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# Commonwealth of Massachusetts

## NASCIO 2017 State IT Recognition Award Nomination

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| <b>Title</b>           | <b>Commonwealth of Massachusetts – CTHRU Transparency Platform</b>  |
| <b>Category</b>        | <b>Open Government and Data, Information and Knowledge Management</b>   |
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| <b>Project Dates</b>   | <b>February – September, 2016</b>   |

## Executive Summary

In September 2016, the Comptroller of the Commonwealth of Massachusetts released the deepest single instance, open data dive into financial transparency of any state in the United States — making spending data for over 21 million transactions dating back to 2010 available.

The driving force behind this initiative was Governor Baker’s overhaul of the Massachusetts Public Records Law. The Comptroller took a proactive approach and made financial and payroll information easily accessible to the public on a new transparency data platform, called [CTHRU](#), powered by Socrata. CTHRU goes beyond serving up rows of stale transactions, by providing intuitive visualizations of the data so citizens, media, public interest groups, and governmental staff can understand detailed financial information quickly and easily.

Through a cloud-based financial transparency site, Massachusetts has:

- Increased inclusivity and transparency related to financial information
- Assured the financial data is both timely, accurate and within the scope of the public record laws
- Reduced hardware and staffing costs by 86%
- Minimized its carbon footprint

## Concept

To address revised Massachusetts Public Records Law, Comptroller Thomas Shack wanted a solution that would not only improve the efficiency of handling public records requests, but also aimed to:

- Enable citizens, media, and government staff with on-demand, consumable and current financial data,
- Encourage the department to adopt a lean government strategy, and
- Create a sustainable platform for the future that would also reduce IT costs and staffing.

### Enabling Citizens and Staff

Citizens deserve to know how their money is being spent. However, state financial information is overwhelming for even the savviest of data analysts. The new solution needed to be easily accessible and the data needed to be easy to consume.

“We think that having open data and having the public’s eyes and public’s resources brought to bear on our data will be useful. It’ll be useful from making sure that we’re avoiding fraud and waste and abuse. We also think it’s useful from a data analytics standpoint,” says Shack.

### Lean, Open Government

The transition to CTHRU was also a deliberate push to replace what Comptroller Shack calls “innovacracy.” In other words, he wanted to stop the trend of government agencies taking innovative ideas and superimposing bureaucratic frameworks on them, ruining the creative spirit that fuels innovation.

Case in point: the state is spending millions of dollars on legacy systems that were difficult to support. Since the Commonwealth doesn’t find it wise to invest in the hardware and security of on-premises solutions, the Comptroller used cloud-first as a guiding principle.

### Sustainable Solution for now and the future

The current original transparency system took nearly seven years to customize and install and had a high capital cost to build. It continues to have high operational costs for licensing, on premise hosting, administration and support. The original transparency team is no longer available for upgrades and new initiatives to add functionality is virtually impossible. The transition of moving the Commonwealth transparency platform to a SaaS where it was successfully launched in just under seven months from ideation and for pennies on the dollar compared to the original customized system (Open Checkbook) which cost millions to procure and maintain. CTHRU, deployed AWS, avoids investment into infrastructure and benefits from a cloud environment which has redundancy, high availability, monitoring and disaster recovery built into the subscription cost.

## Significance

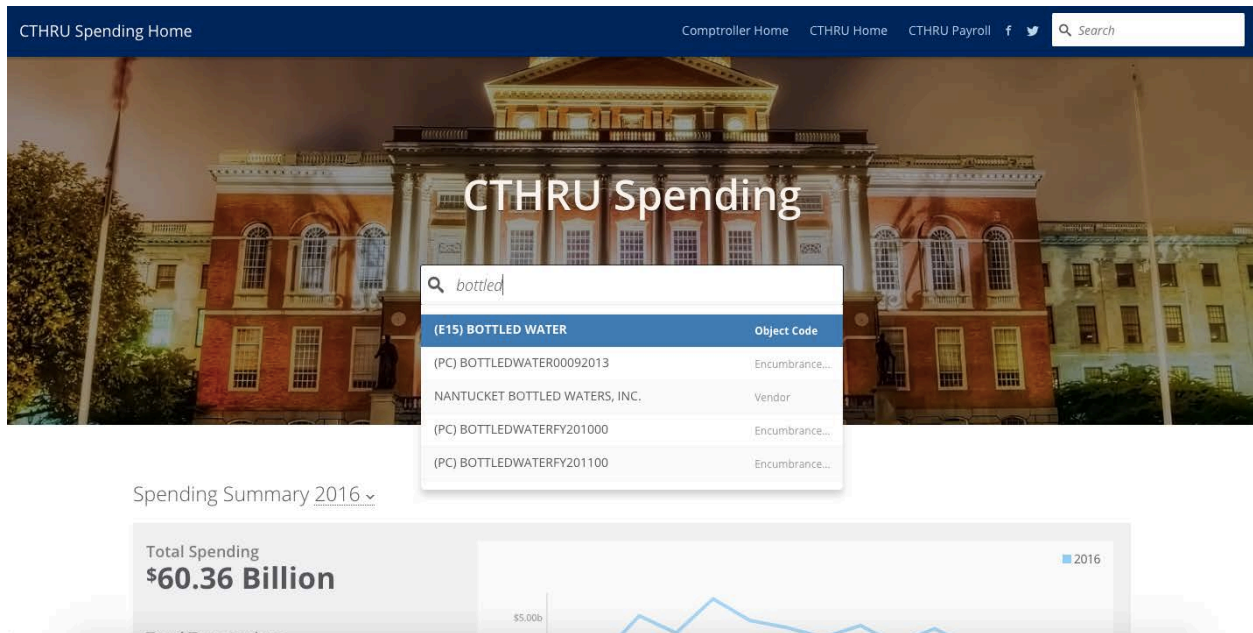
[CTHRU](#) is a unique open data and open records platform powered by Socrata that goes beyond serving up rows of numbers and transactions. It provides visuals of the data so citizens, public interest groups, the media, state finance staff and others can understand it quickly, increasing access and usability of the data far and above the previous solution.

The site is browser agnostic and available on both mobile devices and personal computers, which are ADA compliant for sight-impaired users. This provides an approachable way to search, access, and review public spending information, with the hope that the new system will spark broad interest and innovation.

Updated daily for spending and bi-weekly for payroll data, automating the data has reduced the amount of time staff spends updating reports and improved the refresh rate of the data.

The CTHRU transparency platform has proved to be a valuable asset to partner agencies as a quick and easy way to retrieve spending and payroll data. Without the need for complex queries and is intuitive to use CTHRU data is current as it is updated daily, easy to find and query, and is downloadable into a variety of industry standard/useable formats.

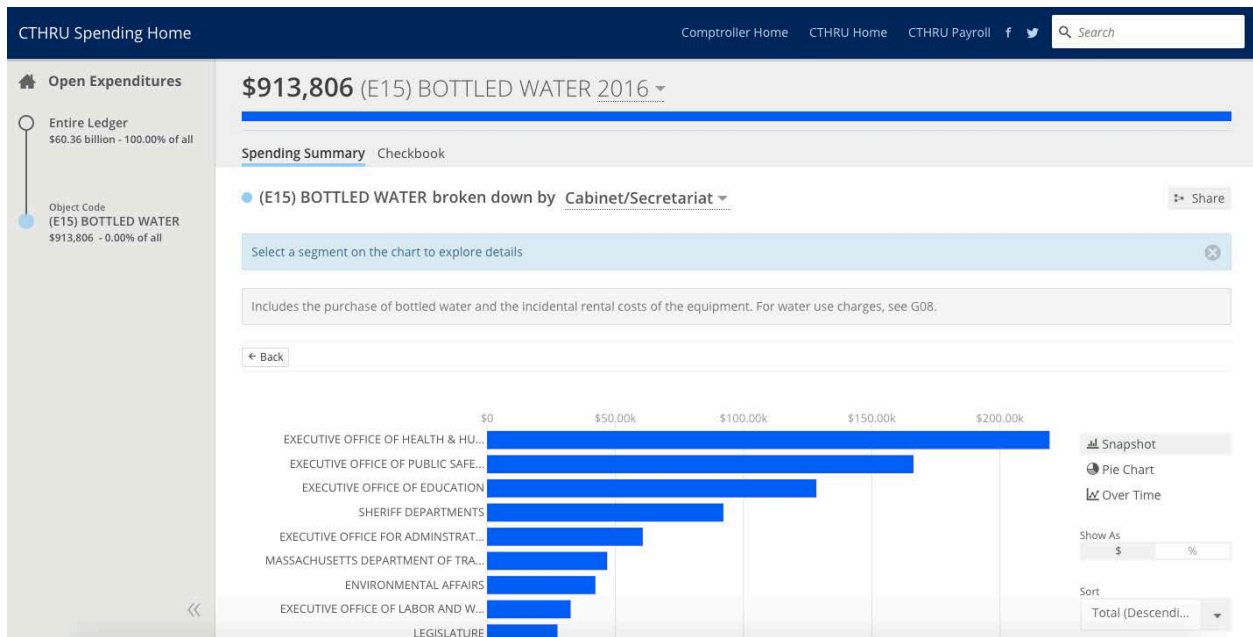
The site has also increased the visibility into Commonwealth finances by allowing users to search for state expenditures by secretariat, department, appropriations, spending categories (object class and object code), vendor and displays critical data such as contract, dollar amount, data and commodity or service type. Search results are available in a downloadable format as well as in a detailed information page that also lists contract deliverables.



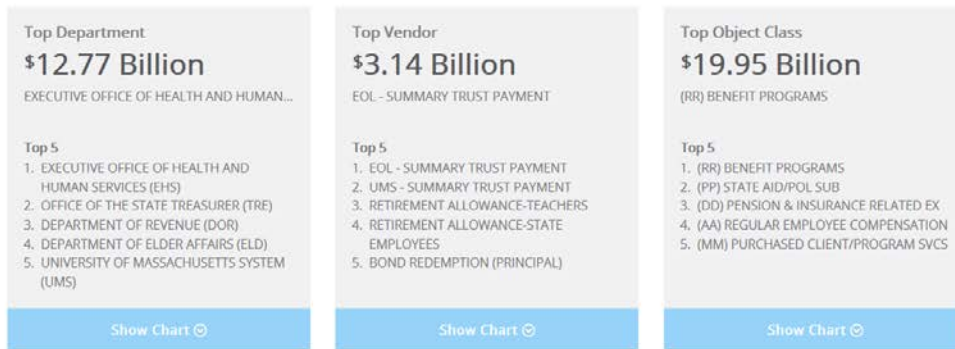
*CTHRU's search function creates a Google-like experience around financial data exploration, regardless of financial acumen.*

# State IT Recognition Award Nomination

## Open Government and Data, Information and Knowledge Management



Detailed chart showing spending summary, which users can access by searching by keyword, vendor, or department.



Comptroller Home | Open Checkbook | View Data in Worksheet

Data visualizations are and Top 5 Cards are GREAT because they provide an easy, intuitive and insightful view into the Commonwealth's financial and payroll data but CTHRU also provides the end user access to the nearly 25 million rows of financial and payroll raw data.

# State IT Recognition Award Nomination

## Open Government and Data, Information and Knowledge Management

| Base_Id                | Budget_Fiscal_Year | Fiscal_Period | Date       | Cabinet_Secretariat                         | Department   | Appropriation_Type | Appropriation_Name                           | Object_C  |
|------------------------|--------------------|---------------|------------|---|--|--------------------|--|-----------|
| A000000000000000003299 | 2010               | 1             | 07/13/2009 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | DEPARTMENT OF ELDER AFFAIRS (ELI) (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED | (40000600)         | MASSHEALTH - SENIOR CARE PLANS               | (RR) BEP  |
| A000000000000000003300 | 2010               | 9             | 04/02/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000700)         | INDEMNITY/THIRD PARTY LIABILITY PLAN         | (RR) BEP  |
| A000000000000000003302 | 2010               | 9             | 03/29/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000430)         | COMMONHEALTH SUPPLEMENTAL CARE FC            | (RR) BEP  |
| A000000000000000003305 | 2010               | 12            | 07/23/2010 | SHERIFF DEPARTMENTS                         | SHERIFF DEPARTMENT NORFOLK (SDI) (3TN) TRUSTS                              | (09106699)         | FY2010 NORFOLK SHERIFF TEMPORARY EX (FF) FAC | (RR) BEP  |
| A000000000000000003306 | 2010               | 10            | 05/03/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000700)         | INDEMNITY/THIRD PARTY LIABILITY PLAN         | (RR) BEP  |
| A000000000000000003316 | 2010               | 9             | 03/15/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40001405)         | MASSHEALTH - ESSENTIAL PLAN                  | (RR) BEP  |
| A000000000000000003319 | 2010               | 10            | 04/26/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000870)         | MASSHEALTH - BASIC EXPANSION                 | (RR) BEP  |
| A000000000000000003323 | 2010               | 9             | 05/13/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | MASS REHABILITATION COMMISSION ( (4FN) FEDERAL GRANTS                      | (41200511)         | VOCATIONAL REHABILITATION DETERMINA          | (JJ) OPE  |
| A000000000000000003326 | 2010               | 3             | 09/21/2009 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000875)         | CERVICAL/BREAST CANCER BENEFITS              | (RR) BEP  |
| A000000000000000003333 | 2010               | 8             | 03/02/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | MASS REHABILITATION COMMISSION ( (4FN) FEDERAL GRANTS                      | (41200020)         | VOCATIONAL REHABILITATION                    | (MM) PUI  |
| A000000000000000003344 | 2010               | 6             | 01/27/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | MASS REHABILITATION COMMISSION ( (4FN) FEDERAL GRANTS                      | (41200511)         | VOCATIONAL REHABILITATION DETERMINA          | (JJ) OPE  |
| A000000000000000003353 | 2010               | 11            | 05/17/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | DEPARTMENT OF ELDER AFFAIRS (ELI) (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED | (40000600)         | MASSHEALTH - SENIOR CARE PLANS               | (RR) BEP  |
| A000000000000000003356 | 2010               | 5             | 11/13/2009 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000700)         | INDEMNITY/THIRD PARTY LIABILITY PLAN         | (RR) BEP  |
| A000000000000000003364 | 2010               | 8             | 02/05/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000500)         | MANAGED CARE PLAN                            | (RR) BEP  |
| A000000000000000003367 | 2010               | 1             | 07/27/2009 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000500)         | MANAGED CARE PLAN                            | (RR) BEP  |
| A000000000000000003372 | 2010               | 12            | 06/14/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000700)         | INDEMNITY/THIRD PARTY LIABILITY PLAN         | (RR) BEP  |
| A000000000000000003375 | 2010               | 2             | 05/28/2009 | EXECUTIVE OFFICE OF TRANSPORTATION          | MASSACHUSETTS HIGHWAY DEPART (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED      | (60100001)         | HIGHWAYS DEPARTMENT PERSONNEL SER            | (GG) ENR  |
| A000000000000000003383 | 2010               | 3             | 09/16/2009 | EXECUTIVE OFFICE OF ECONOMIC DEVELOPMENT    | DIVISION OF BANKS (DOB) (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED           | (70060010)         | DIVISION OF BANKS                            | (UJ) IT N |
| A000000000000000003386 | 2010               | 9             | 03/22/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000700)         | INDEMNITY/THIRD PARTY LIABILITY PLAN         | (RR) BEP  |
| A000000000000000003388 | 2010               | 12            | 06/18/2010 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000500)         | MANAGED CARE PLAN                            | (RR) BEP  |
| A000000000000000003390 | 2010               | 1             | 07/31/2009 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | EXECUTIVE OFFICE OF HEALTH AND H (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED  | (40000500)         | MANAGED CARE PLAN                            | (RR) BEP  |
| A000000000000000003391 | 2010               | 4             | 10/29/2009 | EXECUTIVE OFFICE OF HEALTH & HUMAN SERVICES | DEPARTMENT OF DEVELOPMENTAL SI (1CS) DIRECT APPROPRIATIONS/SUBSIDARIZED    | (50020000)         | RESIDENTIAL AND DAY COMPONENT                | (MM) PUI  |

In the raw data set for spending (above) the user has the ability to filter, create visualizations and export the data in a variety of formats. There are also many additional data columns available in the raw data set. The Socrata platform provides an API into the data as well so Commonwealth transparency data seekers can access the datasets programmatically from their own web apps. This is truly self-service access to transparency data at its best.

## Impact

With 250,000 page views from more than 25,000 unique users since October 1, 2016, citizens and employees of the Commonwealth as well as other interested parties, have spent a collective 2,347 hours (98 days) exploring the financial data of the Commonwealth.

Additionally, “other state and local government leaders have reached out to learn more about our solution to increasing the transparency of our financial data in such an intuitive way,” says Comptroller Shack.

The launch of CTHRU has effectively:

- Increased inclusivity and transparency related to financial information
- Reduced hardware and staffing costs — No longer managing or maintaining on-prem solutions, that are quickly out of date and need ongoing support
- Minimized the carbon footprint of the state — As a result of transferring our business processes and data to the AWS cloud

“The launch of CTHRU was flawless and we have now started to examine future expansion of the system to include retiree payments, tax credits, and authority and quasi-governmental spending among other data sets — so our transparency revolution has just begun,” said Comptroller Tom Shack, “This is a great benefit of getting away from the outdated customized legacy system model

in favor of a single instance running in the 'cloud'. When improvements are made for one subscriber, they are made for all which breaks down silos within and among the states and we are on the right path to making the system as accessible to as many users as possible.”