Tech Helps Transit Authority Rebound in Gulf Coast Area

Brian Heaton | March 7, 2012

Faced with an inland migration of its ridership after Hurricane Katrina, Mississippi's Coast Transit Authority (CTA) turned to technology to reconnect with patrons — and has been reaping the rewards of the upgrade ever since.

The transportation provider has seen a 65 percent drop in customer complaints, a 25 percent reduction of empty vehicles on the road and significant cost savings by moving to automated scheduling, routing and dispatching software for its door-to-door transport services for the elderly and disabled and bus routes after the area was devastated in 2005.

The CTA provides public transportation for three coastal counties and previously handled bus scheduling using Excel spreadsheets, which while an old-school method,

worked well enough prior to Katrina. But with the mass exodus from the coast, the transit authority found its passenger pick up points as far as two miles apart in some instances. The distance caused a number of logistical and operational challenges, such as too many busses on the road and late arrivals.

"Not only was the population displaced and we're trying to re-establish our service, the local governments lost their property and sales tax base, so we knew we were looking at financial challenges," said Kevin Coggin, executive director of the CTA.

While computerized fleet management and scheduling systems aren't new, the edge the CTA gained in deploying various programs from RouteMatch Software has revitalized the agency in the wake of coastal Mississippi's recovery and brought in additional riders.

The CTA provides urban route-based public bus services, but primarily uses the routing and scheduling technology for paratransit services, which provides on-demand transportation for disabled and senior citizens.

Once the Mississippi coastal areas were up and running to the point where regular CTA services resumed, the displacement of regular riders generated some immediate problems. According to Coggin, the CTA had to deny a lot of trip requests that it normally would have accepted, mostly because scheduling was still being done by hand.

In addition, prior to the scheduling and management technology being implemented, complaints from citizens started to escalate. Coggin recalled that while CTA pick-up services normally work on a one-hour window schedule, people were getting picked up in two or three hours, prompting riders to voice their displeasure with political representatives and the media, leading to a bigger emphasis on improving via technology.

Prior to Katrina, the CTA had been discussing moving to an automated transportation management system. But after the disaster, RouteMatch offered its base system to the transportation provider to help get its routes in order, and the transit authority stuck with the program ever since.

Coggin said the CTA looked at a lot of different types of software prior to RouteMatch, but felt the software struck the right balance between usefulness and complexity.

"From a holistic standpoint, it fit our need for the type of business we do," he added.

Emergency Management

Going paperless with its scheduling and fleet management also helped make the CTA a more vital cog in the affairs of Mississippi's Harrison County emergency management agency.

Following Katrina, the demand for the CTA's services rose, as did the recognition of the value that public transportation provides in the area. With the routing software in place,

the CTA now has the ability and responsibility to manage emergency transportation needs and has a designated seat at the county's emergency operations center.

Coggin explained that in the event of a hurricane or other disaster, the CTA is tasked with providing transportation to all people in Harrison County that are in harm's way that want a ride to a local shelter. A year-round registration process was instituted where people can register their address and contact information with the CTA.

Jay Curtis, the CTA's operations director, maintains a database of that information so the transit authority is prepared in case of another disaster. This way routes can be preplanned and the CTA knows ahead of time the resources it needs to commit to emergency transportation.

Coggin said the CTA is also planning to use RouteMatch's "call-out" module in the future, which will allow the authority to send electronic messages to all people in the database — a proactive approach to making sure residents schedule their rides to shelters.

So what's the catch on the technology? Coggin expressed his overall satisfaction with what the software provides, but admitted that some fine-tuning was in order during the initial stages of rolling out the system. He said there is a major investment of time and resources at the beginning in getting all the information uploaded to the program and setting it up.

"You have to feed a lot of data into it and there are parameters you have to set, so it takes a full commitment from the user to recognize the full value and efficiency," Coggin said. "That is what CTA wasn't able to do up front. I would like it to be more user-friendly going forward in so far as being able to tweak it and programming the trips."

http://www.govtech.com/transportation/Tech-Helps-Transit-Authority-Rebound-in-Gulf-Coast-Area.html