



Department of Veterans Affairs

Briefing to ACEC

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Presented By:

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Tahoma, WA National Cemetery



Agenda

- Lessons Learned in VA's Construction Program – Dennis Milsten Associate Executive Director, Construction and Facilities Management
- Program for FY15
- Organization of the VA's Construction Program – Milsten



Lessons Learned: Overview

- Over the past five years the VA's construction program has undergone two internal reviews and three external reviews. Each of these reviews identified processes and procedures that required attention.
- The internal reviews concentrated on systemic issues and solutions including the VA Facility Management transformation and the Construction Review Council deep dive into projects
- The external reviews examined projects and identified systemic solutions as well as specific project issues
- The external reviews validate a number of the issues identified in the internal reviews



Lessons Learned: Internal Reviews (cont.)

- September, 2009: VAFM
 - Collaboration with National Institute of Building Sciences (NIBS)
 - Three initiatives selected for immediate development:
 1. Integrated Planning (IP)
 2. Project Management Plan (PMP)
 3. Post-Occupancy Evaluation (POE)
- November, 2012: Construction Review Council Report
 - Resulted in findings in four distinct areas:
 1. Requirements
 2. Design Quality
 3. Funding
 4. Program Management and Automation



Lessons Learned: External Reviews

- April 29, 2009: Office of the Inspector General (OIG) Report “Follow-Up Audit of VA’s Major Construction Contract Award and Administration Process”
 - Resulted in two recommendations:
 1. Corrective action plan for project management oversight
 2. Program for the timely close-out of major construction contracts
 - Status: Closed as of Fall, 2011



Lessons Learned: External Reviews (cont.)

- April, 2013: GAO Report “Additional Actions Needed to Decrease Delays and Lower Costs of Major Medical-Facility Projects”
 - Resulted in three recommendations:
 1. Use of Medical Equipment Planners
 2. Clearly define roles of VA officials to contractors
 3. Streamline change-control process
 - Status: Closed as of November, 2013



Lessons Learned: Structure

- Lessons Learned will be linked to the VA Capital Infrastructure Lifecycle Process.
- Lessons Learned will be filed in a SharePoint site accessible by all VA employees.
- A SharePoint site with links to documents for all processes, procedures, handbooks, etc. for the entire construction program will be established.
- Estimated Date of Completion: August 1st, 2014



VA Capital Infrastructure Lifecycle Process

Process Requires Detailed Coordination for Success

Planning and Requirement Development & Identification

- A. Workload Projections from Health Care Planning Model identifies access, Workload, wait time games (VHA OPP)
- B. Strategic Communications Strategy (VHA)

Strategic Capital Investment Planning & Budgeting

- A. SCIP infrastructure Gaps identified
- B. Develop Strategic Options to meet SCIP identified needs. (VISNs)
- C. Identify Need for Construction and include in SCIP Long Range
- D. Business Case Submitted for budget consideration (VISN/MC)
- E. Project Review/Scoring (SMETS, SCIP Board)
- F. Project Prioritization and Approval Process (SCIP Board and VA Governance process)
- G. Identify field staff and training requirements (CFM, VHA, OAEM)

FY XX-2

Project Development

- A. Conduct Studies of existing site/facilities to include infrastructure (CFM/VHA)
- B. Develop Basis for Design (CFM/VHA)
- C. Solicit and Select Designer (CFM/VHA)
- D. Complete Schematic Design (CFM/VHA)
- E. Begin Site Selection Process (CFM/VHA)
- F. Assign Construction Site Staff and refine training requirements (CFM)

Authorization & Appropriation

- A. Construction Projects Supporting Documentation Developed (OMB 300, Alternatives Analysis, Risk Analysis, CEA) (OCAMS/VISN/MC)
- B. Major Project Request for Appropriation and Authorization for Design, Land Acquisition, and Construction (OCAMS/OAEM/CFM)

FY XX

Construction Procurement and Execution

- A. Major Construction Procurement and Design (CFM/MC/OCAMS)
- B. Congressional Notification of awards (CFM)
- C. Construction Execution and Management (including major operating plan) and management (OAEM/CFM/MC/OCAMS)
- D. Project Completion (CFM)

FY XX + Y

Activations

- A. Funding
- B. Activation team
- C. Activation Plan
- D. Consultant Services

Repurposing/ Divestiture

- A. Evaluate Space for reinvestment (MC/VISN)
- B. Conduct Facility Condition Assessment (VHA/OAEM/CFM)
- C. Evaluate space needs across enterprise (OAEM/VHA/NCA/VBA)

Lessons Learned Tie-In

- Capital Asset Master Planning (CAMP) Directive
- Integrated Planning
- Standardized Design

- Requirements Control Process
- Three Tier Design Plan
- VA Capital Infrastructure Lifecycle Process Alignment

- Constructability Reviews
- Acquisition Project Management Framework (APMF)
- Project Review Board
- Medical Equipment Planners

- 35% Design
- Activation Funding

- PM Training/ Certification
- Project Management Plan (PMP)
- VA Facility Management School (VAFM)
- Enterprise Data System
- Development of Risk Program
- Streamlining Construction Change Order Process

- Post Occupancy Evaluation (POE)
- Establishment of VA Activation Office

- NHPA Section 111 Outleashing



Lesson:

VA Capital Infrastructure Lifecycle Process Alignment

■ Issue:

- VA traditionally moved from the Strategic Capital Investment Planning (SCIP) process and budgeting directly to Authorization and Appropriations. This established a public marker for price and schedule prior to significant study or engineering Design. As studies and design advanced requirements become more defined the scope and cost increased. This is what GAO identified as cost and time growth.

■ Current Action:

- Realign the VA Capital Infrastructure Lifecycle Process to include Requirements Development between SCIP and Authorization and Appropriations. This is teamed with the 35 percent design lesson and moves VA into alignment with the Department of Defense (DoD) process.



Lesson:

Capital Asset Master Planning Directive (CAMP)

Planning and
Requirements
Identification

■ Issues:

- The VA process to align requirements, activation, and technology has challenged leadership for a considerable time. The development of requirements has been focused on individual facilities, put forward as an OMB-300, prioritized and funded. Often the requirement has not been fully developed to ensure all features are included for project scope and budget. These shortcomings often surface after the project has been approved and design work started. Changes occurring at this point put the budget, scope and execution in jeopardy with the VHA Strategic Plan; specifically the Agile Footprint and Capital Investments.

■ Current Actions:

- VHA established a Capital Assets Strategic Planning (CAMP) Summit to address the issues, develop a process and associated measurement criterion to be implemented across all Veterans Integrated Service Networks (VISNs). A draft directive was developed and the Under Secretary for Health signed the VHA directive February, 2013 establishing the CAMP concept.



Lesson:

Integrated Planning

Planning and
Requirement
s
Identification

■ Issues:

- The VA requires a robust planning process that includes the Veteran population, where they are located, what services are required and where within the VISN, and perhaps the delivery system, expensive specialist care functions can be positioned to best serve the population.

■ Current Actions:

- The VA developed a pilot program in two VISNs. The two VISNs selected represented a growing population and a shrinking Veteran population. Following the completion of the pilot project, a statement of work was developed to obtain the services of planning consultants available to the Regional construction offices.
- The VA has adopted the Integrated Planning Process. The current goal is five to seven VISN level Master Plans with a refresh every five years. This method will assure the VA the best opportunity to keep pace with the changing demographics and medical needs of the Veteran.



Lesson: Standardized Design

Planning and
Requirement
s
Identification

■ Issues:

- The VA builds many clinics each year. VA hires an Architect/Engineer A/E to provide a project specific design for each clinic. Standardizing design reduces costs and mitigate risks.

– Current Actions:

- In order to avoid the inspired creativity of A/E firms a standard model for Community Based Outpatient Clinics (CBOCs), which make up a large part of VA's healthcare system, has been developed.
- This effort involved the development of three distinct CBOC models with standard floor and equipment plans. Pilot projects are currently underway in VISNs 8, 21, and 23 to validate the standard designs.



Lesson:

Requirements Control Process

Strategic
Capital
Investment
Planning and
Budgeting

■ Issues:

- Delays in schedule and increases in cost of VA construction projects are tied to substantial increases or changes in requirements after initial scope and budget formation during the project development phase. There have been several instances where the original project prospectuses have been changed after projects were approved and included in annual budget submission. VA undertook a review of past and current projects to identify how and why these changes occurred and more importantly, to develop a process to prevent such changes in the future.

■ Current Actions:

- Process approved by Secretary in August, 2013 CRC Briefing. Process involves the following steps:
 - Strategic Capital Investment Planning (SCIP) process approved scope
 - Major acquisition milestone decision to ensure scope and cost remain within approved SCIP business case
 - Prior to 35% if design exceeds 10% of approved business case, project is returned to SCIP to re-compete in following year
 - After 35% all changes in scope and/or budget require CRC approval



Lesson:

Three Tier Design Plan

Strategic
Capital
Investment
Planning and
Budgeting

■ Issues:

- VA has a significant backlog of approved projects in different phases of design. VA has not received sufficient funding to execute construction projects totaling over \$6 billion. Advancing every approved project to 100% means that project designs will age on the shelf waiting for construction funding. As the projects age redesign may be required to assure the project meets current codes, medical practice and VA standards. This often results in costly redesign efforts before a project can proceed to construction.

■ Current Action:

- VA has adopted a Three Tier Design Plan that lays out the projects to be included in the budget that are design complete and ready for construction award. This effort focuses the design efforts on the projects VA has identified to receive future funding based on budget guidance and VA needs.



Lesson:

Constructability Reviews SD,DD,CD

Project
Development

■ Issues:

- The VA design process for major construction includes the use of a second Architect/Engineer (A/E) to perform a Peer Review of the design. The process reveals technical issues with the design and serves as a technical quality assurance review of the design effort. This effort is valuable but does not identify any constructability issue. Constructability issues have a significant impact on the construction operation, adding cost and time to the project. Constructability reviews are best performed by people who are construction managers or constructors. This is not a specialty organic to most AE firms.

■ Current Actions:

- Project managers were directed to perform constructability reviews at the same time Peer Reviews are performed. Furthermore, Project Managers were instructed to utilize construction management firms to perform these reviews. Constructability reviews have been conducted on two projects to date.



Lesson: Acquisition Project Management Framework (APMF)

Project
Development

■ Issues:

- The Department of Veterans Affairs lacks governed, repeatable, consistent, efficient, and transparent life cycle process for management and oversight of the acquisition or development of new or enhanced capabilities. This puts VA at risk for ineffective delivery of capabilities, duplication of effort, and ambiguous accountability due to lack of a formal acquisition project management framework.

■ Current Actions:

- The approved plan outlines six goals to success of the framework: clarify costs, create program pilots, required reporting, security strength, training/communication and integration.
- CFM is participating in the pilot program and initial rollout of the APMF to validate its approach to construction. The principle of head of contracting activity (HCA) review is being implemented in the major construction program. Portland has been chosen as the prime candidate for a pilot of this program.



Lesson: Project Review Board

Project
Development

■ Issues:

- A structured management review of all projects is not being accomplished. The review process has focused on the big three projects and projects that presented specific challenges. A systematic process to review a project's progress, issues, and achievements did not exist. This was identified in the VAFM Transformation Initiative and US Army Corps of Engineers (USACE) was identified as the model for the program.

■ Current Action:

- CFM is working with the USACE to establish a Project Review Board (PRB) at VA. The PRB will be similar to the PRB structure at the USACE District offices. The PRB structure will provide a briefing at established milestones and as metrics indicate the project requires executive input or guidance.



Lesson:

Medical Equipment Planners

Project
Development

■ Issues:

- Historically, there has been no specific guidance on the employment of medical equipment planners on the VA's major construction projects. The VA has sometimes relied on VHA employees who have little to no training in the area of medical equipment procurement to fill in this gap. This has led to delays in schedule and cost increases as rooms are redesigned to fit proper medical equipment.

■ Current Action:

- As of May, 2013 all new CFM projects involving medical center procured medical equipment must use a Medical Equipment Planner. Additionally, VA has ensured that the Denver and New Orleans major construction projects employ a Medical Equipment Planner.



Lesson: 35% Design

Budget
Authorization
and
Appropriation

■ Issues:

- The VA process for project approval has always included the preparation of a business case. The business case includes a construction cost estimate and schedule for performance. The cost estimate and schedule are used to assign the project to a construction program and assist in ranking projects for execution. But they are not developed with the assistance of a planning or design team. This led to estimate growth and schedule slippage as the project entered into engineering studies and preliminary design. The business case cost estimate and schedule were published as part of the President's Annual Budget.
- A study of other federal agencies revealed that project cost and schedule were not reported until some level of planning, and often design, was completed. VA will not publish construction cost and schedule data for complex major medical projects until at least 35% design is accomplished.

■ Current Actions:

- VA developed a policy and process that mandates that major medical construction projects achieve at least 35% design prior to cost and schedule information being published. The policy was adopted for the FY 2013 budget submission.



Lesson: Activation Funding

Budget
Authorization
and
Appropriation

■ Issues:

- Activation funding requirements are not identified early enough in the process to coordinate construction and activation activities successfully. This issue results in delays throughout the process. Funds must be available at critical phases of the construction project to facilitate on-schedule delivery.

■ Current Actions:

- The current process for funding activation has changed in order to allow fund availability at critical phases of construction. In the new system total activation funding is identified, but percentages of the total are distributed annually based on the number of years in the project. VHA is using lessons learned through this process to further refine and align with the integrated master schedule



Lesson: PM Certificate/Training

Construction,
Procurement
& Execution

■ Issues:

- The VA's construction programs grew from FY 2003 through FY 2011, without a sufficient increase in staffing. Lack of ample, qualified staff during this time likely contributed to some of the challenges encountered with VA's more complex, large-scale construction projects. A better trained and certified Project Manager would have led the team to developing and identifying all the necessary requirements for a quality project.

■ Current Actions:

- VA Established a contract with training providers to train and coach the project management staff and increase the knowledge and proficiency of all staff associated with the real property capital asset program. CFM Project Managers received training on strategic thinking and planning in February 2013. The next training is set to occur in July 2014.



Lesson:

Project Management Plan (PMP)

Construction,
Procurement
& Execution

■ Issues:

- VA construction projects are complex and involve many stakeholders. Stakeholder responsibilities and roles were often unclear. This issue was identified by VAFM Transformation initiative. The VAFM team examined other Federal agencies to determine the use, importance and governance of PMPs. VAFM advanced a template for the creation of a PMP. The PMP was developed to be scaled to fit complex medical projects as well as small minor projects. The template was also designed to be applicable to all Administrations.

■ Current Action:

- PMPs are created for all active major construction projects and the major construction PMP are approved at the regional director level and maintained on file. PMP are reviewed to assure they are accurate and provide team direction.



Lesson:

VA Facility Management (VAFM) School

Construction,
Procurement
& Execution

■ Issues:

- Education and training for facility management is not coordinated. Each Administration had an education program that addressed Administration specific training requirements. The Federal Buildings Personnel Training Act requires that personnel that participate in facility management training including design and construction personnel. As this requirement expands, a home for all VA facility management training is required. The VA Facility Management (VAFM) initiative recognized this training deficit and worked to establish an academy for facility management education and training.

■ Current Action:

- The VAFM initiative recommended the standup of a schoolhouse and identified the VA Acquisitions Academy (VAAA) as the logical home for the school. This allows integration of the Acquisition and Project Management schoolhouses to assure coordinated education and training. The VAFM school was initially funded by the Human Resources Administration (HRA). Today the VAAA is providing training for construction through many sources and is developing scheduling, construction administration, strategic planning, and construction safety classes.



Lesson: Enterprise Data System

Construction,
Procurement
& Execution

■ Issues:

- VA's construction program in the past has lacked in both integration and standardization which has resulted in significant delays throughout planning, design, construction, and activation. VA does not use a common software system with standardized metrics that allows for consistency and trouble-shooting across projects.

– Current Actions:

- The VA is currently implementing TRIRIGA, a facility management IT tool, in order to streamline the modification review and approval process as well as further integrating the efforts of the VA's construction program.



Lesson:

Development of Risk Program

Construction,
Procurement
& Execution

■ Issues:

- Cost and schedule risks are not accounted for in the project planning process. The lack of risk planning and management leaves projects susceptible to delays and cost increases that might have otherwise been mitigated. The first step to managing risk is the development of what the risks are for a particular project.

■ Current Actions:

- CFM retained the services of a consultant to assist in risk management education and the development of the project risk registers. The consultant continues to support the maintenance of the risk registers.
- Risk registers are being incorporated into the regular project reporting. The SharePoint site for the storage and maintenance of the risk registers is equipped with an alert function to notify leadership of a risk incidence.



Lesson:

Streamlining Construction Change Order Process

Construction,
Procurement
& Execution

■ Issues:

- The Department of VA was not in the practice of specifying any time frames for how long it should take to issue change order, nor did they have any process to track the amount of time it takes to process change orders. Time taken to issue and process change orders can greatly affect the cost and schedule of a project.

■ Current Actions:

- VA is establishing time goals for processing change orders and modifications to the contract as well as standing up a metrics system to allow leadership to monitor change order processing time in order to bring processing time within acceptable standards.
- In order to implement this process, VA has placed contracting officers on-site in New Orleans, Orlando, Denver, Palo Alto and Manhattan. VA has also hired four additional attorneys dedicated to expediting the change order process.



Lesson:

Post Occupancy Evaluation

Activation

■ Issues:

- Following the approval, design, construction and activation of a major construction project, the VA recognized there wasn't a process to evaluate the success or failure to meet the initial requirement. Additionally, there wasn't an effective method to identify shortcomings in the current design standards, specifications and architectural details. To assure VA's continued success in the construction and rehabilitation of projects a process was needed to capture the successes and failings of the current construction process.

■ Current Actions:

- The VA developed a pilot program dedicated to the examination of projects recently activated and occupied. The pilot program was modeled after a process in place with the General Service Administration (GSA) utilizing the assistance of the National Institute of Building Science (NIBS). The advantage of utilizing NIBS stemmed from their involvement with the GSA process and the knowledge gained conducting Post Occupancy Evaluations on GSA projects.
- The VA has adopted the Post Occupancy Evaluation concept on the Major and Minor construction programs with a goal of accomplishing the evaluation within 18 to 24 months after activation.



Lesson:

Establishment of VA Activation Office

Activation

■ Issues:

- The VA's design, construction, and activation costs are not coordinated effectively to ensure funds are available at critical times. Activation funding requirements are not identified early enough in the process to coordinate construction and activation activities successfully. These challenges result in delays throughout the process. Accurate cost estimates and actual funds must be available at critical phases of the construction project. Establishing a mechanism, such as activations funding, to coordinate the various funding streams is required for major construction projects including major equipment, medical equipment, and IT.

■ Current Actions:

- VHA established the VA Activation Office and published the Activation Process Guide, which in turn was issued to VISN directors. Team currently looking at how activations are budgeted, how activation is tracked and reported, and the timing of activation teams standup and their role through the construction cycle.



Lessons Learned: Path Forward

- Next Steps:
 - Completion of pilot programs
 - Close out current lessons
 - Continue to evaluate programs for further lessons

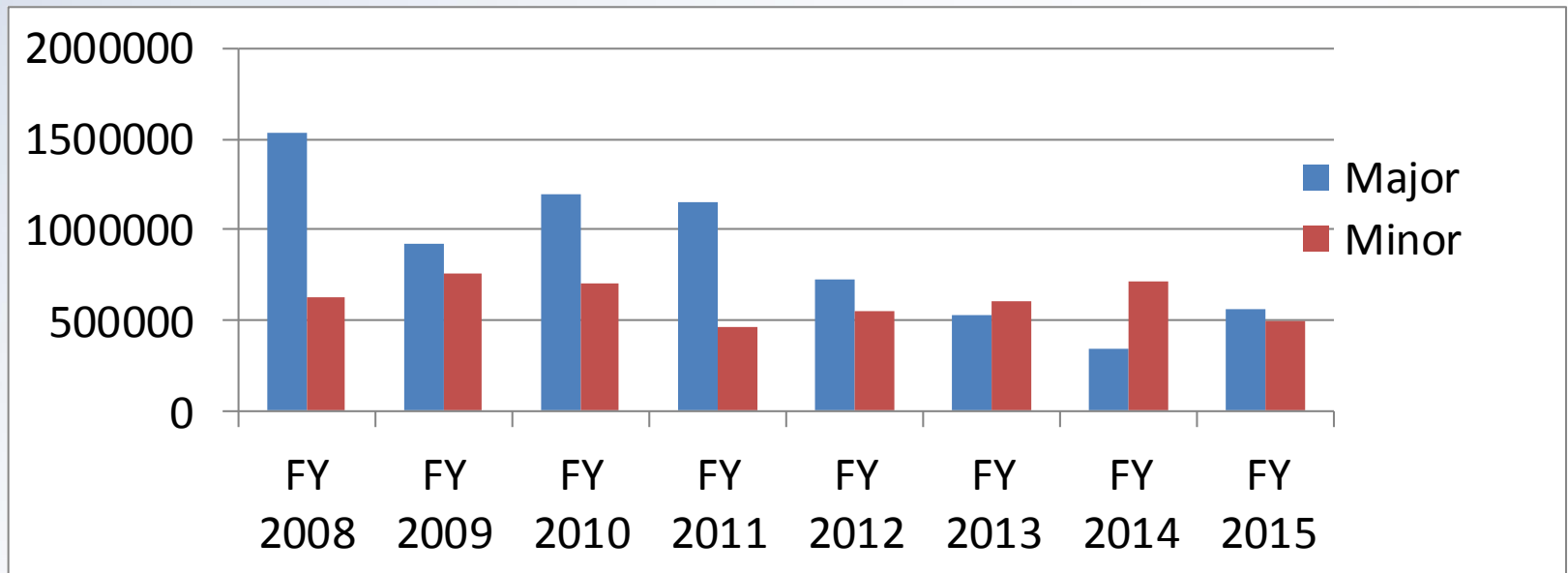


Major Construction Program

- Construction and leasing programs remain healthy at VA
- Increased emphasis on planning and defining requirements
- Design program to assure designs timed to construction funding
- Funding stable - CFM positioned to support increases
- Increased use of Construction Managers from industry
- Continued training for staff to include industry credentialing in construction management
- Training with industry program



Construction Funding (\$000's)





FY 2015 Major Construction Procurements

Location	Description	Estimated (\$000)
West Los Angeles	Seismic Correction - 12 Buildings	35,000
Long Beach	Seismic Corrections- Mental Health and Community Living Center	101,900
Canandaigua	Construction & Renovation	122,400
San Diego	SCI and Seismic Building 11	187,500



FY 2014 Major Leasing Procurements

Location	Facility Type	NUSF
Boston, MA	Replacement Clinic	29,000
South Bend, IN	New Clinic	65,000
Lafayette, LA	Replacement Clinic	29,600
Lake Charles, LA	New Clinic	24,000
Bakersfield, CA	Replacement Clinic	30,000
Mobile, AL	Replacement Clinic	65,000
San Jose, CA	New Clinic	72,000
Springfield, MO	Replacement Clinic	68,000

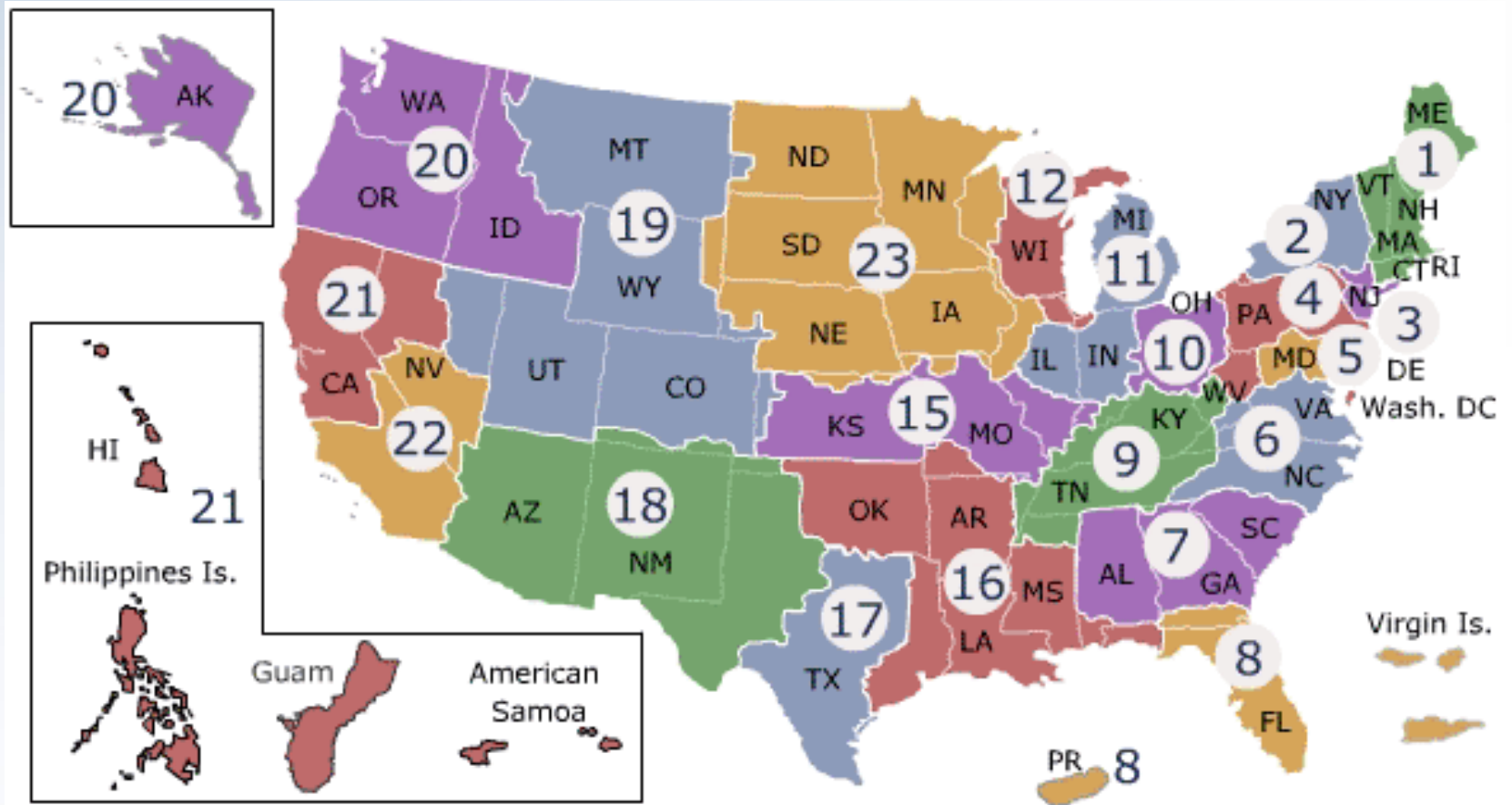


VA Construction Organization

- Major construction – CFM
- Minor and NRM – VISN/Medical Centers, Cemeteries
- Leases CFM and VISN/Medical Centers
- Engagement
 - CFM establishing a scheduled day for vendor meetings
 - VISN Identify the VISN Capital Asset Manager
 - Medical Centers identify Chief Engineer

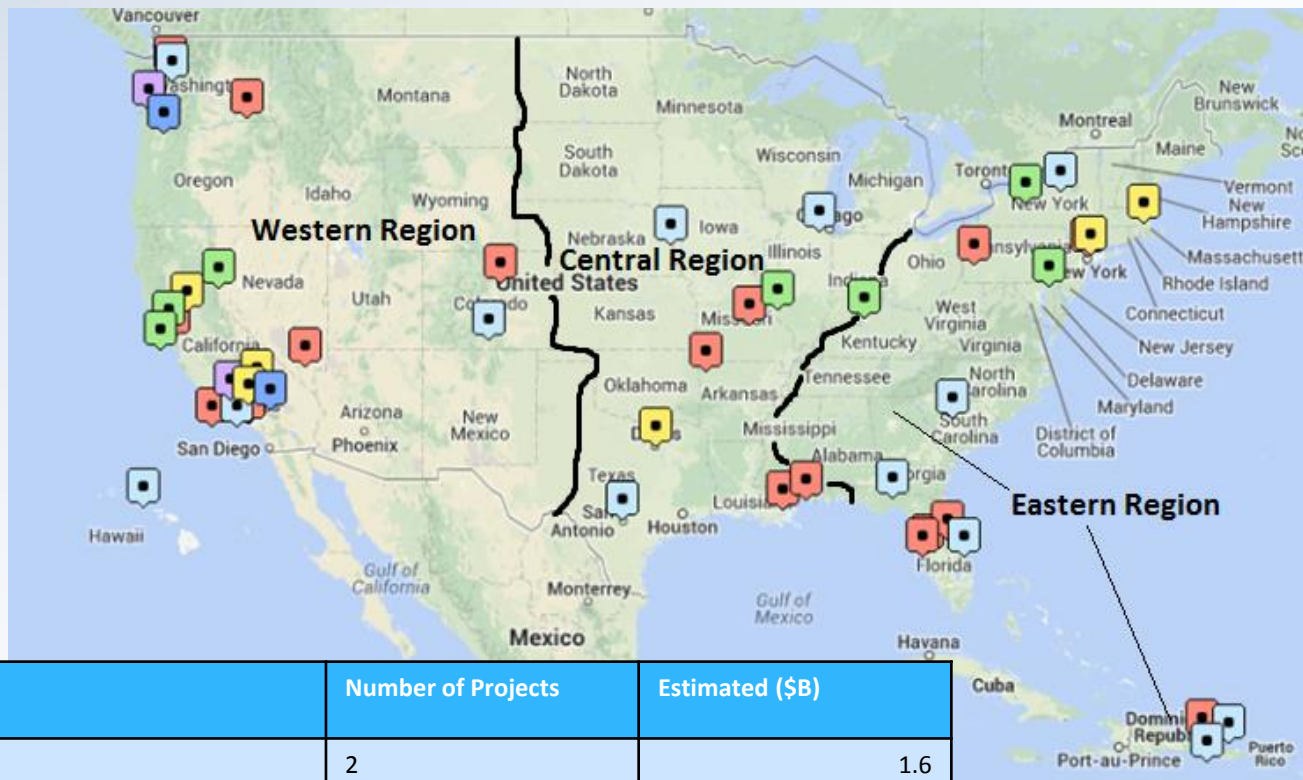


VA Today – 21 VISNs





Active Major Construction Projects February 2014



	Status	Number of Projects	Estimated (\$B)
	Planning	2	1.6
	Schematic Design	7	2.6
	Design Development	7	1.7
	Construction Documents	1	.2
	Construction	21	7.1
	Cemetery Projects	13	.3
TOTAL		51	13.5



Procurement Issues

- Innovative Financing/Procurement
- Best Value vs Low Price Technically Acceptable
- Design Build
- Construction Scheduling
- Commissioning
- Project Labor Agreements
- Small Business Goals and Achievements



Questions?