

AN INTEGRATED SOLUTION

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Asset management & GIS system improves efficiency & provides transparency for Georgia city



Woolpert and the city of Augusta conducted hands-on training of the new asset management system with storm water division employees.

Augusta, Ga., has become a beacon for the application of integrated technology solutions. The city of roughly 200,000 people has been coordinating work activities and managing assets in multiple departments using an integrated technology solution centered on its Cityworks asset management system and Esri geographic information systems (GIS) solutions. The solution has been driving improved workforce management and customer service since its implementation.

“The primary functions of this implementation have been tracking requests and work orders for storm water-related issues and defining impervious surface areas to assess fees,” said Michele Pearman, Augusta’s GIS project manager. “We wanted residents to know that the money from this fee will be spent appropriately in each district. It’s all part of our CityWatch initiative, which provides residents access to government documents, reports and data, making our government more transparent.”

Work Order Management

The city of Augusta hired Woolpert to implement the **Cityworks** asset management system solution for the utilities department in 2014. Since then, the city has been rolling out this solution to other departments. The engineering department, which includes the storm water division, went live with the asset management system in September 2016.

Prior to this implementation, Augusta storm water employees had to physically pick up and turn in work orders at the office. If they completed all of their assigned work before the end of the day, a trip back to the office was required for them to get more orders.

Employees now can log in to their mobile devices to retrieve their work orders in the field, complete them, record their work activities and immediately move to the next task. If nothing else is assigned to them, they can query work near their locations and assign it to themselves. Because all work groups share the same work order list, all groups know that work was reassigned and completed.

Ryan Butler, GIS professional and lead Cityworks analyst for Woolpert, said the system streamlined and centralized work orders to increase efficiency and eliminate duplication.

“Instead of a work order showing up in an email or as a piece of paper on someone’s desk, it goes straight into the system and is accessible and actionable for all Cityworks users,” Butler said. “Cityworks eliminates repeated requests for the same issue and feeds into the education program, which is part of the city’s community outreach efforts. It’s another way to offer and illustrate transparency, which is Augusta’s goal.”

The storm water division’s service requests are entered into the city’s 311 solution and automatically integrated into the asset management system. The system’s configuration automatically routes the requests by water basin. A supervisor is assigned geographically to each storm water basin, and each supervisor has an inbox in Cityworks for these service requests. The supervisor investigates the reported issue, documents it with additional photos and assigns it to the appropriate crew as a work order.

The work order also automatically finds and assigns the commission district, site ID per property, water basin and relevant information for reporting purposes.

Coordinators also are assigned to water basins. They can search the map for reoccurring issues in the geographic area of the complaint, observe patterns to determine if there is a larger issue contributing to a situation, and assign the work order to the correct crew to track real-time labor and materials for monthly reporting.

“On the map, you can see a history of problems in an area,” said Laura Burns, Cityworks reporting specialist for Woolpert. “Frequent or related problems can indicate a deeper issue. Instead of applying Band-Aids to repeated issues, you’re fixing root causes, which saves time and money in the long run.”

Pearman said the system allows crews to coordinate jobs by geographic proximity and prioritize based on location. Storm water activities are meshed with the city’s comprehensive GIS map system, which is accessible for needs that include real estate, public safety, transportation, and environmental services and development. During a recent storm, live maps that showed Cityworks activities helped communicate road closures and areas that had been cleared. The city’s GIS department coordinated with the Emergency Management Agency to collect this information, which was immediately shown on a map via Cityworks and made available to the public.

According to Pearman, these tools create efficiencies that have made the adjustment from paper and emailed work orders to this centralized system go more smoothly than expected in the storm water division.

“These guys who had been using flip phones now are using iPhones in the field,” she said. “There was a lot of training conducted by Woolpert and internally by the city GIS group, and hands-on riding in the truck with the guys. We had some hiccups here and there, but some of the guys we were most worried about are the ones doing the best. If you’re using it every day, it doesn’t take long to get good at it.”



The new system drives improved workforce management and customer service.

Promoting Transparency

Another aspect of Augusta’s most recent asset management system integration was making information regarding storm water assessments accessible to the public.

Tameka Allen, director of Augusta’s information technology department, said that like in many municipalities, the transition to charging residents a storm water fee was not smooth.

“It was a hard sell for the community, because all they saw was an extra cost,” Allen said. “By using Cityworks and providing precise data on how and why those dollars were being used, it eased the process.”

A citizen engagement form on the city’s website allows citizens to request a review of their impervious surface area or their storm water fee. The form links to the commissioner district and the subdivision and is saved in the city’s LaserFiche document management solution.

When the form is submitted, the integrated system automatically creates a service request and attaches the form to the request, making the information immediately available to city staff. The system immediately routes the request to the appropriate investigator.

“The more impervious surface on a property, the more runoff that is created, and the higher the fee for the property owner,” Butler said. “Cityworks allows the city to track repairs and improvements, including costs, back to each commissioner district, so citizens have visibility where their fees are being spent.”

Allen said the city already had some transparency tools available, but decided to launch a more customized suite of tools developed in-house after the implementation. These tools allow the public to search for various projects that were commissioned through the storm water division to see what is being done in their neighborhood.

The city can document how the fees are being spent in the community, drilling down to the subdivision level.

“We have a lot of neighborhood associations, and we wanted to be able to tell them what kind of work is being done,” Pearman said. “This information was very difficult to gather previously, causing office staff to spend days determining where work was occurring for public commission meetings and citizen neighborhood meetings. With the online form and the tie-in to Cityworks, it makes quickly accessing this information easy for everyone.”



Employees can log onto the system from their mobile devices to receive work orders in the field.