

Lives can change in an instant. Are you prepared?



The Motorola FSA4000 Fire Station Alerting system provides the county fire agency with peace of mind by improving dispatch reliability, incident reporting, safety and security, and ensuring that firefighters have the right solution to respond effectively to the community.

Situation: Improve dispatch reliability, response time, incident reporting, safety and security

A mid-size county in North America wanted to improve dispatch reliability and incident response time. The county also wanted to address security and safety at the fire station by providing Dispatch with the ability to remotely monitor fire station smoke alarms and verify that the building had been locked and secured after the fire apparatus left the station. Finally, the county wanted to track alert process activity through event logging and automatic recording of dispatch activity.

Solution: FSA4000 Fire Station Alerting system

Motorola recommended the FSA4000 Fire Station Alerting system. The FSA4000 alerts firefighters by turning on lights and heart saver tones; opens bay doors before/closes them after apparatus leaves the station and sends an alert acknowledgement back to dispatch. Dispatch is able to monitor the station to ensure appliances have been turned off and the bay door is closed. The solution operates over the station's existing infrastructure for cost effective implementation and operation and provides a report log of incident reports with full disclosure.

Results: Increased efficiency, safety, and accountability

With the FSA4000, dispatchers know that the alert has been received, saving valuable time and eliminating confusion. Firefighters can reduce response time by focusing on the job at hand, secure in the knowledge that in the rush of getting to the scene, the bay doors will close and the station will be monitored for safety and security. FSA4000 creates activity logs from each event that indicate each point of the process. The logs can be used for training to improve performance and for accountability after the incident.

Background:

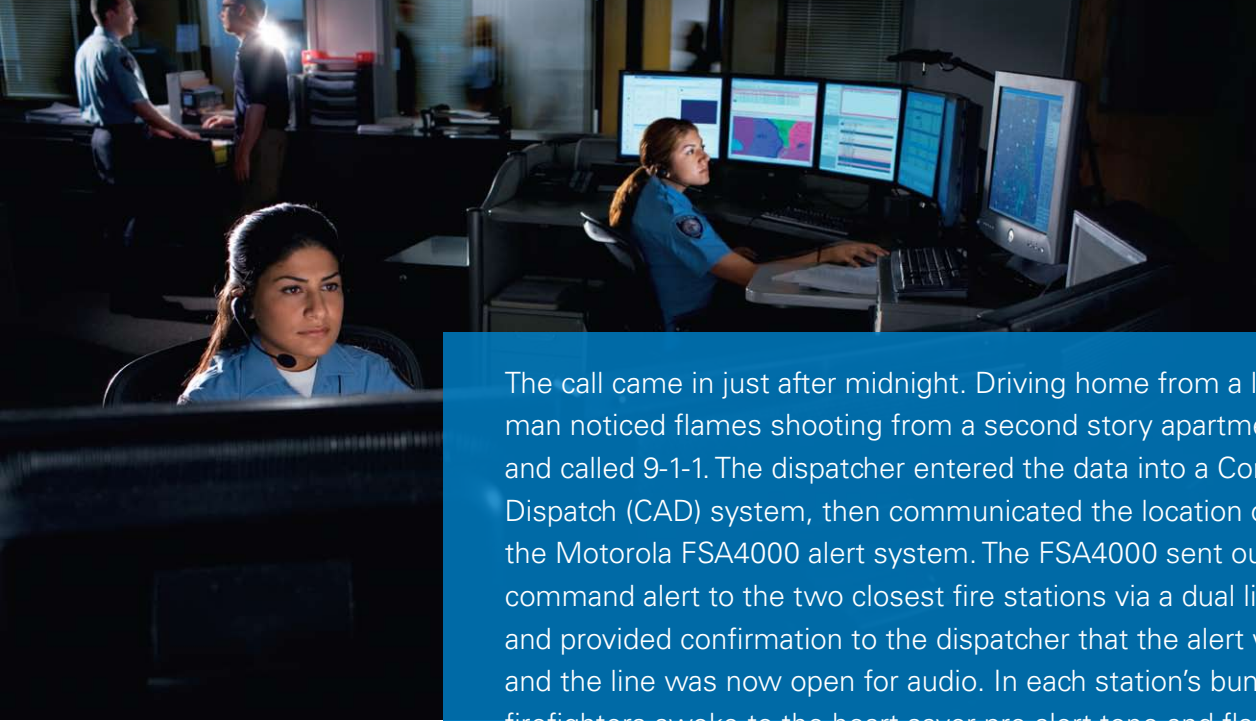
- Mid-size North American county fire department
- Combination career and volunteer firefighters
- Goal: improve dispatch reliability, incident reporting, response time, safety and security

Solution:

- FSA4000 Fire Station Alerting System
- Scalable, flexible, dual link communications
- Leverages existing dispatch consoles and infrastructure, interfaces to CAD
- NFPA1221 standard compliant

Results:

- Increases dispatch reliability
- Improved safety and security of station after departure
- Improved post-incident reports for training
- Improved incident response time



The call came in just after midnight. Driving home from a late shift, a man noticed flames shooting from a second story apartment window and called 9-1-1. The dispatcher entered the data into a Computer Aided Dispatch (CAD) system, then communicated the location of the fire to the Motorola FSA4000 alert system. The FSA4000 sent out an automatic command alert to the two closest fire stations via a dual link interface and provided confirmation to the dispatcher that the alert was received and the line was now open for audio. In each station's bunk room, firefighters awoke to the heart saver pre-alert tone and flashing lights advising them that a dispatch was forthcoming. The firefighters quickly rose and began to prepare, listening as the dispatcher gave instructions. On the way out of the station, they hit the mushroom button to let the dispatcher know they were en route. Through the FSA4000, the dispatcher remotely closed the fire station bay doors and secured the building. Elapsed time: two minutes.



County Fire Service Agency looks for ways to improve emergency response

Those responsible for saving lives want nothing left to chance. Precious seconds wasted could be the difference between rescue and recovery.

With a combination of career and volunteer firefighters staffing its Fire Service agency, a mid size county in North America wanted to improve incident response time and dispatch reliability by upgrading their alerting system. When the county's dispatchers sent a tone page via its two-way radio system to alert first responders of an emergency situation, they would then execute the voice alert process after the tone. However, the only way dispatchers could be assured that the team received the alert was if the firefighters communicated receipt.

In the rush of an emergency response, confirmation was sometimes delayed until site arrival. This created confusion which could result in multiple apparatus being dispatched beyond the immediate need or the dispatcher mistakenly assuming the original apparatus arrived when it did not. In addition, the firefighters needed to manually gather their crews, open and close the bay doors, and shut off the appliances, costing critical minutes and delaying departure from the station.

The county also wanted to address security and safety at the fire station by providing Dispatch with the ability to remotely monitor fire station smoke alarms to ensure that kitchen appliances had been turned off and verify that the building had been locked and secured after the fire apparatus left the building.

Finally, the county wanted the ability to track alert process activity through event logging and automatic recording of dispatch activity and response-related events. Quantifiable metrics would make it easier to evaluate performance for process improvement and training.

The fire chief began looking for technology that would address all of these challenges. Motorola recommended the FSA4000 Fire Station Alerting system, which offered the ideal solution to meet the county's immediate goals, as well as providing other critical benefits.

Attention to detail and leveraging existing infrastructure

Motorola designed and configured the solution to the county's exact specifications, then staged the system at Motorola's Customer Center for Solutions Integration (CCSi). County representatives were

invited to CCSi to participate in a demonstration of the system's features and applications before the equipment was shipped to the site.

Sensitive to budgetary constraints, Motorola was able to leverage the county's existing dispatch center infrastructure with the FSA4000 solution. As a result, the solution was successfully deployed over the county's regional ASTRO® 25 trunking system. Operating over existing land line networks or wireless RF communications systems eliminates the need to purchase additional infrastructure and provides scalability for easy expansion. Equally important, the system conforms to stringent National Fire Protection Association standard (NFPA 1221), which may lower fire department insurance costs and may reduce the risk of liability.

The system integrates a unique dual link redundancy for reliable alerts and intelligent automation, ensuring successful operation of the public safety dispatch process.

Dispatch alerts only those crew members who need to respond, whether it is a Battalion Chief, specific crew, or the entire station by automatic audio routing to the appropriate bunk rooms. Once firefighters have left the station, Dispatch can monitor intrusion and smoke alarms, backup power systems, and status of response equipment, taking corrective action as needed. For example, remote control of fire station access enables dispatch personnel to close bay doors and turn off appliances once firefighters have left the station, preventing unauthorized access, potential theft, fire or vandalism.

County administrators now have the ability to track and view automated activity logs for post incident analysis, providing greater accountability. Automatic recording of dispatch and response actions provides evidence for future analysis for continuous process improvement and training.

Meeting the county's improvement goals

With the FSA4000 fire station alerting system automating critical steps in the response, the county has addressed each of its challenges, streamlining emergency response from end-to-end, including:

- **Alert acknowledgement:** Ensures alert receipt by returning an acknowledgement back to the dispatcher if the station did not receive the alert, ensuring Dispatch that the alert was received.
- **Automation of manual processes:** Provides a method to automate manual processes, leaving the fire fighters to focus on the job at hand by:
 - Waking up the firefighters and EMTs by turning on lights and heart saver alert tones
 - Opening and closing bay doors to save time and ensure the station is secured
 - Shutting off appliances to minimize the risk of fire in the fire station
- **Improved safety and security:** Monitors the fire station electrical system, security system, and sends an alert if fire is detected after firefighters have left the station
- **Cost effective flexibility:** Operates on Motorola consoles, most Motorola infrastructure, and interfaces to CAD, providing the capability to add on to the dispatch center, rather than implementing a complete change out of existing infrastructure equipment
- **Accountability reports:** Creates a report log of information for future training and post incident reports capturing items such as:
 - who dispatched the fire station and at what time
 - when the mushroom button was pushed, indicating apparatus is en route



MOTOA⁴[™]

Mission Critical Portfolio

Technology That's Second Nature[™]

Motorola's FSA4000 Fire Station Alerting system is part of the MOTOA4 Mission Critical Portfolio of products that offer seamless connectivity between first responders. Motorola puts real-time information in the hands of mission critical users to provide better information that enables better decisions for better outcomes. It's Technology That's Second Nature[™].

For more information on Motorola's FSA4000 Fire Station Alerting system, please visit our website at **www.motorola.com/us/government** or contact your local Motorola representative.

> www.motorola.com/us/government



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