



CASE STUDY

Montgomery, Alabama

Overview

In March 2018, the City of Montgomery and Rubicon announced a six-month pilot with the goal of uncovering opportunities for greater efficiency, more reliable fleet maintenance data, and improved customer service. Rubicon's proprietary technology platform, RUBICONSmartCity™, was installed in the City's fleet of waste service vehicles with an aim to increase the Sanitation Department's ability to provide the best possible customer service for their residential and commercial customers.

RUBICONSmartCity was installed in the City of Montgomery's fleet of 80 sanitation vehicles servicing 67,500 residential and commercial customers. After the conclusion of the pilot program, the City of Montgomery signed a three-year contract.

From the pilot program, the following results were identified:



80
Sanitation Vehicles



67.5K
Residential and
Commercial Customers

Improved Customer Service

Driver adoption of Rubicon's technology was excellent, with 96% of drivers logging into their routes every day. During the pilot period drivers documented over 57,000 issues along their routes, including hundreds of photos of locked gates, bins not placed out for collection, or improperly set out garbage and yard waste. This equipped city employees with the information they needed when investigating citizen inquiries and complaints. Flagging issues along a route enables the City to reduce missed pickups and unnecessary go-backs. Rubicon conservatively estimates that if only ten percent of customers called in to report an issue, the City would be able to prevent most unnecessary go-backs, saving the City over \$500,000 annually and avoiding approximately 300 tons of CO₂e emissions.



96%

Driver adoption rate



57,000+

Issues documented



300 tons

CO₂e avoided

Equivalent to 65 passenger vehicles off the road each year

City Insights Collected

The City's fleet of sanitation vehicles were also configured to simultaneously collect data about various quality of life issues in the neighborhoods that they were serving, including potholes, cracks in the road, and illegal dumping. For example, drivers logged the location of eight potholes in the first three weeks of this feature going live, providing a template for how the city could develop a citywide community insight program.



Community Safety Gains

Numbers collected during the pilot showed that speeding instances consistently peaked on Mondays and Thursdays. This pattern suggested that the routes on those days were heavier or more difficult for drivers to complete on time—information that can be used to balance collection routes.

Improved Route Efficiency

Rubicon’s data showed that while the City’s current routes were well organized and efficient, the City might be able to reduce the number of routes that it runs overall. If the City were to reduce its routes by five, the taxpayer savings could total up to approximately \$375,000 per year.



\$375,000

Potential annual savings



Fleet Maintenance

Rubicon's data showed that just 10 trucks were responsible for 75% of critical fault codes. In addition, a single truck was responsible for 23% of all critical fault codes fleetwide. These truck fault code insights can be used to improve the City's truck maintenance program by providing diagnostic information that was previously unavailable, leading to significant potential taxpayer savings over a longer time horizon.

Powered by AWS

RUBICONSmartCity is a software-as-a-service (SaaS) offering that is powered by Amazon Web Services (AWS). Rubicon leverages the AWS Cloud and other tools to empower cities to use cloud-based technology and machine learning to support their vision for a smarter city.



To learn more and sign up for a free pilot, visit: Rubicon.com/smart-city

