When a flood strikes or fires burn out of control in the Fort Worth area, the Emergency Operations Center (EOC) springs into action to coordinate the response. A major incident can involve many agencies: police, fire and EMS may be the first to arrive, but public works, the Red Cross, the Salvation Army, even the nearby Naval Air Station may all need to participate. These stakeholders all use different communication systems, making communications a challenge.

Eric Carter, the Homeland Security Grants Manager for the Fort Worth Office of Emergency Management, explains how they now achieve vital interoperability without wasting precious time and resources. “WAVE has been a critical component in marrying our various communications systems together to be effective during disaster response.”

Carter adds, “The city of Fort Worth is benefiting greatly from having WAVE installed – in terms of both cost savings and our ability to respond to a crisis.”

“In a stressful situation like an emergency or a disaster, when you need to coordinate a large group of folks who don’t necessarily work together on a day-to-day basis, easy communication can be difficult to achieve.”

Juan Ortiz, Fort Worth Emergency Management Coordinator
**CHALLENGE**

Creating a Shared Communications Environment in the EOC

The middle of a crisis is a difficult time to be scrambling for communication links among police, fire and EMS, departments from different communities, various government agencies and the social service groups who respond. In the past the Fort Worth Emergency Operations Center struggled to provide a shared communications environment. Each agency functioned in a silo, using telephones as the only way to talk to different agencies. “While it could be done,” Carter said, “it wasn’t nearly as efficient as being able to share radio channels.”

“We began to investigate technology to improve interoperability,” says Carter. “We wanted the ability to bring radio communications to our desktops, our EOC work stations. We also wanted a solution that would enable us to deliver radio traffic on demand to our EOC users, in addition to bringing in and bridging the variety of communication systems from our partner agencies. And ideally, real-time push-to-talk communications is the best way to deliver an effective response.”.

Radio Communications – Even For Agencies Without Radios

Carter describes the chaos that often accompanied a disaster response between dozens of agencies.

“In the past we had a city radio system that supported our primary responders, but our partner agencies were often on other radio systems. Bridging the gap between those two systems in terms of monitoring or talking was extremely difficult. Plus, some of our non-traditional response agencies in the EOC wouldn’t have radios. So we’d often times have to scramble to get them a radio unit, to be able to monitor what’s going on in the field.”

Juan Ortiz, the Fort Worth Emergency Management Coordinator, adds, “The challenge, the goal really, is to have the right resources in the EOC to coordinate the right resources in the field; to make sure we have the knowledge needed to make the right decisions and take the right actions at the right time. To achieve this requires a continual flow of information. In other words, flawless communication.”

Experience Teaches The Importance Of Flexibility

“You know, we learned our lessons from previous emergencies and disasters,” says Ortiz, including their activation in response to Hurricanes Katrina and Rita in 2005.

During those crises, Fort Worth brought in a large amount of resources to help host over 30,000 people who were displaced. Ortiz remembers, “We needed a lot of flexibility in our communication system to be able to move police, fire, the housing department, the sheriff’s office and other resources around.” But communications were fixed to the console - the fixed radio - at the station. Moving it to the EOC wasn’t practical.

Make Everyone a Good Listener

Fort Worth needed to provide everyone with the ability to monitor all radio traffic, but quickly realized that having everyone transmit on the same channel would impede communications. They had to find a way to provide listen-only access for some and full communication permissions for others.

“We needed to have a communications solution that was very flexible,” says Ortiz, “a system that we could easily configure on the spot, and one that we could limit so anyone could listen, but only those authorized had the capability to transmit… We needed to bring the stress level down in the emergency operations center by simplifying our voice communications.”
SOLUTION

WAVE Eliminates Fort Worth’s Communication Silos

Fort Worth chose WAVE to provide a communications interoperability platform for all their work partners. WAVE has lifted communication barriers, providing the EOC with a seamless push-to-talk experience and large-scale interoperability.

As Carter explains, “WAVE has been great in enabling us to deliver radio communications to our desktops. For agencies without handheld radios, we can make it possible for them to monitor traffic from first responder agencies and talk to their own responders over the desktop communicator. So police can monitor the fire radio from the EOC, fire can monitor transportation and public works, and all of us can talk over the IP-only channel when we need to share information within the EOC.”

“…Police can monitor the fire radio from the EOC, fire can monitor transportation and public works, and all of us can talk over the IP-only channel…”

RESULT

Improved Disaster Response
Carter reflects on adding WAVE technology to the EOC, “It’s been great. We’ve been able to extend our ability to bring agencies together during a disaster; to communicate like we need to during a crisis.”

Ortiz agrees, “The WAVE solution allows us to treat all of our community partners alike and bring them into the EOC as if was their home.”

“WAVE has been a critical component in helping us solve our communications challenge and to bring groups together to be effective during a disaster,” Carter stresses. And as the EOC moves forward, they want to extend seamless communication to personnel who are not typical radio users: executives, managers and social service agencies. They want to bring everyone on to the communications platform so they can stay up-to-the-minute as a crisis evolves.

Plans to Expand.
Moving forward, Carter and Ortiz see WAVE expanding within the Emergency Operations Center. Fort Worth is planning to purchase mobile WAVE licenses so that personnel can connect using smartphones and tablets.

“The other component to this is going to be expanding the push-to-talk to mobile devices,” says Ortiz. “Now we can have those agency’s representatives that don’t necessarily carry a radio on a day to day basis, be able to use their smartphones, or tablets, or other mobile devices to in order to communicate back into the EOC or with all the different systems that are connected to the WAVE environment.”