ThingTech

ThingTech Connects City of Burleson, Texas to the Internet of Things

City of Burleson's Public Works Department leads a city-wide IoT project that includes all city fleets and over 270 assets.

INDUSTRY
Government

CITY NAME
City of Burleson

POPULATION
42,560 (2016)

CITY BUDGET
$92 Million (2017-2018)

NOTABLE PEOPLE
Kelly Clarkson

Introduction

The City of Burleson, Texas recently selected ThingTech to help the city connect its fleet of vehicles, assets, and heavy equipment to the Internet of Things (IoT). In 2017, more than 120 vehicles and assets were equipped with GPS and IoT devices, which continuously monitor and report time, date, location, utilization, diagnostics and motion information in real-time.

This new wave of data exposed several soft targets—wasteful idling, speeding violations, inefficient maintenance schedules—that could be quickly corrected with little effort. But the overall goal was to realize digital transformation by gaining actionable intelligence on how assets were being used, avoiding major expenses that usually occur near the end of a vehicle's lifecycle, and streamlining the city's capital replacement process.

A decisive factor in City of Burleson's IoT buying decision was that several departments faced different problems that converged on one solution.
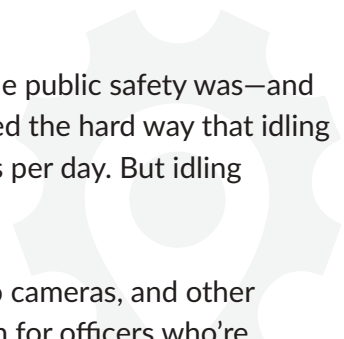
| Problems

At the time, the Burleson police department needed to track its squad cars. While public safety was—and is—a top priority, they also wanted to see gains in fuel efficiency. Burleson learned the hard way that idling was out of control. ThingTech helped them become aware of 4-5 idling violations per day. But idling reports didn't tell the entire story.

Officers keep their engines running for good reasons: to power computers, video cameras, and other electronic equipment. Otherwise, batteries would drain, which is a major concern for officers who're already apprehensive about turning off cameras while on duty. To solve this problem, the Burleson police department needed the ability to detect and distinguish good idling from bad idling.

The Department of Public Works maintains the city's infrastructure. They also handle the maintenance of city vehicles and equipment. Maintenance by engine hours in use is more efficient than maintenance by the mile. But this insight wasn't available to the Director of Public Works, who was battling with a fleet tracking system incapable of accurately capturing and reporting this data. The revelation that reliable real-time tracking and robust reporting capabilities could be achieved with one solution that worked across department silos led to a pilot with ThingTech.

In Burleson, the Finance Department, responsible for managing the city's financial operations, established a revolving vehicle replacement fund for the Department of Public Works. Subsidies flow from every city department's fiscal budget. While Finance manages the aggregate fund, each department is responsible for keeping track of its contributions in a spreadsheet. With multiple spreadsheets across multiple departments, it's difficult to keep accurate records.

With the right software, Finance could seamlessly communicate with Public Works and the other departments, as well as manage the fund in one place.

Solution

By understanding their needs and infrastructure, ThingTech aligned City of Burleson with the right GPS tracking system running on ThingTech's end-to-end IoT platform. ThingTech invited City of Burleson to conduct a six-month pilot project using multiple devices and sensors. The solution gathers location-based and diagnostic data in real time, connects this data to the ThingTech Connect IoT Cloud, and visualizes the data in a meaningful way on ThingTech's Real Time Console and ThingX Mobile App.

City of Burleson's industry-leading asset monitoring units connect to their vehicle's OBDII port, capturing a stream of real-time data that includes date, time, location, diagnostics, speed, hard braking, aggressive acceleration, odometer, engine hours, and ignition on/off status.

This data is then delivered to, stored, and analyzed in the ThingTech Connect IoT Cloud. The ThingTech platform provides City of Burleson with the ability to store a tremendous amount of data and allows them to extend the solution via flexible configuration tools. The real-time data is processed using a rules-based engine to trigger alerts, create workflows, and generate actionable data.

For example, if a squad car is idling or speeding, but the overhead beacon is on, an idling or speeding alert will not be triggered. Otherwise, City of Burleson is notified of an idling violation, which they received 4-5 times per day.

What's more, The City extended the solution by creating specific created custom fields that allowed the City of Burleson to tracks each vehicle's insurance policy details, as well as the allocation of vehicle replacement funds.

THE RESULTS

To date, City of Burleson has reduced its idling violations down to one every couple of months, driving impressive savings in fuel costs citywide.

"We've also built a scorecard system based on different metrics that scores the value of each asset, each year", said Aaron Russell, Director of Public Works, City of Burleson. "Now, we generate a list for asset replacement versus saying 'we'll just keep a vehicle or asset for 7 years'. We save quite a bit of money off [this scorecard system]."

Real time asset tracking and monitoring helped City of Burleson uncover cost challenges. ThingTech's end-to-end Smarter Cities platform and Salesforce integration helped solve these challenges. Also, Public Works and Finance can now ensure that the Asset replacement budget is consolidated in one place, records are kept up-to-date, each asset is insured, and the budget is fully funded.

Your road to an ROI starts here. Contact us anytime to discuss your smart cities or vehicle tracking projects, or to schedule a free consultation.

Next Steps: Contact us and schedule a demo by visiting www.thingtech.com/request-a-demo

ThingTech