data. February 28, 2017.

Open Data showcase project WOW Boston leverages the portal's data to visually link local properties and their owners across the globe.

components of next generation open data portals, including functionality, showcases, fresh data updates, and support resources.

> **"[Analyze Boston] is on the cutting-edge of what we're seeing cities do."**
>
> **STEPHEN LARRICK**
> **Open Data Project Lead, Sunlight Foundation**

An easy-to-use landing page is key to the portal's functionality. It emphasizes usability and features relevant resources, including data sets listed by topic. Its search functionality is upfront and benefits from clear navigation. Citizens have access to a complete listing of the more than 100 datasets available. Clear instructions and tips are available, and they make accessing and interacting with the data easy for users of all backgrounds. "We want the average resident to be able to come and use it," Therriault said.

A featured showcases section includes real projects, illustrating how public and internal users have leveraged

the data beyond simply looking at raw information. "Citizens use this to get better ideas as to what they could do with the data," Therriault said. A showcase project called WOW Boston is a tool that visually links properties and owners. Beantown Solar shows residents where the greatest opportunities are for using solar energy. Boston Garbage Atlas ties trash episodes with specific events, such as student move-in days at universities.

The ability to update information in near real-time makes it more relevant and useful for developers and the general public, alike. For instance, API integrations allow users to build applications and dynamic analyses. The City Hall electricity usage dataset, for example, provides near real-time energy monitoring of the measurements of electricity loads going into City buildings.

Therriault said the portal's scalability is an exciting component of its functionality. "Over time, we can easily scale up to enable better performance to support growth in usage without interruption," he said. He also noted that the team improved its back-end data processes and best practices, including taking proactive approaches to ensuring privacy and security
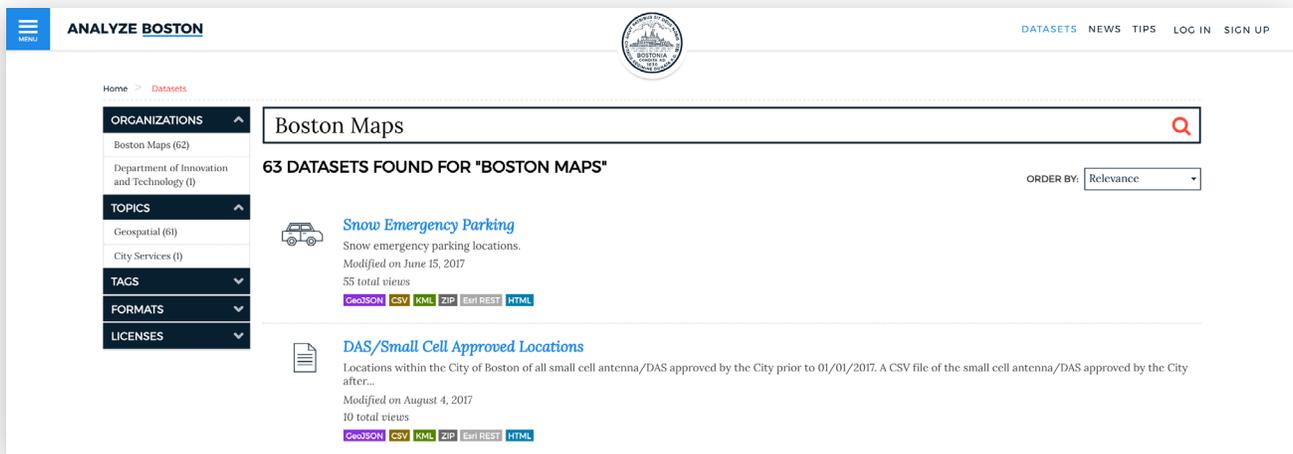
reviews prior to publishing data, as well as integrating Boston Maps geospacial data sets to provide a single source of information for residents.

Boston Looks to Continue Growth and Momentum

Beyond the end of the grant, the City is sustaining Analyze Boston using a variety of innovative tactics. Librarians are continuing to connect the public with open data resources. The City is creating in-person and online

training opportunities while expanding the portal's functionality, outreach, and community collaboration.

Additional data, such as new transportation datasets and 911 dispatch information, will become available and existing data is kept fresh. Expanded outreach and collaboration will include an intentional presence in schools, along with new City and community partnerships. Therriault is excited about continued growth in functionality, including new features and more visualizations. These combined efforts will build on the City's success in leveraging data to better inform and engage its stakeholders and power data-driven initiatives.

Analyze Boston's search functionality is clear, upfront, and user-friendly.

RESULTS

✓ **Reimagined Open Data with Usability Focus.** Replacing its old open data site with OpenGov Open Data facilitated innovation that made Boston's data more useful.

✓ **Creative Partnerships Connected Users with Data.** Sustainable partnerships, such as with public libraries, leverage existing communication channels and help maintain data.

✓ **Fresh Data Made Portal Relevant.** Much of the information in the portal is updated in near real time, making the portal useful for developers and the general public.

✓ **A Fast and Flexible Platform Provided Scalability.** OpenGov's CKAN-powered open data solution supports growth in usage and scaling up without interruption.