Construction Programs

On May 5, 2008, the Department of Veterans Affairs released the final results of its Capital Asset Realignment for Enhanced Services (CARES) business plan study for Boston. The decision to keep the four Boston-area medical campuses open was the culmination of many years of work and tens of millions of dollars as it marked the final step of the CARES planning process.

CARES—VA's data-driven assessment of its current and future construction needs—gave the Department a long-term road map and has helped guide its capital planning process over the past few fiscal years. CARES showed a large number of significant construction priorities that would be necessary for VA to fulfill its obligation to this nation's veterans, and over the past several fiscal years the Administration and Congress have made significant inroads in funding these priorities. Since FY 2004, $4.9 billion has been allocated for these projects. Of these CARES-identified projects, VA has completed 5, and another 27 are currently under construction. It has been a significant, but necessary, undertaking and VA has made slow, but steady, progress on these critical projects.

The challenge for VA in the post-CARES era is that there are still numerous projects that need to be carried out, and the current backlog of partially funded projects that CARES has identified is large, too. This means VA is going to continue to require significant appropriations for the major and minor construction accounts to live up to the promise of CARES.

VA's most recent Asset Management Plan[191] provides an update of the state of CARES projects—including those only in the planning or acquisition process. Appendix E of the plan shows a need for future appropriations of $2.195 billion to complete these projects.

Approved Construction Projects	
Project	**Funding ($ in Thousands)**
Pittsburgh	$62,400
Orlando	$462,700
San Juan	$91,620
Denver	$580,900
Bay Pines	$156,800
Los Angeles	$103,864
Palo Alto	$412,010
St. Louis	$122,500
Tampa	$202,600
TOTAL	**$2,195,394**

The $2.195 billion represents only the backlog of current approved construction projects. It also does not reflect the additional $401 million Congress gave VA as part of the FY 2009 appropriation, which did not earmark specific construction projects.

Meanwhile, VA continues to identify and reprioritize potential major construction projects. These priorities, which are assessed using the rigorous methodology that guided the CARES decisions, are released in the VA's annual "5-Year Capital Plan," which is included in the Department's budget submission. The most recent one was included in Volume IV and is available on the VA website.[192] Pages 7–12 of that document show the priority scoring of projects. Last year's budget request sought funding for only three of the top-scored projects. No funding was requested for any other new project, including those in Seattle, Dallas, Louisville, or Roseburg, Oregon. In addition to the already-identified needs from that table, pages 7–86 show long list of potential major construction projects the Department plans to evaluate from now through FY 2013. These 122 potential projects demonstrate the continued need for VA to upgrade and repair its aging infrastructure and that continuous funding is necessary for not only the backlog of projects, but also to keep VA viable for today's and future veterans.

In a November 17, 2008, letter to the Senate Veterans' Affairs Committee, Secretary Peake said "the Department estimates that the total funding requirement for major medical facility projects over the next five years would be in excess of $6.5 billion."

It is clear that VA needs a significant funding for its construction priorities; its own words and studies show this.

Major Construction Account Recommendations	
Category	**Recommendation ($ in Thousands)**
Major Medical Facility Construction	$900,000
NCA Construction	$80,000
Advance Planning	$45,000
Master Planning	$20,000
Historic Preservation	$20,000
Miscellaneous Accounts	$58,000
TOTAL	**$1,123,000**

Major Construction Account recommendations shown in the table are as follows:

- Veterans Health Administration (VHA) Facility Construction—this amount would allow VA to continue addressing the $2 billion backlog of partially funded construction projects. Depending on the stages and ability to complete portions of the projects, any additional money could be used to fund new projects identified by VA as part of its prioritization methodology in its 5-Year Capital Plan.
- National Cemetery Administration (NCA) Construction—pages 7–143 of the 5-Year Capital Plan detail numerous potential major construction projects for the National Cemetery Administration throughout the country. This level of funding would allow VA to begin construction on at least three of its scored priority projects.
- Advance Planning—this amount helps develop the scope of the major medical facility construction projects as well as identify proper requirements for their construction. It allows VA to conduct necessary studies and research similar to planning processes in the private sector.
- Master Planning—a description of *The Independent Budget* (*IB)* request follows later in the text.
- Historic Preservation—a description of the *IB* request follows later in the text.
- Medical Research Infrastructure—a description of the *IB* request follows later in the text.
- Miscellaneous Accounts—these include the individual line items for such accounts as asbestos abatement, the judgment fund, and hazardous waste disposal. The *IB* recommendation is based upon the historic level for each of these accounts.

Minor Construction Account Recommendations	
Category	**Funding ($ in Thousands)**
Veterans Health Administration	$550,000
Medical Research Infrastructure	$142,000
National Cemetery Administration	$100,000
Veterans Benefits Administration	$20,000
Staff Offices	$15,000
TOTAL	**$827,000**

Minor Construction Account recommendations are:

- VHA—pages 7–95 of VA's capital plan reveal hundreds of already-identified minor construction projects that update and modernize VA's aging physical plant, ensuring the health and safety of veterans and VA employees. Additionally, a great number of minor construction projects address maintenance deficiencies identified in the facility condition assessment, the backlog of which was nearly $5 billion at the start of FY 2008 (page 7–64).
- Medical Research Infrastructure—a description of the *IB* request follows later in the text.
- NCA—pages 7–145 of the capital plan identify numerous minor construction projects throughout the country, including the construction of several columbaria, installation of crypts, and landscaping and maintenance improvements. Some of these projects could be combined with VA's new NCA nonrecurring maintenance efforts.
- Veterans Benefits Administration—pages 7–126 of the capital plan lists several minor construction projects in addition to the leasing requirements VBA needs. This funding also includes $2 million transferred yearly for the security requirements of its Manila office.
- Staff Offices—Pages 7–166 list numerous potential minor construction projects related to staff offices, including increased space and numerous renovations for the VA Office of Inspector General.

[191]www.va.gov/oaem/docs/FY08AssetManagementPlan.pdf.
[192]www.va.gov/budget/summary/2009/index.htm.

CONSTRUCTION ISSUES

Inadequate Funding and Declining Capital Asset Value

The Department of Veterans Affairs must protect against deterioration of its infrastructure and a declining capital asset value

The past decade of delayed and underfunded construction budgets has meant that VA has not adequately recapitalized its facilities. Recapitalization is necessary to protect the value of VA's capital assets through the renewal of the physical infrastructure. This ensures safe and fully functional facilities long into the future. VA's facilities have an average age of more than 55 years, and it is essential that funding be increased to renovate, repair, and replace these aging structures and physical systems.

As in past years, *The Independent Budget* veterans service organizations (IBVSOs) cite the Final Report of the President's Task Force to Improve Health Care Delivery for Our Nation's Veterans (PTF). It found that from 1996–2001, VA's recapitalization rate was just 0.64 percent. At this rate, VA's structures would have an assumed life of 155 years.

The PTF cited a PricewaterhouseCoopers' study[193] of VA's facilities management programs that found that to keep up with industry standards in the private sector and to maintain patient and employee safety and optimal heath-care delivery, VA should annually spend a minimum of 5 percent to 8 percent of plant replacement value (PRV) on its total capital budget.

The FY 2008 VA Asset Management Plan[194] provides the most recent estimate of VA's PRV. Using the guidance of the federal government's Federal Real Property Council, VA's PRV is just over $85 billion.

Accordingly, using that 5 percent to 8 percent standard, VA's capital budget should be between $4.25 and $6.8 billion per year in order to maintain its infrastructure. VA's capital budget request for FY 2009—which includes major and minor construction, maintenance, leases, and equipment—was just $3.6 billion. The IBVSOs greatly appreciate that Congress increased funding above that level with an increase over the Administration request of $750 million in Major and Minor Construction alone. That increased amount brought the total capital budget in line with industry standards, and we strongly urge that these targets continue to be met and we would hope that future VA requests use these guidelines as a starting point without requiring Congress to push them past the target.

Recommendation:

Congress and the Administration must ensure that there are adequate funds for VA's capital budget so that VA can properly invest in its physical assets to protect their value and to ensure that it can continue to provide health care in safe and functional facilities long into the future.

[193]Final Report, Independent Review of Office of Facility Management, PriceWaterhouse, June 17, 1998.
[194]www.va.gov/oaem/docs/FY08AssetManagementPlan.pdf., p. 26.

Increased Spending on Nonrecurring Maintenance:

The deterioration of many VA properties requires increased spending on nonrecurring maintenance.

For years, *The Independent Budget* veterans service organizations (IBVSOs) have highlighted the need for increased funding for the nonrecurring maintenance (NRM) account. NRM consists of small projects that are essential to the proper maintenance and preservation of the lifespan of VA's facilities. NRM projects are one-time repairs, such as maintenance to roofs, repair and replacement of windows and flooring, or minor upgrades to the mechanical or electrical systems. They are a necessary component of the care and stewardship of a facility.

These projects are vitally important. If left unrepaired, they can exact a significant toll on a facility, leading to more costly repairs in the future and the potential of a need for a minor construction project. Beyond the fiscal aspects, facilities that fall into disrepair can create access difficulties and impair patient and staff health and safety. If the needs develop into a larger construction project because early repairs were not done, it creates an even larger inconvenience for veterans and staff.

The industry standard for medical facilities is for managers to spend from 2 percent to 4 percent of plant replacement value (PRV) on upkeep and maintenance. The 1998 PricewaterhouseCoopers[195] study of VA's facilities management practices argued for this level of funding, and previous versions of VA's own Asset Management Plan have agreed that this level of funding would be adequate.

The most recent estimate of VA's PRV is from the FY 2008 Asset Management Plan.[196] Using the standards of the federal government's Federal Real Property Council (FRPC), VA's PRV is just over $85 billion. Accordingly, to fully maintain its facilities, VA needs an NRM budget of at least $1.7 billion. This number would represent a doubling of VA's budget request from FY 2009, but it is in line with the total NRM budget when factoring in the increases Congress gave in the appropriations bill and the targeted funding included in the supplemental appropriations bills.

Increased funding is required not just to fill current maintenance needs and levels, but also to reduce the extensive backlog of maintenance requirements VA has identified. VA monitors the condition of its structures and systems through the Facility Condition Assessment (FCA) reports. VA surveys each medical center periodically, giving each building a thorough assessment of all essential systems. Systems are assigned a letter grade based upon the age and condition of various systems, and VA gives each component a cost for repair or replacement.

Most of these repairs and replacements are managed through the NRM program, although the large increases

in minor construction over the last few years have helped VA to address some of these deficiencies. VA's 2009 5-Year Capital Plan discusses FCAs and acknowledges the significant backlog, noting that in FY 2007, the number of high-priority deficiencies—those with ratings of D or F—had replacement and repair costs greater than $5 billion. Even with the increased funding of the past few years, VA estimates that the cost for repairing or replacing the high-priority deficiencies is more than $4 billion. VA uses the FCA reports as part of its FRPC metrics. It calculates a facility condition index, which is the ratio of the cost of FCA repairs to the cost of replacement. According to the FY 2008 Asset Management Plan, this metric has gone backward from 82 percent in 2006 to just 68 percent in 2008. VA's strategic goal is 87 percent, and for it to meet that, it would require a sizable investment in NRM and minor construction.

Given the low level of funding the NRM account has historically received, the IBVSOs are not surprised at the metrics or the dollar cost of the FCA deficiencies. The 2007 "National Roll-Up of Environment of Care Report,"[197] which was conducted in light of the shameful maintenance deficiencies found at the Department of Defense's Walter Reed Army Medical Center, further proves the need for increased spending on this account. Maintenance has been neglected for far too long, and for VA to provide safe, high-quality health care in its aging facilities, it is essential that more funding be allocated for this account.

The IBVSOs also have concerns with how NRM funding is actually apportioned. Because it falls under the Medical Care account, NRM funding has traditionally been apportioned using the Veterans Equitable Resource Allocation (VERA) formula. This model works when distributing health-care dollars, targeting funding to those areas with the greatest demand for health care. When dealing with maintenance needs, however, this same formula may actually intensify the problem, moving money away from older hospitals, such as in the Northeast, to newer facilities where patient demand is greater, even if the maintenance needs are not as high. We were happy to see that the conference reports to the VA appropriations bills required NRM funding to be apportioned outside the VERA formula, and we would hope that this continues into the future.

Another issue related to apportionment of funding came to light in a May 2007 Government Accountability Office (GAO) report that found that the bulk of NRM funding is not actually apportioned until September, the final month of the fiscal year.[198] In September 2006, the GAO found that VA allocated 60 percent of that year's NRM funding. This is a shortsighted policy that impairs VA's ability to properly address its maintenance needs, and because NRM funding is year-to-year, this practice could lead to wasteful or unnecessary spending as managers attempt to hastily spend their apportionment before forfeiting it. We cannot expect VA to perform a year's worth of maintenance in a month. It is clearly poor policy and not in the best interest of veterans. The IBVSOs believe that Congress should consider allowing some NRM money to be carried over from one fiscal year to another. Whereas we would hope that this would not resort to medical centers hoarding funding, it could result in more efficient spending and better planning than the current situation in which hospital managers sometimes have to spend a large portion of maintenance funding before losing it at the end of the fiscal year.

Recommendations:

VA must dramatically increase funding for nonrecurring maintenance in line with the 2 percent to 4 percent total that is the industry standard so as to maintain clean, safe, and efficient facilities. VA also requires additional maintenance funding to allow the department to begin addressing the substantial maintenance backlog of facility condition assessment–identified projects.

Portions of the nonrecurring maintenance account should be continued to be funded outside of the Veterans Equitable Resource Allocation formula so that funding is allocated to the facilities that actually have the greatest maintenance needs.

Congress should consider the strengths of allowing VA to carry over some maintenance funding from one fiscal year to another so as to reduce the temptation some VA hospital managers have of inefficiently spending their NRM money at the end of a fiscal year for fear of losing it.

[195]Final Report, Independent Review of Office of Facility Management, PriceWaterhouse, June 17, 1998.
[196]www.va.gov/oaem/docs/FY08AssetManagementPlan.pdf., p. 26.
[197]www1.va.gov/opa/pressrel/docs/Environment_of_Care_Roll-up.pdf.
[198]www.gao.gov/new.items/d07410r.pdf.

Maintain VA's Critical Health Infrastructure:

The Independent Budget ***veterans service organizations (IBVSOs) are concerned with VA's recent attempts to back away from the capital infrastructure blueprint laid out by the Capital Asset Realignment for Enhanced Services (CARES) plan, and we are worried that its emerging plan to begin widespread leasing and contracting for inpatient services might not meet the needs of veterans.***

The Department of Veterans Affairs acknowledges three main challenges with its capital infrastructure projects: First, they are costly. According to a March 2008 briefing given to veterans service organizations, over the next five years VA would need $2 billion per year for its capital budget. Second, there is a large backlog of partially funded construction projects. That same briefing claimed the difference in major construction requests given to the Office of Management and Budget was $8.6 billion from FY 2003 through FY 2009 and that it has received slightly less than half that total. Additionally, there is a $2 billion funding backlog for projects that are partially but not completely funded. Third, VA is concerned about the timeliness of construction projects, noting that it can take the better part of a decade from the time VA initially proposes a project until the doors actually open for veterans.

Given these challenges, VA has broached the idea of a new model for health-care delivery, the Health Care Center Facility (HCCF) leasing program. Under the HCCF, VA would begin leasing large outpatient clinics in lieu of major construction. These large clinics would provide a broad range of outpatient services, including primary and specialty care as well as outpatient mental health services and ambulatory surgery.

On the face of it, this sounds like a good initiative. Leasing has the advantage of being able to be completed quickly, as well as being adaptable, especially when compared to existing major medical facilities. Leasing has been particularly valuable for VA as evidenced by the success of the community-based outpatient clinics and Vet Centers.

The IBVSOs are concerned, however, with VA's plan for inpatient services. VA aims to contract for these essential services with affiliates or community hospitals. This program would privatize many services we believe VA should continue to provide. We lay out our objections to privatization and widespread contracting for care in the "Contract Care Coordination" section of this *Independent Budget.*

Beyond those objections, though, is the example of Grand Island, Nebraska. In 1997 the Grand Island VA Medical Center closed its inpatient facilities, contracting out with a local hospital for those services. Recently the contract between the local facility and VA was canceled, meaning veterans in that area can no longer receive inpatient services locally. They must travel great distances to other VA facilities, such as the Omaha VA Medical Center. In some cases, when Omaha is unable to provide specialized care, VA is flying patients at its expense to faraway VA medical centers, including those in St. Louis and Minneapolis.

Further, with the canceling of that contract, the local hospital no longer provides the same level of emergency services that a full VA medical center would provide. With VA's restrictions on paying for emergency services in non-VA facilities, especially for those who may have some form of private insurance, this amounts to a cut in essential services to veterans. Given the expenses of air travel and medevac services, the current arrangement in Grand Island has likely not resulted in any cost savings for VA. Ferrying sick and disabled veterans great distances for inpatient care also raises patient safety and quality of care concerns.

The HCCF program raises many concerns the IBVSOs believe VA must address. Among these questions, we wonder how VA will handle governance, especially with respect to the large numbers of non-VA employees who would be treating veterans? How will the non-VA facility deal with VA directives and rule changes that govern health-care delivery and that ensure safety and uniformity of the quality of care? Will VA apply its space planning criteria and design guides to non-VA facilities? How will VA's critical research activities, most of which improve the lives of all Americans and not only veterans, be affected if they are being conducted in shared facilities, and not a traditional part of VA's first-class research programs? What will this change mean for VA's electronic health record, which many have rightly lauded as the standard that other health-care systems should aim to achieve? Without the electronic health record, how will

VA maintain its high quality of care standards and continuity for a veteran who moves to another area?

But, most important, CARES required years to complete and consumed thousands of hours of effort and millions of dollars of study. The IBVSOs believe it to be a comprehensive and fully justified road map for VA's infrastructure as well as a model VA can apply periodically to assess and adjust those priorities. Given the strengths of the CARES process and the lessons VA learned and has applied from it, why is the HCCF model, which to our knowledge has not been based on any sort of model or study of the long-term needs of veterans, the superior one? We have yet to see evidence that it is and until we see more convincing evidence that it will truly serve the best interests of veterans, the IBVSOs will have a difficult time supporting it.

Recommendation:

VA must not implement the Health Care Center Facility model without fully addressing the many questions raised in *The Independent Budget*, and VA must explain how the program would meet the needs of veterans, particularly as compared to the road map the Capital Asset Realignment for Enhanced Services laid out.

Research Infrastructure Funding:

The Department of Veterans Affairs must have increased funding for its research infrastructure to provide a state-of-the-art research and laboratory environment for its excellent programs, but also to ensure that VA hires and retains the top scientists and researchers.

VA Research Is a National Asset

Research conducted in the Department of Veterans Affairs has led to such innovations and advances as the cardiac pacemaker, nuclear scanning technologies, radioisotope diagnostic techniques, liver and other organ transplantation, the nicotine patch, and vast improvements in a variety of prosthetic and sensory aids. A state-of-the-art physical environment for conducting VA research promotes excellence in health professions education and VA patient care as well as the advancement of biomedical science. Adequate and up-to-date research facilities also help VA recruit and retain the best and brightest clinician scientists to care for enrolled veterans.

VA Research Infrastructure Funding Shortfalls

In recent years, funding for the VA Medical and Prosthetics Research Program has failed to provide the resources needed to maintain, upgrade, and replace VA's aging research facilities. Many VA facilities have exhausted their available research space. Along with space reconfiguration, ventilation, electrical supply, and plumbing appear frequently on lists of needed upgrades in VA's academic health centers. In the 2003 Draft National Capital Asset Realignment for Enhanced Services (CARES) plan, VA included $142 million designated for renovation of existing research space and build-out costs for leased researched facilities. However, these capital improvement costs were omitted from the Secretary's final report. Over the past decade, only $50 million has been spent on VA research construction or renovation nationwide, and only 24 of the 97 major VA research sites across the nation have benefited.

In House Report 109-95 accompanying the FY 2006 VA appropriations, the House Appropriations Committee directed VA to conduct "a comprehensive review of its research facilities and report to the Congress on the deficiencies found and suggestions for correction of the identified deficiencies." In FY 2008, the VA Office of Research and Development initiated a multiyear examination of all VA research infrastructure for physical condition and capacity for current research, as well as program growth and sustainability of the space needed to conduct research.

Lack of a Mechanism to Ensure VA's Research Facilities Remain Competitive

In House Report 109-95 accompanying the FY 2006 VA appropriations, the House Appropriations Committee expressed concern that "equipment and facilities to support the research program may be lacking and that some mechanism is necessary to ensure the Department's research facilities remain competitive." A significant cause of research infrastructure's neglect is that there is no direct funding line for research facilities.

The VA Medical and Prosthetic Research appropriation does not include funding for construction, renovation, or maintenance of research facilities. VA researchers must rely on their local facility managements to repair, upgrade, and replace research facilities and capital equipment associated with VA's research laboratories. As a result, VA research competes with other medical facilities' direct patient care needs—such as medical services infrastructure, capital equipment upgrades and replacements, and other maintenance needs—for funds provided under either the VA Medical Facilities appropriation account or the VA Major or Minor Medical Construction appropriations accounts.

Recommendations:

The Independent Budget veterans service organizations anticipate VA's analysis will find a need for funding significantly greater than VA had identified in the 2004 Capital Asset Realignment for Enhanced Services report. As VA moves forward with its research facilities assessment, the IBVSOs urge Congress to require the VA to submit the resulting report to the House and Senate Committees on Veterans' Affairs no later than October 1, 2009. This report will ensure that the Administration and Congress are well informed of VA's funding needs for research infrastructure so they may be fully considered at each stage of the FY 2011 budget process.

To address the current shortfalls, the IBVSOs recommend an appropriation in FY 2010 of $142 million, dedicated to renovating existing VA research facilities in line with the 2004 CARES findings.

To address the VA research infrastructure's defective funding mechanism, the IBVSOs encourage the Administration and Congress to support a new appropriations account in FY 2010 and thereafter to independently define and separate VA research infrastructure funding needs from those related to direct VA medical care. This division of appropriations accounts will empower VA to address research facility needs without interfering with the renovation and construction of VA direct health-care infrastructure.

Program for Architectural Master Plans:

Each VA medical facility must develop a detailed master plan.

The delivery models for quality health care are in a constant state of change. This is the result of many factors, including advances in research, changing patient demographics, and new technology.

The Department of Veterans Affairs must design health care facilities with a high level of flexibility in order to accommodate these new methods of patient care. VA must be able to plan for change to accommodate new patient care strategies in a logical manner with as little effect as possible on other existing patient care programs and provide for growth in already existing programs.

A facility master plan is a comprehensive tool to look at potential new patient care programs and how they might affect the existing health-care facility. It also provides insight with respect to possible growth, current space deficiencies, and other facility needs for existing programs and how VA might accommodate these in the future.

In some cases in the past, VA has planned construction in a reactive manner. After funding, VA would place projects in the facility in the most expedient manner—often not considering other projects and facility needs.

This would result in shortsighted construction that restricts rather than expands options for the future.

The Independent Budget veterans service organizations believe that each VA medical center should develop a comprehensive facility master plan to serve as a blueprint for development, construction, and future growth of the facility. Short- and long-term Capital Asset Realignment for Enhanced Services (CARES) objectives should be the basis of the master plan.

Four critical programs were not included in the CARES initiative. They are long-term care, severe mental illness, domiciliary care, and polytrauma. VA must develop a comprehensive plan addressing these needs and its facility master plans must account for these services. VA has undertaken master planning for several VA facilities, most recently in the Tampa medical center. This is a good start, but VA must ensure that all facilities develop a master plan strategy to validate strategic planning decisions, prepare accurate budgets, and implement efficient construction that minimizes wasted expenses and disruption to patient care. Other projects for consideration in developing master plans should include Jackson, Mississippi; San Diego; Long Beach, California; and Memphis.

Recommendations:

Congress must appropriate $20 million to provide funding for each medical facility to develop an architectural master plan.

Each facility master plan should include the areas omitted from the Capital Asset Realignment for Enhanced Services: long-term care, severe mental illness, domiciliary care, and polytrauma programs as they relate to a particular facility.

The VA Central Office must develop a standard format for these master plans to ensure consistency throughout the VA health-care system.

Completed architectural master plans should be considered as VA develops future major medical construction budget requests.

Empty or Underutilized Space:

The Department of Veterans Affairs must not use empty space inappropriately and must continue disposing of unnecessary property where appropriate.

Studies have suggested that the VA medical system has extensive amounts of empty space that the Department can reuse for medical services. Others have suggested that unused space at one medical center may help address a deficiency that exists at another location. Although the space inventories are accurate, the assumption regarding the feasibility of using this space is not.

Medical facility planning is complex. It requires intricate design relationships for function and the demanding requirements of certain types of medical equipment. Because of this, medical facility space is rarely interchangeable, and if it is, it is usually at a prohibitive cost. For example, VA cannot use unoccupied rooms on the eighth floor to offset a deficiency of space in the second floor surgery ward. Medical space has a very critical need for inter- and intradepartmental adjacencies that must be maintained for efficient and hygienic patient care.

When a function expands or moves, these demands create a domino effect of everything around it. These secondary impacts greatly increase construction expense, and they can disrupt patient care.

Some features of a medical facility are permanent. Floor-to-floor heights, interstitial space, column spacing, and structural floor loading cannot be altered. Different aspects of medical care have different requirements based upon these permanent characteristics. Laboratory or clinical spacing cannot be interchanged with ward space because of the needs of different column spacing and perimeter configuration.

Patient wards require access to natural light and column grids that are compatible with room-style layouts. Labs should have long structural bays and function best without windows. When renovating empty space, if the area is not suited to its planned purpose, it will create unnecessary expense and be much less efficient.

Renovating old space rather than constructing new space creates only a marginal cost savings. Renovations of a specific space typically cost 85 percent of what a similar, new space would. When you factor in the aforementioned domino or secondary costs, a renovation can end up costing more and produce a less satisfactory result. Renovations are sometimes appropriate to achieve those critical functional adjacencies, but they are rarely economical.

Many older VA medical centers that were rapidly built during and after World War II to treat a wounded veteran population are simply unable to be renovated for contemporary needs. Most of these Bradley-style buildings were designed before the widespread use of air conditioning and the floor-to-floor heights are very low. Accordingly, it is impossible to retrofit them for modern mechanical systems. Many also have long, narrow wings radiating from a small central core, which is an inefficient way of laying out rooms for modern use. This central core, too, has only a few small elevator shafts, complicating the vertical distribution of modern services.

Another critical problem with this unused space is its location. Much of it is not located in a prime location; otherwise, VA would have previously renovated or demolished this space for new construction. This space is typically located in outlying buildings or on upper floor levels and is unsuitable for modern use.

Public Law 108-422 incentivized VA's efforts to dispose of excess space by allowing VA to retain the proceeds from the sale, transfer, or exchange of certain properties in the Capital Asset Fund. Further, that law required VA to develop short- and long-term plans for the disposal of excess facilities, which it reports to Congress annually. VA must continue to develop these plans, working in concert with their architectural master plans and the long-range vision for VA medical centers. VA has developed metrics to track its use of underutilized space and actively monitor this as part of the Federal Real Property Council reporting requirements.

Recommendation:

VA must continue to monitor and develop short- and long-term plans with respect to the disposal of unnecessary space in nonhistoric properties that otherwise are not suitable for medical or support functions because of the structure's permanent characteristics or its location.

VA Space Planning Criteria/Design Guides:

The Department of Veterans Affairs must continue to maintain and update its Space Planning Criteria and Design Guides to reflect state-of-the-art methods of health-care delivery.

VA has developed space-planning criteria it uses to allocate space for all VA health-care construction projects. These criteria are organized into 60 chapters: one for each health-care service provided by VA and its associated support services. VA updates these criteria to reflect current methods of health-care delivery.

In addition to updating these criteria, VA has utilized a computer program called VA SEPS (Space and Equipment Planning System) as a tool to develop space and equipment allocation for all VA health-care projects. This tool is operational and VA currently uses it on all projects.

The third component used in the design of VA health-care projects is design guides. Many of the 60 space-planning criteria chapters has an associated design guide. These design guides go beyond the allocation of physical space and outline how this space is organized within each individual function, as well as how the function relates to the entire medical facility.

VA has updated several of the design guides to reflect current patient delivery models. These include guides that cover spinal cord injury/disorders center, imaging, and polytrauma centers, as well as several other services.

Recommendation:

VA must continue to maintain and update the space-planning criteria and the VA Space and Equipment Planning System tool. It also must continue the process of updating the design guides to reflect current delivery models for patient care. VA must regularly review and update all of these space-planning tools as needed, to reflect the highest level of patient care delivery.

Design-Build Construction Delivery System:

The Department of Veterans Affairs must evaluate use of the design-build construction delivery system.

For the past 10 years, VA has embraced the design-build construction delivery system as a method of project delivery for many health-care projects. Design-build attempts to combine the design and construction schedules in order to streamline the traditional design-bid-build method of project delivery. The goal is to minimize the risk to the owner and reduce the project delivery schedule. Design-build, as used by VA, places the contractor as the design builder.

Under the contractor-led design-build process, VA gives the contractor a great deal of control over how he or she designs and completes the project. In this method, the contractor hires the architect and design professionals. With the architect as a subordinate, a contractor may sacrifice the quality of material and systems in order to gain profits at the expense of the owner.

Use of design-build has several inherent problems. A shortcut design process reduces the time available to provide a complete design. This provides those responsible for project oversight inadequate time to review completed plans and specifications. In addition, the construction documents may not provide adequate scope for the project, leaving out important details regarding the workmanship or other desired attributes of the project. This makes it difficult to hold the builder accountable for the desired level of quality. As a result, a project is often designed as it is being built, which often compromises VA's design standards.

Design-build forces the owner to rely on the contractor to properly design a facility that meets the owner's needs. In the event that the finished project is not satisfactory to the owner, the owner may have no means to insist on correction of work done improperly unless the contractor agrees with the owner's assessment. This may force the owner to go to some form of formal dispute resolution, such as litigation or arbitration.

Recommendations:

VA must evaluate the use of design-build as a method of construction delivery to determine if design-build is an appropriate method of project delivery for VA health-care projects.

VA must institute a program of "lessons learned." This would involve revisiting past projects and determining what worked, what could be improved, and what did not work. VA should compile and use this information as a guide to future projects. VA must regularly update this document to include projects as they are completed.

Preservation of VA's Historic Structures:

The Department of Veterans Affairs must further develop a comprehensive program to preserve and protect its inventory of historic properties.

VA has an extensive inventory of historic structures that highlight and memorialize America's long tradition of providing care to veterans. These buildings and facilities enhance our understanding of the lives of those who have worn the uniform, and who helped to develop this great nation. Of the approximately 2,000 historic structures in VA's inventory, many are neglected and deteriorate year after year because of a lack of funding. These structures should be stabilized, protected, and preserved because they are an integral part our nation's history.

Most of these historic facilities are not suitable for modern patient care. As a result, a preservation strategy was not included in the Capital Asset Realignment for Enhanced Services process. For the past six years, *The Independent Budget* veterans service organizations (IBVSOs) have recommended that VA conduct a formal inventory of these properties, classifying their physical condition and their potential for adaptive reuse. VA has been moving in that direction and historic properties are identified on its website. VA has placed many of these buildings in an "Oldest and Most Historic" list, and these buildings require immediate attention.

At least one project has received funding. VA has invested more than $100,000 in the past year to address structural issues at a unique round structure in Hampton, VA. Built in 1860, it was originally a latrine and the funding is allowing VA to convert it into office space.

The cost for saving some of these buildings is not very high considering that they represent a part of history that enriches the texture of our landscape that once gone cannot be recaptured. For example, VA can restore the Greek revival mansion in Perry Point, Maryland, which was built in the 1750s, to use as a training space for about $1.2 million. VA could restore the 1881 Milwaukee Ward Memorial Theater for use as a multipurpose facility at a cost of $6 million. This is much less than the cost of a new facility.

As part of its adaptive reuse program, VA must ensure that the facilities that it leases or sells are maintained properly. VA's legal responsibilities could, for example, be addressed through easements on property elements, such as building exteriors or grounds.

The IBVSOs encourage the use of P.L. 108-422, the Veterans Health Programs Improvement Act, which authorized historic preservation as one of the uses of a new capital assets fund that receives funding from the sale or lease of VA property.

Recommendation:

VA must further develop a comprehensive program to preserve and protect its inventory of historic properties.