OIG

Office of Inspector General

U.S. Department of State • Broadcasting Board of Governors

AUD-CGI-18-54 | Office of Audits | August 2018

Audit of the Bureau of Overseas Buildings Operations' Value Engineering Program

CONTRACTS, GRANTS, AND INFRASTRUCTURE DIVISION

OIG HIGHLIGHTS

AUD-CGI-18-54

August 2018
OFFICE OF AUDITS
Contracts, Grants, and Infrastructure Division

Audit of the Bureau of Overseas Buildings Operations' Value Engineering Program

What OIG Audited

The Bureau of Overseas Buildings Operations (OBO) directs the Department of State's (Department) overseas buildings program and its mission is to provide safe, secure, and functional facilities. Within OBO, the Office of Cost Management oversees the required value engineering (VE) program. The intent of the VE program is to achieve essential functions at the lowest lifecycle cost consistent with required levels of performance, reliability, quality, or safety. VE performs studies that result in a report with recommendations for improving the cost and function of a planned project. For the period covered by this audit, the Office of Management and Budget (OMB) required agencies to annually report the results of its VE program, including VE expenditures, cost savings, and cost avoidances.

OIG conducted this audit to determine whether OBO complied with Federal and Department VE program requirements and accurately reported VE expenditures, cost savings, and cost avoidances to OMB. OIG was unable to complete the planned audit analysis because of missing documentation. In particular, OIG could not evaluate the overall effectiveness of the VE program.

What OIG Recommends

OIG made six recommendations intended to improve the execution of OBO's VE program. On the basis of OBO's responses to a draft of this report, OIG considers all six recommendations resolved pending further action. A synopsis of OBO's responses to the recommendations and OIG's reply follow each recommendation in the Audit Results section of this report. OBO's responses to a draft of this report are reprinted in Appendix D.

What OIG Found

OIG found that OBO complied with some, but not all, Federal and Department VE program requirements. Specifically, for projects reviewed for this audit, OBO performed VE studies or obtained approved waivers for 66 of 67 projects. However, OBO did not perform a second VE study for 49 construction projects that merited a second VE study on the basis of OBO's own VE Policy and Procedures Directive in place at the time. In addition, for the projects reviewed, OIG found in some cases that documentation was either missing or incomplete for required items.

The deficiencies identified occurred, in part, because OBO management did not enforce program requirements outlined by OMB and OBO policy for maintaining VE program data. In addition, OBO lacks a reliable centralized database to maintain information and record the results of the VE program. Without a reliable database and management controls to collect and evaluate VE program data, OBO cannot accurately determine VE cost savings and cost avoidances. Because OBO has not implemented sufficient controls over its VE program, the Department is missing opportunities to achieve essential construction functions at the lowest lifecycle cost, which is the fundamental purpose of the VE program.

OIG also found that OBO did not comply with OMB reporting requirements. Specifically, OBO did not submit annual VE reports to OMB for FYs 2013 through 2015, as required, and the VE report submitted in FY 2016 was 2 months late and contained inaccuracies. OBO's noncompliance with VE reporting requirements occurred, in part, because OBO management did not enforce VE reporting requirements outlined in OMB and OBO policies. In 2017, OMB waived the VE reporting requirement for Federal agencies. OMB reiterated that VE should continue and encouraged agencies to work with OMB to highlight successful uses of VE. Until OBO management implements a process to collect and evaluate VE program data, it will remain unable to properly report VE cost savings and cost avoidances and highlight successful uses of VE. Reporting VE savings and cost avoidances is also important to demonstrate that OBO is prudently using U.S. taxpayer funds to advance its mission.

CONTENTS

OBJECTIVE

The Office of Inspector General (OIG) conducted this audit to determine whether the Bureau of Overseas Buildings Operations (OBO) complied with Federal and Department of State (Department) value engineering (VE) program requirements and accurately reported VE expenditures, cost savings, and cost avoidances to the Office of Management and Budget (OMB).

BACKGROUND

OBO directs the Department's overseas buildings program. OBO's mission is to provide safe, secure, and functional facilities that represent the U.S. Government to the host nation and support Department staff in achieving U.S. foreign policy objectives. OBO is required by OMB Circular A-131[1] to implement a VE program. VE is a systematic process of reviewing and analyzing the requirements, functions, and elements of systems, projects, equipment, facilities, services, and supplies to achieve the essential functions at the lowest lifecycle cost consistent with required levels of performance, reliability, quality, or safety.[2] VE concentrates on improving project value by seeking to optimize lifecycle costs, quality, performance, schedule, risk, and initial cost reduction. VE is generally performed in a workshop environment by a multidisciplinary team of contractor or in-house agency personnel. VE studies can be performed at any time in a project's life cycle; however, because of the difficulty in implementing recommendations later in the design phase, the greatest value and improvement potential is realized when the VE study occurs during the final planning or early in the design phase.

VE studies result in a report with recommendations for improving the cost and function of a planned project. VE's goal is to break down a project into parts and identify alternative ways to satisfy each part's function. Used effectively, VE can provide greater knowledge of projected costs, ensure realistic budgets, identify and remove nonessential capital and operating costs, and clarify the economic effect of various project development and design decisions.

Within OBO, the VE program is managed by the Office of Cost Management (COST),[3] which is part of the Directorate of Program Development, Coordination, and Support. According to OBO, the Department avoided an estimated $380 million in costs as a result of OBO's VE program during FY 2016 and FY 2017.[4]

[1] OMB Circular A-131 (revised), "Value Engineering" (December 26, 2013). OMB Circular A-131 was issued in 1988 and revised in 1993 and 2013.

[2] OMB Circular A-131 (revised December 26, 2013), § 5.k.

[3] COST identifies all costs associated with OBO projects during all stages of project development, from concept to construction completion.

[4] According to OBO personnel, OBO classifies all savings achieved through VE as cost avoidances. OBO does so because all VE calculations are estimates.

Federal and OBO Value Engineering Policy

The focus of this audit was on OBO projects that were in the design or construction phase or were completed during FY 2016 and FY 2017 and had estimated construction costs exceeding $5 million. OIG determined that 67 projects met these criteria. Of the OBO projects that were in the design or construction phase or were completed during FY 2016 and FY 2017, 30 projects had VE studies performed after OMB Circular A-131[5] was revised in December 2013 and 31 projects had VE studies performed before December 2013.[6] For the 31 studies performed before December 2013, the OMB Circular[7] issued in May 1993 was in effect. The remaining six projects received a waiver and therefore did not require a VE study.

When performing the audit, OIG used the OMB Circular in effect at the time the VE study was performed to assess compliance with Federal and Department VE program requirements. For example, the OMB policy in effect since December 2013[8] requires VE for new projects when the project cost estimate is at least $5 million, unless the requirement is waived. The May 1993 OMB policy,[9] in contrast, required VE for new projects if the project cost estimate was at least $1 million. In addition, both OMB policies required agencies to annually report (by December 31 of each calendar year) the fiscal year results of the VE program, including VE expenditures, cost savings, and cost avoidances.[10] However, a June 2017 OMB memorandum[11] "paused" this requirement until OMB Circular A-131 can be amended to eliminate the reporting requirement.

Before OMB Circular A-131 was updated in December 2013, OBO implemented its VE program by requiring a VE study on projects with construction costs more than $1 million.[12] This policy also required two VE studies for projects with construction costs more than $20 million. After OMB Circular A-131 was revised in December 2013, OBO implemented its VE program by requiring a VE study on projects with construction costs more than $5 million.[13] For projects with construction costs more than $100 million, a second VE study may be performed. In addition, the VE Program Manager was responsible for preparing the annual VE program performance report to OMB before the requirement was "paused" in June 2017.

[5] OMB Circular A-131 (revised December 26, 2013).

[6] Construction projects often take many years to complete. Therefore, it is not uncommon for construction projects that began prior to December 2013 to be active in FY 2016 or FY 2017.

[7] OMB Circular A-131 (revised May 21, 1993).

[8] OMB Circular A-131 (revised December 26, 2013), §§ 7.a.2.i, 7.a.2.iii.

[9] OMB Circular A-131 (revised May 21, 1993), § 8.

[10] OMB Circular A-131 (revised December 26, 2013), § 8.

[11] OMB Memorandum M-17-26, "Reducing Burden for Federal Agencies by Rescinding and Modifying OMB Memoranda," at 9 (June 15, 2017).

[12] OBO Policy and Procedures Directive (P&PD), "P&PD Program Execution Office, Design and Engineering Division (PE/DE) COST 03: Value Engineering," at 2 (May 26, 2004).

[13] OBO P&PD (revised), "P&PD COST 02: Value Engineering," at 2 (July 1, 2015).

OBO's Value Engineering Process

The COST VE Program Manager's primary responsibility is to coordinate and implement OBO's VE Program. OBO's policy is to conduct VE studies at a stage in the design phase that is no later than 35 percent through the completed design[14] for design/build[15] and design/bid/build[16] projects. OBO contracts with independent VE teams to conduct VE studies using an indefinite delivery/indefinite quantity contract task order.[17,18] The independent VE teams include architects (landscape and interior), engineers (mechanical, electrical, structural, civil, geotechnical, blast, and facilities), and a cost estimator. The independent VE team is selected on the basis of the project's unique characteristics and is led by a Certified Value Specialist, who is certified by the Society of American Value Engineers International Certification Board.

The VE study is typically a 5-day activity during which the independent VE team gathers project information, performs functional analysis to understand the needs of the project, generates alternatives for functions, develops a proposal that includes cost estimates for these alternatives, and presents the VE recommendations to OBO. Once the VE study is complete, the independent VE team prepares and submits a written report of the findings to OBO within 1 week of the end of the study. The written report of the results includes individual VE recommendations as well as a detailed cost estimate of savings, lifecycle cost analysis, and sketches. Examples of VE recommendations to OBO included deleting humidifiers that the VE team did not believe were necessary, eliminating a structural pond basin, providing dimmer switches in private offices, relocating a gym to the recreation building and consolidating locker rooms, and using potted plants instead of rooftop planters.

Implementation

OBO is responsible for implementing the VE study. During the implementation phase, the OBO project team reviews the VE study, including the recommendations, to determine which recommendations to implement on the basis of a project's scope, schedule, budget, building codes, OBO standards, and other requirements.

The OBO Project Manager (PM) is required to document the project team's decision in a detailed implementation spreadsheet. The implementation spreadsheet is partially completed by the independent VE team and describes each VE recommendation. Additional columns must be

[14] According to Federal Acquisition Regulation (FAR) 36.102, "Definitions," "design" includes defining the construction requirement, producing the technical specifications and drawings, and preparing the construction cost estimate.

[15] According to FAR 36.102, "design-build" combines design and construction in a single contract with one contractor.

[16] According to FAR 36.102, "design-bid-build" means that design and construction are sequential and are contracted separately with two contracts and two contractors.

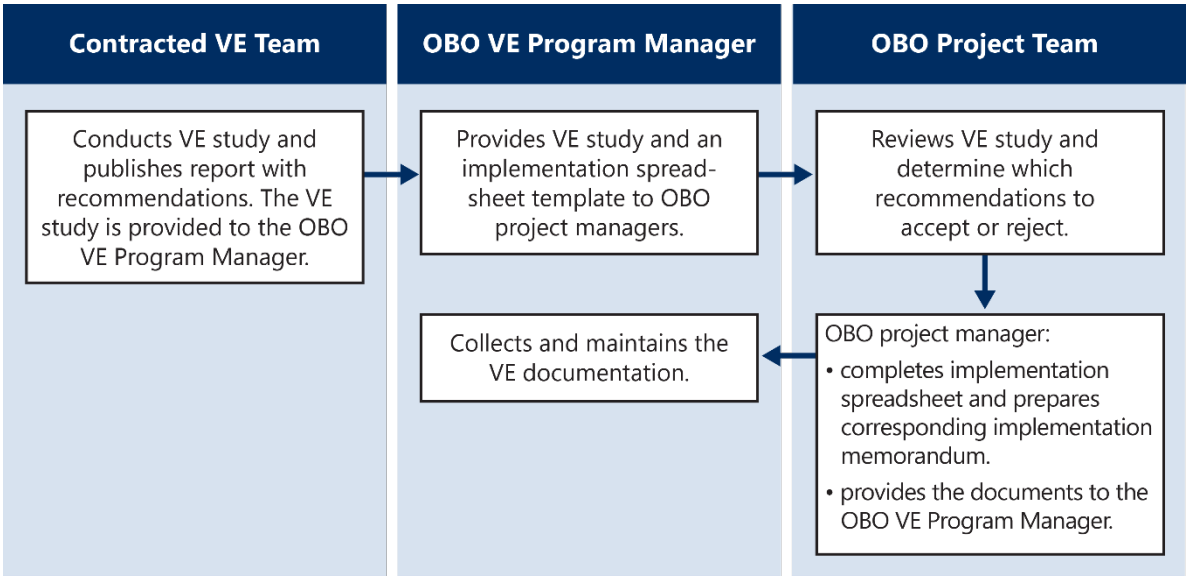
[17] FAR 16.501-2 (a), "General," states, "the appropriate type of indefinite-delivery contract may be used to acquire supplies and/or services when the exact times and/or exact quantities of future deliveries are not known at the time of contract award." Indefinite-quantity contracts permit the Department to order supplies or services after requirements materialize. FAR 16.501-2 (b)(2).

[18] COST has a group of contractors available for VE services.

added by the PM to address the team's resolution of particular recommendations. For accepted recommendations, the PM must include project-specific VE justification information that summarizes the estimated initial costs[19] and the operations and maintenance costs;[20] for rejected recommendations, the PM must identify the reasons that they were rejected. The PM must submit the implementation spreadsheet with a corresponding implementation memorandum to the VE Program Manager. The purpose of the implementation memorandum is to summarize which VE recommendations will be implemented and the total estimated VE cost avoidances. The memorandum must also briefly explain why specific VE recommendations were not implemented.

The OBO PM then directs the project's architectural and engineering team to incorporate the accepted recommendations into the project's design documents. VE PMs are responsible for verifying that approved recommendations are incorporated into the final project design documents. Figure 1 illustrates OBO's VE study process.

Figure 1: OBO's Value Engineering Study Process



Source: Generated by OIG using VE process information provided by OBO.

[19] A project's initial costs are costs that are incurred during the design and construction process.

[20] A project's operations and maintenance costs are the costs required for maintaining, repairing, or replacing (if necessary) devices, equipment, machinery, building infrastructure, and supporting utilities.

Waivers

OMB policy permits waivers from required VE studies when approved by the agency's Senior Accountable Official.[21] OBO implements this policy by requiring the PM to initiate the waiver process. If a PM determines that such a waiver is appropriate, the PM prepares a waiver request memorandum and submits it to COST for consideration. A waiver can be obtained if (1) a project is using the same design as another project that has had a VE study and the recommendations from the previous study have been incorporated into the new project, (2) the project is a physical security upgrade using standard design details, or (3) a project is a standalone Marine Security Guard Residence (MSGR) using standard design details. The VE Program Manager and the COST Director make a recommendation on the waiver request and then forward that request to the Department's Head of Contracting Activity for approval.

Value Engineering Quality Control

The VE Program Manager is responsible for quality control. According to the COST Management Guidebook,[22] the VE Program Manager reviews the implementation spreadsheet and implementation memorandum. The VE Program Manager should (1) coordinate with PMs to ensure proper development and receipt of VE implementation spreadsheets and implementation memoranda, (2) maintain documentation that supports the work and the annual reported VE results, and (3) update the VE program database. In addition, the VE Program Manager should maintain a quality control checklist that includes a quality review of the three main VE deliverables: the VE study, the implementation memorandum, and the subsequent site assessment. The checklist should be included in the VE project folder in both hardcopy and electronic form. The VE Program Manager should conduct VE assessments on site during construction to review the implementation, adjust reports of the savings achieved through VE, and gather lessons learned. In addition, OBO's process requires the PM's Division Chief[23] or Office Director[24] to sign implementation memoranda, which promotes VE quality control. This level of sign-off is intended to encourage the OBO project team to thoroughly review the suggestions and recommendations made by the VE team.

[21] OMB Circular A-131 (revised December 26, 2013, at 4) states that agencies shall designate a Senior Accountable Official to coordinate, oversee, and ensure the appropriate consideration and use of VE. The Senior Accountable Official, or the official's designee, is the approval authority for waivers. The approval authority for all OBO VE waivers is the director of the Bureau of Administration, Office of Logistics Management, Office of Acquisitions Management.

[22] OBO, "COST Guidebook," Chapter 3 (October 2016).

[23] Division Chiefs within OBO's Directorate of Program Development, Coordination, and Support, Office of Project Development and Coordination, are responsible for the day-to-day control and coordination of all activities conducted by the Division staff.

[24] The Office Director within OBO's Directorate of Program Development, Coordination, and Support, Office of Project Development and Coordination provide professional guidance and advice to OBO management in aspects of project development.

Value Engineering Change Proposals

A contractor can submit a value engineering change proposal (VECP) consistent with the VE clauses in the contract if doing so would lower the project's lifecycle cost to the Government without impairing essential functions, characteristics, or performance of items or processes. The Federal Acquisition Regulation (FAR)[25] requires that agencies provide contractors with a financial incentive to develop and submit VECPs by including a specific provision to this effect. VECP clauses set forth in FAR 52.248-1,[26] FAR 52.248-2,[27] and FAR 52.248-3[28] are mandated for all Government contracts; however, a contractor's participation under the clause is voluntary. The construction contractor shares the savings resulting from accepted VECPs with the Department.[29] The construction contractor may submit a VECP any time after the award of the construction contract and before project completion.[30] The OBO onsite project director is usually the first to receive VECPs; after receipt, the project director typically forwards the VECPs through the OBO Construction Management Branch.[31] The processing of the VECP should be coordinated with the VE Program Manager.[32]

AUDIT RESULTS

Finding A: OBO's Management of the Value Engineering Program Needs Improvement

OIG found that OBO complied with some but not all Federal and Department VE program requirements. Specifically, for projects reviewed for this audit that were in the design or construction phase or completed during FY 2016 and FY 2017, OBO performed VE studies or obtained approved waivers for 66 of 67 projects. However, OBO did not perform a second VE study for 49 construction projects that merited a second VE study on the basis of OBO's VE Policy and Procedures Directive (P&PD) in place at the time.[33] In addition, for the 61 projects

[25] FAR 48.102, "Policies."

[26] FAR 52.248-1 (a), "Value Engineering," states "the Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily."

[27] FAR 52.248-2 (a), "Value Engineering-Architect-Engineer," states "the Contractor shall (1) perform value engineering (VE) services and submit progress reports as specified in the Schedule; and (2) submit to the Contracting Officer any resulting value engineering proposals."

[28] FAR 52.248-3 (a), "Value Engineering – Construction," states "the Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily."

[29] OBO P&PD (revised), "P&PD COST 02: Value Engineering," at 4 (July 1, 2015).

[30] Ibid.

[31] OBO P&PD (revised), "P&PD COST 02: Value Engineering," at 10 (July 1, 2015).

[32] Ibid.

[33] Twelve construction projects did not merit a second VE study because they were below the dollar threshold established in OBO's VE policy. OBO's May 2004 version of its VE policy stated that for projects with construction costs more than $20 million, two VE studies would be performed. This policy was updated on July 1, 2015, to state that for complex projects or projects with construction costs more than $100 million, a second study may be performed.

reviewed that required a VE study,[34] OIG found in some cases that documentation was either missing or incomplete for required items such as implementation spreadsheets, implementation memoranda, and documented justifications for rejected VE study recommendations. OIG also performed additional analysis on six OBO construction projects[35] and found, in most cases, that VE cost avoidances claims were not supported by sufficient documentation. Because of the missing documentation, OIG was unable to complete the planned audit analysis and, accordingly, could not evaluate the overall effectiveness of the VE program. Furthermore, OIG reviewed the contracts associated with the six projects and found that five contracts contained the required VECP clause but one did not.

The identified deficiencies occurred, in part, because OBO management did not enforce program requirements outlined by OMB and OBO policies for maintaining VE program data. In addition, OBO lacks a reliable centralized database to maintain information and record the results of the VE program. Furthermore, other than the VE Program Manager, the OBO personnel who are substantially involved with the VE program are not assessed on their adherence to the VE program requirements in their annual performance evaluations. Without a reliable database and management controls to collect and evaluate VE program data, OBO cannot accurately determine VE cost savings and cost avoidances. Moreover, because OBO has not implemented sufficient controls over its VE program, the Department is missing opportunities to achieve the lowest lifecycle cost, which is the VE program's fundamental purpose.

OBO Performed Initial Value Engineering Studies but Not Secondary Ones

OMB and OBO policies state that a VE study is required for projects with construction costs over an established dollar threshold, unless a waiver is approved.[36] OIG found that OBO performed a VE study or obtained an approved waiver for 66 of the 67[37] capital construction[38] and major

[34] Of the 67 capital construction and major rehabilitation projects in the design or construction phase or completed during FY 2016 and FY 2017, 6 had waivers and did not require a VE study. See Appendix A: Purpose, Scope, and Methodology for detailed information regarding the universe of projects for this audit.

[35] OIG selected the New Embassy Compounds in London, England; Maputo, Mozambique; and N'Djamena, Chad; as well as the Amman, Jordan, Major Rehabilitation Compound; the Nuevo Laredo, Mexico, New Consulate Compound; and the Libreville, Gabon, Marine Security Guard Residence. See Appendix A: Purpose, Scope, and Methodology for detailed information regarding the projects audited, including the universe and selection.

[36] The current policy, OMB Circular A-131 (revised December 26, 2013, at 5) states "The minimum threshold for agency projects and program which require the application of VE is $5 million," which has been implemented in OBO's P&PD (revised July 1, 2015, at 2). On the basis of information provided by OBO, OIG determined that 67 projects had budgets exceeding $5 million and were in the design or construction phase or completed during FY 2016 or FY 2017. Of these projects, 30 had been started after the OMB Circular had been revised, and 31 projects had been started when the earlier OMB requirements were in place. Specifically, OMB Circular A-131 (revised May 21, 1993, at § 8) states, "The minimum threshold for agency projects and program which require the application of VE is $1 million." All of the projects selected for review, including ones started during the 1993 guidance, exceeded the current threshold. The remaining six projects had waivers and did not require a VE study.

[37] Appendix B provides details of the compliance testing performed on the 67 projects.

[38] Capital construction projects are for new facilities.

rehabilitation projects[39] that were in the design or construction phase or completed during FY 2016 and FY 2017.

OBO's May 2004 version of its VE policy[40] stated that for projects with construction costs more than $20 million, two VE studies would be performed. This policy was updated on July 1, 2015,[41] to state that for complex projects or projects with construction costs more than $100 million, a second study may be performed. OIG identified 49[42] projects meriting a second VE study on the basis of the policy in place at the time; however, OBO did not provide evidence that a second study had been performed for any of the 49 projects. In addition, OBO personnel stated that a second VE study may be performed on a specific component of a project, but a second full-scale study is not normally performed; however, OBO also did not provide evidence that a second study had been performed on a specific component for any of the projects reviewed.

OBO Generally Processed Value Engineering Waivers Appropriately

OMB Circular A-131[43] states that agency guidance should permit waivers from required VE studies, when doing so is approved by the Senior Accountable Official or the official's designee. In addition, OBO policy[44] states that a VE study is required unless a waiver is approved. All waivers must explain why a VE study would not be beneficial to the project. Furthermore, the waiver must be cleared by OBO's managing directors and the Head of Contracting Authority.

Of the 67 projects more than $5 million that were reviewed for this audit, OBO obtained a waiver for 6 projects: Chennai, India; Freetown, Sierra Leone; Madrid, Spain; Sarajevo, Bosnia and Herzegovina; Stockholm, Sweden; and Tunis, Tunisia. OIG reviewed the waivers and found that all six waivers documented why the projects would not benefit from a VE study and provided justifications to support the waiver request. For example, three waivers were granted for projects that implemented security requirements and three waivers were granted for projects that added additional components to existing structures that already had VE studies. Five of the six waivers contained the required clearances from OBO personnel and were approved and signed by the Head of Contracting Activity, as required by OBO policy.[45, 46] OBO stated a sixth waiver was obtained for the Freetown, Sierra Leone, rehabilitation project; however, OBO could only provide an unsigned waiver.

[39] Major rehabilitation projects renovate or replace a major building system.

[40] OBO P&PD (revised May 26, 2004), at 2.

[41] OBO P&PD (revised July 1, 2015), at 2.

[42] Twelve construction projects did not merit a second VE study because they were below the dollar threshold established in OBO's policy.

[43] OMB Circular A-131 (revised December 26, 2013), § 7.a.2.iii.

[44] OBO P&PD (revised July 1, 2015), at 2.

[45] OBO P&PD (revised July 1, 2015), at 4 and 8, and OBO P&PD (revised May 26, 2004), at 2 and 11.

[46] The approval authority for all OBO VE waivers is the Director of the Bureau of Administration, Office of Logistics Management, Office of Acquisitions Management.

Required Spreadsheets and Memoranda Were Often Missing, Incomplete, or Inconsistent

OBO's VE policy requires the PM to send a formal memorandum to the COST Office Director summarizing which VE recommendations will be implemented.[47] In addition, the policy requires a VE implementation spreadsheet with project-specific VE justification information. In the implementation spreadsheet, OBO is required to identify whether it accepted or rejected the recommendation; if a recommendation was rejected, the spreadsheet must include an explanation for this decision. The implementation spreadsheet should also summarize the total estimated initial savings and the operations and maintenance potential VE savings. Furthermore, the Foreign Affairs Manual[48] states that, as part of managing the VE program, COST should evaluate projects during the planning, design, and construction phases to ensure projects provide user requirements at the lowest lifecycle costs.

OIG found that OBO's documentation for the VE program was incomplete[49] and inconsistent.[50] Specifically, OIG reviewed 61 projects[51] and found that OBO developed implementation spreadsheets for 44 of the projects (72 percent). Of those projects with implementation spreadsheets, OBO did not include the reason for rejecting VE study recommendations for 13 of 44 projects (30 percent). OIG also found that OBO did not issue required implementation memoranda for 47 of the 61 projects (77 percent). In addition, of the 14 implementation memoranda prepared, 5 (36 percent) were unsigned drafts and, therefore, OIG was unable to determine if the implementation memoranda were reviewed by the division chief or office director. Figure 2 illustrates the extent to which OBO's VE documentation complied with Department requirements.

[47] OBO P&PD (revised July 1, 2015), at 2.

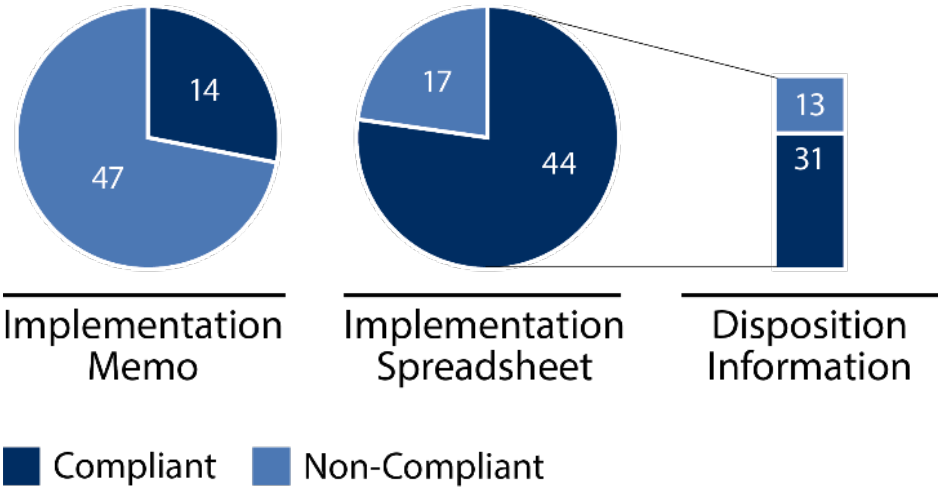
[48] The Foreign Affairs Manual, 1 FAM 284.1, "Office of Cost Management (OBO/PDCS/COST)."

[49] Incomplete documentation is data lacking a necessary element.

[50] Inconsistent documentation is data that are not compatible with another claim.

[51] Of the 67 capital construction and major rehabilitation projects in the design or construction phase or completed during FY 2016 and FY 2017, 6 had waivers and did not require a VE study. OIG reviewed 61 capital construction and major rehabilitation projects in the design or construction phase or completed during FY 2016 and FY 2017 that met the criteria for a VE study. See Appendix A: Purpose, Scope, and Methodology for detailed information about the universe of projects for this audit.

Figure 2: Value Engineering Documentation



Source: Generated by OIG using VE information provided by OBO.

OIG also selected 6 of the 61 projects for additional analysis. OIG did so to determine the completeness and accuracy of the content included in the VE studies, implementation spreadsheets, and implementation memoranda. However, OIG was unable to complete the planned audit analysis because VE documentation was either missing or incomplete for required items such as implementation spreadsheets, implementation memoranda, and documented justifications for rejected VE study recommendations. Accordingly, OIG curtailed the audit work and could not evaluate the effectiveness of OBO's VE program. Table 1 provides details relating to the six projects selected for additional analysis.

Table 1: Details of Projects Selected for Additional Analysis

Construction Project	Project Type	Date of VE Study	Estimated Construction Cost (In Millions)	Accepted VE Cost Avoidances (In Millions)
London New Embassy Compound (NEC), England	Capital Construction	October 2011	$1,030	$31
Maputo NEC, Mozambique	Capital Construction	June 2013	$284	$21.4
N'Djamena NEC, Chad	Capital Construction	January 2013	$230	$28.1
Amman Rehabilitation, Jordan	Major Rehabilitation	June 2013	$217	$7.6
Nuevo Laredo New Consulate Compound (NCC), Mexico	Capital Construction	May 2014	$156	$4.5
Libreville MSGR, Gabon	Capital Construction	August 2014	$24	$1.3
Total			**$1,941**	**$93.9**

Source: Generated by OIG using construction project and VE information provided by OBO.

For the London NEC, the VE study included 77 recommendations, of which OBO rejected 61 (79 percent). The VE implementation spreadsheet did not explain why OBO rejected these recommendations, which represented a projected $24.4 million in cost avoidances. Furthermore, the implementation spreadsheet was inconsistent with the corresponding implementation memorandum. For example, the implementation spreadsheet noted total cost avoidances of $15.2 million, but the memorandum identified total cost avoidances of $30.7 million.

For the Maputo NEC, the implementation spreadsheet contained an accepted recommendation in the amount of $406,600. However, the corresponding implementation memorandum listed the recommendation as rejected with $0 in cost avoidances. On the basis of additional information provided by OBO, OIG determined that the recommendation was actually accepted.

For the N'Djamena NEC, the VE study included 40 recommendations, of which OBO rejected 28 (70 percent). The VE implementation spreadsheet did not explain why OBO rejected these recommendations, which if adopted, included $30.4 million in projected cost avoidances. When OIG brought this matter to OBO's attention, OBO provided OIG a draft document that included non-specific justifications for eight of the rejected items. For example, one recommendation proposed a heat recovery chiller to reheat coils, but the justification for the rejection stated the reheat chiller was not suitable for the climate. However, OBO did not provide the corresponding implementation memorandum showing estimated cost avoidances.

For the Amman Major Rehabilitation, the VE study included 53 recommendations, of which OBO rejected 47 (89 percent). The VE implementation spreadsheet did not explain why OBO rejected

these recommendations, which if adopted, included $43.5 million in projected cost avoidances. However, OBO provided a draft document that included the justifications of the rejected items. For example, one recommendation proposed to replace internal concrete walls with beams and columns. OBO rejected the recommendation because doing so would eliminate solid walls that could serve as load-bearing walls and that could supplement framing during construction. Moreover, the implementation spreadsheet incorrectly indicated that the cost avoidances of the accepted recommendations were $6.3 million. OIG instead determined the estimated cost avoidances were actually $7.6 million on the basis of accepted recommendation estimates in the VE study report.

For the Nuevo Laredo NCC, the VE study included 48 recommendations, of which OBO rejected 33 (69 percent). In this instance, the VE implementation spreadsheet included an explanation for why OBO rejected the recommendations. OIG determined the justification information included in the VE implementation spreadsheet for rejecting the VE study recommendations was detailed and reasonable. OBO rejected nine recommendations stating that these recommendations did not meet OBO criteria. For example, one recommendation proposed to relocate the gym to the recreation building and to consolidate locker rooms, but OBO rejected this recommendation because the gym is required to be behind a setback protection and, therefore, the proposal did not meet OBO requirements. However, OBO did not provide the corresponding implementation memorandum showing cost avoidances associated with accepted recommendations, which were estimated to be $4.5 million.

For the Libreville MSGR, the implementation spreadsheet listed two recommendations as rejected but included them with the total cost avoidances in the amount of $118,700. On the basis of additional information provided by OBO, OIG determined that the two recommendations were actually accepted by OBO.

Table 2 shows the number of proposed, accepted, and rejected recommendations for the six projects reviewed along with the number of VE study recommendations rejected that did not include the required justification information in the implementation spreadsheets.

Table 2: Number of Value Engineering Recommendations by Project

Construction Project	Proposed	Accepted	Rejected	Recommendations Rejected Without Justification
London NEC	77	16	61	16
Maputo NEC	32	13	19	0
N'Djamena NEC	40	12	28	20
Amman Rehabilitation	53	6	47	47
Nuevo Laredo NCC	48	15	33	0
Libreville MSGR	34	22	12	10
Total	**284**	**84**	**200**	**93**

Source: Generated by OIG from analysis of VE implementation spreadsheets provide by OBO.

Required Value Engineering Clause Was Included, but No Evidence That Value Engineering Change Proposals Were Received

The FAR[52] requires that agencies provide contractors with a financial incentive to develop and submit VECPs by including a VE incentive provision in construction contracts. VECP clauses in FAR 52.248-1, FAR 52.248-2, and FAR 52.248-3 are mandated for all Government contracts. OIG reviewed the contracts for the aforementioned six OBO construction projects and found that five of six contracts (83 percent) contained the required VECP clause. The only contract that did not contain the VECP clause—the London NEC—was the most costly project of the six. According to OBO officials, the clause was not included in the London NEC project because of Early Contractor Involvement.[53] Because the contractor was involved in the design phase and was expected to use its specialized knowledge to keep the cost low during the design phase, OBO believed that it was unnecessary to include the VECP clause in that contract because doing so might actually undermine its particular incentives to promote lower costs. According to OBO, including the VECP clause may have been counterproductive in this case because it might have given the contractor an incentive to delay making cost-reducing recommendations until it was awarded the construction portion of the contract; this delay would have allowed the contractor to obtain additional profits through its anticipated share of VECP savings. However, with Early Contractor Involvement, the contractor is expected to recommend cost-reducing recommendations during the design phase, an approach that is intended to result in savings for the Department and profits to the contractor during the firm-fixed-price negotiation for this type of contract.

Although the construction contracts for five of six projects reviewed contained the VECP clause, no documentation suggested that OBO received and considered a VECP for any of the projects. In fact, according to the VE Program Manager, the VE program rarely receives VECPs from the contractor for design/build projects because the construction contractor is involved in both the

[52] FAR 48.102, "Policies."

[53] Early Contractor Involvement is a project delivery method in which, as the title suggests, the construction contractor is involved at an early point in the design with the intention of shortening the time between design and construction.

design and construction phases; that is, a contractor is likely to include suggestions at these phases. Four[54] of six projects reviewed by OIG were design/build projects. In addition, the VE Program Manager may not always be aware when a VECP is submitted if OBO project directors process the VECP as a typical contract change order.[55] However, in that case, the changes and potential savings should have been reported to the VE Program Manager, as set forth in OBO guidance.[56]

OBO Officials Did Not Enforce Adherence to Federal and OBO Value Engineering Policies

The instances of noncompliance with Federal and Department guidelines identified during the audit occurred, in part, because OBO management did not enforce program requirements outlined in OBO's policies and guidebooks for maintaining and reporting VE results. In addition, OBO lacks a reliable centralized database and repository to record the results and maintain documents of the VE program. Furthermore, other than the VE Program Manager, the OBO personnel who are substantially involved with the VE program are not assessed on their adherence to the VE program requirements in their annual performance evaluations.

OBO Did Not Enforce Program Requirements

The Government Accountability Office[57] states that management should monitor internal controls "as part of the normal course of operations." Ongoing monitoring should be "built into the entity's operations, performed continually, and responsive to change." In addition, OMB policy,[58] OBO's VE P&PD,[59] and the COST Guidebook[60] explain the VE process and the required VE documentation necessary to have an active and productive VE program.

OIG found that OBO management did not sufficiently oversee and enforce VE program requirements to ensure compliance with Federal requirements and Department policies to maintain documentation and report results. In addition, OBO management did not sufficiently monitor whether VE study recommendations that were considered reasonable and offered

[54] The four design/build projects that OIG reviewed were N'Djamena, Chad; Amman, Jordan; Nuevo Laredo, Mexico; and Libreville, Gabon.

[55] The evaluation and processing of a VECP is treated similarly to any change order during construction.

[56] The OBO Construction and Commissioning Guidebook (July 31, 2008) states, "To satisfy an Overseas Buildings Operations requirement to report savings resulting from [VE] activities, the Project Director will report accepted [VECPs] from the construction contractor. The report will be made to the [OBO] Value Engineering Officer through the cognizant Project Executive after the execution of the contract modification granting the construction contractor a share of the savings." The revised OBO Construction Management Guidebook (May 2016) does not include this language; however, the OBO P&PD, "Value Engineering," (May 26, 2004, and July 1, 2015) states that all processing of VECPs should be coordinated with the VE program.

[57] Government Accountability Office, *Standards for Internal Control in the Federal Government*, (GA0-14-704G, September 2014) §§ 16.04 and 16.05, "Internal Control System Monitoring."

[58] OMB Circular A-131 (revised December 26, 2013).

[59] OBO P&PD (revised), July 1, 2015.

[60] OBO, "COST Guidebook," Chapter 3 (October 2016).

potential cost avoidances were implemented, and management did not evaluate the basis for rejecting VE study recommendations and appropriately document those decisions.

OIG also found that OBO did not have an effective method to collect and evaluate VE information in a centralized, organized manner to ensure that files included all required documents. OBO presently uses a Microsoft Excel document that should include the status of VE studies and details relating to VE recommendations, which OBO refers to as the VE database. The Excel document includes multiple worksheet features that can assist with reporting information. The Excel document is accessible to OBO personnel involved with managing the VE program, and it is their responsibility to update and maintain the information contained in the Excel document. However, the VE Program Manager stated that the Excel document is not "authoritative" and acknowledged that the Excel document is not always updated or accurate. Moreover, some VE documentation is maintained by the VE Program Manager but other documentation is maintained by the OBO PMs. For example, for three of the six projects selected for additional analysis, the VE Program Manager did not have the implementation spreadsheets and implementation memoranda in the VE files and had to obtain them from the OBO PMs.

OBO Value Engineering Cost Avoidances Cannot Accurately Be Determined

Without a reliable database and management controls to collect and evaluate VE program data, OBO cannot accurately determine and report VE cost savings, cost avoidance, and expenditures. In addition, because OBO has not implemented sufficient controls over its VE program, the Department may be missing opportunities to identify and remove nonessential capital and operating costs and achieve the lowest lifecycle cost, which is the VE program's fundamental purpose.

Recommendation 1: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a communications strategy to periodically keep Bureau of Overseas Buildings Operations personnel informed of the purpose and requirements of the value engineering program and respective roles in maintaining value engineering program data.

Management Response: OBO accepted the recommendation, stating that it "will develop and present quarterly [VE] [i]nformational presentations that will be open to all OBO personnel using [VE] services." OBO also stated that it "will provide the Risk and VE Policy Directive and Standard Operating Procedures to all offices whose work requires VE services," which "will be in an effort to better communicate the purpose and requirements of the [VE] program and detail each office's respective roles in maintaining [VE] program data."

OIG Reply: On the basis of OBO's acceptance and planned actions, OIG considers this recommendation resolved, pending further action. This recommendation will be closed when OIG receives and accepts documentation demonstrating that OBO developed and implemented a communications strategy to periodically keep OBO personnel informed of the purpose and requirements of the VE program and respective roles in maintaining VE program data.

Recommendation 2: OIG recommends that the Bureau of Overseas Buildings Operations (a) develop standards to assess adherence to value engineering program requirements and (b) insert those standards into the work commitments and annual performance evaluations of all personnel substantially involved with the value engineering program.

Management Response: OBO accepted the recommendation, stating that it "will develop standards that assess adherence to [VE] program requirements and include those standards into the work commitments and annual performance evaluations of all personnel substantially involved with the VE program starting in 2019."

OIG Reply: On the basis of OBO's acceptance and planned actions, OIG considers this recommendation resolved, pending further action. This recommendation will be closed when OIG receives and accepts documentation demonstrating that OBO developed standards that assess adherence to VE program requirements and inserted those standards into the work commitments and annual performance evaluations of all personnel substantially involved with the VE program.

Recommendation 3: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a quality assurance process to periodically (and no less than bi-annually) validate that it is: (a) implementing value engineering study recommendations that are considered reasonable and that offer a potential for cost savings, cost avoidances, and expenditures; (b) considering all value engineering study recommendations offered and documenting the basis for rejecting recommendations; and (c) informing the Director of the Bureau of Overseas Buildings Operations about the results of the quality assurance review.

Management Response: OBO accepted the recommendation, stating that it "will develop and implement a quality assurance process that will bi-annually validate that it is: (a) implementing [VE] study recommendations that are considered reasonable and that offer a potential for cost savings, cost avoidances, and expenditures; (b) considering all [VE] study recommendations offered and documenting the basis for rejecting recommendations; and (c) informing the Director of [OBO] about the results of the quality assurance review."

OIG Reply: On the basis of OBO's acceptance and planned actions, OIG considers this recommendation resolved, pending further action. This recommendation will be closed when OIG receives and accepts documentation demonstrating that OBO (a) implemented VE study recommendations that are considered reasonable and that offer a potential for cost savings, cost avoidances, and expenditures; (b) considered all VE study recommendations offered and documented the basis for rejecting recommendations; and (c) informed the Director of OBO about the results of the quality assurance review.

Recommendation 4: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement procedures to verify that the current value engineering database is updated with accurate and current value engineering information when value engineering documentation and data are received.

Management Response: OBO accepted the recommendation, stating that the current VE implementation memorandum template "only requires that any updates be reported." OBO further stated that it "will develop a policy that will send a specific request, after award, to inquire [about] . . . any updates in the previously reported data and verify that the current [VE] database is updated with accurate and current [VE] information" when that documentation and data are received.

OIG Reply: On the basis of OBO's acceptance and planned actions, OIG considers this recommendation resolved, pending further action. This recommendation will be closed when OIG receives and accepts documentation demonstrating that OBO developed and implemented procedures to verify that the current VE database is updated with accurate and current VE information when VE documentation and data are received.

Recommendation 5: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a central repository to maintain complete and accurate value engineering program information to include, at a minimum: value engineering studies, implementation spreadsheets, implementation memoranda, requests for and approval of waivers, calculations regarding value engineering cost savings and cost avoidances for recommendations implemented, and the justifications for rejecting value engineering study recommendations.

Management Response: OBO accepted the recommendation, stating that it "will continue to investigate possibilities for a central repository to maintain a complete and accurate [VE] program" in addition to current IT resources. OBO further stated that it plans to look for "a software solution that will enable all of OBO to access the VE files to look up project specific [risk and VE] project information" without allowing all users "to manipulate the data itself."

OIG Reply: On the basis of OBO's acceptance and planned actions, OIG considers this recommendation resolved, pending further action. This recommendation will be closed when OIG receives and accepts documentation demonstrating that OBO developed and implemented a central repository to maintain complete and accurate VE program information, including, at a minimum, VE studies, implementation spreadsheets, implementation memoranda, requests for and approval of waivers, calculations regarding VE cost savings and cost avoidances for recommendations implemented, and justifications for rejecting VE study recommendations.

Finding B: OBO's Annual Value Engineering Reports to OMB Were Neither Timely nor Accurate

OIG found that OBO did not comply with OMB's annual reporting requirements. Specifically, OBO did not submit annual VE reports to OMB for FYs 2013 through 2015, as required, and the VE report submitted in FY 2016 was 2 months late and contained inaccuracies. Similar to the underlying deficiencies noted in Finding A of this report, OBO's noncompliance with VE reporting requirements occurred, in part, because OBO management did not enforce VE reporting requirements outlined in OMB and OBO policy. Although OMB waived the VE

program annual reporting requirement for Federal agencies in 2017, OMB reiterated that VE should continue to be overseen by the agency's Senior Accountable Official and encouraged agencies to work with OMB to highlight successful uses of VE. Until OBO management implements a process to collect and evaluate VE program data, it will remain unable to do so. Moreover, reporting VE savings and cost avoidances is also important to demonstrate that OBO is prudently using U.S. taxpayer funds to advance its mission.

OBO Did Not Accurately Report Value Engineering Results

Prior to 2017, OMB required agencies to annually report (by December 31 of each calendar year) the results of the VE program, including VE expenditures and cost avoidance.[61, 62] OIG found that OBO did not consistently do so. Specifically, for multiple fiscal years, OBO did not submit an annual report to OMB. In October 2016, OBO's VE program transitioned to a new VE Program Manager. OBO's new VE Program Manager submitted the FY 2016 annual report; however, it was submitted more than 2 months late and contained inaccuracies. For example, the VE cost avoidance amount reported to OMB for the Athens Chancery rehabilitation was $3,611,800. However, this amount differed from the program data maintained in OBO's VE program database, which indicated that $2,114,500 was realized, a difference of $1,497,300. In another example, the FY 2016 annual report to OMB reported total cost avoidances of $360,055 for the Khartoum, Sudan, MSGR, which was also listed by OBO as a top five VE project.[63] However, VE program data for the Khartoum MSGR project were not in the VE program database and could not be confirmed by OIG. Although OMB waived the VE program annual reporting requirement for Federal agencies in 2017, OMB reiterated that VE should continue to be overseen by the agency's Senior Accountable Official and encouraged agencies to work with OMB to highlight successful uses of VE.[64]

Similar to the underlying cause of the deficiencies noted in Finding A of this report, OBO's noncompliance with VE reporting requirements occurred, in part, because OBO officials did not enforce VE program requirements outlined in OMB and OBO policies on reporting VE results. Although reporting VE program results is no longer required by OMB, OMB encourages agencies to highlight successful uses of VE. Until OBO management implements a process to collect and evaluate VE program data, it will remain unable to accurately report VE cost savings and cost avoidances or highlight successful uses of VE. Moreover, implementing VE study recommendations and reporting VE savings and cost avoidances are also important to demonstrate to U.S. taxpayers that OBO construction projects are identifying and removing

[61] OMB Circular A-131 (revised December 26, 2013), § 8.

[62] OMB Memorandum M-17-26, at 9 (June 15, 2017), paused this requirement until OMB Circular A-131 can be amended to eliminate the reporting requirement.

[63] A section of the report to OMB calls for a description of the top five VE projects for the fiscal year. The top five projects are listed by title showing the cost savings, cost avoidances, and quality improvements achieved by applying VE.

[64] OMB Memorandum M-17-26, at 9 (June 15, 2017), paused this requirement until OMB Circular A-131 can be amended to eliminate the reporting requirement.

nonessential capital and operating costs and prudently using U.S. taxpayer funds to advance its mission.

Recommendation 6: OIG recommends that the Bureau of Overseas Buildings Operations annually post to its public internet site the results of the value engineering program to highlight successful uses of value engineering and to demonstrate that the Bureau of Overseas Buildings Operations is committed to identifying and removing nonessential capital and operating costs from its construction projects and is prudently using U.S. taxpayer funds to advance its mission.

Management Response: OBO accepted the recommendation, stating that it "will develop a practice of annually posting to its public internet site the results of the [VE] program" and "provide information to highlight successful uses of [VE] methods, thus demonstrating U.S. taxpayer savings." OBO further stated that it will provide the relevant information in a "non-contract/project specific manner" to avoid "opening [the] U.S. government up to adverse contractor actions."

OIG Reply: On the basis of OBO's acceptance and planned actions, OIG considers this recommendation resolved, pending further action. This recommendation will be closed when OIG receives and accepts documentation demonstrating that OBO annually posted, to its public internet site, the results of the VE program to highlight successful uses of VE and to demonstrate that it is committed to identifying and removing nonessential capital and operating costs from its construction projects and is prudently using U.S. taxpayer funds to advance its mission.

RECOMMENDATIONS

Recommendation 1: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a communications strategy to periodically keep Bureau of Overseas Buildings Operations personnel informed of the purpose and requirements of the value engineering program and respective roles in maintaining value engineering program data.

Recommendation 2: OIG recommends that the Bureau of Overseas Buildings Operations (a) develop standards to assess adherence to value engineering program requirements and (b) insert those standards into the work commitments and annual performance evaluations of all personnel substantially involved with the value engineering program.

Recommendation 3: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a quality assurance process to periodically (and no less than bi-annually) validate that it is: (a) implementing value engineering study recommendations that are considered reasonable and that offer a potential for cost savings, cost avoidances, and expenditures; (b) considering all value engineering study recommendations offered and documenting the basis for rejecting recommendations; and (c) informing the Director of the Bureau of Overseas Buildings Operations about the results of the quality assurance review.

Recommendation 4: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement procedures to verify that the current value engineering database is updated with accurate and current value engineering information when value engineering documentation and data are received.

Recommendation 5: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a central repository to maintain complete and accurate value engineering program information to include, at a minimum: value engineering studies, implementation spreadsheets, implementation memoranda, requests for and approval of waivers, calculations regarding value engineering cost savings and cost avoidances for recommendations implemented, and the justifications for rejecting value engineering study recommendations.

Recommendation 6: OIG recommends that the Bureau of Overseas Buildings Operations annually post to its public internet site the results of the value engineering program to highlight successful uses of value engineering and to demonstrate that the Bureau of Overseas Buildings Operations is committed to identifying and removing nonessential capital and operating costs from its construction projects and is prudently using U.S. taxpayer funds to advance its mission.

APPENDIX A: PURPOSE, SCOPE, AND METHODOLOGY

The Office of Inspector General (OIG) conducted this audit to determine whether the Bureau of Overseas Buildings Operations (OBO) complied with Federal and Department of State (Department) value engineering (VE) program requirements and accurately reported VE expenditures, cost savings, and cost avoidances to the Office of Management and Budget (OMB).

OIG conducted this audit from November 2017 to June 2018. Audit work was performed in the Washington, DC, metropolitan area. The scope of the audit for Finding A included projects that were in the design or construction phase or completed during FY 2016 or FY 2017 and that had estimated construction costs exceeding $5 million (see Appendix C for a listing of these projects). On the basis of projects identified, OIG sampled six projects for additional analysis. The scope of the audit for Finding B included annual VE reports submitted to OMB for FY 2013 through FY 2016. OIG conducted this performance audit in accordance with generally accepted government auditing standards. These standards require that OIG plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives. OIG believes that the evidence obtained provides a reasonable basis for the findings and conclusions presented in this report.

To obtain background information for this audit, including criteria, OIG researched and reviewed Federal laws and regulations, as well as Department policies and procedures. Specifically, OIG reviewed OMB requirements, the Federal Acquisition Regulation, the Foreign Affairs Manual, the Foreign Affairs Handbook, and applicable OBO Policy and Procedures Directives. In addition, to obtain an understanding of OBO's VE program requirements and procedures, OIG interviewed OBO officials familiar with the VE program.

To determine whether OBO complied with Federal and Department VE program requirements and accurately reported VE expenditures, cost savings, and cost avoidances to OMB for those projects in the design or construction phase or completed during FY 2016 and FY 2017, OIG reviewed and analyzed OBO's annual VE report to OMB, VE studies, implementation spreadsheets, implementation memoranda, waivers, and applicable supporting documentation. In addition, OIG reviewed construction contracts for the six sampled projects and interviewed OBO officials to identify whether any VE change proposals were included in the construction contracts and submitted by the contractors.

Prior Reports

A Government Accountability Office report[65] examined Department construction efforts at the U.S. Embassy in Kabul, Afghanistan. Specifically, the report examined (1) the extent to which construction cost and schedule changed and the reason for the changes, (2) the Department's

[65] Government Accountability Office, *Embassy Construction Cost and Schedule Have Increased, and Further Facilities Planning Is Needed* (GA0-15-410, May 2015).

use of temporary facilities on the compound, and (3) the Department's planning for the embassy's projected facility needs. The report concluded that the Department did not properly follow OMB and OBO VE and risk assessment policies, a fact that likely contributed to increased costs and extended schedules in the 2009 and 2010 contracts. The Government Accountability Office recommended that the Department ensure that existing VE and risk assessment policies are followed in future Kabul construction projects. The Department concurred with the recommendation and stated that, going forward, it will better administer VE and risk assessment by adhering to active OBO policies.

Work Related to Internal Controls

OIG performed steps to assess the adequacy of internal controls related to the management of OBO's VE program, including reviewing policies, procedures, and processes applicable to the areas audited. In addition, OIG gained an understanding of the VE program and tested controls to ensure that OBO complied with VE requirements. OIG summarized internal control deficiencies and weaknesses identified during the audit in the "Audit Results" section of this report.

Use of Computer-Processed Data

OIG obtained and used computer-processed data provided by OBO. Specifically, OIG obtained a list of capital construction and major rehabilitation projects that were in the design or construction phase or completed during FY 2016 and FY 2017, an annual VE report to OMB, VE studies, waivers, implementation spreadsheets, and implementation memoranda.

Universe of Capital and Major Rehabilitation Projects

OIG initially received a list of 66 capital construction and major rehabilitation projects from OBO, all of which were in the design or construction phase or completed during FY 2016 and FY 2017. However, after discussions with the OBO VE Program Manager, OIG determined the Tokyo, Japan, and Beijing, China, major rehabilitation projects should not have been included in the 66 projects because they did not meet the criteria for OIG's scope period. OIG removed the two projects from the universe. In addition, the Jerusalem, Israel, project was in the planning stage and had not reached the stage to conduct a VE study. OIG also removed that project from the universe. At this point OIG identified 63 projects within the scope of the audit.

During OIG's review of the OBO FY 2016 annual report that was submitted to OMB, OIG noted OBO reported two waivers. OIG requested the waivers that OBO reported to OMB for FY 2016; however, OBO provided OIG with a total of four waivers processed during FY 2016 that should have initially been provided to OIG. Furthermore, OIG identified 2 waivers that were initially included in the 63 projects that fell within the scope of the audit. In total, OBO provided OIG six waivers that were within the audit scope.

On the basis of information provided by OBO, which included 63 initial projects and 4 additional waivers that were identified, OIG determined 67 capital construction and major rehabilitation

projects were in the design or construction phase or completed during FY 2016 and FY 2017. Of the 67 projects identified, 6 had waivers and did not require a VE study. Therefore, OIG reviewed 61 capital construction and major rehabilitation projects in the design or construction phase or completed during FY 2016 and FY 2017 that met the criteria for a VE study. As noted in the "Audit Results" section of this report, OBO lacked a reliable centralized database to maintain information and record the results of the VE program.

To assess the completeness and accuracy of the list, OIG corroborated the data with the OBO FY 2016 Planning Report and documentation obtained from OBO. OIG reconciled the list with the information obtained from OBO and confirmed that the 67 capital construction and major rehabilitation projects were all included in the scope period of the audit. On the basis of this assessment, OIG believes the data are complete and sufficiently reliable to meet the audit objective.

Value Engineering Report, Studies, Waiver, Implementation Spreadsheets, and Implementation Memoranda

OIG obtained an electronic VE report that the Department submitted to OMB, VE studies, waivers, implementation spreadsheets, and implementation memoranda, all of which were prepared by OBO or OBO's contractors. OIG attempted to reconcile the VE data between the different documents; however, as noted in the "Audit Results" section of this report, the VE documentation was limited. Specifically, required implementation spreadsheets and implementation memoranda were often not prepared, were missing information, or contained inconsistent information. This limited OIG's ability to complete its analysis of OBO's VE program, and OIG accordingly curtailed its audit. In addition, OIG could not determine whether the reported number of waivers was accurate. For example, the FY 2016 annual report submitted to OMB indicated that two waivers had been granted by Head of Contracting Activity[66] during that fiscal year; however, OBO provided OIG documentation that four waivers had been granted that fiscal year. OIG was unable to verify the completeness and accuracy of the documentation. Therefore, OIG determined the data to be of undetermined reliability.

Detailed Sampling Methodology

OIG's sampling objective was to select a sample of capital construction and major rehabilitation projects in the design or construction phase or completed during FY 2016 and FY 2017 that met the threshold for having a VE study. From the universe of projects, OIG selected a target of six construction projects to provide evidence for the audit objective.

Audit Universe

OIG requested a list of OBO construction projects in the design or construction phase or completed during FY 2016 and FY 2017 with construction costs more than $5 million. After

[66] The approval authority for all OBO VE waivers is the director of the Bureau of Administration, Office of Logistics Management, Office of Acquisitions Management.

reviewing a list of construction projects provided by OBO, OIG determined a total of 67 construction projects were in the design or construction phase or completed during FY 2016 and FY 2017, which included New Embassy Compounds, New Consulate Compounds, New Office Buildings, Annexes, Warehouses, Marine Security Guard Residences, and major rehabilitation projects. OIG reviewed all 67 projects to determine whether a VE study and supporting documentation was completed or a waiver obtained, as required. See Appendix B for a list of the 67 projects.

Construction Project Selection Methodology

Using specific criteria, OIG reduced the scope of the universe to a group of six construction projects with the largest reported VE savings and larger estimated construction costs to complete a comprehensive review of the reported VE savings. These six projects came from the universe of construction projects in the design or construction phase or completed during FY 2016 and FY 2017. The six selected construction projects were a mix of design/build and design/bid/build New Embassy Compounds, New Consulate Compounds, Marine Security Guard Residences, and major rehabilitation projects. In addition, OIG considered the estimated completion date of the construction projects to ensure that the selection was completed in 2017 or estimated to be completed by 2019 so that OIG could obtain the maximum VE data for the selected construction projects. Furthermore, OIG considered the geographic location to ensure that the selections represented several regions. Details of the six construction projects selected are shown in Table A.1.

Table A.1: Construction Projects Sampling Summary

Construction Project	Execution Strategy	Estimated or Actual Substantial Completion Date	Project Stage as of October 2017	Estimated Construction Cost (In Millions)	Accepted VE Cost Avoidances (In Millions)
London New Embassy Compound, England	Design/Bid/ Build	11/2017	Construction	$1,030	$31
Maputo New Embassy Compound, Mozambique	Design/Bid/ Build	6/2019	Construction	$284	$21.4
N'Djamena New Embassy Compound, Chad	Design/Build	4/2017*	Complete	$230	$28.1
Amman Major Rehabilitation, Jordan	Design/Build	10/2018	Construction	$217	$7.6
Nuevo Laredo New Consulate Compound, Mexico	Design/Build	10/2017	Construction	$156	$4.5
Libreville Marine Security Guard Residence, Gabon	Design/Build	2/2018	Construction	$24	$1.3

*Actual substantial completion date.

Source: Generated by OIG using construction project and VE information provided by OBO.

APPENDIX B: THE BUREAU OF OVERSEAS BUILDINGS OPERATIONS COMPLIANCE WITH VALUE ENGINEERING REQUIREMENTS FOR FY 2016 AND FY 2017 CONSTRUCTION PROJECTS

Construction Project	Value Engineering Study or Waiver	Second Value Engineering Study	Implementation Spreadsheet	Implementation Spreadsheet Contained Justification[a]	Implementation Memorandum
Amman Rehabilitation, Jordan	Yes	No	Yes	No	No
Ankara New Embassy Compound (NEC), Turkey	Yes	No	Yes	No	No
Ashgabat NEC, Turkmenistan	Yes	No	Yes	Yes	Yes
Asuncion NEC, Paraguay)	Yes	No	No	N/A	Yes*
Athens Rehabilitation, Greece	Yes	No	Yes	Yes	No
Baghdad Power Plant, Iraq	Yes	No	No	N/A	No
Beijing Rehabilitation, China	Yes	No	No	N/A	No
Beirut NEC, Lebanon	Yes	No	Yes	Yes	No
Belmopan Marine Security Guard Residence (MSGR), Belize	Yes	No	No	N/A	No
Berlin Rehabilitation, Germany	Yes	No	No	N/A	No
Bishkek NEC, Kyrgyzstan	Yes	No	Yes	Yes	No
Brazzaville MSGR and Warehouse, Congo	Yes	No	Yes	Yes	Yes

Construction Project	Value Engineering Study or Waiver	Second Value Engineering Study	Implementation Spreadsheet	Implementation Spreadsheet Contained Justification[a]	Implementation Memorandum
Buenos Aires Rehabilitation, Argentina	Yes	Not required	Yes	No	No
Cairo Rehabilitation, Egypt	Yes	Not required	No	N/A	No
Chennai Rehabilitation India	Waiver	Waiver	Waiver	Waiver	Waiver
Colombo NEC, Sri Lanka	Yes	No	No	N/A	Yes*
Copenhagen Rehabilitation, Denmark	Yes	Not required	Yes	Yes	No
Dhahran New Consulate Compound (NCC), Saudi Arabia	Yes	No	Yes	Yes	Yes*
Dushanbe Warehouse, Tajikistan	Yes	No	Yes	Yes	No
Erbil NCC, Iraq	Yes	No	Yes	No	No
Freetown Rehabilitation, Sierra Leone	Waiver	Waiver	Waiver	Waiver	Waiver
Freetown MSGR, Sierra Leone	Yes	Not required	No	N/A	No
Georgetown Rehabilitation, Guyana	Yes	No	No	N/A	No
Guadalajara NCC, Mexico	Yes	No	Yes	Yes	Yes
Guatemala City NEC, Guatemala	Yes	No	Yes	Yes	Yes
Harare NEC, Zimbabwe	Yes	No	Yes	Yes	No
Hermosillo NCC, Mexico	Yes	Not required	No	N/A	Yes*
Hong Kong Rehabilitation	Yes	No	No	N/A	No

Construction Project	Value Engineering Study or Waiver	Second Value Engineering Study	Implementation Spreadsheet	Implementation Spreadsheet Contained Justification[a]	Implementation Memorandum
Hyderabad NCC, India	Yes	No	Yes	Yes	Yes
Islamabad NEC, Pakistan	Yes	No	No	N/A	No
Jakarta NEC, Indonesia	Yes	No	Yes	No	No
Jeddah NCC, Saudi Arabia	Yes	No	Yes	No	No
Johannesburg MSGR, South Africa	Yes	Not required	Yes	Yes	No
Libreville MSGR, Gabon	Yes	No	Yes	Yes	Yes
London NEC, England	Yes	No	Yes	No	No
Madrid Rehabilitation, Spain	Waiver	Waiver	Waiver	Waiver	Waiver
Manila Rehabilitation, Philippines	Yes	No	Yes	No	No
Maputo NEC, Mozambique	Yes	No	Yes	Yes	No
Matamoros NCC, Mexico	Yes	No	No	N/A	No
Mbabane NEC/MSGR, Swaziland)	Yes	No	Yes	Yes	No
Mexico City NEC, Mexico	Yes	No	Yes	Yes	No
Montevideo Rehabilitation, Uruguay	Yes	No	No	N/A	Yes
Moscow Rehabilitation, Russia	Yes	No	Yes	Yes	No
Moscow Rehabilitation, Russia	Yes	No	No	N/A	No
N'Djamena NEC, Chad	Yes	No	Yes	No	No
New Delhi NEC, India	Yes	No	No	N/A	Yes

Construction Project	Value Engineering Study or Waiver	Second Value Engineering Study	Implementation Spreadsheet	Implementation Spreadsheet Contained Justification[a]	Implementation Memorandum
Niamey NEC, Niger	Yes	No	Yes	No	No
Nogales NCC, Mexico	Yes	Not required	Yes	Yes	No
Nouakchott NEC, Mauritania	Yes	No	Yes	Yes	No
Nuevo Laredo NCC, Mexico	Yes	No	Yes	Yes	No
Oslo NEC, Norway	Yes	No	Yes	Yes	No
Paramaribo NEC, Suriname	Yes	No	Yes	Yes	No
Paris MSGR, France	Yes	Not required	Yes	No	No
Port Moresby NEC, New Guinea	Yes	No	Yes	Yes	Yes*
Pristina NEC, Kosovo	Yes	No	No	N/A	No
Rangoon Rehabilitation, Burma	Yes	No	Yes	No	No
Sarajevo Warehouse, Bosnia and Herzegovina	Waiver	Waiver	Waiver	Waiver	Waiver
Shenyang Rehabilitation, China	Yes	Not required	Yes	No	No
Stockholm Rehabilitation, Sweden	Waiver	Waiver	Waiver	Waiver	Waiver
Taipei New Office Building, Taiwan	Yes	No	No	N/A	No
Tegucigalpa NEC, Honduras	Yes	Not required	Yes	Yes	Yes
Tel Aviv Rehabilitation, Israel	Yes	No	Yes	Yes	No
The Hague NEC, Netherlands	Yes	No	Yes	Yes	No

Construction Project	Value Engineering Study or Waiver	Second Value Engineering Study	Implementation Spreadsheet	Implementation Spreadsheet Contained Justification[a]	Implementation Memorandum
Tijuana MSGR, Mexico	Yes	Not required	Yes	Yes	No
Tunis Rehabilitation, Tunisia	Waiver	Waiver	Waiver	Waiver	Waiver
Vilnius Rehabilitation, Lithuania	Yes	No	Yes	Yes	No
Wuhan Rehabilitation, China	No	Not required	Yes	Yes	No

[a] N/A in column denotes construction project did not have an implementation spreadsheet.
*Denotes that OBO provided an implementation memorandum but the document was in draft and not signed.

Source: Generated by OIG from value engineering information provided by OBO.

APPENDIX C: BUREAU OF OVERSEAS BUILDINGS OPERATIONS FY 2016 AND FY 2017 CONSTRUCTION PROJECTS ESTIMATED TO EXCEED $5 MILLION

Construction Project	Project Type	Execution Strategy	Substantial Completion Date	Project Stage as of October 2017	Construction Budget (In Millions)	Accepted Value Engineering Cost Avoidances (In Millions)
Amman Rehabilitation, Jordan	Major Rehabilitation	Design/Build	10/11/2018 (estimated)	Construction	$217	$7.6
Ankara New Embassy Compound (NEC), Turkey	Capital Construction	Design/Bid/ Build	9/8/2020 (estimated)	Construction	$528	$16.6
Ashgabat NEC, Turkmenistan	Capital Construction	Design/Build	1/20/2019 (estimated)	Construction	$272	$13.6
Asuncion NEC, Paraguay	Capital Construction	Design/Bid/ Build	5/16/2021 (estimated)	Construction	$249	$4.5
Athens Rehabilitation, Greece	Major Rehabilitation	Design/Bid/ Build	10/30/2017 (estimated)	Construction	$343	$2.1
Baghdad Power Plant, Iraq	Capital Construction	N/A for this type of project	10/18/2018 (estimated)	Construction	$206	$0
Beijing Rehabilitation, China	Major Rehabilitation	Design/Build	4/30/2018 (estimated)	Construction	$119	$641 (thousand)
Beirut NEC, Lebanon	Capital Construction	Design/Bid/ Build	To be determined	Construction	$1,167	$16.2
Belmopan Marine Security Guard Residence (MSGR), Belize	Capital Construction	Design/Build	11/15/2017 (estimated)	Construction	$22	$890 (thousand)
Berlin Rehabilitation, Germany	Major Rehabilitation	Design/Bid/ Build	5/29/2017 (estimated)	Construction	$91	$0
Bishkek NEC, Kyrgyzstan	Capital Construction	Design/Build	3/15/2017 (actual)	Construction	$171	$16.6

Construction Project	Project Type	Execution Strategy	Substantial Completion Date	Project Stage as of October 2017	Construction Budget (In Millions)	Accepted Value Engineering Cost Avoidances (In Millions)
Brazzaville MSGR and Warehouse, Congo	Capital Construction	Design/Build	5/15/2018 (estimated)	Construction	$22	$600 (thousand)
Buenos Aires Rehabilitation, Argentina	Major Rehabilitation	Design/Bid/ Build	To be determined	Plan/Design	To be determined	$30.8
Cairo Rehabilitation, Egypt	Major Rehabilitation	Design/Bid/ Build	To be determined	Plan/Design	To be determined	$1.9
Chennai Rehabilitation India	Major Rehabilitation	Not Provided	Not Provided	Not Provided	$24	Waiver
Colombo NEC, Sri Lanka	Capital Construction	Design/Build	8/16/2020 (estimated)	Construction	$314	$0
Copenhagen Rehabilitation, Denmark	Major Rehabilitation	Design/Bid/ Build	To be determined	Plan/Design	To be determined	–$1.6*
Dhahran New Consulate Compound (NCC), Saudi Arabia	Capital Construction	Design/Bid/ Build	9/15/2020 (estimated)	Construction	$339	$0
Dushanbe Warehouse, Tajikistan	Capital Construction	Design/Bid/ Build	3/30/2017 (actual)	Construction	$22	$381 (thousand)
Erbil NCC, Iraq	Capital Construction	Design/Bid/ Build	To be determined	Design	$795	$3
Freetown Rehabilitation, Sierra Leone	Major Rehabilitation	Design/Bid/ Build	Not Provided	Not Provided	Not Provided	Waiver
Freetown MSGR, Sierra Leone	Capital Construction	Design/Build	12/12/2018 (estimated)	Construction	$16	$0
Georgetown Rehabilitation, Guyana	Major Rehabilitation	Design/Build	To be determined	Construction	$51	$0
Guadalajara NCC, Mexico	Capital Construction	Design/Build	To be determined	Design	$374	$0

Construction Project	Project Type	Execution Strategy	Substantial Completion Date	Project Stage as of October 2017	Construction Budget (In Millions)	Accepted Value Engineering Cost Avoidances (In Millions)
Guatemala City NEC, Guatemala	Capital Construction	Design/Build	To be determined	Design	$500	$14
Harare NEC, Zimbabwe	Capital Construction	Design/Build	8/1/2018 (estimated)	Construction	$293	$11.6
Hermosillo NCC, Mexico	Capital Construction	Design/Build	To be determined	Design	$27	$2.8
Hong Kong Rehabilitation	Major Rehabilitation	Design/Bid/ Build	8/25/2017 (estimated)	Construction	$32	$1.9
Hyderabad NCC, India	Capital Construction	Design/Build	To be determined	Construction	$350	$3.6
Islamabad NEC, Pakistan	Capital Construction	Design/Build	5/31/2018 (estimated)	Construction	$1,089	$0
Jakarta NEC, Indonesia	Capital Construction	Design/Build	2/6/2019 (estimated)	Construction	$529	$13
Jeddah NCC, Saudi Arabia	Capital Construction	Design/Bid/ Build	3/31/2018 (estimated)	Construction	$288	$1.3
Johannesburg MSGR, South Africa	Capital Construction	Design/Build	8/12/2018 (estimated)	Construction	$22	$182 (thousand)
Libreville MSGR, Gabon	Capital Construction	Design/Build	2/27/2018 (estimated)	Construction	$24	$1.3
London NEC, England	Capital Construction	Design/Bid/ Build	11/15/2017 (estimated)	Construction	$1,030	$31
Madrid Rehabilitation, Spain	Major Rehabilitation	Design Build	Not Provided	Not Provided	$25	Waiver
Manila Rehabilitation, Philippines	Major Rehabilitation	Design/Bid/ Build	11/2/2020 (estimated)	Construction	$213	$3.3
Maputo NEC, Mozambique	Capital Construction	Design/Bid/ Build	6/12/2019 (estimated)	Construction	$284	$21.4
Matamoros NCC, Mexico	Capital Construction	Design/Build	5/11/2019 (estimated)	Construction	$181	$3.6
Mbabane NEC/MSGR, Swaziland)	Capital Construction	Design/Build	12/19/2016 (actual)	Complete	$162	–$60* (thousand)
Mexico City NEC, Mexico	Capital Construction	Design/Bid/ Build	To be determined	Design	$943	$37.3
Montevideo Rehabilitation, Uruguay	Major Rehabilitation	Design/Bid/ Build	To be determined	Construction	$135	$400 (thousand)

Construction Project	Project Type	Execution Strategy	Substantial Completion Date	Project Stage as of October 2017	Construction Budget (In Millions)	Accepted Value Engineering Cost Avoidances (In Millions)
Moscow Rehabilitation, Russia	Major Rehabilitation	Design/Bid/ Build	7/8/2018 (estimated)	Construction	$281	$2.7
Moscow Rehabilitation, Russia	Major Rehabilitation	Design/Bid/ Build	To be determined	Plan/Design	$385	$0
N'Djamena NEC, Chad	Capital Construction	Design/Build	4/27/2017 (actual)	Complete	$230	$28.1
New Delhi NEC, India	Capital Construction	Design/Bid/ Build	To be determined	Design	$875	$26
Niamey NEC, Niger	Capital Construction	Design/Build	4/4/2020 (estimated)	Construction	$288	$19.5
Nogales NCC, Mexico	Capital Construction	Design/Build	To be determined	Design	$19	$8
Nouakchott NEC, Mauritania	Capital Construction	Design/Build	11/2/2017 (estimated)	Construction	$192	$2.5
Nuevo Laredo NCC, Mexico	Capital Construction	Design/Build	10/21/2017 (estimated)	Construction	$156	$4,539
Oslo NEC, Norway	Capital Construction	Design/Bid/ Build	3/8/2017 (actual)	Construction	$244	$6.5
Paramaribo NEC, Suriname	Capital Construction	Design/Bid/ Build	7/16/2016 (actual)	Complete	$166	$2.8
Paris MSGR, France	Capital Construction	Design/Bid/ Build	To be determined	Design	$59	$6.7
Port Moresby NEC, New Guinea	Capital Construction	Design/Bid/ Build	9/27/2019 (estimated)	Construction	$194	$3.8
Pristina NEC, Kosovo	Capital Construction	Design/Build	3/14/2018 (estimated)	Construction	$224	$45 (thousand)
Rangoon Rehabilitation, Burma	Major Rehabilitation	Design/Bid/ Build	10/15/2017 (estimated)	Construction	$26	$1.3
Sarajevo Warehouse, Bosnia and Herzegovina	Capital Construction	Design/Build	11/23/2016 (actual)	Construction	$12	Waiver
Shenyang Rehabilitation, China	Major Rehabilitation	Design/Bid/ Build	2/23/2019 (estimated)	Construction	$14	$0

Construction Project	Project Type	Execution Strategy	Substantial Completion Date	Project Stage as of October 2017	Construction Budget (In Millions)	Accepted Value Engineering Cost Avoidances (In Millions)
Stockholm Rehabilitation, Sweden	Major Rehabilitation	Not Provided	Not Provided	Not Provided	$21	Waiver
Taipei New Office Building, Taiwan	Capital Construction	Design/Build	5/31/2018 (estimated)	Construction	$241	$3.2
Tegucigalpa NEC, Honduras	Capital Construction	Design/Bid/ Build	To be determined	Design	$94	$2.5
Tel Aviv Rehabilitation, Israel	Major Rehabilitation	Design/Bid/ Build	12/31/2018 (estimated)	Construction	$55	$5.2
The Hague NEC, Netherlands	Capital Construction	Design/Bid/ Build	8/25/2017 (actual)	Construction	$224	$4.7
Tijuana MSGR, Mexico	Capital Construction	Design/Build	7/9/2018 (estimated)	Construction	$19	$318 (thousand)
Tunis Rehabilitation, Tunisia	Major Rehabilitation	Not Provided	Not Provided	Not Provided	$12	Waiver
Vilnius Rehabilitation, Lithuania	Major Rehabilitation	Design/Bid/ Build	5/29/2017 (estimated)	Construction	$45	$306 (thousand)
Wuhan Rehabilitation, China	Major Rehabilitation	Design/Bid/ Build	9/28/2018 (estimated)	Construction	$21	$0

* Denotes the accepted value engineering recommendations that resulted in an initial increase to the cost of the project to meet functions at a lower cost during the life of the project.

Source: Generated by OIG using construction project and value engineering information provided by OBO.

APPENDIX D: THE BUREAU OF OVERSEAS BUILDINGS OPERATIONS RESPONSE

United States Department of State

Washington, D.C. 20520

AUG 17 2018

UNCLASSIFIED

TO: OIG/AUD – Denise M. Colchin

FROM: OBO/RM – Jürg E. Hochuli

SUBJECT: Draft Report on OIG Audit of the Bureau of Overseas Buildings Operations Value Engineering Program.

The Bureau of Overseas Buildings Operations (OBO) appreciates the opportunity to provide comments to the subject draft report.

Attached are OBO's written comments to the recommendations made by OIG. The comments are in bold text for ease of reference.

Attachment:

Comments on the draft report.

UNCLASSIFIED

UNCLASSIFIED

OBO Comments on the OIG Draft Report on Audit of OBO Value Engineering Program

(U) Recommendation 1: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a communications strategy to periodically keep the Bureau of Overseas Buildings Operations personnel informed of the purpose and requirements of the value engineering (VE) program and respective roles in maintaining value engineering program data.

(U) OBO Response: OBO accepts this recommendation. OBO plans to develop and present quarterly VE Informational presentations that will be open to all OBO personnel using VE services. Also, OBO will provide the Risk and VE Policy Directive and Standard Operating Procedures to all offices whose work requires VE services. This will be in an effort to better communicate the purpose and requirements of the value engineering program and detail each office's respective roles in maintaining value engineering program data.

(U) Recommendation 2: OIG recommends that the Bureau of Overseas Buildings Operations (a) develop standards to assess adherence to value engineering program requirement and (b) insert those standards into the work commitments and annual performance evaluations of all personnel substantially involved with the value engineering program.

(U) OBO Response: OBO accepts this recommendation. OBO will develop standards that assess adherence to value engineering program requirements and include those standards into the work commitments and annual performance evaluations of all personnel substantially involved with the value engineering program starting in 2019.

(SBU) Recommendation 3: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a quality assurance process to periodically (and no less than bi-annually) validate that it is: (a) implementing value engineering study recommendations that are considered reasonable and that offer a potential for cost savings, cost avoidances, and expenditures; (b) considering all value engineering study recommendations offered and documenting the basis for rejecting recommendations; and (c) informing the Director of the Bureau of Overseas Buildings Operations about the results of the quality assurance review.

(U) OBO Response: OBO accepts this recommendation and will develop and implement a quality assurance process that will bi-annually validate that it is: (a) implementing value engineering study recommendations that are considered reasonable and that offer a potential for cost savings, cost avoidances, and expenditures; (b) considering all value engineering study recommendations offered and documenting the basis for rejecting recommendations; and (c) informing the Director of the Bureau of Overseas Buildings Operations about the results of the quality assurance review.

(U) Recommendation 4: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement procedures to verify that the current value engineering database is updated with accurate and current value engineering information when value engineering documentation and data is received.

UNCLASSIFIED

UNCLASSIFIED

(U) OBO Response: OBO accepts this recommendation. The VE implementation memorandum template currently in place only requires that any updates be reported. Going forward, OBO will develop a policy that will send a specific request, after award, to inquire whether there are any updates in the previously reported data and verify that the current value engineering database is updated with accurate and current value engineering information when value engineering documentation and data are received.

(U) Recommendation 5: OIG recommends that the Bureau of Overseas Buildings Operations develop and implement a central repository to maintain complete and accurate value engineering program information to include, at a minimum: value engineering studies, implementation spreadsheets, implementation memoranda, requests for and approval of waivers, calculations regarding value engineering cost savings and cost avoidances for recommendations implemented, and the justifications for rejecting value engineering study recommendations.

(U) OBO Response: OBO accepts this recommendation. OBO will continue to investigate possibilities for a central repository to maintain a complete and accurate value engineering program, in addition to the current OBO/COST's internal IT resources. OBO/COST has engaged OBO/IRM for their assistance to develop an IT software solution that will enable all of OBO to access the VE files in order to look up project specific Risk/VE project information without the ability to manipulate the data itself.

(U) Recommendation 6: OIG recommends that the Bureau of Overseas Buildings Operations annually post to its public internet site the results of the value engineering program to highlight successful uses of value engineering and to demonstrate that the Bureau of Overseas Buildings Operations is committed to identifying and removing nonessential capital and operating costs from its construction projects and is prudently using U.S. taxpayer funds to advance its mission performance evaluations of all personnel substantially involved with the value engineering program.

(U) OBO Response: OBO accepts this recommendation and is planning the following actions: (a) develop a practice of annually posting to its public internet site the results of the value engineering program; (b) provide information to highlight successful uses of value engineering methods, thus demonstrating U.S. taxpayer savings; and (c) provide information in a non-contract/project specific manner that will allow OBO to display this information without opening U. S government up to adverse contractor actions.

UNCLASSIFIED

ABBREVIATIONS

COST	Office of Cost Management
FAR	Federal Acquisition Regulation
MSGR	Marine Security Guard Residence
NEC	New Embassy Compound
OBO	Bureau of Overseas Buildings Operations
OIG	Office of Inspector General
OMB	Office of Management and Budget
P&PD	Policy and Procedures Directive
PM	Project Manager
VE	value engineering
VECP	value engineering change proposal

OIG AUDIT TEAM MEMBERS

Denise Colchin, Director
Contracts, Grants, and Infrastructure Division
Office of Audits

Melissa Bauer, Audit Manager
Contracts, Grants, and Infrastructure Division
Office of Audits

Weldon Boone, Senior Auditor
Contracts, Grants, and Infrastructure Division
Office of Audits

Roberto Gonzalez-Perez, Senior Auditor
Contracts, Grants, and Infrastructure Division
Office of Audits

Marcus Jaramillo, Senior Auditor
Contracts, Grants, and Infrastructure Division
Office of Audits

HELP FIGHT

FRAUD. WASTE. ABUSE.

1-800-409-9926

stateoig.gov/hotline

If you fear reprisal, contact the
OIG Whistleblower Ombudsman
to learn more about your rights:

WPEAOmbuds@stateoig.gov

stateoig.gov
Office of Inspector General • U.S. Department of State
P.O. Box 9778 • Arlington, VA 22219