

EXECUTIVE SUMMARY

Project Description

The Unified Communications Center (UCC), a magnificent building that opened on September 26, 2006, consolidates all communications functions of the District of Columbia and related call-taking operations into a common state-of-the-art facility and common technology infrastructure. The UCC is the result of a \$116 million investment that consolidates all public safety and non-public safety communications functions of the District of Columbia, including 9-1-1 and 3-1-1 call taking and dispatch as well as the Mayor's Citywide Call Center ((202) 727-1000) non-emergency constituent service call processing. In addition the UCC houses the Homeland Security and Emergency Management Agency (HSEMA), the Regional Incident Command and Control Center (RICCC), and the Mayor's Command Center. The UCC consolidates the "command and control" functions of all public safety first responders and integrates these functions into the critical emergency management and transportation responsibilities of the District of Columbia. During major emergencies, the UCC provides centralized regional coordination and communications, involving FEMA (RICCC), FBI, Capitol Police, Secret Service, Park Police and other critical agencies within the National Capital Region (NCR).

The 128,000-square-foot facility is located on 11.8 acres on the grounds of St. Elizabeths Hospital campus, approximately four miles from the Capitol in the District of Columbia. Some of the key facts and features include a design that will accommodate a minimum 72-hour emergency self-sustaining operation in the event of emergency. It has blast/bullet-resistant glass/walls and 100-foot security setbacks. In addition, there is critical system redundancy, power and communication interruption protection. The entire UCC facility has been designed to meet or exceed GSA Level C security standards.

The technical systems infrastructure is also a model of integration for the most advanced technology:

- (1) Telephony – Used for call receipt, routing and automatic distribution, processing, tracking statistics
- (2) Computer Aided Dispatch System (CAD) – Used to process public safety emergency and non-emergency constituent calls
- (3) Radio Dispatch – Infrastructure and software used for public safety radio dispatch of first responders
- (4) Digital Voice Logging / Recording System – Used for recording of call taking and dispatch operations
- (5) Timing – Used to synchronize all systems of the UCC to a common clock
- (6) LAN/WAN Security Infrastructure – Used to provide physical network connectivity of systems within UCC and to the DC WAN to provide inherent reliability and necessary redundancy
- (7) Integrated Network Monitoring System (INMS) – Provides real-time monitoring and management of all critical technical infrastructure for prevention, maintenance and recovery

The key benefits of the UCC for the citizens of the District include, but are not limited to, the areas of public safety (i.e. security, emergency preparedness and reliability). The UCC improves service delivery to District citizens, increases efficiency and economy through shared resources, leads to faster response from our public safety agencies, and results in better coordination among agencies during emergencies. The consolidated communications center allows a single entity to provide common services citywide and allows stakeholder agencies like MPD and FEMS to focus on their core mission. Since the opening of the UCC, the center has logged a receipt of over 1.6 million calls. Additionally, the contribution to the economic growth and revitalization of this previously disadvantaged enterprise zone is noteworthy. The UCC project created over 170 new positions—142 of those positions were filled with District residents. With the influx of 400 employees in the operational facility, business for local patrons has increased 15 percent and new dining establishments are currently under construction.

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Washington, DC Unified Communications Center (UCC)

A. Project Title

“We can. We will safeguard our great city and our people.” Washington, DC Unified Communications Center



B. Description of Business Problem and Solution

Prior to the initiation of the UCC project, public safety and non-public safety communications functions of the District of Columbia operated from multiple agencies in multiple facilities on separate technology infrastructures. Specifically 9-1-1 communications was split between police and fire facilities, each functioning on different and incompatible telephony, computer-aided dispatch, and radio infrastructure. Non-emergency communications functions were split between the police department and a separate customer service call center, again utilizing different and incompatible technology infrastructure. The Emergency Management Agency, now the Homeland Security and Emergency Management Agency, was housed in yet another facility, utilizing a different technology infrastructure from any of the other communications functions.

The only common feature was the need to upgrade their existing structures and technologies because the existing limitations could no longer support best practices. To address the many proposals to build individual centers, in 1998 city leaders conducted long-term planning to not only improve services but meet future demand. It was the District's IT leadership that developed the concept of creating a unified center that would consolidate all of the call-taking functions in one location.

The UCC consolidates all public safety and non-public safety communications with a common technology infrastructure, into a common state-of-the-art communications facility, supported by fully redundant facility infrastructure (water, and all electrical and mechanical systems). Common technology infrastructure provides full communication and interface of the critical business functions associated with public safety first responders and constituent services.

In addition, the UCC project includes the commissioning of a fully redundant backup center to complement the operations of the UCC.

The UCC includes the following technology systems all integrated for use by multiple agencies to provide maximum efficiency of response in the event of major incidents, natural and man made disasters, and any acts which jeopardize public safety:

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- Telephony System – a state-of-the-art automatic call distribution system, coupled with intelligent workstations, effectively and efficiently routes and processes emergency and non-emergency constituent calls
- Computer Aided Dispatch – a complex call processing application assists the call taker in identifying the calling party and determining the optimal dispatch of public safety personnel while interfacing to various local systems and neighboring jurisdictions for effective coordination of critical public safety information
- Public Safety Radio Systems – radio dispatch systems support the police and fire 800 MHz and 460 MHz radio infrastructure
- Digital Voice Logging / Recording System – systems record and archive all voice and radio traffic for emergency response
- Timing System – system synchronizes all UCC systems to a common clock
- EMA Radio Systems – approximately 55 radio systems are used for coordination with neighboring jurisdictions and to meet various requirements of FEMA
- Audio Visual Systems – A/V systems integrated throughout the facility and across multiple agencies allow for effective and efficient information sharing and event/crisis management
- LAN / WAN / Security Infrastructure – LAN/WAN/Security infrastructure provides secure transmission of voice and data amongst the multiple technology systems
- Integrated Network Monitoring System (INMS) – system provides real-time monitoring and management of all critical technology systems for prevention, maintenance and recovery

US Department of Homeland Security Secretary Michael Chertoff proclaimed that the UCC is, “a great model for the rest of the country.” Secretary Chertoff also admitted he had a case of “operations center envy,” after his first tour of the facility.

C. Significance of the Project to the Improvement of Operation of Government

The UCC project encompasses a new way of doing business for the District of Columbia and a benchmark for excellence in the nation. The centerpiece of the UCC is a 24-hour call center for 9-1-1 (public safety emergency), 3-1-1 (public safety non-emergency), and (202) 727-1000 (non-public safety, non-emergency) calls. There are 265 cross-trained call-takers and dispatchers to respond to all citywide emergency and non-emergency calls using proven state-of-the-art programming and communications systems specifically designed for these functions. Call center systems track all public safety emergency and non-emergency calls, as well as all customer service requests. These systems also report on call center performance and coordinate reporting of traffic control, traffic management, and other citywide communications services and systems.

The UCC technology infrastructure provides the unique ability for the District of Columbia to report every call state for every 9-1-1 call from the time the caller dials 9-1-1 to the time the dispatch event is closed. This is referred to as “end-to-end” reporting. The technology infrastructure, in combination with the facility design, allows for the integration of additional call centers. For example, the Department of Motor Vehicles (DMV) Call Center will relocate to the UCC in the near future. Also, the building's infrastructure was planned to accommodate other expansions. In 2007, the Emergency Management Agency absorbed the city's homeland security division. That additional staff, functions and operations are now located at the UCC as one agency: the Homeland Security and Emergency Management Agency (HSEMA).

The UCC improves service delivery to District citizens, increases efficiency and economy through shared resources, leads to faster response from our public safety agencies, and results in better coordination among agencies during emergencies. The consolidated communications center allows a single entity to provide common services citywide

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and allows stakeholder agencies like MPD and FEMS to focus on their core mission. Lastly, the UCC is an important catalyst for neighborhood revitalization and economic development in a lower economic area of the District of Columbia.

The opening and commissioning of the Unified Communications Center has spearheaded a new era in management and coordination of public safety and non-public safety initiatives. The UCC provides real-time coordination of public safety entities within the District of Columbia and the entire National Capitol Region as a function of the Emergency Operations Center and 9-1-1 and 3-1-1 communications functions residing in the same facility and on common technology infrastructure. In addition, the redundant facility infrastructure ensures that all functions housed in the facility shall remain operational and self-sustained for a minimum of 72 hours.

The common state-of-the-art and integrated technology infrastructure has led to unprecedented emergency response times in the District of Columbia. Since the opening of the UCC, the center has logged receipt of more than 1, 038, 920 calls. Response times have measurably improved. The average of all 9-1-1 and Fire and Emergency Medical Services (FEMS) calls in the District of Columbia answered within five (5) seconds has increased from 94.3 percent to 97.5 percent.

D. Public Value of the Project

The UCC promises a substantial financial and non-financial return on our investment. The UCC is projected to:

- a) Improve residents' access to citywide emergency and non-emergency services;
- b) Coordinate citywide service standards and processes;
- c) Increase accountability for timely delivery of services through new management and organization structures;
- d) Provide better-trained call-takers and more efficient call-taking processes;
- e) Realize cost savings by taking advantage of system operational and lifecycle efficiencies;
- f) Contribute to economic development and community revitalization in the southeast quadrant of the District of Columbia;
- g) Provide a safe, secure and reliable facility to effectively manage emergency events;
- h) Improve the city's emergency preparedness capabilities

Benefits to service recipients, tax payers, and city agencies

Under the motto, "We can. We will safeguard our great city and our people," the UCC has set a new standard of excellence in the realm of public safety and response time to emergency situations. The mission of the UCC is to incorporate proven technology and business processes to achieve the highest levels of workflow efficiency and customer service, thereby raising the confidence of District citizens.

The direct public benefit of the UCC to the citizens is in decreased "end-to-end" response time for public safety first responders. UCC technology manages and tracks "end-to-end" call processing. The primary UCC technology and business processes manage the front-end process associated with this call processing. The front-end process associated with this response time begins with the time of call arrival and ends at the time of call dispatch to public safety operations, or the "call to dispatch" process.

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The UCC project has resulted in improved business processes that reflect public safety best practices, as well as the technology and building infrastructure which support these processes. Improved business processes include, but are not limited to, the following:

- Universal call-taking
- Universal dispatch capabilities
- Performance standards and service level agreements consistent with the aforementioned
- Cross-training and back up operations plans that provide a comprehensive public safety emergency response system
- Staffing employees to workload call volume

The workforce and support infrastructure are key to sustaining improvements in business processes and related goals of the project. The UCC project and facility provides the following components to ensure that the District is able to attract and retain the requisite caliber of communications personnel:

- Defined career ladder;
- Comprehensive training capability;
- Staff dining and fitness facilities;
- Appropriate stress mediation / relaxation areas; and
- Onsite child development center

The UCC has successfully integrated complex technologies across multiple critical agencies and functions, and has provided a workplace and amenities conducive to ensuring the employees responsible for these critical functions are equipped and empowered to be successful.

