

## CITY OF AUSTIN

### PROBLEM

In the fourth largest city in Texas, multiple entities with a common interest in public safety have joined forces in spite of operational challenges and unique service needs. Austin Police, Austin Fire, Austin-Travis County EMS, Travis County Sheriff, Austin DOT, and the Austin Airport needed an interoperable solution that provided innovative, integrated and configurable technology that could meet each agencies' unique needs.

The combined agency service area spans over a large geographical area and had been serviced with two different computer aided dispatch (CAD) systems which functioned as data silos. Prior to moving to CAD Enterprise (formerly Inform CAD), the dispatch process included using closest line of sight and mobile radios as the primary communication method.

### SOLUTION

The agencies came together to form the Combined Transportation, Emergency and Communications Center (CTECC) to connect their disparate systems, improve operational efficiencies, and increase safety for responders and citizens. Through their strong commitment to the CTECC goal of creating an interoperable environment and enable all of the participating agencies, departments, and field personnel to function as a team as well as retain their existing agency requirements—and a thorough research process, they selected CentralSquare's CAD and Mobile Enterprise (formerly Inform CAD and Mobile) for the challenge.

Sharing CAD Enterprise as their mission critical engine, each agency is able to configure their unique business rules, alerts, response plans, and workflow while sharing data across the platform to better coordinated response. Mobile Enterprise units extend dispatch information to the field for better two-way communication, immediate access to incident data and warnings and hazards, insight into unit



#### Agency

Austin Police Department TX  
Travis County Sheriff TX (TC RMS)  
Travis County Courts TX  
Austin Fire Department TX

#### Vital Statistics

Area Served	1,024 sq. miles
Population	1,249,763
Annual Call Volume	1.7 million
Dispatcher/Call Taker Seats	100+

#### Products

CAD Enterprise (formerly Inform CAD); Mobile (formerly Inform Mobile); Field Ops; Disaster Recovery

locations across the multiple agencies and disciplines, and advanced GIS-centric mapping and routing using Esri technology. The agencies have implemented nearly 2,000 mobile units across their field staff and responders are better informed of situations they are walking—or running—into.

Today more than ever, it is critical for agencies to access and share unit, response, incident, and citizen information—to keep our communities and responders safe. When Austin was hit with the mail package bombings in early 2018 during the South by Southwest Music Festival that brought more than 200,000 visitors to the area, the Austin Police



Department experienced a 150% increase in call volume and still maintained an above average answer rate of 97.96% of all calls answered in under 10 seconds. With 1,300 calls alone reporting suspicious packages, Austin Police, Fire, EMS, County Sheriff, DOT, and the Austin-Bergstrom Int'l Airport used CentralSquare's CAD and Mobile Enterprise for interconnected and coordinated response.

Today's largest cities on a common dispatch platform across police, fire, and EMS use CentralSquare's CAD Enterprise.

## OPERATIONAL DETAILS

In partnering with CentralSquare, the CTECC now has a seamless CAD solution and next generation mobile system that creates a dynamic multi-agency, multi-jurisdictional operational blueprint. The partnership also emphasizes mutual-aid commitment and a long-term strategy for expanding community reach with new cities and agencies coming online and future technology enhancements.

CentralSquare's Mobile Enterprise is a wireless PC-based mobile fleet application that seamlessly extends CAD systems to in-vehicle laptop computers. The secure wireless solution operates on a variety of wireless platforms and provides secure access to mission-critical information while out in the field. The innovative application provides the law enforcement, fire, and EMS agencies with seamless integration to CAD, and equips field personnel with unparalleled real-time access to the information they need. Mobile continually shows real-time incident details and unit locations over the large service area. Additionally, access to public and proprietary databases via CentralSquare's robust message switch enables information sharing across other agencies.

CAD enables more than 100 dispatcher/call takers to provide cross-agency regional call taking and dispatch with seamless communications to CAD users (Police, Sheriff, Fire, EMS, and Airport) in the field. Agencies are equipped with robust capabilities for resource management, AVL and routing, messaging, call status, mapping and unit tracking. Regardless of the location of the mobile units, they can be fully deployed by dispatch and communications across joint task teams.

## THE FLEXIBLE CAPABILITIES OF AN INTEGRATED SOLUTION

Mobile Enterprise's integration with CAD Enterprise provides capabilities that are flexible to each agency's requirements. With Austin Fire Department's 1000 personnel staffed over 75 stations covering 13 jurisdictions, resource sharing and seamless communications with Austin-Travis County EMS is a continuum. Joint response is required on more than eighty

percent of calls. Advanced Esri-based mapping provides the ability to see other units dispatched to incidents. The agencies also mine historical GIS and response time data to improve future response times with modifications to speed limits and road network recommendations. GIS updates are conducted weekly with eight to ten streets being updated or brought online with its 1.2 million growing population.

"CAD and Mobile enabled our agencies to break down the 'brick-and-mortar' attitudes where building more stations to cover jurisdictions was necessary. The mobile technology allows us to bring more counties online for regional dispatch and enhances our services. This allows for faster response times through shared resources and cross training, saving taxpayer dollars, and creating seamless joint-agency response (Fire, Medical and Law Enforcement)," said Lt. David K. Belknap, Austin Fire.

"Mobile enables our agency to provide the citizens of Austin and Travis County a reliable and quality service for emergency pre-hospital medical rescue. Its advanced multi-agency communications and automatic vehicle location features, among others are mission critical for first responders," said Jasper Brown, Austin-Travis County EMS. Mobile is the core application for the Austin Police Department's (PD) 1,500 Mobile units. Mobile's tight integration with CAD keeps responders in the know with a bi-directional, real-time connection to Command staff, partnering agencies, incidents, responding units, historical background information on names, addresses, and vehicles, and more. With audio and visual alerts, Mobile users are aware of cautions and hazard information. Responders are better informed of situations they are walking—or running—into, with more collaboration and in-field situational awareness with access to information across the CentralSquare software suite as well as external sources like the NCIC database. With ability to send an SOS alert and self-dispatch, Mobile can serve as the responder's life-line to critical communication and incident information—including call/dispatch details, mutual aid response, BOLOs, outstanding warrants, caution notes, address history, watch lists, and more. Responders can visually track the position of their unit and other responding vehicles in relation to the incident with GIS-centric mapping and data on road closures, the nearest intersection, and mile markers.

"Mobile is the cornerstone for our department to effectively communicate and respond more quickly to situations. Its dynamic communications capabilities with real-time updates and Esri-based mapping (routing, GPS) are crucial for law enforcement safety, enabling joint agency responses to better protect and serve the community," said Sgt. Derek Galloway,

Austin Police Department.

Similar to Austin PD, Mobile enhances officer safety for the Travis County Sheriff's Office with supervisors knowing the location of all their units. The decrease in response times, even by seconds, can further enhance officer safety with the added benefit of increased safety for the public. The ability to manage calls while out in the field empowers field personnel to instantly view calls and assign themselves to the call based on their proximity. The ability for self-management minimizes radio traffic and allows dispatchers to handle incoming calls, rather than spending time tracking down incident locations or other units.

Lt. Robert Mills of the Travis County Sheriff Department knows that the system will continue to positively enhance performance and improve safety. "Mobile has proven itself as a solution that empowers field personnel by putting the information they need at the tips of their fingers to better respond to calls, and to enhance their safety and that of the public," said Lt. Mills.

## **TRAFFIC MANAGEMENT SYSTEM, THE FIRST IN THE UNITED STATES**

In 2004, CAD was integrated with the Austin Department of Transportation's Traffic Management System via wide area network (WAN) to provide up-to-the-minute status on the highway road network throughout the area. Installed road sensors allow for monitoring traffic slowdowns, construction, and traffic accidents. The road sensor technology and integration with CADs mapping engine provides real-time information to the call taker/dispatcher who can then monitor the road network prior to dispatching an appropriate unit. CAD will modify response recommendations accordingly to minimize response times when units are dispatched along the road network.

The innovative integration reportedly reduced response times by up to 1.5 minutes from the 5-6 minute average. The traffic management system is a valuable part of the CTECC vision for improving public safety and reducing response

times to emergency situations.

## **CLIENT BENEFITS**

CAD and Mobile deliver critical information in real-time to CTECC personnel including:

- Advanced technology with seamless integration to field personnel
- Real-time incident details, enhanced mapping, and communications
- Enhanced officer safety through access to real-time incident information, records check, and unit position and status
- The integrated CAD to Mobile solution has significantly improved dispatch and response performance
- Provides CTECC personnel and Austin/Travis County residents with the confidence that emergency situations will be processed in the most accurate and expeditious manner possible