

# **CITYWIDE ANALYTICS TEAM** 2017 Year in Review

## **OUR MISSION**

The City of Boston's Analytics Team uses data and technology to make life better for everyone who lives and works in Boston. Mayor Walsh created our team in 2015 with the goal of developing innovative programs and improving performance across all parts of City government. Our work helps tackle many of Boston's greatest challenges, from public health and education to transit access and economic mobility, and our team plays a key role in major City initiatives such as Imagine Boston 2030 and Vision Zero. We also support departments throughout the City by providing the tools, infrastructure, and expertise to empower every City program to make data a central part of their day-to-day workflows.

#### **OUR TEAM**

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## **HIGHLIGHTS FROM 2017**



**Analyze Boston.** <u>Analyze Boston</u>, the City of Boston's open data portal, officially launched in April. The site curates more than a hundred datasets and pairs them with tools for data exploration and analysis. In May, we hosted an <u>Open Data Challenge</u> at District Hall, which saw more than 20 teams of participants using open data to answer real-world challenges faced by various City programs.

**Imagine Boston 2030.** We designed a <u>set of dashboards</u> to visualize progress in implementing the City's <u>Imagine Boston 2030</u> plan. These visualizations use data to help illustrate where we stand on the goals set in the fall of 2015, when Imagine Boston 2030 was created, and will be updated annually. Going forward, the tool will help the public to understand long-term trends affecting quality of life in Boston, such as

housing costs, economic opportunity, and public health and safety.







**MBTA Performance.** We designed a dashboard to condense multiple pages of the MBTA's <u>Back on Track reliability metrics</u> into a single view for the Mayor's Office. The dashboard provides an easily-accessible graphical display of the system's performance across each line and over time, and also includes measures of public posts about the T pulled from Twitter in order to deliver real-time insights into the state of the system on any given day.

**EMS Community Assistance Team.** When <u>Boston EMS</u> received funding to add 20 full-time EMTs to their team, we were brought in to help track their impact and find new ways to deliver even better service to residents. Based on our analyses and recommendations, Boston EMS <u>created a new Community Assistance Team</u> to provide specialized care for residents dealing with issues such as substance abuse and homelessness. Known as Squad 80, this team works in high-demand areas and can help connect patients with the long-term support and services they need.

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What Works Cities Certification. Boston was one of nine U.S. cities awarded certification for Bloomberg Philanthropies' <u>What Works Cities program</u>. The program recognizes our commitment to the use of data and analytics to improve residents' quality of life. Through What Works Cities, Boston will share insights with a community of peers, helping cities lead the way on big challenges ranging from equity to climate change.

**New Data Infrastructure.** We set up a new environment for the team's use on <u>Amazon Web Services</u>, securely linked it to the City's own datacenters, and deployed open-source tools for data management, visualization, analysis, and machine learning. We also kicked off procurement for a new Analytics Data Warehouse platform, to be built in 2018, which will combine modern, scalable, cloud-based data warehouse technology with tools that make it easier for our team to manage and use the data we collect.

# WHAT'S COMING IN 2018

**Leveraging Cultural Assets.** The Mayor's <u>Office of Arts & Culture</u> wants better data and insights to inform grant programming and strategic planning to promote advocacy for the arts. We're working with them to bring together data from internal and external sources, collecting event information from websites and building an up-to-date database of spaces, events, installations, and programs throughout the City to inform their plans. We'll also use this data to power a public-facing map to provide constituents with a comprehensive view of cultural assets across the city.

**Reducing Greenhouse Gas Emissions.** Boston's <u>Building Energy Reporting and Disclosure Ordinance</u> (BERDO) is a critical tool for achieving the goals of the <u>Climate Ready Boston</u> program. We're working with the Environment Department to automate and clean data collected from building owners throughout Boston, in order to more effectively enforce BERDO and gain insights from these reports. This project will help the City reduce its carbon footprint by expanding public awareness of buildings' energy usage and finding opportunities to improve efficiency through targeted outreach programs.

**Understanding Transportation Barriers to Food Access.** In community listening sessions on the topic of food insecurity, the Mayor's <u>Office of Food Access</u> (OFA) frequently heard from residents concerned that travel costs were an obstacle to finding healthy food. We'll work with OFA to understand the scale and scope of this issue, identify its causes and impacts, and collaborate with other departments to find solutions that can help ensure access to healthy nutrition for all Bostonians.



**And much more!** We are also working on projects which are designed to optimize EMS resources, increase safety on Boston's streets, prioritize capital investments for Boston Public Schools, provide data-driven insights for parking enforcement operations, and streamline City revenue reporting and collection. We'll update the team's website and Analyze Boston regularly as these projects develop, and we look forward to sharing more of our work with the public throughout 2018!



