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VA CONSTRUCTION

Additional Actions Needed to Decrease Delays and Lower Costs of Major Medical-Facility Projects

Statement of Lorelei St. James, Director, Physical Infrastructure





United States Government Accountability Office Washington, DC 20548

Chairman Coffman, Ranking Member Kirkpatrick, and Members of the Subcommittee:

I am pleased to be here today to discuss our recent work examining cost increases and schedule delays at the Department of Veterans Affairs' (VA) major medical-facility construction projects. According to VA's fiscal year 2013 budget submission to Congress, the Veterans Health Administration's (VHA) existing infrastructure does not fully align with the current health care needs of the veteran population. To help address this situation, VA has 50 major medical-facility projects under way, including new construction and the renovation of existing medical facilities, at a cost of more than \$12 billion. Although VA has taken steps to improve its process for managing these construction projects, opportunities exist for VA to improve its efforts.

This testimony discusses VA construction management issues, specifically (1) the extent to which the cost, schedule, and scope for selected new medical-facility projects have changed since they were submitted to Congress and the reasons for these changes, (2) actions VA has taken to improve its construction management practices, and (3) the opportunities that exist for VA to further improve its management of the costs, schedule, and scope of these construction projects. This testimony is based on our April 2013 report. In that report, we discuss VA's current 50 major medical-facility projects, including the original cost estimates and completion dates and the projects' current status according to November 2012 data. To understand issues involving costs estimates

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¹GAO, VA Construction: Additional Actions Needed to Decrease Delays and Lower Costs of Major Medical-Facility Projects, GAO-13-302 (Washington, D.C.: April 4, 2013).

²U.S. Department of Veterans Affairs, *Fiscal Year 2013 Budget Request. Construction IV* (Washington, D.C.: 2012).

³The term "major medical-facility project" means a project for the construction, alteration, or acquisition of a medical facility involving the total expenditure of more than \$10 million. See 38 U.S.C. § 8104. These projects cost at least \$10 million, some in the hundreds of millions of dollars. The project types include new construction, renovation of existing structures, expansion, or a combination of types. The total number of major VA medical-facility projects is based on agency data from November 2012.

⁴We identified reasons for selected facilities' overall cost and schedule changes, but were not able to identify the extent to which specific reasons changed these costs and schedules, unless specifically noted.

and completion dates, we took a more detailed review of four VA medical-facility projects in Las Vegas, Orlando, New Orleans and Denver. We also reviewed and analyzed construction documents, VA's *Strategic Plan Fiscal Years 2011 to 2015*, and other relevant documents. We interviewed officials from VA; veterans support organizations; architectural and engineering firms; general contractor construction firms; and construction management firms. The work on which this statement is based was conducted from April 2012 to April 2013 in accordance with generally accepted government auditing standards. For a more detailed explanation of our scope and methodology, see the April 2013 report.

In summary, we recognize that some cost increases and schedule delays result from factors beyond VA's control; however, our review of VA's largest projects indicated weaknesses in VA's construction management processes also contributed to cost increases and schedule delays. Given that VA is currently involved in 50 major medical-facility construction projects, including four large medical centers, VA should take further action to improve its management of costs, schedule, and scope of these projects.

Cost Increases and Schedule Delays at the Four Largest Projects Occurred for a Variety of Reasons

Cost Increases and Schedule Delays

Costs increased and schedules were delayed considerably for VA's four largest medical-facility construction projects, when comparing November 2012 construction project data with the cost and schedule estimates first submitted to Congress. Cost increases ranged from 59 percent to 144 percent,⁵ representing a total cost increase of nearly \$1.5 billion and an

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⁵According to the Office of Management and Budget (OMB), federal agencies should keep a contingency fund of 10 to 30 percent above total estimated costs to address increased costs on construction projects. However, this guidance applies after construction has begun, and many of the cost increases we observed occurred before that time. The construction contractor is generally responsible for cost increases and schedule overruns under the terms of the fixed-price contract. OMB Circular No. A–11, Appendix 8 (2012).

average increase of approximately \$366 million per project. The schedule delays ranged from 14 to 74 months with an average delay of 35 months per project (see table 1).

Table 1: Veterans Affairs Major Medical-Facility Projects Cost Increases and Schedule Delays, as of November 2012

| Project location | Initial total estimated costs | Total estimated costs | Percentage increase | Initial estimated completion date | Current estimated completion date | Number of months extended | Total estimated years to complete ^a |
|---------------------|-------------------------------|-----------------------------|------------------------|-----------------------------------|--|---------------------------|---|
| Las Vegas | \$325 million | \$585 million | 80 | April 2009 | June 2014 | 74 | 10.25 |
| Orlando | \$254 million | \$616 million | 143 | April 2010 | July 2013 ^b | 39 | 8.5 |
| Denver | \$328 million | \$800 million | 144 | February 2014 | April 2015 | 14 | 10.5 |
| New Orleans | \$625 million | \$995 million | 59 | December 2014 | February 2016 | 14 | 8.5 |

Source: GAO Analysis of VA data.

^aThe column titled "total estimated years to complete" is reported to the nearest quarter year and is calculated from the time VA approved the architecture and engineering firm to the current estimated completion date. We calculated the "number of months extended" column by counting the months from the initial estimated completion date to the current estimated completion date, as reported by VA. According to VA, the dates in the initial estimated completion dates are from the initial budget prospectus, which assumed receipt of full construction funding within 1 to 2 years after the budget submission. In some cases, construction funding was phased over several years and the final funding was received several years later. Naval Facilities Engineering Command officials we spoke with told us that historically, their medical facility projects take approximately 4 years from design to completion. We calculated the percentage change in cost by using the initial total estimated costs and total estimated costs, as reported by VA.

^bVA provided time extensions to the Orlando, Florida contractor extending the contract completion date to July 2013. Because of an ongoing dispute between VA and the general contractor regarding performance of the contract in Orlando, VA issued a "show-cause" notice to the contractor on January 31, 2013. The show-cause notice provides the contractor an opportunity to present any facts relevant to the dispute. As of the publication of this testimony, VA has yet to determine the next steps to resolve this matter. July 2013 is considered the current completion date provided to us by VA officials. However, the general contractor disagrees with this date and has estimated that it will be spring 2014.

Of the remaining 46 major medical-facility projects, 26 are under construction or were recently completed. Of these 26, half have experienced cost increases, but the other half experienced either no change in costs or a decrease in costs. Nineteen of 24 construction projects currently under construction or recently completed have experienced schedule delays.⁶

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⁶VA did not provide schedule data for both initial estimated completion date and current estimated completion date for two projects under construction.

In commenting on a draft of our April 2013 report, VA contends that using the initial completion date from the construction contract would be more accurate than using the initial completion date provided to Congress; however, using the initial completion date from the construction contract would not account for how VA managed these projects prior to the award of the construction contract. Cost estimates at this earlier stage should be as accurate and credible as possible because Congress uses these initial estimates to consider authorizations and make appropriations decisions. We used a similar methodology to estimate changes to cost and schedule of construction projects in a previous report issued in 2009 on VA construction projects. We believe that the methodology we used in our April 2013 and December 2009 report on VA construction provides an accurate depiction of how cost and schedules for construction projects can change from the time they are first submitted to Congress.⁷ It is at this time that expectations are set among stakeholders, including the veterans' community, for when projects will be completed and at what cost.

Reasons for Cost Increases and Schedule Delays at VA's Four Largest Projects and Related Scope Changes

At each of the four locations we reviewed, different factors contributed to cost increases and schedule delays:

- Changing health care needs of the local veteran population changed the scope of the Las Vegas project. VA officials told us that the Las Vegas Medical Center was initially planned as an expanded clinic co-located with Nellis Air Force Base. However, VA later determined that a much larger medical center was needed in Las Vegas after it became clear that an inpatient medical center shared with the Air Force would be inadequate to serve the medical needs of local veterans.
- Decisions to change plans from a shared university/VA medical center to a stand-alone VA medical center affected plans in Denver and New Orleans. For Denver and New Orleans, VA revised its original plans for shared facilities with local universities to stand-

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⁷GAO, VA Construction: VA is Working to Improve Initial Project Cost Estimates, but Should Analyze Cost and Schedule Risks, GAO-10-189 (Washington, D.C.: Dec. 14, 2009).

- alone facilities after proposals for a shared facility could not be finalized.
- Changes to the site location by VA delayed efforts in Orlando. In Orlando, VA's site location changed three times from 2004 to 2010. It first changed because VA, in renovating the existing VA hospital in Orlando, realized the facility site was too small to include needed services. However, before VA could finalize the purchase of a new larger site, the land owner sold half of the land to another buyer, and the remaining site was again too small.
- Unanticipated events in Las Vegas, New Orleans, and Denver also led to delays. For example, VA officials at the Denver project site discovered they needed to eradicate asbestos and replace faulty electrical systems from pre-existing buildings. They also discovered and removed a buried swimming pool and found a mineral-laden underground spring that forced them to continually treat and pump the water from the site.

VA Has Taken Steps to Improve Its Construction Management Practices

VA has made improvements in its management of major medical-facility construction projects, including creating a construction-management review council. In April 2012, the Secretary of Veterans Affairs established the Construction Review Council to serve as the single point of oversight and performance accountability for the planning, budgeting, executing, and delivering of VA's real property capital-asset program. The council issued an internal report in November 2012 that contained findings and recommendations that resulted from meetings it held from April to July 2012. The report revealed that the challenges identified on a project-by-project basis were not isolated incidents but were indicative of systemic problems facing VA, and made several recommendations to address these problems. But VA has not yet developed specific guidance or instructions for how to implement the recommendations.

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⁸The Construction Review Council was comprised of officials from the VA, including the secretary, deputy secretary, chief of staff, under secretaries, and assistant secretaries, as well as key leaders across the department. The Secretary of VA chaired nine meetings from April 18 through June 15, 2012, to review the VA construction program and identify challenges that led to changes in scope, cost over-runs, and scheduling delays of major projects.

⁹VA, *The Construction Review Council Activity Report* (Washington, D.C.: November 2012).

VA has taken some other actions to improve construction project management. For example, VA has collaborated with other federal agencies involved in medical facilities construction to tap their experience, and convened a construction industry forum to communicate about ways to improve medical facilities construction practices. In addition, VA has taken steps to involve construction contractors earlier in some projects to allow coordination with the architectural and engineering firms in designing and planning a project.

Opportunities Exist for VA to Further Improve Its Construction Management Practices

Although VA has made improvements in its management of major medical-facility construction projects, many of these projects continue to experience cost increases and schedule delays. We recognize that some cost increases and schedule delays result from factors beyond VA's control; however, our review of VA's four largest projects indicates that weaknesses in VA's construction management processes—in particular, those listed below—also contributed to cost increases and schedule delays:

Using Medical Equipment Planners

VA officials have emphasized that they need the flexibility to change their heath care processes in response to the development of new technologies, equipment, and advances in medicine. 10 Given the complexity and sometimes rapidly evolving nature of medical technology, many health care organizations employ medical equipment planners to help match the medical equipment needed in the facility to the construction of the facility. Federal and private sector stakeholders during our review reported that medical equipment planners have helped avoid schedule delays. VA officials told us that they sometimes hire a medical equipment planner as part of the architectural and engineering firm services to address medical equipment planning. However, we found that for costly and complex facilities, VA does not have guidance for how to involve medical equipment planners during each construction stage of a major hospital and has sometimes relied on local VHA staff with limited experience in procuring medical equipment to make medical-equipmentplanning decisions. In Orlando, medical equipment specifications changed several times and led to cost increases of at least \$14 million in addition to schedule delays, as these issues forced VA to suspend

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¹⁰VA, Strategic Plan Refresh: FY2011-FY2015, (Washington, D.C).

construction until the issues were resolved. In our April 2013 report, we recommended that the Secretary of VA develop and implement agency guidance to assign of medical equipment planners to major medical construction projects. VA agreed and said it planned to address this recommendation.

Sharing Information on the Roles and Responsibilities of VA's Construction-Management Staff

Construction of large medical facilities involves numerous staff from multiple VA organizations. Officials from the Office of Construction and Facilities Management (CFM) stated that during the construction process, effective communication is essential and must be continuous and involve an open exchange of information among VA staff and other key stakeholders. 11 However, we found that the roles and responsibilities of CFM and VHA staff are not always well communicated and that it is not always clear to general contracting firms which VA officials hold the authority for making construction decisions. This can cause confusion for contractors and architectural and engineering firms, ultimately affecting the relationship between VA and the general contractor. For example, contractor officials at one site said that VA's project manager directed them to defer the design of specific rooms until medical equipment was selected for the facility; however, VA's central office then directed the contractor to proceed with designing the rooms. This conflicting direction from VA could require the contractor to redesign the space, further expending project resources. Participants from VA's 2011 industry forum also reported that VA roles and responsibilities for contracting officials were not always clear and made several recommendations to VA to address this issue. In April 2013, we recommended that the Secretary of VA develop and disseminate procedures for communicating—to contractors—clearly defined roles and responsibilities of the VA officials who manage major medical-facility projects, particularly those in the change-order process. VA agreed and stated they had actions underway to improve communication involving roles and responsibilities.

Managing the Change-Order Process

Most construction projects require, to varying degrees, changes to the facility design as the project progresses, and organizations typically have a process to initiate and implement these changes through change

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¹¹VA, Construction Primer (Washington, D.C.: January 2013).

orders. Federal regulations¹² and agency guidance¹³ state that change orders must be made promptly, and that there be sufficient time allotted for the government and contractor to agree on an equitable contract adjustment. VA officials at the sites we visited stated that change orders that take more than a month from when they are initiated to when they are approved can result in schedule delays, and officials at two federal agencies that also construct large medical projects told us that it should not take more than a few weeks to a month to issue most change orders. 14 However, officials at two sites, New Orleans and Orlando, said that it was common for VA to take 6 months to process a change order, even though VA has directed its staff to eliminate or minimize delays. 15 Processing delays may be caused by the difficulty involved in VA's and contractors' coming to agreement on the costs of changes and the multiple levels of review required for many of VA's change orders. In April 2013, we recommended that the Secretary of VA issue and take steps to implement guidance on streamlining the change-order process based on the findings and recommendations of the Construction Review Council. 16 VA concurred with our recommendation and was reviewing the options proposed by the Construction Review Council to streamline the changeorder process.

We provided a draft of our April 2013 report for VA for review and comment. In its written comments, VA concurred with our recommendations.

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¹²⁴⁸ C.F.R. § 43.201

¹³VA, VA *Resident Engineer Handbook*, "Chapter 3: Major Construction: Contract Changes" (3.24) (Washington, D.C.)

¹⁴Specifically, we interviewed the U.S. Army Corps of Engineers and Naval Facilities Engineering Command. We recognize that the Department of Veterans Affairs serve different populations in the defense community—active duty military personnel and veterans, respectively. However, these organizations construct similar medical facilities, in addition to abiding by federal government regulations for construction projects.

¹⁵Although officials at one of these sites said that VA's timeliness of the change order process has improved, they noted that a change order still takes an average of 2 to 3 months, indicating to them that further improvement is needed.

¹⁶GAO-13-302.

Chairman Coffman and Ranking Member Kirkpatrick, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

Contacts and Acknowledgments

If you have any questions about this testimony, please contact Lorelei St. James at (202) 512-2834 or stjamesl@gao.gov. Other key contributors to this testimony include are Ed Laughlin (Assistant Director), Nelsie Alcoser, George Depaoli, Raymond Griffith, Joshua Ormond, Amy Rosewarne, James Russell, Sandra Sokol, and Crystal Wesco.

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