



## WHITE PAPER

DATE: April 16, 2026

TO: FIRESCOPE Board of Directors  
23300 Castle Street  
Riverside, CA 92518-2200

FROM: FIRESCOPE Operations Team, Task Force, & CAD to CAD  
Subcommittee

SUBJECT: FIRESCOPE CAD-TO-CAD TYPING RECOMMENDATION  
EXECUTIVE SUMMARY WHITEPAPER

APPROVAL: The FIRESCOPE Board of Directors approved this Whitepaper on April 16, 2026.

### SUMMARY

Computer-Aided Dispatch (CAD) systems are the backbone of emergency response coordination. However, the lack of interoperability between different CAD systems across jurisdictions has led to significant challenges, including delayed emergency services, misdirected calls, and limited situational awareness.

Vendors also describe CAD-to-CAD differently, creating confusion (including products marketed as CAD-to-CAD that cannot send information into a CAD). The proposed FIRESCOPE typing recommendation is meant to end this ambiguity by defining clear interoperability types with minimum capabilities vendors must meet. This executive summary summarizes the full recommendation and minimum standards.

### RECOMMENDATIONS

FIRESCOPE CAD-to-CAD Subcommittee proposes a Typing Standard for CAD-to-CAD interoperability.

### FISCAL IMPACTS/COST ANALYSIS

As a typing recommendation only, adoption of this recommendation by FIRESCOPE has no fiscal impact to FIRESCOPE or fire agencies.

### IMPLEMENTATION PLAN

CAD-to-CAD implementations are too specific to an agency's needs for a general



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implementation plan. The CAD-to-CAD Sub-Committee can offer some general next steps for an agency considering the implementation of FIRESCOPE CAD-to-CAD typing system.

### FINDINGS

The CAD-to-CAD subcommittee was tasked with the following via the original whitepaper:

1. Develop the capability to share real-time resource type, status, and location of all fire resources in a format that can be viewed in either a shared or compatible platform.
2. Adopt a standard data exchange format for sharing emergency incident data between CAD systems. For example, the NENA/APCO Emergency Incident Data Exchange Document.
3. Identify solutions for interagency network connectivity to share emergency incident data. For example, investigate the feasibility of using the ESInet network (State 911) to connect CAD systems.
4. Develop standards for interoperability between situational awareness applications for enhanced information such as incident management details and other map services.
5. Work with CAL OES to investigate the feasibility of AB911 to support the use of the ESInet network to support data sharing.

The whitepaper correctly identified the importance of Computer-Aided Dispatch (CAD) and the significant problems with interoperability. CAD systems are the backbone of emergency response coordination. However, the lack of interoperability between different CAD systems across jurisdictions has led to significant challenges, including delayed emergency services, misdirected calls, and limited situational awareness. These issues hinder the ability of emergency services to provide timely and efficient responses, especially during multijurisdictional incidents. A system to connect two or more CADs, is called a CAD-to-CAD system, and can overcome these issues by enabling dynamic CAD information sharing features such as closest resource concept or border drop.

The whitepaper tasked this committee with developing standards and identifying solutions for this interoperability. We are not the first to attempt to do so - organizations as diverse as the Department of Homeland Security (DHS), the National Highway Traffic Safety Administration (NHTSA), and Integrated Justice Information Systems (IJIS) have described the issue, including technical standards set by bodies like the Association of Public Safety Communications Officials (APCO) and the National Emergency Number Association (NENA).

This committee dove deep into these technical issues, working with CAL OES and



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vendors as directed to define technical capabilities. Much time and effort was spent on technical details (such as whether data should be formatted in XML vs JSON). During this work, the technology continued to evolve and change beneath our feet. During this time, great confusion continued to exist and spread amongst California fire agencies on the capabilities and use of CAD-to-CAD systems and compatibility between systems. This is exacerbated by sometimes conflicting or incorrect statements made by software vendors, creating market confusion. For example, a recent statewide push for a CAD-to-CAD system marketed a system that in fact cannot send any data into a CAD.

As a result, we realized that just as the vehicle typing standard does not specify the type of metal to be used in a door, our focus on deep technical minutia would not solve the confusion in the marketplace on needs, capabilities, and how to use these technologies. It would not clearly communicate the needs of California fire agencies with vendors.

We believe FIRESCOPE is well poised to resolve this confusion. To address these challenges, we propose a Typing System for CAD-to-CAD interoperability systems. This standard would classify CAD-to-CAD systems into types, each with defined capabilities and minimum requirements. Each level offers more sophisticated functionality for enhancing response coordination, reducing errors, and improving mutual aid efforts.

## CONCLUSION

This typing system would give leaders a simple ladder of capability, reduce vendor ambiguity, and help agencies build interoperable dispatch operations that improve speed, accuracy, and regional coordination.