Challenge
How do six entities with a common interest in protecting the public join forces in spite of operation barriers and unique service needs? Austin Police, Austin Fire, Austin-Travis County EMS, Travis County Sheriff, Austin DOT, and the Austin Airport have achieved interoperability goals through strong commitment and innovative technology.

The Texas Department of Transportation (DOT), Austin-Bergstrom International Airport (via city wide area network), Austin Police and Fire Departments along with Austin-Travis County’s EMS, and Sheriff’s Department were spread throughout a vast area and utilized two computer aided dispatch (CAD) systems without any

Client Benefits
Agency Mobile Units
Austin Police 1,500
Austin Fire 130
Austin-Travis County EMS 70
Travis County Sheriff 350
Austin-Bergstrom Int’l Airport 12
Texas DOT

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

Products
Inform CAD; Inform Browser; Inform Mobile; Inform GISLink

Interfaces (partial listing)
Paging; Station Printing; Station Alerting (Locution); Tiburon RMS interface; FDM RMS interface; ANI/ALI and TDD; TXDPS Proxy (Records Check) with additional databases; Deccan; ProQA; Radio Interface (Regrouping/PTT/Statusing); Alarm Billing Interface

type of integrated response, data sharing, or advanced capabilities. Prior to TriTech, dispatching was done by using closest line of sight, and mobile radios were the primary method of communications. The Combined Transportation, Emergency and Communications Center (CTECC) that forms the multi-agency consortium had a vision for interoperability when seeking technology vendors for a long-term partnership.
Solution
The CTECC in Austin, Texas integrated multiple city, county and state agencies under one common operational platform utilizing TriTech’s Inform CAD and Mobile solutions. CTECC’s vision was to create 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.

In partnering with TriTech, 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.

TriTech’s Inform Mobile 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 FIPS 140-2 compliant 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 Inform CAD, and equips field personnel with unparalleled real-time access to the information they need. Inform Mobile continually shows real-time incident details and unit locations over a vast service area. Additionally, access to public and proprietary databases via TriTech’s robust message switch enables information sharing across other agencies.

Inform CAD enables over 100 dispatcher/call takers to provide cross-agency regional call taking and dispatch with seamless communications to Inform Mobile users (Police, Sheriff, Fire, EMS, and Airport) in the field. The 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
Inform Mobile’s integration with Inform CAD 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.

“Inform CAD and Inform 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.

“Inform 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.

Inform Mobile is the core application for the Austin Police Department’s (PD) 1500 Mobile units. Mobile’s in-vehicle computer screen and audio provide dynamic information sharing between the communication center and the units while on calls. Inform Mobile enables law enforcement to see real-time updates for all calls, both emergency and non-emergency, while the records checks system enhances officer safety.

“Inform 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, Inform 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. “Inform 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.

Inform to Traffic Management System, the First in the United States
In 2004, Inform 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 Inform 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. Inform CAD will modify response recommendations accordingly to minimize response times when units are dispatched along the road network.

The innovative project has reported to have reduced response times by up to 1.5 minutes from the 5-6 minute average. The project went live and is a valuable part of the CTECC vision for improving public safety and reducing response times to emergency situations.

Client Benefits
Inform Mobile and Inform CAD 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