MISSION CRITICAL
AUSTIN/TRAVIS COUNTY, TEXAS
REGIONAL RADIO SYSTEM

“With our new radio system, we’re able to coordinate our resources a lot more efficiently – which is definitely a contribution to the safety of the people who use it.”

— PETE COLLINS, CHIEF INFORMATION OFFICER
“By partnering with these other agencies, the city has gotten a much better system, with much more functionality and greater coverage, than we could have afforded ourselves.”
— ROBERT TURNER, PROJECT MANAGER

**SITUATION**
Replacing an aging network with a powerful resource for community safety.

When it was time for the city of Austin, Texas, to build a new public-safety radio system, discussions with Travis County officials and leaders from other neighboring entities made it clear they had a rare opportunity to:

- Streamline emergency operations when incidents require rapid joint response
- Enable city and county personnel to communicate across organizational boundaries
- Improve radio coverage throughout the metro area
- Provide enhanced communications for schools, transportation, and public works to help them coordinate with public safety efforts

**SOLUTION**
Shared resources.

**System:** A new regional 800 MHz Project 25 network supports dependable and truly interoperable voice communications, while a new mobile data system supports CAD, RMS, and AVI applications to give people the information they need, when and where they need it.

**Coverage area:** Uses simulcast technology to cover 1300 square miles of rolling hills that include city, suburban and rural areas.

**Users:** Six governmental entities, approximately 50 departments, and 6,000 users, with expected growth to 10,000 users. More entities are expected to join the network in later phases.

**RESULT**
An advanced network at an affordable cost.

“Shared infrastructure was a great benefit because no one agency could absorb the cost for the entire system. We were able to take the combined center approach, leverage our dollars, and produce a very good outcome from it.” – Pete Collins

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City and county work side-by-side. The new network supports an 80,000 square foot Combined Transportation, Emergency and Communications Center (CTECC) that houses the office of emergency management and provides state-of-the-art dispatch facilities for fire, EMS, police, sheriff, public transit, and highway monitoring by the state department of transportation.

A unique mix of agencies came together: the City of Austin, Travis County, the Austin Independent School District, the University of Texas, Capital Metro (which handles bus transportation in the area) and the Texas Legislative Council. Their goal was a shared network that meets their individual needs while helping them work together to serve the public.

“What people often forget,” says Robert Turner, Project Manager for the City of Austin, “is if you have a natural disaster, it doesn’t recognize city nor county boundaries. It happens. And so we have to respond and communicate effectively – and directly – to provide the most efficient level of service.”

Interoperability allows users from all participating agencies to be in direct contact during routine or extraordinary circumstances. For example, police and sheriff’s officers and campus security crews can now talk at the scene of a robbery. Police, fire, EMS, traffic control and the water department can coordinate response to flooding or severe weather. “By having a common communication system,” Turner says, “you can do a much more effective job in managing the incident.”

Three critical steps led to success in organizing Austin/Travis County’s Regional Radio System: establishing a common need, getting people committed to that need, and building trust among the entities. “The number one factor in building trust was to establish that everyone was going to have one vote when it came to decision making, regardless of their size or budget,” says Danny Hobby, Emergency Services Coordinator for Travis County Government and a member of the coalition since its inception.
“Ready for action when the need is greatest. Whether it’s a tornado or rain event or some other tragedy, we’re going to be prepared,” says Robert Turner. “Unlike public telephone systems or public networks, our system has the reliability and the redundancy to continue to function.”

“How do you explain saving a life?” asks Danny Hobby. “How do you explain protecting property adequately and having the resources to do that?” Because dependability is vital, the City of Austin and Travis County opted for a robust, regional network they could control and manage themselves.

“Sometimes people ask me why do you own your radio network, why couldn’t you have gone on a public shared network?” Pete Collins explains, “Because the public safety network is the lifeline of our public safety personnel. They need it 100% of the time. It has to be monitored very closely and we have to be very proactive in maintaining it. So we would rather entrust our communications to a strong partnership with Motorola to obtain that high reliability and hold ourselves accountable. The other interesting thing about having your own network is you can define your own coverage requirements and then say that it has to be proven. You don’t even accept the system unless it meets your requirements.”

“With a commercial system, you’re just another customer,” states Turner. A private system allows users to provide input into all aspects of the system including coverage, operation and performance. “And if you ask any firefighter, police officer or paramedic out there, that’s the most important thing because their lives depend on it.”

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Lifesaving information at their fingertips.

“The new computer dispatch system will provide an enhanced level of functionality to allow officers to take more quick and effective tactical operations as needed,” says Robert Turner.

“Mobile data is extremely important to our operation,” says Pete Collins, “because of the vast amount of information we obtain through it... (and also because) it relieves the radio system of traffic.” Austin is taking advantage of the network’s data capacity by implementing a new computer-aided dispatch (CAD) system with automatic vehicle location (AVL). Rescuers in the field will see a map of the incident area and the location of other units responding to the event. Firefighters will be able to see the next arriving apparatus and start giving assignments.

Other data applications will provide wireless access to information such as medical records, vehicle licensing, criminal warrants and ID databases. During a routine traffic stop, officers will have a better idea what to expect before they approach a vehicle. Also, mobile reporting software will allow employees to file paperwork without returning to the station, saving time and keeping officers on the street.

“Here are things you can do with mobile data that you simply can’t do with voice radio,” says Robert Turner. “Things that allow officers to be more inquisitive, to do more checking when they have a suspect, to validate a story. Whether it’s providing information to officers, or allowing paramedics to access medical information, or allowing firefighters to access fire plans, mobile data is simply part of the everyday way we do business.”

“Mobile data is simply another tool that our public safety folks expect to have and absolutely need to have in order to do their jobs effectively.”

— ROBERT TURNER
“Motorola is definitely a leader in mission critical systems for public safety. We are so impressed with our systems here. We have tested independently and the proof is definitely in the pudding. We probably have 6,000 users on our system right now and it works. We have a lot of respect for Motorola.”

– Pete Collins

“Motorola has been a true partner in this project. In spite of the fact that we had numerous issues with securing permission for tower sites and other project impacts, Motorola has worked tremendously to adjust, to reallocate, and to realign so that we’ve been able to finish this project on schedule. We are also within budget for a project this size. And that I think is really the best example of the partnership between the city of Austin and Motorola on this project.”

– Robert Turner

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We are committed to bringing all of our knowledge and technical expertise together so you can focus on what you do best… to serve and protect the public.