

## 5 Ways Data Analytics, Performance Agreements Saved Cincinnati \$3.3 Million in Fiscal 2017

Theo Douglas | May 10, 2017



Deploying data analytics, forging departmental performance agreements, holding bi-weekly performance management sessions and following lean strategies have yielded a positive cumulative fiscal impact of more than \$3.3 million in fiscal 2017, Cincinnati officials informed the mayor and city council members in a [staff report and memorandum](#) on Tuesday, May 9.

Both documents went out to the mayor and council for informational purposes, but will be the subject of a presentation on Tuesday, May 16, to the council's [Rules & Audit Committee](#) chaired by Councilman Kevin Flynn who "has demonstrated an extraordinary interest in the work," according to City Manager Harry Black.

In an email, Flynn credited officials in the city manager's office for "using data analytics in a very methodical and process-oriented fashion," to ensure the council has "actual data so that we can make informed decisions."

During the past two fiscal years, since standing up the Office of Performance and Data Analytics (OPDA) in 2015, Cincinnati has realized a total cumulative fiscal impact

of \$6.1 million, Black told *Government Technology* — the result of gathering data, analyzing it and identifying strategies to save money across the enterprise.

He and Chief Performance Officer [Leigh Tami](#) prepared Tuesday's staff report and memo, Black said, because the mayor and council accepted his value proposition and the business case behind pursuing performance management and data analytics when he came to Cincinnati [in 2014](#).

Having invested around \$400,000 in OPDA initially, plus another \$200,000 to \$300,000 to build it out, Black said officials deserved to hear about the return on that investment — which was accomplished in five ways.

## 1. Analyzing Read-Only Data

Analyzing data on outstanding claims and bills owed the city gave officials a deeper understanding of which could most effectively be “triaged” and, ultimately, collected. Staffers analyzed read-only data collected by OPDA from a variety of departments, working with the attorney who heads their collection center to determine which claims could likely be resolved based on their age and amount due.

Tami said triaging has meant farming out some debt to outside collection firms — but refocusing in-house efforts on other money owed “and seeing if there are debts that we can bundle, there are settlements that we can make.”

Cincinnati has also been able to collect a lot of information about debts that it didn't have access to previously, Tami said, and this has helped the effort. As a result, citywide debt collection rose by \$523,840.

More generally, OPDA's work collecting and analyzing data helped departments citywide that were not able previously to see the full scope of information they generated.

“I think since the inception of this office, through its centralized role in processing data and analyzing that data for use operationally, we've been able to create a system that empowers departments to optimize what they're doing,” Tami said.

Black, who recently authored a [retrospective](#) on the methodologies behind these efforts and what they've meant to government, agreed.

“Key is how we have [perfected], and continue to, perfect integrating all of the components together to work as a system. Having all of these components work together as a system allows us to drive the level of performance, the results and the outcomes that we desire,” he said. “And in the most efficient way possible, which gets us to the finish line faster.”

## 2. Bringing Previously Outsourced Work In-House

Working with the Cincinnati Police Department, OPDA was able to bring in-house work previously done by the RAND Corp.

That work included collecting, analyzing and maintaining policing data, with an emphasis on traffic stops and citations — including an early warning system to detect potentially problematic traffic stop procedures.

Doing so helped the city realize \$350,000 in costs avoided, an annual figure.

### **3. Drilling into Firefighter Staffing Data**

Scrutinizing city firefighter staffing helped officials understand the department's staffing model and reduce the number of people listed on limited duty — which in turn reduced the number of firefighters who had to be called in to work overtime.

"We're trying to figure out if people are on medical leave, can we work with employee health services to help them rehabilitate? Is limited duty the most appropriate option in all these cases?" Tami said. "I think that often even data sets like staffing and money, we don't necessarily see them together or we're not looking at them together. The real, tremendous value added to that process is that we look at this information and we do it regularly."

Here, the city saved an estimated \$972,491, plus an additional roughly \$150,000 by maximizing its collection of billable emergency medical services revenue.

Collecting that data was relatively easy, Chief Data Officer Brandon Crowley told *Government Technology*, but the city also had to create an accountability process.

### **4. Insituting Data Automation Processes**

Automating in-house processing, cleaning and management of data collected from other departments let OPDA handle hundreds of data sets from city departments.

This enabled city oversight in areas including tracking the location and status of city vehicles via GPS; recording public safety and first responder activity; and following customer service requests through City Hall. The cost savings here, estimated conservatively, is \$500,000.

### **5. One-Person Management of Data Analytics Infrastructure**

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In the effort's third year, Black said he expects the processes now underway to continue to yield strategies, cost avoidances and savings. The city manager praised the mayor, council and residents for their support and engagement. "Cincinnati as a community in general, they really get this stuff and they like it. It excites them and it makes them proud that their local government is engaged in these types of activities."

Crowley agreed, and said during his 17 years at the city, he's never seen such data so emphasized or made transparent.

OPDA's work and the city's transparency efforts, Crowley said, " just catapulted into just a completely different stratosphere."