

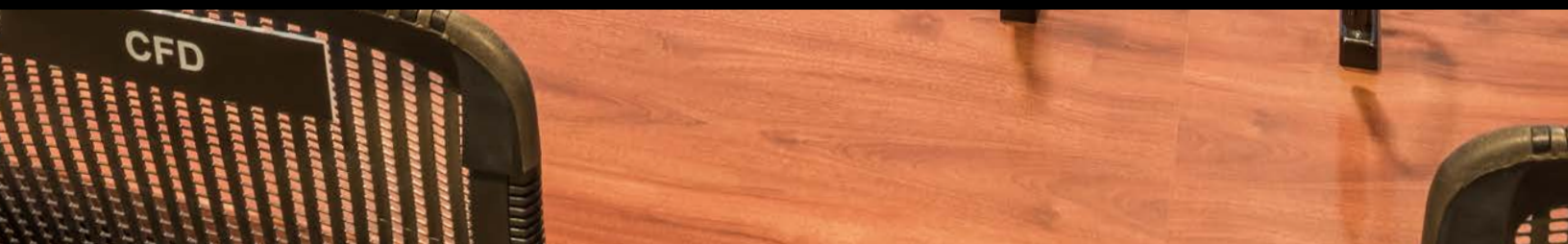
Case Study

CHARLOTTE-MECKLENBURG POLICE DEPARTMENT



CINEMASSIVE

Charlotte-Mecklenburg Police Department





## Case Study: Charlotte-Mecklenburg Police Department



### 1 THE CLIENT

#### One of Fastest Growing Cities in the U.S.

The City of Charlotte, North Carolina has been one of the nation's fastest-growing cities in the U.S. for several years and that trend shows no signs of slowing down. But rapid growth has had its challenges – particularly for the Charlotte-Mecklenburg Police Department (CMPD) and the Charlotte Fire Department (CFD) tasked with safeguarding the safety and welfare of the community.

To address these challenges, the City of Charlotte decided to revamp its existing Public Safety Operations infrastructure to include:

- A multi-use Command Center used to assemble municipal departments for crisis and disaster management.
- A state-of-the-art Real Time Crime Center (RTCC) to provide real-time intelligence to officers in the field while supporting investigations by gathering digital evidence.
- An Emergency Operations Center (EOC) used by multiple departments for training, immediate emergency response activation, tabletop scenario planning, and exercises.

By standardizing on a single technology platform, we are now able to successfully share video and content between systems and entities across disparate geographical locations with ease.

Crystal Cody  
Public Safety Technology Director  
City of Charlotte





## 2 THE CHALLENGE

The original RTCC and Command Center technology lacked the advanced visual and situational awareness capabilities to support the sharing of real-time intelligence. In addition, the technology was not tightly integrated with the Video Management System (VMS) managing over 700 cameras across the city. This limited the speed at which facilities and departments could respond and effectively collaborate.

In 2019, the city began looking for a new visual collaboration system that could:

- Interoperate among three new control room facilities
- Allow non-engineering users to adjust content layouts across video walls without extensive training or back-end development or programming
- Provide a single, holistic operating environment with components developed and supported around the clock by a single vendor
- Easily integrate with the city's current VMS system, dashboard tools, security applications, and other environments

Another challenge was the city's tight timeframe for implementation. The entire system needed to be fully operational by the Republican National Convention in August of 2020. With an immovable deadline, delay or failure was not an option.

“ This new system has helped our team achieve the goals of better collaboration across departments and teams, with enhanced visual features, and greater ease of content management. ”

Lieutenant Travis Pardue  
Real Time Crime Center



## 3 THE SOLUTION

With responsibility for all technology for police, fire, and radio communications, the city's Public Safety Technology Director established firm solution requirements. First and foremost, the city needed a single solution for each of the three locations that would address the interoperability and ease of use gaps in the current system. It would also need to be future-proof enough to integrate with future platforms and applications.

Since each of these spaces would be managing a constant stream of content from multiple sources (video feeds, data analytics, dashboards, maps, etc.), the platform would need to consume virtually any digital data. In addition, it would need to allow non-engineering staff to quickly create and

modify wall layouts and behaviors in response to rapidly changing use cases and missions.

After much research, CineMassive was selected to provide situational awareness across these mission-critical environments. CineMassive's CineNet interface was the ideal solution for offering users complete control over video wall layouts and content arrangement. Because the platform is designed for non-technical users, CineNet also met the city's ease-of-use requirements. This was important since the city could not guarantee around-the-clock onsite engineering resources.



### COMMAND CENTER

The Command Center operates on an as-needed basis for major police and joint government operations and events. Each operation in the Command Center is dictated entirely by the team using it at that time. CineMassive provided a visualization solution that would allow teams to push content to the video wall with the devices they bring in to the Command Center.

CineMassive installed an Alpha FX Edge video wall processor to power the police chief's conference room along with another multipurpose room used for meetings and press conferences. An Alpha FX Core video wall processor routes video to the Command Center which consists of a 10x3 wall with 46" CineView III displays,

a 75" auxiliary monitor, and four 55" monitors. In addition, there is a single Site Manager device assigned to both processors with CineNet. A total of eight Cinelink devices encode cable tuners, Genetec servers, and local PC workstations to ensure these sources can be seen on the video wall. The system also integrates with existing microphones in the room to provide sound reinforcement for meetings and teleconferencing. All content in the room is managed through the CineNet software on a touch control point at the back of the room.



## REAL TIME CRIME CENTER (RTCC)

The RTCC serves as a patrol force multiplier and a post-incident review resource for the CMPD. By monitoring an integrated system of more than 700 IP cameras and license plate readers throughout the city, detectives in the crime center provide real-time information to patrol units and command. The RTCC's recording capabilities also allow for investigative information to be shared with detectives. Additionally, officers can review the effectiveness of tactics during operations to help inform debriefings with officers in the field and command.

To readily manage the hundreds of incoming sources across a crisp video wall, CineMassive installed a single Alpha FX Core video wall processor with CineNet and a Site Manager device. The processor powers a 12x2 LCD video wall with 46" CineView III displays and two additional 75" auxiliary displays. In addition, six operator PCs located in the RTCC are connected to the Alpha FX Core processor to allow for local content to be displayed on the video wall. Four CineLink devices encode two Genetec servers to drive content to the video wall. On a touch control point near the rear of the room, operators can use CineNet to easily manage content layouts and arrange video assets as needed at their desks.



## EMERGENCY OPERATIONS CENTER (EOC)

A new room located within the Fire Department Headquarters, the EOC is designed for emergency management and response. Operators staffing the room monitor and manage content across multiple sources and dashboards. First Alert, IP cameras, TV tuners, and 14 additional HDMI connections spread out across the room are all managed through a series of multiple video walls across two perpendicular walls. CineMassive's solution gives the EOC the ability to activate at a moment's notice.

CineMassive installed a single Alpha FX Core video wall processor with a Site Manager for the main EOC room, conference room, and an emergency management room – all of which are controlled by CineNet. The main room has

a 4x3, a 3x3, and two 2x2 LCD video walls. The conference and emergency management rooms each have a single 55" CineView III display. A total of 10 CineLink devices capture static PC workstation content while also providing connections for department officials who bring their own devices. Whether the content comes from the permanent workstations or devices brought in by various departments, a touch control point in the back corner of the room uses CineNet to adjust layouts, move content, and push video and dashboard information to each display and video wall.

“ This new system allows for a more streamlined display of content along with the ability to change content in seconds depending on what is needed in that exact moment for the incident at hand – which is crucial for Emergency Management and Public Safety situations that are always changing. ”

Elaney Katsafanas  
Emergency Management Planner  
Emergency Operations Center



## 4 THE BENEFITS

CineMassive has allowed the City of Charlotte to vastly improve its ability to monitor, investigate, and respond to public safety incidents more effectively. Collaboration across various teams and departments has also been improved. Thanks to CineMassive's advanced visual and situational capabilities, real-time sharing of critical intelligence from a variety of sources has never been easier.

Just as importantly, the CineNet platform has provided a level of simplicity not often found in sophisticated visual collaboration and video wall solutions. Non-engineering resources can adjust layouts, content, and dashboard information in each of the three facilities, and interoperability with other departmental IT environments is no longer a concern.

From the video wall displays to the processors, and the user-friendly software that brings it all together, we wanted to 'turn the key and just drive' like a high-performance vehicle, and that's what CineMassive delivered to us.

Richard Saintvilus  
System Architecture & Support Team Lead  
City of Charlotte

### SCHEDULE A LIVE DEMO

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