CASE STUDY

Consolidating 18 PSAPs to 2 with a single CAD system

DuPage County, Illinois | *USA*



Industry

- Public Safety

Solutions

- Octave OnCall Records and OnCall Analytics; Octave I/CAD, Mobile for Public Safety, Mobile Responder

Challenges

- 600K calls/year across 62 agencies
- Four CAD systems
- 18 PSAPs condensed into two

Results

- Fully integrated, countywide system
- Supports 60 CAD, 975 mobile, 700 RMS and 350 field reporting users
- Faster responses

Located in the Chicago metropolitan area, **DuPage County** is Illinois' second-most populous county with nearly 1 million residents. As part of the Illinois Technology and Research Corridor, the county is home to many headquarters and regional offices of Fortune 500 companies.

DuPage County call-takers and dispatchers handle around 600,000 911 calls every year. This large call volume used to be spread across 18 public safety answering points (PSAPs), most within small, local police departments. There were four different computer-aided dispatch (CAD) systems utilized throughout the county and several communities were dispatched by PSAPs outside the DuPage 911 authority system.

During the economic downturn in 2009, smaller PSAPs elected to close, and the 18 geographic PSAP locations were consolidated into two: DuPage Public Safety Communications (DU-COMM) and Addison Consolidated Dispatch Center (ACDC), to serve 62 police and fire agencies. This consolidation took over 10 years to complete. DuPage County wanted the two consolidated PSAPs to operate on a shared system to reduce transfers and create a smoother workflow for dispatching calls. DuPage County State's Attorney Robert Berlin's vision was a seamless system that efficiently handled 911 calls from event initiation to court case disposition. DuPage County selected Octave's CAD, records management system (RMS), analytics and mobile solutions to meet these goals.

Versatility in an evolving landscape

When DuPage County decided to roll out a shared system for both centers, it was met with challenges. Those involved standardization and streamlining dispatch codes for greater efficiency. The county needed consensus from all 62 agencies to merge the data and workflows of several different CAD systems and determine which of the existing technologies should interface with the shared system. The diversity and age of some of the configurations made it difficult for agencies to maintain consistent workflows to see incidents through from an initial call to the eventual resolution, e.g., in the court system. DuPage County carefully considered what it needed to meet its goals for the two consolidated PSAPs and chose

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Executive director of the Emergency Telephone Systems Board of DuPage County

Octave's CAD, RMS, analytics and mobile solutions to increase efficiency.

"Communicating with your vendors is critical because they can't help you if they don't know what you're trying to accomplish," said Linda Zerwin, executive director of the Emergency Telephone Systems Board of DuPage County, which is the 911 authority for ACDC and DU-COMM. "Octave is a true partner to us and helped us all along the way. We have 62 agencies, which can mean 62 different operational ways to do something. We asked ourselves, 'How do we standardize the systems to make the dispatching process successful and get somebody dispatched to the event in 12 seconds?' Then we worked with Octave to make that happen."

Seconds matter in public safety

The fully integrated, countywide solution supports multiple concurrent users – 60 CAD, 975 mobile, 700 RMS and 350 field reporting, plus more than 50 interfaces. With Octave's CAD, the centers can now get help to residents faster since all 62 agencies can see queued calls for service. For example, when call-takers initiate an event, it's put in the pending queue. Agencies have live access to the queue and can dispatch themselves based on priority, allowing call-takers to focus on incoming calls. The new combined system is versatile, and dispatching can be done using command line and/or drag-and-drop methods depending on the operator's preference. "(Octave's CAD is) a very versatile system, which allows multiple types of users to be successful," said Zerwin.



As an example of how the single, integrated 911 system works, three weeks after the system was operational, a 911 call came into ACDC reporting an apartment complex fire. The ACDC dispatcher created the event within 13 seconds. Police were dispatched six seconds later, and firefighters were dispatched by DU-COMM 52 seconds after the CAD event was created. A year later, ACDC took a call about a structure fire at the same apartment complex. The initial ticket was created for police and fire responses across two PSAPs in nine seconds. Police officers were nearby and on scene in 12 seconds, and fire units from DU-COMM were dispatched in 15 seconds. The first fire unit arrived on scene in two minutes and 27 seconds. With training and one year of using Octave's CAD system, the dispatchers and call-takers provided assistance even faster.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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