

U.S. ARMY CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY

TESTIMONY OF

**LLOYD C. CALDWELL, P.E.
U.S. ARMY CORPS OF ENGINEERS
BEFORE THE**

**COMMITTEE ON VETERANS AFFAIRS
UNITED STATES HOUSE OF REPRESENTATIVES**

ON

**BUILDING A BETTER VA: ASSESSING ONGOING MAJOR
CONSTRUCTION MANAGEMENT PROBLEMS WITHIN THE
DEPARTMENT**

January 21, 2015

Mr. Chairman and Members of the Committee, I am Lloyd Caldwell, Director of Military Programs for the U.S. Army Corps of Engineers (Corps). I provide leadership for execution of the Corps' engineering and construction programs in support of the Department of Defense (DOD), other agencies of the Federal Government in the United States and around the globe. Lieutenant General Thomas Bostick, Chief of Engineers, leads the Corps. Thank you for the opportunity to testify here today.

DOD's construction program utilizes designated Construction Agents, of which the Corps is one; who procure and execute design and construction of projects to deliver the Department's infrastructure requirements authorized by law. The Corps is also known for the Civil Works mission it provides for the Nation, and the Corps' capabilities are perhaps uniquely developed to fulfill both military and civil engineering responsibilities. Interagency collaboration is an important element of the Corps' work, and the Corps provides interagency support as a part of its service to the nation. The Economy Act (31 USC 1535 (b)) provides all necessary authorities for the Corps to assist the Department of Veterans Affairs (VA) with any construction requirements, from minor to major construction, to include completion of the Aurora, Colorado Replacement VA Medical Center (Aurora Hospital).

The Corps fully recognizes the importance of the service of members of the armed forces, the support of their families, and the service of our veterans, in sustaining the strength of our nation. We understand the vital link between the goals of their service and missions and the technical capabilities we provide, from consultation to delivery of infrastructure. As I testified on November 20, 2013, the Corps has significant construction management capabilities and experience delivering medical facilities for our service members and veterans. Today, we have been asked by the Committee to testify on the subject of construction delays and cost overruns involving the VA's major medical projects with a specific focus on the Aurora Hospital.

My testimony will specifically address what actions we are taking in partnership with VA to complete construction of the Aurora Hospital. I will also address the Corps interagency relationships, how our approach to constructing medical facilities can assist

VA and our veterans in delivering major medical construction projects, the Corps' project acquisition process, and our experience with medical facility construction

THE CORPS' RELATIONSHIP WITH THE DEPARTMENT OF VETERANS AFFAIRS

The Corps has an established relationship with the VA, providing support for a broad range of facility construction and maintenance requirements. Authority for the Corps' work with VA is based on the Economy Act, which provides both parties with sufficient authorities to work collaboratively on VA funded projects. During 2007, the Corps of Engineers and the VA formalized its relationship through a Memorandum of Agreement (MOA) for the Corps to provide the VA a broad range of engineering and construction services. In 2011, we signed a new agreement focused on supporting the Veterans Integrated Service Network (VISN) offices with execution of their minor construction and non-recurring maintenance needs, and in 2014, we signed an agreement to support the National Cemetery Administration (NCA) for its minor construction requirements.

Prior to fiscal year 2007, Corps execution support to VA was at or below \$2 million. This workload has grown substantially in subsequent years as follows:

Fiscal Year	Execution Amount (\$ millions)
2007	7
2008	14
2009	108
2010	348
2011	377
2012	340
2013	239
2014	156

As execution funds have increased over the years, so has the collaborative relationship between the Corps and VA. Corps Headquarters has an established relationship with the VA's Office of Construction and Facilities Management. Our regional and local

offices have also developed relationships with each of the 21 VISN offices around the country. In recent years, the Corps has managed work at 74 different VA facilities nationwide. Whether and how a VISN incorporates the Corps services into its projects is at the discretion of each VISN.

As a result of our relationship the Corps has executed projects and assistance for the VA valued at \$1.59 billion since 2007. We have also initiated \$49 million in new projects in support of the VA's NCA requirements. The Corps has not executed any of VA's major construction projects since 1956 when we supported the VA's post-World War II hospital construction program.

One successful example of our efforts in supporting VA with their minor construction program is the Post Traumatic Stress Disorder (PTSD)/Mental Health Research Addition at the Charleston, South Carolina VA Medical Center completed in 2014. The project provided a one story, 16,000 square foot building at a cost of \$8.2 million.

VA WORKING WITH THE CORPS TO COMPLETE CONSTRUCTION OF THE AURORA HOSPITAL

In December 2014, the VA requested our assistance to complete the Aurora Hospital project. The Corps is working with VA to develop a new interagency agreement that would transition the project to the Corps. We are in the process of assessing the requirements of this project and working with VA to finalize the agreement. We must determine the amount of work that has been completed and develop a scope of work and cost estimate for the remaining construction activities. We have visited the site and have formed a team of technical experts that will be reviewing the completed work and contract documents. While these actions are occurring, we are also advising the VA in the management of their interim construction contract with the contractor, Kiewit-Turner. This approach will continue progress on the project while we prepare to assume project responsibilities. The existing authorities under the Economy Act are adequate for the Corps to reach an interagency agreement with VA and take over the role of Construction Agent of the Aurora Hospital. While the Corps will assume a major role in the construction execution for Aurora Hospital, the VA, as the project's proponent, is still responsible for project requirements, resourcing and facility transition to full operations.

By using our project delivery process, we are confident that the Corps, acting as Construction Agent, can complete construction of the Aurora Hospital for VA and meet the needs of our veterans and their families.

FACILITIES DEVELOPMENT PROCESS

Regardless of the nature of the facility, the Corps has developed and implemented processes and capabilities for design and construction, which have been refined over many years. Our project management business process brings together the range of diverse professionals and activities required of a successful project, which includes our design, construction, acquisition, and project management professionals. Success across the normal project life cycle depends upon early involvement of all team members to understand the overall project objectives and to plan the approach to execute the project from design through construction. The following are the four major phases of the facilities development process:

1. Planning and Programming;
2. Project Development and Design;
3. Construction; and
4. Operation and Maintenance.

Each of these elements represents unique skills, involving multi-disciplined teams who account for project scope, delivery schedule, and ultimate cost as team members work collaboratively with one another. These basics must be managed concurrently, in a continuous cycle that occurs throughout the life of a project.

The responsibility for Planning and Programming for construction projects rests with the service or agency requiring the facility. In the case of VA medical facilities, it is VA's responsibility to determine programming requirements and prepare budget requests to meet the medical needs of our veterans and their families. This role will remain with VA when the Corps acts in the role of Construction Agent. The ultimate success of a project depends upon early development of the scope and acquisition plans of action, including validation of the scope and cost estimates. The Corps in this phase is in an

assistance role; the proponent agency retains responsibility for the master plan and pre-design capital planning work.

Project Development and Design work begins as requirements are being developed. It engages all stakeholders and involves more than facility design. We also define and align requirements that may compete for cost, scope, or schedule objectives. Plans for acquisition, work phasing, and project delivery are agreed upon early, and before construction. We will determine the project acquisition processes, which will influence the design process and development of the solicitation. For medical facilities, the medical equipment requirements may be extensive, so decisions are made among the team for the manner of acquisition of medical equipment.

Construction is a team effort from design through construction to include clinicians and medical service personnel of the Using Agency for medical facilities. During construction, we partner with the private sector construction contractor and the government management team. Frequent, periodic meetings ensure open lines of communication to enable clear understanding of what all parties need throughout the project's life.

A governance approach that involves oversight from the job site to Corps leadership ensures early recognition, leadership awareness, and decision-maker involvement in resolving problems. A series of structured control processes, implemented throughout the organization, are designed to identify and evaluate issues with our partners as they arise and minimize the time it takes to address and resolve them.

Training is also a vital component in maintaining professional standards and keeping up to date on current practices. We maintain educational courses and require or encourage professional credentialing in the processes and disciplines required for our mission. We provide specialized technical training across a broad range of subjects, providing continuous learning, essential to maintain the highest levels of expertise in engineering and construction throughout the Corps. We also draw heavily from the Defense Acquisition University, its certification and continuing educations programs to maintain contracting competencies.

Budget and schedule risk is inherent in executing any construction projects, and medical facilities are among the most complex facilities we construct and deliver on behalf of DOD. They require close, frequent coordination with a large number of stakeholders, often with divergent interests and requirements. They require exacting technical design and construction standards, both of which must be carefully managed. Moreover, they are subject to changing requirements due to evolving medical technology – even during construction. We manage the challenges posed by those risks, and we seek to minimize the cost and time growth risk which complex medical facility construction may face.

To assure the standards and criteria of the Defense health system, we established specialized medical infrastructure capabilities and employ them across the enterprise to assist us in delivering medical projects. Our Medical Center of Expertise at Fort Belvoir, Virginia, applies specialized knowledge to address demanding health care facility requirements. It provides a full range of medical facility design, construction, outfitting, commissioning, and medical maintenance capabilities that support the Defense Health Agency. The Center's staff includes subject matter experts in medical facility design and construction, serve as technical consultants, and draw on architect-engineer firms experienced in medical facility design. They participate in every phase of project delivery, from requirements development to project close out, and ensure we meet the full range of health care facility standards.

The Corps has a long history of executing some of the nation's most challenging construction projects and programs, whether through our Military Missions or Civil Works responsibilities. The past 13 years have been especially demanding as we have simultaneously provided support to operations in Iraq, Afghanistan and to DOD as it transforms and realigns. During this period, the Corps physically completed 2,499 military construction projects with a combined programmed amount of \$52 billion. The Corps has delivered, or is in the process of designing and constructing, a full range of medical facilities for DOD, to include very large hospitals valued near a billion dollars that are capable of delivering world-class medical services for the members of our

Armed Forces and their families. A summary of some of the recently completed and ongoing Corps work of significant medical facilities follows.

Location	Description	Delivery	Authorization
Fort Belvoir, VA	New Hospital completed	2011	\$1.03 billion
Fort Sam Houston, TX	Hospital Addition completed	2011	\$802 million
Fort Benning, GA	New Hospital completed	2014	\$475 million
Fort Riley, KS	New Hospital under construction	2015	\$404 million
Fort Bliss, TX	New Hospital under construction	2016	\$966 million
Rhine Ordnance Barracks, Germany	New Hospital under construction	2022	\$990 million

Our relationship with VA is strong and is growing. We look forward to working with VA as Construction Agent to complete the Aurora Hospital project and to continue our partnership and collaboration on future major medical construction projects. We also acknowledge the solemn duty to care for our veterans and will continue to support those efforts with our most capable teams as we continue to develop our support and assistance relationships with the VA.

Mr. Chairman, this concludes my statement. Thank you for allowing me to be here today to discuss the Corps' capabilities and our work to assist VA. I would be happy to answer any questions you or other Members may have.