RUBICON

CASE STUDY

West Memphis, Arkansas

Overview

The City of West Memphis faced mounting customer complaints and workers' compensation claims due to its yard-based residential collection. As a result, the City transitioned to curbside collection with side loaders. To ease the transition and maximize route efficiencies, customer service improvements, and driver safety increases, West Memphis announced a six-month pilot with Rubicon in May 2018. RUBICONSmartCity™ was installed in the City's fleet of 13 sanitation vehicles that service approximately 8,500 locations.

Rubicon's platform enabled the City of West Memphis to collect data that would help the administration optimize routes and ensure that the sanitation worker could have a voice if a customer filed a complaint. The following results were identified in the pilot launch:

13
Sanitation Vehicles

8.5K
Locations

Improved Customer Service

Driver adoption of Rubicon's technology was strong, with 93 percent of drivers logging into their routes every day. Drivers documented nearly 500 issues, including bins not out. Many of these issues were backed up by photos, which can be used to protect drivers by validating what they see and do on their routes. Office staff were then able to use this data to resolve citizen complaints and provide clarity on the progress of each route. "It really does help us when a customer calls to complain that we missed them," said Michael Bonner, Director of Public Works for the City of West Memphis. "The drivers love it because we can confirm if a bin was out waiting for us or not."

Community Safety Gains

The pilot showed that hard driving instances peak on Mondays. This pattern suggested that routes on Mondays may have been more difficult for drivers to complete on time. It also demonstrated that the majority of speeding and hard driving instances came from a small number of drivers. With this information, additional coaching could be implemented for those drivers to improve overall safety in the community.

Improved Route Efficiency

Rubicon worked with the City to maximize routing improvements with the changes to the City's operation, as the City now operates two one-arm side loaders for residential collection. According to the City, "The data has shown that utilizing the one-arm loader and having one employee for residential pickup saved the City $150,000 per year."

> "Rubicon has been a game changer for our Public Works Department. It has allowed us to use data to better and more efficiently manage our drivers' routes, improving our residents' service.
>
> Marco McClendon
> Mayor of West Memphis, Arkansas

Fleet Maintainence

Rubicon's data showed that just six trucks were responsible for 93 percent of critical fault codes. Early alerts from trucks that had critical issues helped the Fleet Maintenance Department improve safety and service, with a larger opportunity to implement more preventative maintenance going forward.

City Insights Collected

The City's fleet of sanitation vehicles also was configured to collect additional data such as potholes and graffiti in the neighborhoods it was serving while completing routes. These collected insights are easily transferred to other City departments that are charged with addressing issues and can help improve the quality of life in West Memphis.

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/cities

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