

Case Study:

DC Fire & EMS Control Room Upgrade

Organization: District of Columbia Fire & Emergency Medical Services (DC Fire & EMS)

Industry: Emergency Response & Public Safety

Location: Washington, DC.

Integrator: Unassailable Solutions



Executive Summary

DC Fire & EMS upgraded their aging LCD control room display to a Neoti LED video wall, enhancing situational awareness, reducing eye fatigue, and improving real-time response. Neoti's superior technology, cost-effectiveness, and ability to meet tight deadlines made it the ideal choice. This upgrade has streamlined operations and provided long-term scalability for mission-critical functions.



The Challenge: Outdated & Failing Technology

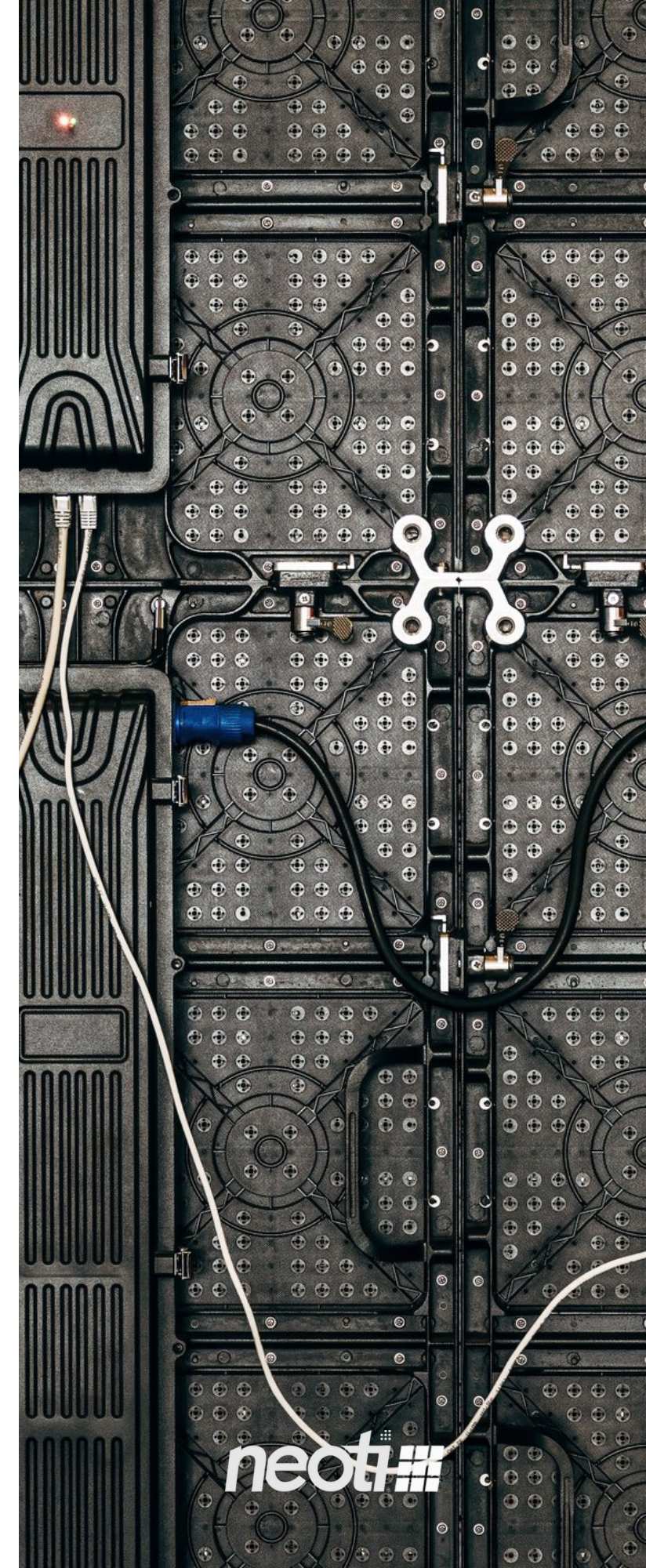
DC Fire & EMS relied on a four-over-four LCD panel setup supplemented by consumer-grade televisions for its Fire Operations Center. However, the existing displays were approaching end-of-life, leading to frequent failures and lengthy delays in acquiring replacement parts—sometimes taking months. These limitations made it clear that a more reliable, high-performance solution was required to ensure uninterrupted mission-critical operations.

Additionally, as part of their preparation for high-profile events, including the presidential inauguration and emergency response scenarios, DC Fire & EMS needed a technology partner that could meet strict deadlines and deliver a durable, future-proofed solution.

The Selection Process: Why Neoti?

The department explored multiple options, including competing solutions from Vanguard and Planar. After attending a major trade show and evaluating various LED vendors, DC Fire & EMS chose Neoti based on key factors:

1. **Superior Technology:** The 0.9mm pixel pitch LED solution provided unmatched clarity, crucial for operators sitting just 8 feet from the display. In addition to the fine pixel pitch, the display featured advanced image processing, superior black levels, and enhanced brightness control, ensuring crisp visuals with minimal eye strain. Its seamless design also eliminated the distracting bezels of previous LCD setups, providing a more immersive and efficient viewing experience.
2. **Scalability & Serviceability:** The ability to replace individual LED panels without major downtime ensured long-term reliability. The system was delivered with extra LED panels for easy swapping, and Neoti retains additional inventory from the same batch to ensure perfect color matching when repairs are needed.
3. **Cost-Effectiveness:** While some competing options were significantly more expensive, and others were less costly, Neoti provided the best value by balancing affordability with superior quality and service, making it the most compelling choice.
4. **Tight Timeline Commitment:** Neoti was one of the few vendors able to guarantee installation before the presidential inauguration, an essential deadline.
5. **U.S.-Based Design & Support:** Avoiding China-based vendors was a priority, and Neoti's strong presence in the U.S. was a decisive factor.

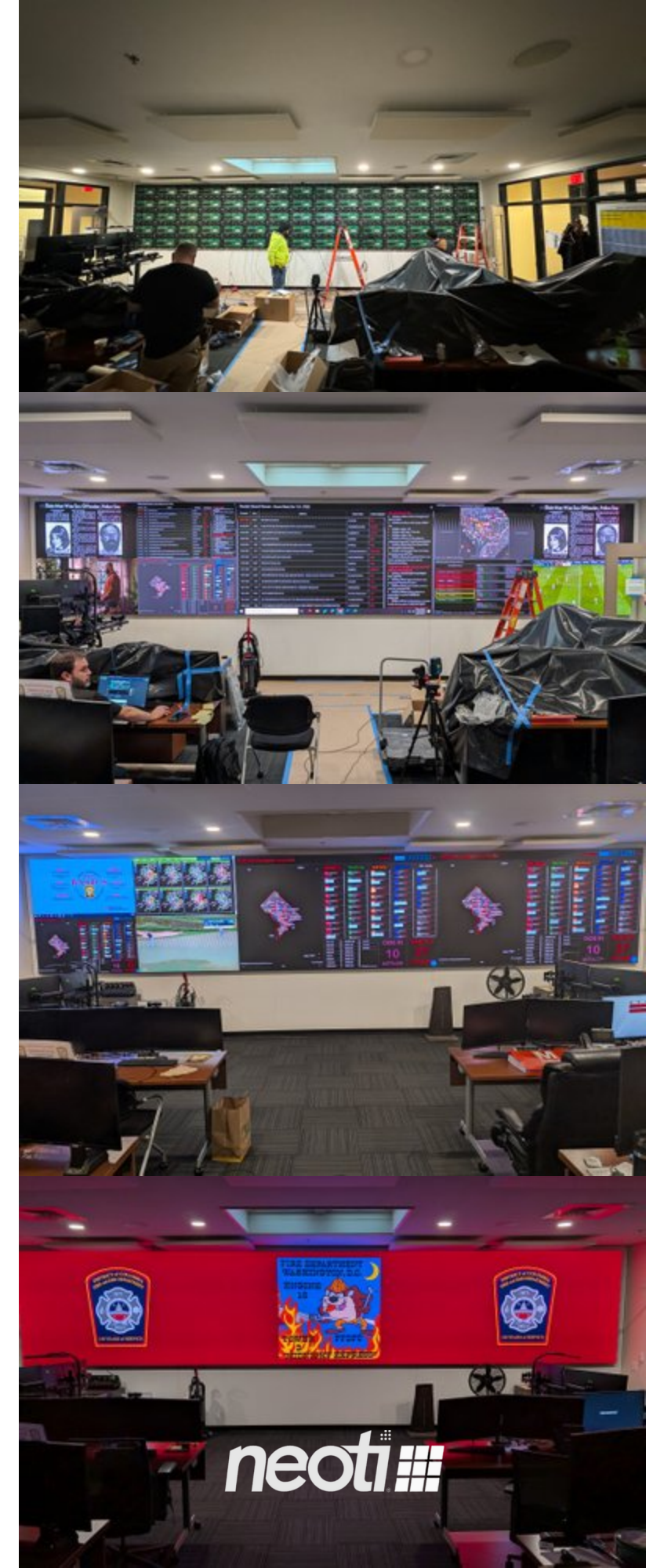


The Solution:

A Seamless LED Video Wall

The new LED video wall spans nearly the entire 30-foot-wide control room wall, providing a seamless, ultra-high-resolution display. Unlike the previous setup, which was fragmented with bezels and smaller displays, the new system offers:

- **Enhanced Situational Awareness:** Larger, more easily viewable content across the entire room.
- **Reduced Eye Fatigue:** Operators, who spend 24-hour shifts in the control room, reported significantly less strain compared to LCDs.
- **Greater Flexibility:** The ability to customize dashboard layouts dynamically and optimize information presentation for different emergency scenarios.





Operational Impact & Benefits

While it is still early to measure long-term efficiencies, immediate benefits include:

Improved Decision-Making: The seamless, high-resolution display makes critical data easier to analyze.

Real-Time Emergency Response Enhancement: During the Potomac River mid-air collision emergency, the display facilitated rapid coordination, efficiently tracking additional fire engines and rescue squads.

Adaptive Brightness Control: Operators can now adjust brightness levels to match lighting conditions, enhancing usability during both day and night shifts.

Reduced Heat Concerns: Despite initial fears of increased heat output, the coated LED panels and efficient power management resulted in lower-than-expected heat emissions and energy consumption.

Structural Cost Savings: Neoti's direct wall-mounting solution eliminated the need for an expensive steel mounting structure, saving approximately \$60,000.



Customer Feedback

Neoti's installation and support received high praise, with on-site specialists ensuring a seamless deployment. DC Fire & EMS highlighted Neoti's commitment, responsiveness, and ability to meet tight deadlines with hands-on assistance.

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“The quality of the product, the support we received, and Neoti's ability to meet our deadlines were outstanding. When I initially mentioned the timeline, my leadership laughed and said it wasn't possible—but Neoti delivered.”

Thomas Chenworth, DC Fire & EMS

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“From a support perspective, Joe (Neoti's representative) was phenomenal—he was part of our team and put in long days to get it done.”

Jason Jaworski, Unassailable Solutions

Lessons Learned & Best Practices

Choosing a USA based vendor with strong service and reliability is crucial. Neoti's responsiveness and commitment ensured the project's success under tight deadlines.

Investing in future-proof technology pays off. The extra panels and color-matching inventory ensure long-term sustainability.

Customization enhances usability. The ability to adjust brightness and optimize dashboard layouts makes daily operations smoother.

Future Plans & Expansions

DC Fire & EMS plans to further optimize the system with a new centralized dashboard, integrating all emergency response data into a unified, real-time interface. This improvement will streamline operations, ensuring consistency across all shifts.

Conclusion: A Model for Public Safety Technology

Neoti’s LED solution has elevated DC Fire & EMS’s control room into a state-of-the-art command center, enhancing the department’s ability to respond swiftly and efficiently to emergencies. This case study serves as a benchmark for other public safety agencies seeking **U.S. -based, TAA-compliant video wall technology for mission-critical environments.**

Feature	Old LCD Setup	Neoti LED Video Wall
Display Type	4x4 LCD Panels	Seamless LED Wall
Viewing Experience	Bezels obstruct view	Seamless display
Heat Output	High	Lower & efficient
Scalability & Repairs	Difficult	Easy, with extra panels
Eye Fatigue	High strain	Reduced strain, easier on eyes

See the difference for yourself. Schedule a demo or consultation today to transform your control room with Neoti’s state-of-the-art LED solutions.

- **Neoti LED Video Walls | 877-356-3684 | sales@neoti.com**
- **Unassailable AV integration | 540-713-2045 | info@unassailablesolutions.com**

