

# 10 ways analytics can make your city smarter

For many of us, the term “smart city” conjures up images of sensors collecting data about everything from traffic patterns to energy use. It’s common for government leaders to think, “That’s not for us. We’re not there yet.” But if your organization is collecting data of any kind, you are in a position to use that data to create a smarter city for your citizens.

While the huge amount of data your departments are collecting may feel like a burden, it actually is a great resource that - if harnessed - can help you make neighborhoods safer, your budget leaner and services better. You can join cities throughout the world that are using analytics to make sense of data.

Government leaders wonder where to start in using analytics to improve their operations and enrich their citizens’ lives. Quite simply, analysis begins with a problem. What issue do you want to solve? What task needs to be simplified? Many local governments integrate their databases and start using analytics to solve one problem. Then, after gleaning value from that first solution, they begin to use analytics to solve other problems throughout the organization.

Here are 10 examples of analytics being used to solve problems or simplify tasks for government organizations.

## 1 Citizen feedback

Alberta Parks manages about 250 campgrounds and 14,000 campsites that receive more than 1.8 million overnight visitors every year. From May to mid-October, the Parks department receives 15,000 customer survey replies. With the help of software that analyzes text, the department doesn’t have to wait until a post-season quiet time to sift through the surveys. It is able to quickly identify trends in the feedback comments and make adjustments dynamically to improve the camping experience for visitors.

## 2 Criminal justice and public safety

One of the UK’s largest police forces deployed an intelligence analytics platform across the entire enterprise. The mission-critical system contains 12 million documents, 9 million structured records and provides real-time intelligence 24 hours a day. It is used by more than 40,000 officers and police personnel daily and can be accessed securely by other government agencies. The platform provides integration with confidential, highly specialized and highly secure protected units. With the intelligence management system in place, information can be acted upon in real time to protect the public around the clock.

## 3 Child well-being

In New Zealand, the Ministry of Social Development is using analytics as a transformation tool that helps struggling young people create a better future. This is a perfect example of inclusive growth: It helps the individual, the society and the economy alike. Better targeting empowers welfare beneficiaries with confidence and life skills, and reduces the cycle of long-term benefit dependency.

## 4 Economic development

Local government agencies in the Campania region around Naples, Italy, rely on analytics to evaluate and respond to more than 7,000 applications for regional projects; verify compliance with tender specifications; and manage the financing phases and progress toward completion - all while operating with maximum transparency and speed. In the past few years, officials have transitioned from manual processes to an integrated monitoring system (IMS) that manages the financing of its scientific research initiatives.

## 5 Education

The Fox Chapel Area School District outside Pittsburgh has earned numerous accolades, with each school in the district winning the US Department of Education's coveted Blue Ribbon award. Yet there was one group of students the district wanted to serve better: those with learning disabilities. By using Pennsylvania's Value-Added Assessment System (PVAAS), the district was able to better track year-to-year growth of all students. The result: A decade ago, learning-disabled 11th graders showed 14 percent proficiency in math and 29 percent proficiency in reading on state-mandated tests. Today, the proficiency level is 69 percent for both subjects.

## 6 Citizen services

In France, job seekers who collect unemployment benefits are receiving assistance that is customized to their unique situations. Analytics helps empower local service branches to design personalized pathways to employment, helping the branches customize for citizen needs while still meeting statewide quality and consistency standards and goals.

## 7 Fraud detection

In Los Angeles County, the Department of Public Social Services (DPSS) offers a range of programs to alleviate hardship and promote health, personal responsibility and economic independence. Across the county's many communities, DPSS offers temporary financial assistance, employment services, free/low-cost health insurance, food benefits, in-home services for the elderly and disabled, and other financial assistance. To support program integrity efforts in the CalWORKs Stage 1 Child Care Program, LA County turned to SAS® Analytics to identify potential fraud, enhance investigations and prevent improper payments. By doing so, it has helped the most vulnerable members of the community while protecting millions in taxpayer dollars.

## 8 Health care

In Wake County, North Carolina, cardiac arrest victims have a better chance at survival thanks to new, analytics-driven recommendations from the county's Emergency Medical Services (EMS). Based on an analysis of 20 years of data about cardiac arrest patients, Wake County EMS changed its recommendations for how long to conduct CPR from 25 minutes (the industry standard) to 60 minutes or more - if EMTs see cardiac activity during CPR. A study found that using the new CPR guidelines saved 100 people in the first year.

## 9 Natural resources and conservation

Cary, NC, helps citizens monitor water usage and saves millions of dollars in the process with an automated water meter system. Aquastar replaced monthly manual readings with a wireless IoT system that collects hourly meter data, allowing the town to operate more efficiently and provide citizens with in-depth water usage reports powered by SAS Analytics. Cary replaced approximately 60,000 residential and commercial water meters with new, state-of-the-art meters and radio transmitters. Through operational savings, Aquastar will save the utility more than \$10 million above the cost of the project.

## 10 Transportation

The Øresundsbron between Denmark and Sweden is a five-mile expanse of bridge and tunnel that connects the two countries and two major metropolitan areas: Copenhagen in Denmark and Malmö in Sweden. With the help of analytics, it also connects its "customers" with destination ideas based on their unique likes and dislikes - the bridge's way of driving the revenue-generating traffic it needs to support itself. Using SAS Customer Intelligence, the bridge's marketing and customer-service teams share meaningful, relevant offers unique to each of the 180,000 travelers who own toll passes. Open rates for the weekly emails are 30 percent.

## Conclusion

There are many examples of analytics serving the greater good in cities around the world. Analytics can help prioritize resources in disaster relief efforts, measure the results of innovative new programs to benefit foster children, and help conserve dwindling energy reserves. How is your city smart and getting smarter with analytics? Come share your story and read more of ours at [blogs.sas.com/statelocalgov](https://blogs.sas.com/statelocalgov).