United States Government Accountability Office

Report to Congressional Requesters

September 2018

EMBASSY CONSTRUCTION

Pace Is Slower Than Projected, and State Could Make Program Improvements

Accessible Version

GAO-18-653

GAO Highlights

Highlights of GAO-18-653, a report to congressional requesters

September 2018

EMBASSY CONSTRUCTION

Pace Is Slower Than Projected, and State Could Make Program Improvements

Why GAO Did This Study

In 1998, terrorists bombed two U.S. embassies in East Africa, killing over 220 people and injuring more than 4,000 others. In 1999, State launched the CSCP with the primary goal of providing secure, safe, and functional workplaces, and OBO adopted a streamlined, standard design for all new embassies. In 2011, OBO shifted to the Excellence approach for new embassies, where greater use of custom designs is intended to improve embassies' functionality, quality, operating costs, and appearance.

GAO was asked to review the performance of the CSCP. This report examines (1) the pace of the CSCP in constructing new embassies, (2) the cost and schedule performance of OBO's recent embassy construction projects, and (3) key factors that have affected State's ability to deliver construction projects efficiently. GAO analyzed information from State planning, funding, and reporting documents and interviewed State and contractor officials. As part of an assessment of nine construction case-study projects, selected for cost or schedule increases, GAO conducted four site visits to embassies under construction.

What GAO Recommends

GAO recommends that State (1) provide information on the estimated effects of inflation on planned projects, (2) provide an analysis of estimated total costs and time frames to complete the CSCP, (3) conduct an OBO-wide workforce analysis, and (4) pilot formal construction partnering. State concurred with our recommendations and also conveyed it is now pursuing other initiatives beyond Excellence.

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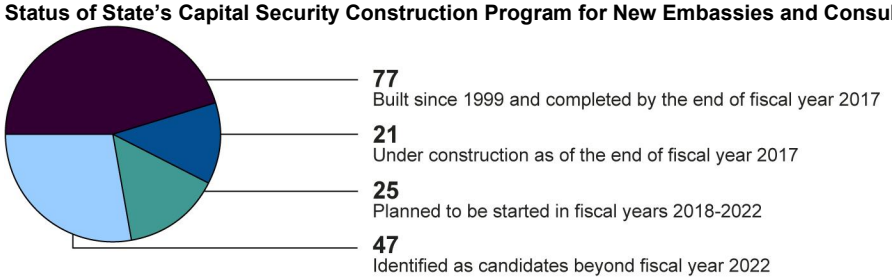
What GAO Found

The Department of State's (State) Bureau of Overseas Buildings Operations (OBO) has constructed new embassies at a slower pace than forecast due in part to unexpected building requirements and inflation. In 1999 State identified a need to replace 180 embassies. In 2005, with about 30 projects underway, State planned to replace the other 150 embassies by 2018. Since 1999, OBO has built 77 embassies under its Capital Security Construction Program (CSCP), at a total cost of about $24 billion as of fiscal year 2017. CSCP's pace has been affected by unexpected additional building requirements, such as office annexes and Marine quarters. Also, CSCP received only one program funding adjustment for inflation since 1999, and State does not intend to seek annual adjustments. Currently, OBO does not provide information on inflationary effects on CSCP or an estimated total capital investment or feasible time frames for the nearly 50 embassies identified for replacement beyond 2022. Lack of such information may affect stakeholders' ability to make informed budget decisions.

Status of State's Capital Security Construction Program for New Embassies and Consulates



Source: GAO analysis of U.S. Department of State (State) data. | GAO-18-653

Note: While State forecast an intention to build 180 new embassies in 1999, it subsequently decided to take a different approach for about 10 posts by keeping some existing embassies and upgrading them.

While cost growth occurred on a majority of completed embassy projects and durations averaged about 36 months, these were generally within budgeting and planning allowances. GAO could not assess performance of Excellence projects because none had been completed as of the end of fiscal year 2017.

Staffing workload and contractor collaboration have affected OBO's project delivery. Without an OBO-wide workforce analysis, it is unclear whether OBO's staffing is commensurate with its workload needs. OBO maintains that its office overseeing project design reviews is understaffed, adversely affecting some of its critical functions. Contractors also expressed concerns about the quality of design reviews, which may be affected by a staffing shortage and the use of temporary contractors. Also, OBO and contractor officials acknowledged weaknesses in collaboration, particularly with regard to contractors less experienced with embassy construction. Of the five contractors GAO spoke with, three said they are unlikely to pursue future projects because of issues working with OBO. Formal construction partnering—an industry best practice—between OBO and its contractors could help avoid adversarial relationships that inhibit swift resolution of issues. OBO's two long-standing contractors that have completed most of the CSCP embassy projects participated in early projects OBO identified as having used formal partnering.

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Abbreviations

ARB	Accountability Review Board
architectural and engineering firms	design firms
bridging	design-build with bridging
CSCP	Capital Security Construction Program
Design and Engineering	Office of Design and Engineering
Diplomatic Security	Bureau of Diplomatic Security
Excellence	Excellence in Diplomatic Facilities
GSA	General Services Administration
OBO	Bureau of Overseas Buildings Operations
OMB	Office of Management and Budget
Partnering	formal construction partnering
PD	Project Director
PSC	personal services contractors
SED	Standard Embassy Design
State	U.S. Department of State

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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Congressional Requesters

The U.S. Department of State (State) operates more than 275 embassies, consulates, and other diplomatic missions worldwide.[1] More than 86,000 U.S. government employees are housed in these facilities. On August 7, 1998, terrorists bombed the U.S. embassies in Nairobi, Kenya, and Dar es Salaam, Tanzania, killing over 220 people and injuring more than 4,000 others. Following those attacks, the Secure Embassy Construction and Counterterrorism Act of 1999 required State to develop and report a list of diplomatic facilities scheduled for replacement, prioritized on the basis of their vulnerability to terrorist attack. At that time, State determined that embassies at more than 180 posts needed to be replaced to meet security standards and initiated the Capital Security Construction Program (CSCP) to construct new secure, safe, and functional embassies, administered by State's Bureau of Overseas Buildings Operations (OBO). To expedite construction, OBO standardized embassies' designs and streamlined their construction through a design-build project delivery method, which combined design and construction under a single contract. In 2006, we reported that OBO's Standard Embassy Design (SED) and design-build approach had made significant progress in expediting construction and helped to cut the average completion time of projects to about 3 years—nearly half the time of embassies built during the prior construction era following the 1983 Beirut embassy bombing.[2]

In 2011, in response to criticisms that some SED embassies had a "fortress-like" appearance and were not as adaptable to local conditions, OBO replaced the SED with a new Excellence in Diplomatic Facilities initiative (Excellence). In contrast to SED, Excellence makes use of customized designs for each embassy, which OBO maintains will improve embassies' functionality, quality, and operating costs, as well as their

[1]In this report, we include consulates in our references to embassies as a general category of diplomatic posts.

[2]GAO, *Embassy Construction: State Has Made Progress Constructing New Embassies, but Better Planning Is Needed for Operations and Maintenance Requirements,* GAO-06-641 (Washington, D.C.: June 30, 2006).

appearance in representing the United States. However, stakeholders have expressed concern that the Excellence approach may add to the cost to construct embassies and slow the rate of moving personnel into more secure facilities. In a 2017 report, we examined the implementation and evaluation of Excellence within OBO headquarters.[3]

You asked us to review the performance of the CSCP. This report examines (1) the pace of the program in constructing new embassies, (2) the cost and schedule performance of State's recent embassy construction projects, and (3) factors that have affected State's ability to deliver construction projects efficiently.

To conduct this review, we obtained information from agency planning, funding, and reporting documents and interviewed State officials within OBO; the Bureau of Diplomatic Security (Diplomatic Security); and the Office of Acquisitions Management. We also examined cost data drawn from the Federal Procurement Data System as well as OBO-provided data on contract costs and schedules, which we found to be sufficiently reliable for our purposes. In addition, we also interviewed officials from construction contractors that have built embassies for State. Further, we selected nine construction projects as case studies from among projects awarded in fiscal year 2008 through fiscal year 2015 and funded through CSCP.[4] Selection criteria included projects whose construction time exceeded or was estimated to exceed 36 months (as informed by GAO's 2006 assessment that early CSCP embassies were built in about 36 months and OBO's projection that Excellence embassies will generally not take any longer to build), or projects with actual or estimated construction contract cost increases of more than 5 percent over initial contract price at award (OBO's typical cost contingency at contract award), or projects meeting both conditions. We sought to include as

[3]In that report, we found that OBO's Excellence approach posed cost and schedule trade-offs. In addition, we found that while OBO had established guidance to implement Excellence, it lacked tools to fully evaluate the performance of this new approach. GAO, *Embassy Construction: State Needs to Better Measure Performance of Its New Approach,* GAO-17-296 (Washington, D.C.: Mar. 16, 2017).

[4]Our final nine construction case studies were projects in Kyiv, Ukraine; Monterrey, Mexico; Santo Domingo, Dominican Republic; Bishkek, Kyrgyzstan; Jakarta, Indonesia; Jeddah, Saudi Arabia; The Hague, Netherlands; Pristina, Kosovo; and Port Moresby; Papua New Guinea. Oslo, Norway was initially one of our case studies. However during our audit work, the contractor that built the embassy initiated litigation against State related to this project. Because it is generally our practice to refrain from auditing matters pending in litigation, we removed Oslo from our case study list.

many different CSCP contractors in our case studies as possible from the pool of eight contractors constructing embassies from fiscal year 2008 through fiscal year 2017. We also reviewed the design contracts for two projects that had just begun construction.[5] For each of our case studies, OBO compiled relevant information into project narratives. In general, we attribute information from these narratives to OBO.

In September 2017, we traveled to Jeddah, Saudi Arabia; Jakarta, Indonesia; The Hague, Netherlands; and Pristina, Kosovo to observe construction progress and meet with U.S. embassy officials responsible for construction, facilities maintenance, post management, and security. In addition we interviewed contractor officials in these locations and in the United States. We also reviewed the results of a 2016 survey of OBO staff.[6] Specifically, we have included narrative responses from that survey commenting on issues we encountered during our audit work for this report. Views expressed in the survey may not be representative of all OBO staff views on given topics. For more information on our OBO staff survey, its results, and methodology, see GAO-17-296. See appendix I for more information on our scope and methodology for this report.

We conducted this performance audit from April 2017 to September 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Following terrorist attacks against the U.S. embassy in Beirut, Lebanon, in 1983, State began an embassy construction program—known as the Inman program—to protect U.S. personnel. However, as we've previously

[5]These two design contracts were for Hyderabad, India, and Beirut, Lebanon.

[6]GAO-17-296. This survey solicited the views of OBO's staff on the sufficiency of OBO's strategic vision, policies, procedures, and technical guidance for the Excellence approach as well as any particular efficiencies or challenges brought about by the approach. We sent the survey to 1,511 OBO staff, 705 (47 percent) of whom responded. The results of our survey provided measures of employees' views at the time they completed the survey in July and August 2016.

reported, State completed only 24 of the 57 planned construction projects, in part due to poor planning, systemic weaknesses in program management, difficulties acquiring sites, schedule delays, cost increases, and subsequent funding limitations.[7] Following the demise of the Inman program in the early 1990s, State initiated very few new embassy projects until after the two 1998 embassy bombings in Kenya and Tanzania. Following the bombings in Africa, the Secure Embassy Construction and Counterterrorism Act of 1999 required State to develop and report a list of diplomatic facilities scheduled for replacement based on their vulnerability to terrorist attack.[8] One of the congressional findings in the Secure Embassy Construction and Counterterrorism Act of 1999 was that unless embassy vulnerabilities are addressed in a sustained and financially realistic manner, the lives and safety of U.S. employees in diplomatic facilities will continue to be at risk from further terrorist attacks. State subsequently initiated the CSCP to construct new embassies. The CSCP is administered by OBO, which in April 2018 had about 1,135 direct-hire civil service personnel, U.S. Foreign Service officers, and personal services contractors stationed in Washington, D.C., and overseas.[9]

The Secure Embassy Construction and Counterterrorism Act of 1999 calls for new diplomatic facilities to be sufficiently sized to ensure that all U.S. government personnel at a post are located on a single secure site and that those facilities are set back not less than 100 feet from the site's perimeter boundary.[10] Before constructing a new embassy, State must certify to Congress that, among other things, the facility's design incorporates adequate measures for protecting classified information and activities as well as personnel working in the facilities.[11] OBO contracts with architectural and engineering firms (design firms) to develop bridging or full designs meeting security and other project requirements. These design firms submit their designs for reviews by OBO and Diplomatic Security to ensure conformance with building code and security

[7]GAO-17-296.

[8]22 U.S.C. § 4865 note. Obligations and expenditures.

[9]OBO defines personal services contractors as individuals who have direct employment contracts with State.

[10]These requirements are subject to waiver by the Secretary of State.

[11]Foreign Relations Authorization Act, Fiscal Years 1988 and 1989, Pub. L. No. 100-204, § 160 (Dec. 22, 1987), codified as amended at 22 U.S.C. § 4851 note. Construction security certification.

standards, respectively. Diplomatic Security, in consultation with the Office of the Director of National Intelligence, must certify that the design meets security standards prior to the start of construction.[12] While this certification occurs during the design phase of a project, Diplomatic Security also has other roles in the process, such as participating in site selection, ensuring OBO contractors have necessary security clearances, and ensuring facilities are securely constructed.

After passage of the Secure Embassy Construction and Counterterrorism Act of 1999, State determined that embassies at 180 posts—out of 260 posts at the time—needed to be replaced to meet security standards.[13] State adjusted this milestone—to building 150 embassies by 2018—in 2005, when it worked with the Office of Management and Budget (OMB) to establish the Capital Security Cost-Sharing Program (cost-sharing), with a primary goal of accelerating the replacement of embassies.[14] Under cost-sharing, nearly 30 U.S. agencies with a presence in U.S. embassies were to provide a total of $17.5 billion[15] for constructing the 150 new embassies by 2018—12 years sooner than had been projected without cost sharing. In justifying its cost-sharing approach, State emphasized that, among other things, requiring agencies to pay for overseas staff would make them more likely to closely assess the need for each overseas position, thereby rightsizing overseas staffing levels.[16]

Standard Embassy Design (SED)

OBO sought to expedite construction and control CSCP costs through adoption of the SED and streamlined construction through a design-build

[12]When facilities do not or cannot meet certain security standards, State mitigates identified vulnerabilities to the extent feasible and documents standards that cannot be met through its waivers and exceptions process.

[13]In 2017, there were over 285 posts overseas.

[14]According to agency officials, approximately 30 new embassies were completed or under construction at this time, out of the original goal of 180.

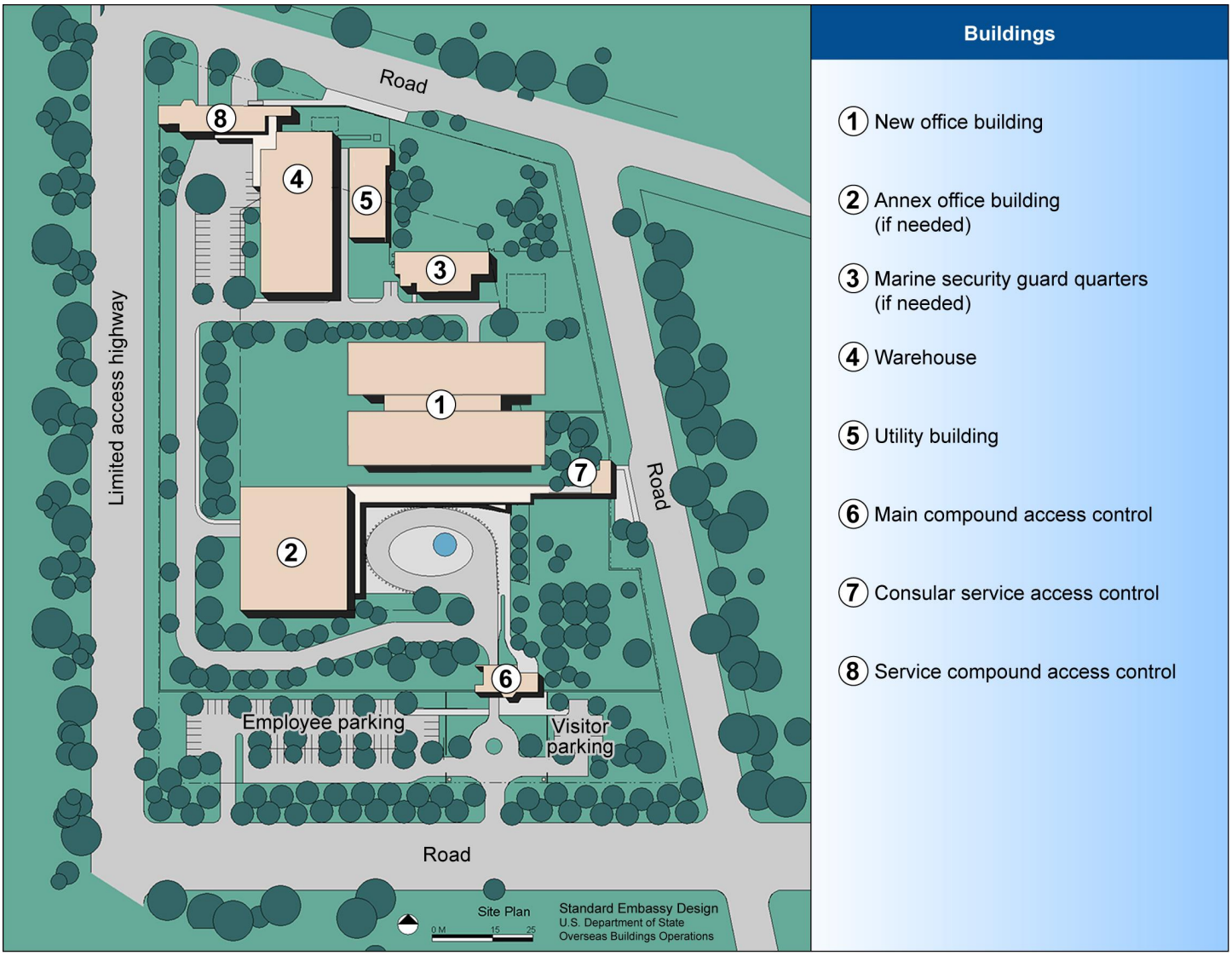
[15]All funding and cost figures in this report are in nominal dollars and are not adjusted for inflation.

[16]GAO, *Embassy Construction: Proposed Cost-Sharing Program Could Speed Construction and Reduce Staff Levels, but Some Agencies Have Concerns,* GAO-05-32 (Washington, D.C.: Nov. 15, 2004).

delivery method.[17] The SED was a set of documents providing prototypical plans for a medium-sized embassy including specifications and design criteria, and explaining how to adapt those to a particular site and project. The SED was not a complete design but rather a standardized template for the structural, spatial, and security requirements of a new embassy compound to guide a contractor's final design. Compound elements described by the SED generally included the main office building; U.S. Marine security guards' living quarters; a warehouse; a utility building; compound access control buildings and perimeter walls; and parking facilities. The SED also allowed for the standardization of building components such as security windows and doors. Figure 1 shows the prototypical facilities defined by the SED.

[17]OBO used a design firm to convert the design for the U.S. embassy in Kampala, Uganda, (designed in 1999) into a standard that could be site adapted for future embassy projects; this became known as the SED.

Figure 1: U.S. Department of State Standard Embassy Design Components

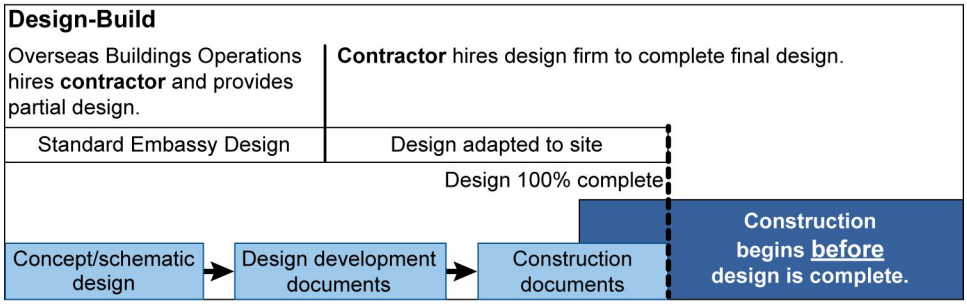


Sources: GAO and U.S. Department of State. | GAO-18-653

OBO combined the SED with the design-build delivery method, which integrates completion of the design as well as all construction responsibilities into a single contract. Under this model, the design-build contractor is responsible for both design and construction and thus generally bears the risks, such as added cost, for any design problems because the contractor hires the design firm to bring the design to completion. Under the SED approach, OBO hired its own design firms

beforehand to conduct project development activities such as planning surveys, site studies, and other analyses needed to inform the project's design. OBO would utilize these design firms to develop a scope of work and provide the design-build contractor a concept or schematic design showing how OBO expected the office chancery and supporting embassy facilities to be arranged on the site using the SED prototypical design to include standard site and building plans, technical specifications, design criteria, and instructions for its adaptation for a particular project and contract requirements.[18] The contractor's design firm would then use the SED documentation to develop a 100-percent completed design adapted for a site at a particular post. Figure 2 provides an overview of the embassy construction process under OBO's implementation of design-build utilizing the SED.

Figure 2: Construction of a U.S. Embassy under Design-Build Project Delivery Method and Standard Embassy Design



Source: GAO. | GAO-18-653

Note: This is a general representation of this OBO project delivery method. It may not represent every project.

Transition to Excellence

In 2006, we reported that the SED approach and design-build delivery method had enabled OBO to make significant progress in completing new embassies and had helped to reduce the average time to complete projects to about 3 years (36.7 months). This was nearly 3 years faster than embassies built during the Inman era.[19] However, while the SED

[18]OBO also generally provided site utilization diagrams to convey how buildings—such as the office building and U.S. Marine security guard quarters—might be arranged on the site. Also, OBO provided some planning drawings to show how a project's space requirements might be arranged and the site adapted within the SED framework.

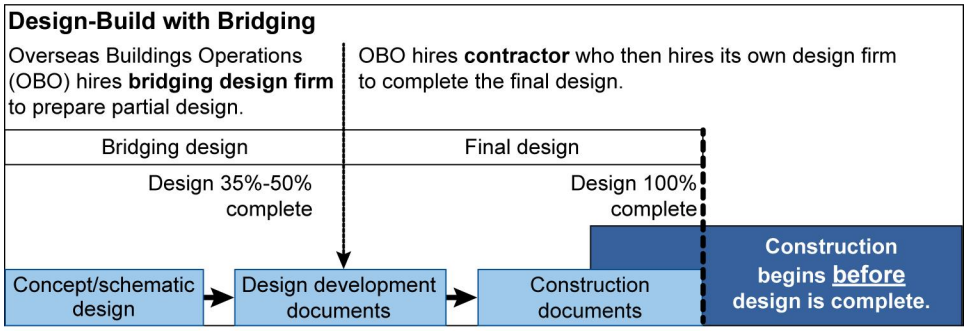
[19]GAO-06-641.

approach enabled OBO to accelerate the construction of new embassies, some stakeholders raised concerns about the aesthetics, quality, location, and functionality of those facilities. Criticisms included that the SED embassies had a "fortress-like" appearance that detracted from their symbolic value in presenting American ideals of openness and innovation; that the emphasis on speed and cost control resulted in poorer-quality buildings and removal of functional elements such as warehouses; that the 10-acre lot specified by the SED required siting embassies too far from urban centers where foreign government offices are located; and that the standardized aspects of its design were difficult to adapt to unique site conditions and post needs.

To address some of these criticisms, OBO began to use design-build with bridging (bridging) as a delivery method in 2008 with the first construction project awarded in 2009. Generally under this method, OBO first contracts with a design firm (the bridging architect) to develop a project-specific, partial design package (bridging design) that conveys State's design vision and a higher level of detail for key design requirements. Such details that State might convey in a bridging design could include the selection of specific building systems (e.g., the types of structural foundation systems to be used for each building on the site) or post-specific security features (e.g., location, types, and heights of security walls and bollards to be used around and within the site). Unlike the SED, each bridging design is project-specific, customized, and separately executed by an outside design firm contracted by OBO. The extent of each bridging design varies by project but generally approximates an overall 35- to 50-percent completed design, according to OBO officials.[20] OBO's procedure is to then separately contract with a construction contractor (and its own design firm) to complete the design and build the project. Figure 3 provides an overview of the embassy construction process under bridging.

[20]According to OBO officials, bridging designs include multiple design disciplines whereby elements such as architectural design may be developed to a far greater extent than others, such as electrical design.

Figure 3: Construction of a U.S. Embassy under Design-Build with Bridging Project Delivery Method



Source: GAO. | GAO-18-653

Note: This is a general representation of this OBO project delivery method. It may not represent every project.

Although customized, OBO's bridging designs continued to use the SED as a starting point for several years after OBO adopted bridging in 2008. However, criticisms aimed at the underlying SED elements continued, for instance, that the standardized design sometimes hindered adaptation of designs in response to different climates, countries, or unique post functions. In 2011, OBO initiated the Excellence approach, which placed greater emphasis on custom designs for each project. OBO subsequently phased out the SED as the basis for embassy designs, and according to OBO officials, SED specifications, standards and guidance were incorporated into OBO's Design Standards and Design Guide.[21]

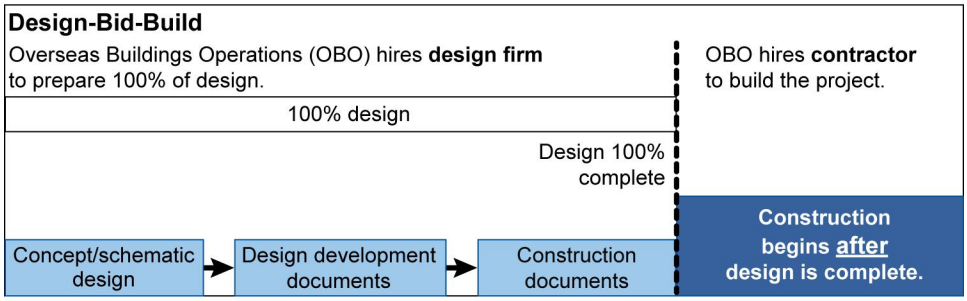
According to OBO officials, by 2014, design firms hired by OBO to develop bridging designs no longer used the SED as a starting point. In addition, OBO shifted to greater use of the design-bid-build delivery method alongside bridging.[22] Generally under design-bid-build, OBO first solicits and contracts with a design firm to develop a 100-percent design. Under this method, OBO then uses the completed design to solicit bids from prospective construction contractors. According to OBO documentation, OBO selects a project's delivery method, either bridging or design-bid-build, based on an evaluation of a project's local context,

[21]OBO's Design Standards were released in 2013, and have been subsequently updated. OBO's Design Guide was released in 2016. We did not assess the degree to which those documents contain SED elements.

[22]While OBO predominately employed design-build during the SED program era, it did utilize design-bid-build for a few select iconic projects, such as Berlin and Beijing.

complexity, construction factors, and urgency. Figure 4 provides an overview of the embassy construction process under design-bid-build.

Figure 4: Construction of a U.S. Embassy under Design-Bid-Build Project Delivery Method



Source: GAO. | GAO-18-653

Note: This is a general representation of this OBO project delivery method. It may not represent every project.

Under both bridging and design-bid-build, OBO generally bears greater risk than it did under strict design-build in the SED approach. That is because if design errors impact construction, the contractor may seek additional costs and schedule relief from OBO for needed corrections and changes it attributes to problems with the design provided by the government. Additionally some stakeholders have expressed concern that the added design-work inherent to the Excellence approach may add to the cost to construct embassies and slow the rate of moving personnel into more secure facilities. However, OBO has maintained that greater design control under Excellence will improve embassies' functionality, quality, operating costs, and their overall public impact in representing the United States.

State's Project Delivery Pace Has Been Slower Than Projected, as Unforeseen Building Requirements and Inflation Have Affected Progress

Although State has built 77 new embassies since 1999 and at the end of fiscal year 2017 had another 21 under construction, the CSCP's project delivery pace has fallen short of State's 2005 target of constructing 150 new embassies by 2018. This is due, in part, to unexpected building requirements and the effects of inflation.[23] In 2012, recognizing the erosion of purchasing power as a result of inflation, the Benghazi Accountability Review Board (ARB)[24] recommended State work with Congress to increase the CSCP's annual funding level from $1.4 billion to approximately $2.2 billion in fiscal year 2015 and for up to 10 years thereafter. OBO plans to begin construction of 25 embassies in fiscal years 2018–2022 and nearly 50 more beyond fiscal year 2022, but it is unclear whether OBO can maintain its average pace of 5 new embassy contract awards per year—particularly as State has not defined the overall capital cost and potential timeframes needed to achieve this goal, nor does it currently expect to seek year-to-year adjustments for inflation.

State Will Not Meet Its Original Project Delivery Goals

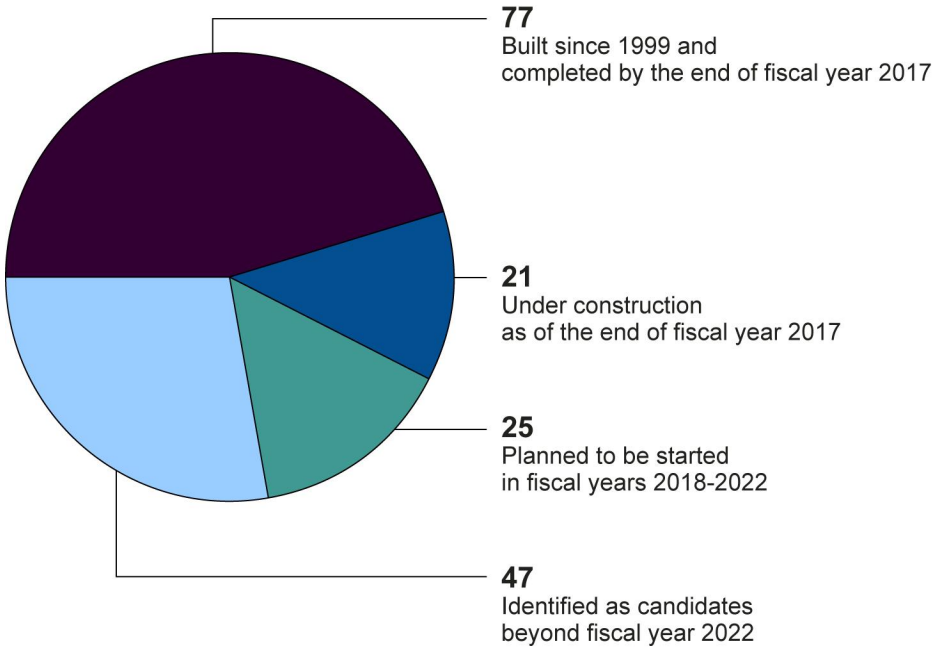
Although State has made progress in constructing more secure embassies, State's CSCP will not achieve the target of constructing 150 new embassies by 2018, a milestone that the 2005 cost-sharing was intended to facilitate. From fiscal year 1999 through 2017, State

[23]When we refer to inflation, we mean both general economic inflation as well as construction inflation. Economic inflation, defined as the rate of change in the general level of prices for goods and services, can be measured by broad price indexes such as the gross domestic product price index or the consumer price index. It differs from construction inflation, which can be measured by price indexes specific to the costs of different compositions of inputs and services to the construction industries.

[24]The Benghazi ARB examined the circumstances surrounding the September 2012 killings of four U.S. government personnel, including the U.S. Ambassador to Libya, in Benghazi, Libya. A series of attacks involving arson, small-arms and machine-gun fire, and use of rocket-propelled grenades, grenades, and mortars, focused on two U.S. facilities in Benghazi. In addition, the attacks severely wounded two U.S. personnel, injured three Libyan contract guards, and resulted in the destruction and abandonment of both facilities.

completed 77 new embassies and had 21 under construction. In fiscal year 2017, State also forecast a potential need for 72 additional embassies beyond those completed or under construction. Of those 72, State planned to begin construction on 25 new embassies in fiscal years 2018 through 2022, at an estimated pace of 5 new starts per year. The remaining 47 locations were identified by State as candidates for new embassy compounds beyond 2022.[25] Figure 5 shows the status of CSCP embassy projects as of the end of fiscal year 2017.[26]

Figure 5: Status of the Capital Security Construction Program for New Embassies and Consulates



Source: GAO analysis of U.S. Department of State data. | GAO-18-653

Note: The data exclude the following:

[25]This excludes 38 posts OBO deems as too small to justify a traditional diplomatic compound. OBO officials stated that they have been discussing with Diplomatic Security how to best meet the security requirements of those posts.

[26]State forecast an intention to build 180 new embassies after the 1998 bombings of two U.S. embassies, revising that to 150 in 2005 because it had about 30 embassy projects completed or underway when cost sharing was announced, according to OBO officials. These officials also explained that State subsequently decided to take a different approach for about 10 posts, by keeping some existing embassies and upgrading them.

1 – project in Islamabad that entails the expansion of office space and housing on an existing compound.

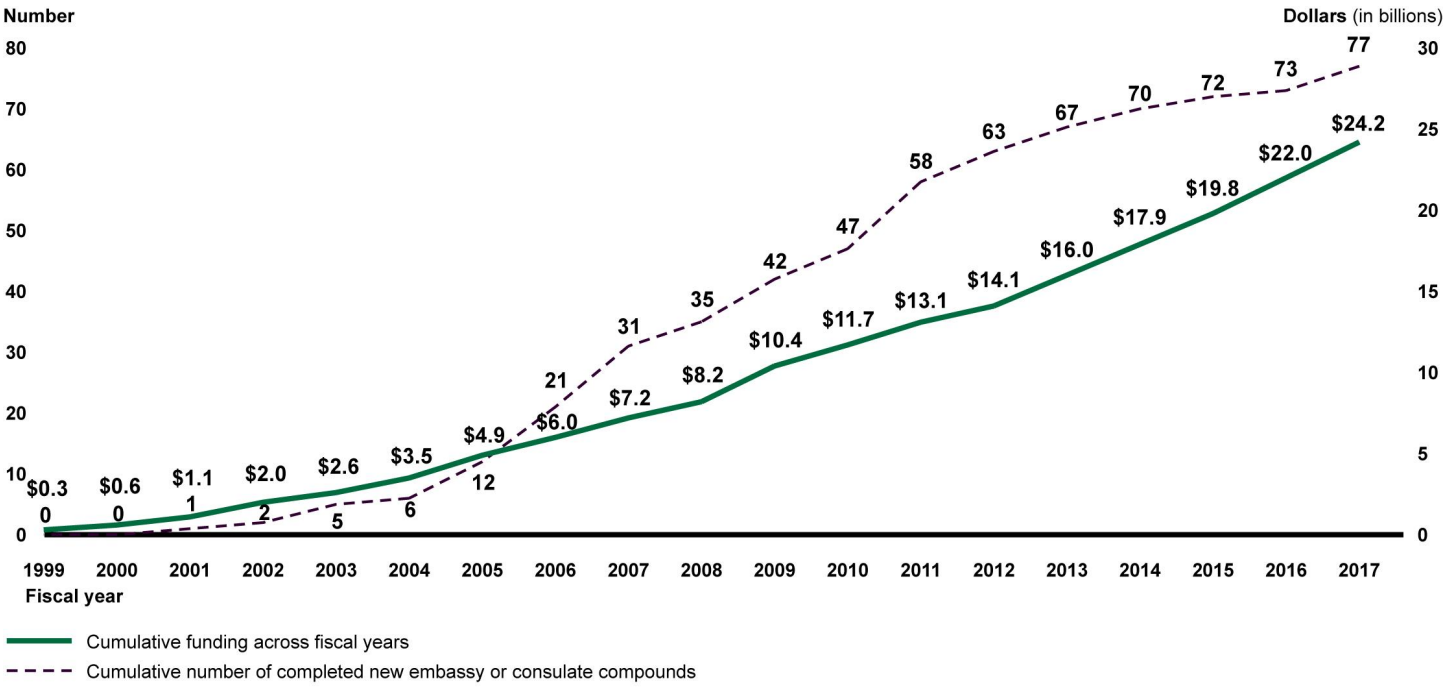
3 – projects in Berlin, London, and Taipei all separately funded outside of the Capital Security Construction Program.

28 – office annexes or acquired buildings upgraded for use as an embassy.

38 – posts the Department of State cites as too small for a traditional compound solution.

Total CSCP funding from 1999 through 2017 reached approximately $24.2 billion (in nominal dollars). Figure 6 shows the cumulative progress in completing the 77 embassies along with year-to-year cumulative funding from fiscal year 1999 through fiscal year 2017.[27]

Figure 6: Cumulative Capital Security Construction Program Funding and Completed Embassies and Consulates, Fiscal Years 1999–2017



Source: GAO analysis of U.S. Department of State (State) documents. | GAO-18-653

Notes: Funding figures are based on State data presented in nominal dollars and are not adjusted for inflation because we could not identify a suitable price index to adjust for inflation in construction costs across different countries.

[27]As it typically takes multiple years to construct a new embassy, there were no completed projects in 1999 and 2000, the first 2 years of the CSCP. Funding is based on State financial data.

Fiscal year funding precedes and is not in direct alignment with project completions due to the multiyear nature of construction projects. Thus, the $24.2 billion received through the end of fiscal year 2017 includes funding received for 21 embassies and consulates still under construction.

The total number of completed embassies excludes (a) 21 embassies and consulates still under construction at the end of fiscal year 2017; (b) 28 completed annexes or acquired office buildings; and (c) 3 annexes still under construction at the end of fiscal year 2017 that were funded under the Capital Security Construction Program.

The figure includes supplemental and Overseas Contingency Operations funding.

The figure excludes new embassy projects separately funded and completed outside of the Capital Security Construction Program, such as the embassies built in Berlin and London.

State's CSCP will not achieve the 2005 target of constructing 150 new embassies by 2018. To achieve this target, State would have had to complete an average of about 10 embassies per year. Instead, on average, State has completed 5 new embassy compounds each year since cost-sharing was authorized in 2005. If State's project delivery pace remains unchanged, it would take more than 15 years to complete the 72 new embassies identified in State's CSCP planning schedule at the end of fiscal year 2017.[28]

The CSCP Has Had to Cover Unforeseen Additional Building Requirements and Has Received One Inflation Adjustment

The pace of CSCP has been affected by unexpected building requirements and inflation. Beyond the 77 completed embassies and the 21 under construction, the $24 billion for CSCP since 1999 has also funded additional building requirements that State had not originally envisioned.[29] According to State, these unforeseen requirements included:

1. On-compound staff housing at some posts, such as Beirut;
2. New or reopened posts, such as Kabul,
3. Marine security guard quarters on some new and existing compounds, such as Monterrey, in response to a recommendation in

[28]This estimate assumes a consistent level of funding—from State and other U.S. agencies' cost-sharing contributions—to support an average of 5 new projects starts per year and that embassies have generally taken 3 years (36 months) to complete.

[29]We could not accurately disaggregate funding for unexpected building requirements from total CSCP funding.

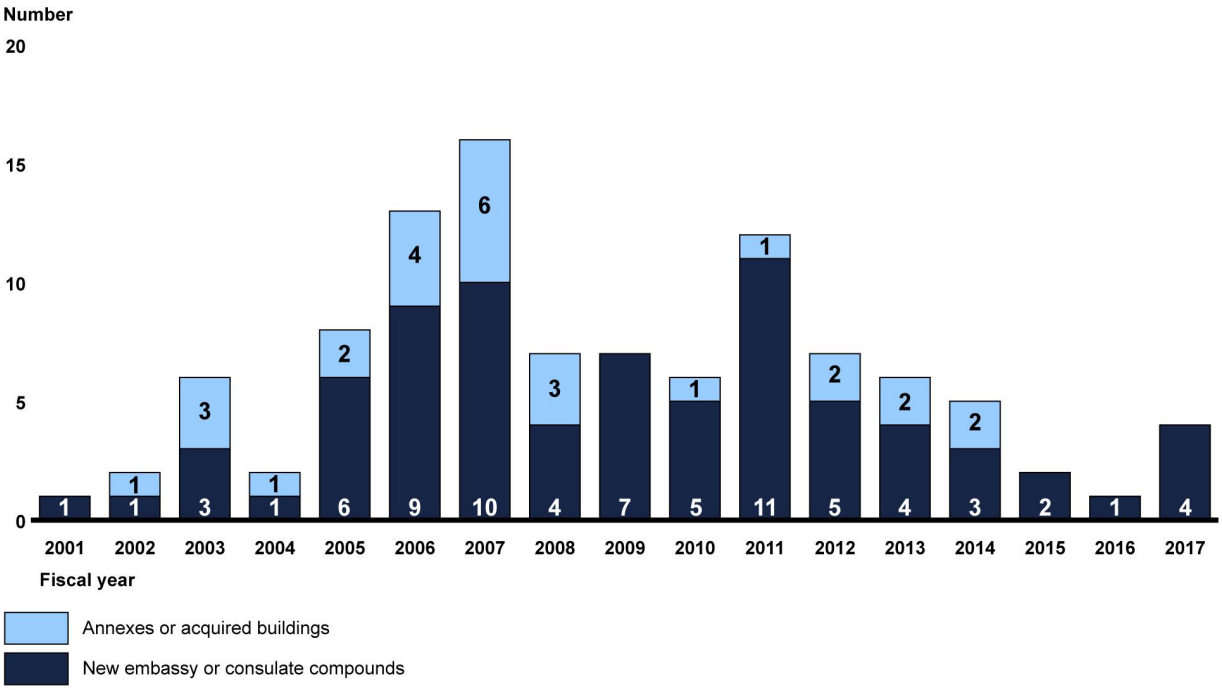
the 2012 Benghazi ARB report and as State revised its policy governing the presence of U.S. Marines at some posts.[30]

4. New security requirements at high threat posts—such as taller perimeter walls, guard towers, and unique security support spaces.
5. Office annexes; for example OBO is now building new annexes in Kampala, Uganda and Nairobi, Kenya, posts where new embassies were completed in 2001 and 2006 respectively. From 1999 through 2017 State completed 28 annex office buildings under the CSCP—such as for U.S. Agency for International Development—or acquired buildings and upgraded them for use as an embassy.

Figure 7 shows completed annex projects along with embassy completions. OBO officials told us that unforeseen requirements continue to affect the CSCP.

[30]In support of the 2012 ARB recommendation, State sought to create new Marine security guard detachments at 35 posts to further protect diplomatic personnel, as well as increase the number of Marines at posts that already had a detachment. The National Defense Authorization Act for Fiscal Year 2013 called for an expansion of Marine security guard detachments at embassies and consulates to enhance Marine Corps security, particularly at posts identified by State as in need of additional security. Pub. L. No. 112-239, § 404 (Jan. 2, 2013). While Marine security guard quarters were included as a possible SED component, at times they were not constructed.

Figure 7: Capital Security Construction Program Embassy and Annex Completions, Fiscal Years 2001–2017



Source: GAO analysis of U.S. Department of State (State) data. | GAO-18-653

Notes: Fiscal years 1999 and 2000 are not shown because it typically takes State's Bureau of Overseas Buildings Operations about 3 years to construct a new embassy, therefore no projects were completed in those first two years of the program.

Data exclude 21 embassies and consulates and 3 annexes still under construction at the end of fiscal year 2017.

Figure excludes new embassy projects separately funded and completed outside of the Capital Security Construction Program, such as the embassies built in Berlin and London.

Projects have varying construction schedules. Regardless of when a project is awarded, its completion date may differ from other projects awarded during the same fiscal year.

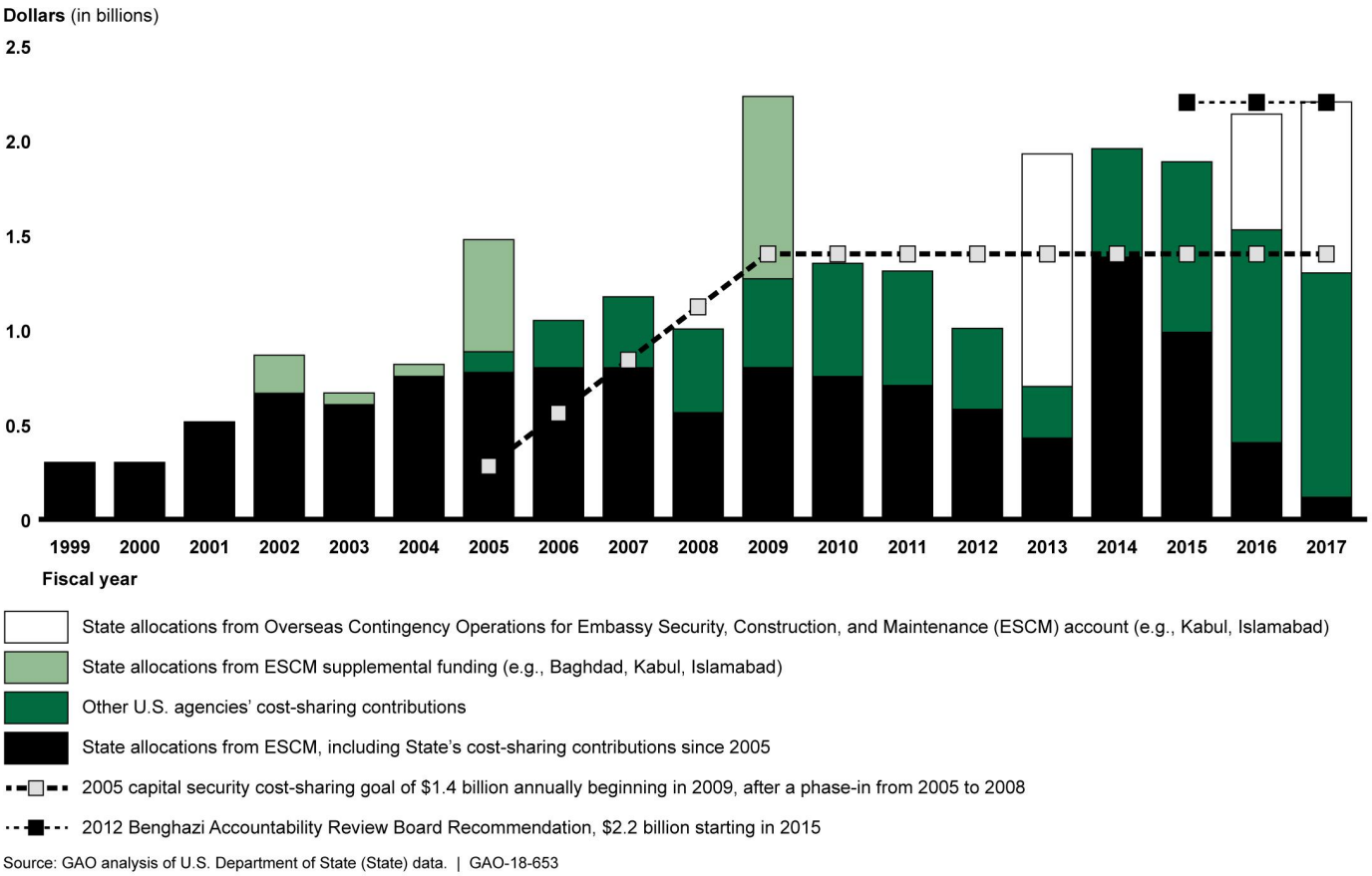
Over time, CSCP funding has also been subject to the effects of inflation. The 1999 ARB following the bombings of U.S. embassies in Tanzania and Kenya recommended that embassy construction and other security improvements be funded at $1.4 billion per year over 10 years. With the introduction of cost-sharing in 2005, State set an annual CSCP funding goal of $1.4 billion, as the 1999 ARB had recommended, as well as the goal of completing 150 new embassies by 2018 for a projected funding total of $17.5 billion. However, State officials indicated that when the program was established, no provision was made for potential inflation over the life of the program. Therefore, while CSCP funding generally increased from 2005 through 2010, OBO officials stated that CSCP funding gradually purchased less than anticipated due to the lack of an

inflation adjustment. This absence of inflation as a built-in factor in program planning is in contrast to OBO's cost estimates for individual new embassy projects. Those project-level cost projections account for inflation and recognize that the projects will typically take at least 3 years to build. If annual CSCP program-level funding is held constant as individual project costs generally increase over time, fewer projects can be funded in later years of the program resulting in a slower pace of project delivery.

In 2012, recognizing the erosion of purchasing power as a result of inflation, the Benghazi ARB recommended that State work with Congress to restore the CSCP capacity to its earlier level by increasing its annual funding level to approximately $2.2 billion starting in fiscal year 2015 and for up to 10 years thereafter. Based on State data, that recommended funding level was not met in 2015, but was generally met in fiscal years 2016 and 2017 due to the provision of additional Overseas Contingency Operations funding.[31] In general, according to OBO, such funding is used to support State requirements in high-threat locations, which, according to OBO, are subject to the highest rates of project cost change. State generally considers this funding to be non-enduring and supplemental to funding through State's regular budgets. Figure 8 shows State funding data representing the total annual CSCP funding from fiscal year 1999 through 2017—including cost-sharing, supplemental, and Overseas Contingency Operations funding—compared with State's 2005 CSCP funding goal ($1.4 billion annually) and the 2012 Benghazi ARB annual funding recommendation ($2.2 billion annually), proposed for implementation in fiscal year 2015.

[31]State reported to us that it received total funding for CSCP of $1.9 billion in fiscal year 2015, $2.1 billion in fiscal year 2016, and $2.2 billion in fiscal year 2017.

Figure 8: Capital Security Construction Program (CSCP) Annual Funding Compared with Accountability Review Board Recommended Funding Levels, Fiscal Years 1999–2017



Source: GAO analysis of U.S. Department of State (State) data. | GAO-18-653

Notes: Funding figures are based on State data presented in nominal dollars and not adjusted for inflation because we could not identify a suitable price index to adjust for inflation in construction costs across different countries.

The 1999 Accountability Review Board following the bombings of U.S. embassies in Tanzania and Kenya recommended that embassy construction and other security improvements be funded at $1.4 billion per year over 10 years. Later, State recommended that CSCP funding be set at $1.4 billion annually starting in 2005 to accelerate the construction of 150 new embassies and consulates by the end of 2018. In 2012, the Benghazi Accountability Review Board recommended funding be adjusted for inflation and set at $2.2 billion annually, starting in 2015, for up to 10 years.

State Has Not Estimated Total CSCP Cost and Time Frame and Has Not Planned for Future Inflation

Although the CSCP schedule for fiscal year 2017 identifies nearly 75 embassies still requiring replacement, the overall capital cost and likely time frame expected to achieve the program's goal are unknown, as OBO has not made such estimates. According to OBO officials, State is not focused on replacing a set number of embassies within an estimated total capital investment cost (e.g., 150 embassies for $17.5 billion, as planned in 2005) or by a given end-date (e.g., 150 embassies by 2018, as planned in 2005). Rather, OBO's approach is to request $2.2 billion annually in accordance with the Benghazi ARB's recommendation. According to these officials, this approach allows agencies that contribute to cost-sharing to consistently plan for a predictable funding level, and OBO will work to complete as many projects as soon as possible within this annual funding level. Further, they noted that State does not intend to seek annual inflation adjustments for the CSCP.

In general, according to OBO policy, the CSCP is guided by Diplomatic Security's annual Security Environment Threat List of security rankings for posts, from which OBO develops a "Top 80" list of the 80 most at-risk posts needing a new embassy.[32] OBO uses the Top 80 list to develop and adjust the CSCP schedule, which presents planned embassy awards for the current fiscal year and for each of the next 5 fiscal years. For example, the November 2016 CSCP schedule (current at the end of fiscal year 2017) listed the 5 posts slated for awards in fiscal year 2017. In addition, it listed the 25 posts slated for awards in fiscal years 2018 through 2022, grouped by the specific fiscal year when OBO anticipated being able to award the relevant construction contracts. The nearly 50 embassies planned for beyond fiscal year 2022 were broadly categorized in an "out-year" category in the November 2016 CSCP schedule.

According to leading practices in capital decision-making we have previously identified, agencies' long-term capital plans should provide insight into likely funding and other resources and time frames needed to achieve organizational mission goals.[33] We also noted in our guide to

Lack of Reliable Data on the Number of Staff Moved into New Embassies

The number of U.S. government staff moved into more secure facilities has been a reported performance measure for the Capital Security Construction Program (CSCP) since the time of the Standard Embassy Design approach. For example, the U.S. Department of State (State) reported moving over 30,000 people (out of more than 86,000) into more secure facilities from 2000 through 2014.

We attempted to assess CSCP performance on this measure on a project-by-project basis but found it unreliable for the purpose of establishing how many staff have been moved into newly constructed facilities. State's Bureau of Overseas Buildings Operations (OBO) officials explained that the "number of staff moved" metric was based on the projected desk and non-desk positions within each embassy construction contract. However, OBO never established a policy or procedure on how these data should be collected, managed, or validated. The data for this metric were informally tracked within OBO's Office of Construction Management.

As a result, information for this performance measure is inconsistent, precluding a progress assessment of the CSCP using this metric. For example, totals for some years included data for major renovation projects of existing buildings while other years' data may have included acquired buildings purchased by State (and built by others).

In 2017, we found State's one strategic CSCP-related performance indicator—the relocation of staff into more secure and functional facilities—provides no performance assessment on the extent to which Excellence facilities are any more functional, sustainable, or effective in supporting U.S. diplomacy. We recommended State determine whether this measure is still appropriate or needs to be revised. According to OBO officials, this metric is being revisited as part of a broader evaluation of OBO's performance measures. See GAO-17-296.

Source: GAO analysis of information from the U.S. Department of State (State). | GAO-18-653

[32]Posts with a new embassy or consulate that has been awarded, is under construction, or was built to State's security standards are not included in the Top 80 list.

[33]See GAO, *Executive Guide: Leading Practices in Capital Decision-Making*; GAO/AIMD-99-32 (Washington, D.C.: December 1998).

leading practices that, while out-year cost estimates are preliminary, they help provide decision makers with an overall sense of funding needs and that such long-range planning assists in developing both current and future budgets.

OBO's fiscal year 2017 CSCP schedule does not identify estimated costs, either at the project or aggregate level.[34] According to OBO officials, scope, cost, and size estimates are communicated on a project-specific basis to stakeholders through briefings and each fiscal year's congressional notifications listing projects to be implemented in the coming years.[35] According to these officials, the CSCP schedule is intended to be a flexible way to communicate a snapshot of OBO's prioritization of posts to receive embassy awards over the next 5 fiscal years, emphasizing that the exact list can change. For example, a new embassy project might be advanced sooner than originally planned due to a change in State's security or policy priorities. Conversely, a project may be moved out to a later fiscal year due to challenges that OBO believes may be posed by the host government or other challenges identified during or after site acquisition. Although the CSCP does track the projected timing of some specific projects, State lacks a strategic planning document that estimates longer term CSCP resource needs. For example, the CSCP schedule contains no estimated 5-year program cost for the next 25 embassies OBO plans to build, nor does it provide stakeholders an estimate or cost range for the total capital investment and feasible time frames needed to address the 47 embassies that OBO has identified for replacement beyond the next 5 years.

Additionally, guidance from OMB indicates that when developing budget estimates agencies should consider the effect that economic or other changes can have on program levels beyond the budget year.[36] OMB guidance further states that agencies should be prepared to discuss the

[34]According to OBO, the CSCP 6-year schedule is designed to identify the anticipated contract award year for new construction and major rehabilitation projects, and its primary purpose is to inform OBO's stakeholders. The rolling 6-year schedule supports project planning and is not perceived as a budget document.

[35]Each year, State provides notices to Congress about its planned spending under the Embassy Security, Construction, and Maintenance appropriation, to include planned cost for new embassy projects.

[36]See Executive Office of the President, Office of Management and Budget, *Preparation, Submission, and Execution of the Budget,* OMB Circular No. A-11 (Washington: D.C.: July 2017). Circular No. A-11 is annually updated, most recently in June 2018.

impact that program levels and changes in methods of program delivery will have on program operations and administration. OMB guidance states that for discretionary programs, agencies may include an allowance for the full rate of anticipated inflation, less than the full rate, or no allowance for inflation. The guidance recognizes that agencies must make trade-offs between budget increases for inflation versus other increases for programmatic purposes.

Given that it contains no cost information, the CSCP schedule is not meant to be a tool to forecast and convey to stakeholders the long-term effects of inflation on program capacity. Therefore, considering the 72 embassies yet to be replaced, past inflationary effects, and the CSCP's pace thus far, it is unclear what pace OBO will be able to maintain without some level of inflation adjustment to its funding goal of $2.2 billion per year. Without information on the projected pace of construction and estimated effects of inflation, stakeholders' may lack complete information to make fully-informed budget decisions.

Completed Embassy Projects Have Generally Stayed within Budgeting and Planning Allowances

While cost growth occurred on a majority of completed embassy projects and durations averaged about 36 months, these were generally within budgeting and planning allowances.[37] We could not assess cost and schedule performance of projects begun under the Excellence approach because none had been completed by 2017. OBO maintains that the greater upfront investment in more customized designs under this approach will yield long-term benefits in embassies' functionality, quality, and operating costs, as well as in their appearance in representing the United States. While an assessment of those potential benefits cannot be made at this time, we did find examples of Excellence and Excellence-like

[37]When we refer to the value of construction contracts, depending on the contract's delivery method, this value may or may not include some design costs. In general, the contract value for a project executed under design-bid-build reflects only the cost to construct the project, as State separately contracts for the design. Whereas, for projects executed under design-build and design-build with bridging, generally the contract values reflect both costs for a contractor to complete a project's design and to construct the project, based on the SED or a partial bridging design.

projects illustrating how innovative designs can increase upfront project costs.

Contract Costs for Most Completed Projects Have Increased but Generally Stayed within Contingency Allowances

While construction contract costs increased after award for most of the 22 completed projects we reviewed,[38] the increases were generally less than contingency allowances, and most projects were completed within their contingency budgets. State reserves a contingency amount in its project budget—ranging from 5 to 10 percent of the contract value at award—to cover unforeseen project changes and cost increases.[39] OBO's overall project budgets also include funding for other nonconstruction costs and contracts, such as planning, design, and on-site project management and security.

For the 22 completed embassy construction projects we reviewed, 16 (almost 75 percent) were finished within 10 percent or less of the original contract value at award, and 3 of these 16 projects finished under the original contract value at award. Six of the projects (over 25 percent) exceeded the original contract value at award by over 10 percent.

For the 6 projects whose final costs were more than 10 percent over the original contract value at award, some of the cost increases were due to events unrelated to original design or construction issues. For example, in Khartoum, Sudan, OBO project documentation indicates that the contract increase was due, in part, to host government restrictions on the

[38]We reviewed the 22 embassy construction contracts awarded between fiscal years 2008 and 2017 that were completed by the end of fiscal year 2017. We chose fiscal year 2008 as a starting point because this was when OBO shifted to design-build with bridging to address problems found with earlier SEDs—such as the need to balance SED standardization with unique post conditions. At the time, OBO believed bridging would better define the project requirements and improve quality for projects than the SED alone could achieve and provide less room for the contractor to make interpretations and change OBO's intent for the project. We did not review the larger project budgets and many other contracts often associated with embassy projects, such as OBO contracts for site acquisition, planning and value-engineering, design, commissioning and testing during construction, or furniture and equipment (e.g., telecom and security systems).

[39]OMB's *Capital Programming Guide* indicates that, as a general guide, a cost variance of plus or minus 10 percent or more should trigger formal reporting so that management can take corrective action.

importation of needed construction materials and having to restart the project.[40] In other instances, as discussed earlier, additional building requirements increased project costs. For example, OBO officials noted that a U.S. Agency for International Development office annex was added to the embassy project in Kyiv, Ukraine, and Marine security guard quarters were added to the projects in Monterrey, Mexico; Mbabane, Swaziland; and Vientiane, Laos.

Table 1 shows the original construction contract value at award and the final or current contract value for the 22 completed projects as of the end of fiscal year 2017. Of these 22 projects, 16 were SEDs; four were "Excellence-like," meaning they were transition projects awarded after OBO's 2011 decision to institute Excellence but before OBO finished implementing Excellence in 2014; and 2 were not based on the SED template but predated the Excellence initiative. Contract value for some completed projects may change, in part due to outstanding requests for costs from the contractor or legal claims. Our cost assessment of the 22 completed projects included no Excellence projects, as none had been completed as of the end of fiscal year 2017.[41]

Table 1: Overseas Buildings Operations (OBO) Construction Contract Costs for Completed Embassy and Consulate Projects, as of the End of Fiscal Year 2017

Dollars in millions

Project	Fiscal year of award	Project type; contract delivery method	Contract value at award	Contract value as of the end of fiscal year 2017	Variance	Percent change
1. Bucharest, Romania	2008	Standard Embassy Design design-build	$139.8	$135.8	-$4.0	-2.9%
2. Djibouti, Djibouti	2008	Standard Embassy Design design-build	121.3	125.4	4.1	3.4%
3. Dubai, United Arab Emirates	2008	Standard Embassy Design design-build	126.2	127.3	1.1	0.9%
4. Khartoum, Sudan[a]	2008	Standard Embassy Design design-build	49.0	82.2	33.2	67.8%
5. Kyiv, Ukraine[a]	2008	Standard Embassy Design design-build	209.9	238.6	28.7	13.7%

[40]OBO had initially awarded a contract for the project in 2005.

[41]In April 2018, based on State data, Nuevo Laredo, Mexico, became the first completed Excellence project.

Project	Fiscal year of award	Project type; contract delivery method	Contract value at award	Contract value as of the end of fiscal year 2017	Variance	Percent change
6. Lusaka, Zambia	2008	Standard Embassy Design design-build	102.0	104.4	2.4	2.4%
7. Belgrade, Serbia	2009	Standard Embassy Design design-build	117.1	124.0	6.9	5.9%
8. Bujumbura, Burundi	2009	Standard Embassy Design design-build, bridging	109.1	103.3	-5.8	-5.3%
9. Guangzhou, China	2009	design-bid-build	163.8	182.8	19.0	11.6%
10. Monrovia, Liberia	2009	Standard Embassy Design design-build	135.4	135.8	0.4	0.3%
11. Monterrey, Mexico[a]	2009	Standard Embassy Design design-build, bridging	101.9	125.0	23.1	22.7%
12. Dakar, Senegal	2010	Standard Embassy Design design-build	138.8	148.6	9.8	7.1%
13. Libreville, Gabon	2010	Standard Embassy Design design-build	72.3	74.4	2.1	2.9%
14. Santo Domingo, Dominican Republic[b]	2010	Standard Embassy Design design-build, bridging	148.8	150.4	1.6	1.1%
15. Bishkek, Kyrgyzstan[c]	2011	Standard Embassy Design design-build, bridging	116.8	123.3	6.5	5.6%
16. Oslo, Norway[d]	2011	Excellence-like design-bid-build	177.9	187.4	9.5	5.3%
17. Rabat, Morocco	2011	design-build, bridging	150.6	146.6	-4.0	-2.7%
18. Vientiane, Laos[a]	2011	Standard Embassy Design design-build	109.7	125.2	15.5	14.1%
19. Cotonou, Benin	2012	Standard Embassy Design design-build, bridging	126.0	134.5	8.5	6.7%
20. Mbabane, Swaziland[a]	2012	Excellence-like design-build, bridging	108.6	123.0	14.4	13.3%
21. Paramaribo, Suriname	2013	Excellence-like; design-bid-build	114.9	121.2	6.3	5.5%
22. N'djamena, Chad	2014	Excellence-like design-build, bridging	159.7	166.1	6.4	4%
Total[e]			**2,799.6**	**2,985.3**	**185.7**	**6.6%**

Source: GAO analysis of Department of State federally reported contract data and OBO project data. | GAO-18-653

Notes: Award amounts are in nominal dollars and are not adjusted for inflation. When we refer to the value of construction contracts, depending on the contract's delivery method, this value may or may not include some design costs. In general, the contract value for a project executed under design-bid-build reflects only the cost to construct the project, as State separately contracts for the design. Whereas, for projects executed under design-build and design-build with bridging, generally the contract values reflect both costs for a contractor to complete a project's design and to construct the project, based on the Standard Embassy Design or a partial bridging design.

GAO case studies are highlighted in gray. (These include 4 of 9 case-study projects that were completed by the end of fiscal year 2017.)

[a]According to project documentation, the cost increase in Khartoum was related, in part, to the holding of construction containers by the host government, resulting in project stoppage and termination of the original 2005 contract. Cost increase in Kyiv was due in part to the addition of an office annex; cost increases in Monterrey, Mbabane, and Vientiane were due in part to Marine security guard quarters, for the latter two posts added in response to the Benghazi Accountability Review Board recommendations.

[b]Contract value for Santo Domingo—a project that was substantially completed in May 2014—has not been finalized, as there was inactivity by the government and the contractor in closing out the contract, in part, due to warranty issues and at least one outstanding request for equitable adjustment from the contractor, according to OBO and contractor officials.

[c]Contract value for Bishkek may change. State reported to us that there were sizable requests for equitable adjustment received from the contractor, but that these were the subject of ongoing negotiations.

[d]Contract value for Oslo may change as the contractor has sought legal relief for outstanding contract claims.

[e]Excludes mini-compounds such as Bandar Seri Begawan, Brunei; Kolonia, Federated States of Micronesia; Koror, Palau; Malabo, Equatorial Guinea; and Suva, Fiji.

For the 21 ongoing construction projects that we reviewed, 14 (including 7 Excellence projects and 4 Excellence-like projects) had experienced some cost growth beyond the original contract value at award as of the end of fiscal year 2017. Because these were ongoing projects and 6 of the 21 had been awarded in fiscal year 2017 and therefore had not substantially progressed, we could not determine whether they would finish within their budget contingency, nor could we compare cost increases of Excellence projects—none of which had been completed—with cost increases of SED projects. See appendix II for the cost status of these ongoing projects as of the end of fiscal year 2017.

Innovative Designs Can Increase Project Costs

OBO maintains that its greater upfront investment in unique designs under Excellence will yield long-term benefits in embassies' functionality, quality, and operating costs, as well as their appearance in representing the United States. Critics of the Excellence program assert that aspects of unique designs, such as buildings' shapes and layouts, construction materials, or the architectural products used, are often expensive to design, build, and maintain.[42] For example, some Excellence or Excellence-like designs specify stylized, custom-built architectural facades that are to be installed on the buildings' exteriors. These can include cantilevered roofs; customized windows; architectural screens;

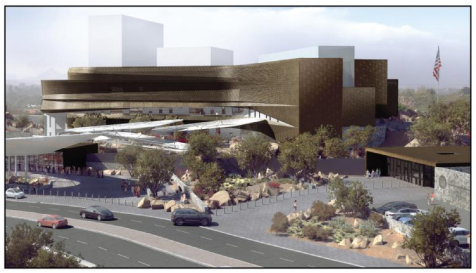
[42]Critics of the Excellence program have included both current and former OBO and DS staff and management officials, some State contractors, and some congressional stakeholders.

glass curtain-wall systems;[43] or very specific stone, brick, or concrete work. Some critics have also raised concerns about some aspects of buildings' interior architectural features. For example a project official reported to us that State could have saved nearly $950,000 had it utilized an aluminum handrail—rather than a bronze handrail—for one embassy's main staircase. The bridging design called for all metal site furnishings and railings to be a bronze tone in color. The bridging designer specifically indicated the use of bronze color throughout the design was intended to relate to the local metal craft of the region. An OBO official we spoke with indicated that while he understood there might be some savings for changing the handrail to aluminum, he felt the designer's intent in specifying the use of a bronze handrail was clear and was approved by OBO during the design review process, and thus he did not feel it would be appropriate to make a change. Figure 9 depicts the more custom and stylized Excellence exterior designs alongside more standardized SED projects.

[43]A curtain wall is defined as a thin, usually aluminum-framed wall, containing in-fills of glass, metal panels, or thin stone. The framing is attached to the building structure and does not carry the floor or roof loads of the building.

Figure 9: Examples of More Customized Exterior Designs (top row) Compared with More Standardized Exteriors of Some Standard Embassy Design (SED) Projects (bottom row)

Pristina, Kosovo (Excellence)



Hyderabad, India (Excellence)

Jakarta, Indonesia (Excellence-like)

Port-au-Prince, Haiti (SED)

Jeddah, Saudia Arabia (SED)

Belmopan, Belize (SED)

Sources: GAO and U.S. Department of State (State) documentation. | GAO-18-653

In reviewing our case study projects, we found instances of custom exteriors that had led to greater construction costs. For example, OBO project documentation shows the use of a customized glass exterior wall designed for the Jakarta, Indonesia, embassy significantly impacted cost and schedule after contract award, adding at least $18 million to the cost and 180 days to the schedule. According to project documentation as well as OBO and contractor officials, OBO's decision to employ a unique glass curtain-wall system for that project and subsequent questions raised by Diplomatic Security about the design, led OBO to modify the contract to add (1) $2.2 million and 180 added days to explore alternative designs and conduct redesign work in order to obtain Diplomatic Security certification; (2) $13.3 million, which OBO told us was for a dedicated facility to be established in the United States to securely fabricate the glass curtain wall before secure shipment to the site; and (3) $3 million to

have cleared American workers install portions of the wall.[44] OBO had not previously employed such a system in a completed embassy project and could not provide us with documentation analyzing the risks of such a feature to cost and schedule—which might have included potential delays to get Diplomatic Security's approval of the design—compared with conventional concrete construction.[45] Figure 10 shows this glass curtain wall under construction.

Figure 10: Exterior and Interior Views of U.S. Embassy Jakarta's Glass Curtain Wall, under Construction during GAO Site Visit in September 2017

Source: GAO. | GAO-18-653

Additionally, on the Hyderabad, India, project, OBO project documentation shows the initial design of the unique exterior screen concerned OBO management, leading to more design development by the contract architect, further review by OBO's design staff, and added

[44]The total cost impact attributable to the glass curtain wall is unclear, as issues with the wall were included in a larger contract modification that included multiple other issues. While the construction contract was awarded in 2012, the security certification of the project's design was not provided until 2015.

[45]State was concurrently employing a glass curtain wall system in the construction of a new U.S. embassy in London. The use of that system was the subject of a State Inspector General's review. See U.S. Department of State, Office of Inspector General: *Audit of the Construction Contract Award and Security Evaluation of the New Embassy Compound London*, Report Number: AUD-CGI-15-31 (Arlington, Va.: July 2015).

cost. Senior management expressed concerns about the appearance of the screen, mainly that the screen was too traditional compared with the spirit of the design of the building and the rest of the campus and that the pattern of the screen needed more variation for daylight and views. To respond to this concern, OBO issued two contract modifications to OBO's architect for additional design work for the exterior screen. OBO told us that subsequent design development for three alternatives for the screen contributed an additional design cost of about $750,000, raising the final bridging design cost to approximately $10.5 million.[46] That figure excludes roughly $816,000 for support services during construction, of which OBO reports a minor portion was attributable to ensuring that the construction contractor achieved the design intent for the exterior screen. Figure 11 shows schematic design renderings of the approved screen design.

Figure 11: Schematic Renderings of the U.S. Consulate in Hyderabad and Its Exterior Screen

Source: U.S. Department of State. | GAO-18-653

In our 2016 survey of OBO staff, several staff indicated that unique Excellence project designs can impact costs.[47] Table 2 provides examples of such comments.

[46]We did not asses the construction contractor's cost for the fabrication and installation of the screen itself.

[47]GAO-17-296.

Table 2: Selected 2016 Survey Comments from Staff of the Bureau of Overseas Buildings Operations (OBO) regarding Unique Designs under the Excellence Approach

- The exterior of OBO buildings are the most expensive element (in proportion to size) yet many of our newer designs have complex exterior screens, louvers, sun shades, or decorative "second skin" over the expensive structure. The overall shape of the exteriors has also gotten more complex and sculptured also adding cost and constructability issues.
- The [design firm], from the beginning of the project, ignored the security comments—and advice of integrating security into the architectural design—by security engineers and Diplomatic Security. It resulted in redesigning the project at over 65 percent project initial planning. They concentrated on the architectural facade and ignored the comprehensive integration of the entire security requirement and toward the end of project they had to get involved in mitigation strategies.
- The SED [Standard Embassy Design] program built many buildings over time at a reasonable cost, but the quality of the buildings in terms of function, maintenance, and appearance was not always the best. The [Excellence] program causes the buildings to be more expensive and take longer to design and build. They have not been in service, so functionality and longevity cannot be evaluated. However, in terms of appearance, they present unique faces quite different than the boxy SED that has been described at times as a "medium security prison."
- Construction is more complicated and requires more labor and materials to build. Curtain walls, curved or inverted walls, canopies, exterior mixed building material facades, etc. [are examples of more complicated efforts] and there are also the additional costs of performing long-term operations and maintenance.

Source: GAO analysis. | GAO-18-653

Note: Our 2016 survey solicited OBO staff's views on the sufficiency of OBO's strategic vision, policies, procedures, and technical guidance for the Excellence approach as well as any particular efficiencies or challenges brought about by the approach. We sent the survey to 1,511 OBO staff, 705 (47 percent) of whom responded. The results of our survey provided measures of employees' views at the time they completed the survey in July and August 2016. Views expressed in the survey may not be representative of all OBO staff views on given topics. For further information about the survey methodology and results, see GAO, Embassy Construction: State Needs to Better Measure Performance of Its New Approach, GAO-17-296 (Washington, D.C.: Mar. 16, 2017).

Construction of Completed Projects Averaged Around 36 Months

For the 22 completed embassies we reviewed, the average time to completion was just over 36 months, though with some distinctive outliers. To assess schedule, we compared embassy construction durations with a benchmark of 36 months.[48] We used that planning allowance because, in the past, OBO has maintained that a SED would generally take no more than 36 months to construct and that construction

[48]Duration is officially measured from OBO's "final notice to proceed"—sometimes referred to as "full notice to proceed"—issued to the contractor to "substantial completion," which generally establishes that the new facilities are ready for use by State. Under OBO guidance, substantial completion is the contractual milestone that transfers responsibility for maintenance and utilities to the department and begins the warranty period for systems and equipment.

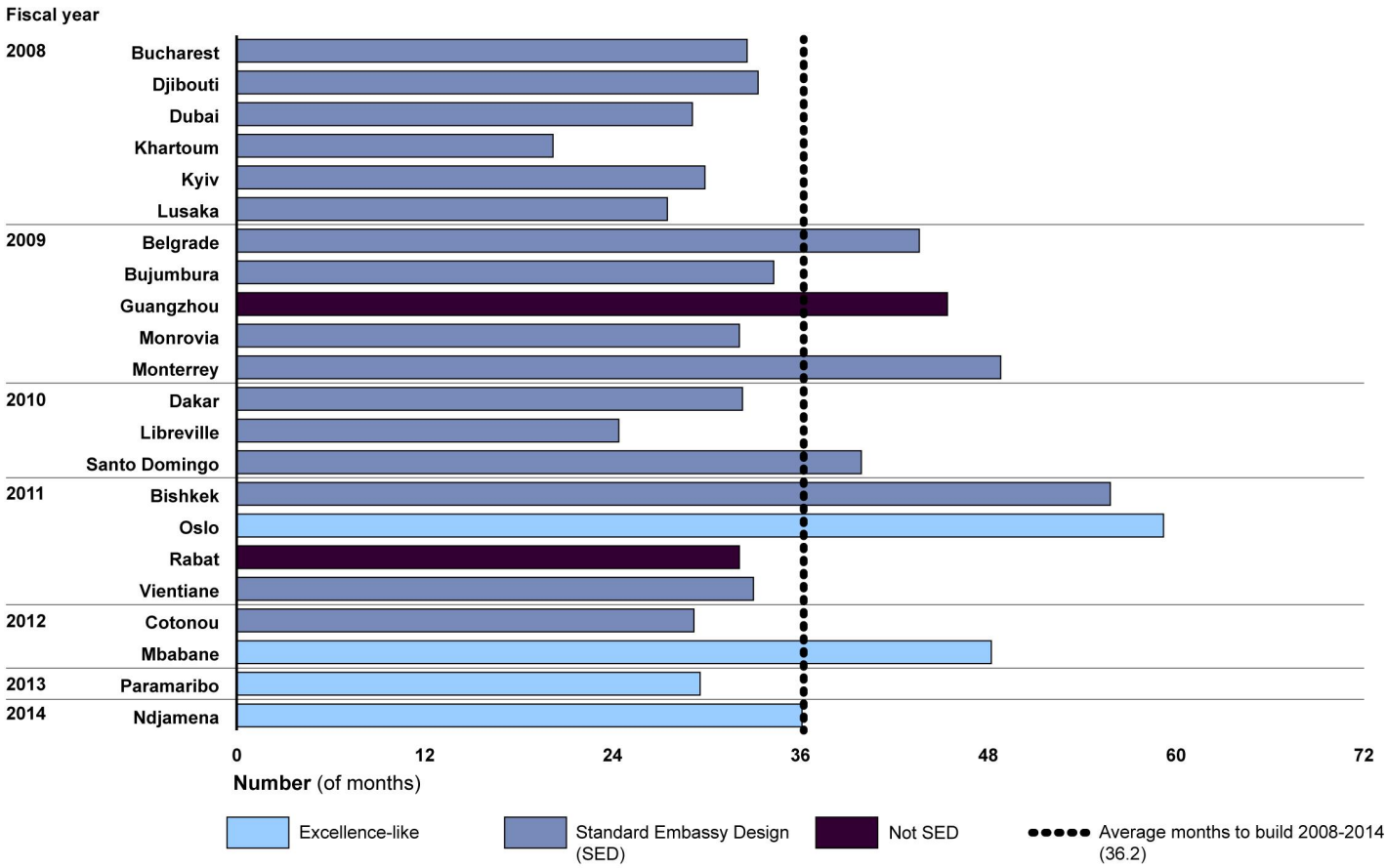
durations would not be any different under Excellence.[49] For the 22 completed construction projects, 14 (about 64 percent) were completed in 36 months or less, including one Excellence-like project. The remaining 8 projects (36 percent) were completed in over 36 months, including 4 SED projects and 3 Excellence-like projects.[50]

Construction durations can be affected by factors not controlled by the U.S. government, such as host government relations, adverse security conditions, or border/port closures. For example, one schedule outlier was due to a work stoppage and restart in Khartoum, Sudan, where the short schedule does not capture the construction activities performed under an earlier 2005 contract. Other events extending construction duration included, as referenced earlier, the addition of U.S. Marine security guard quarters to the projects in Monterrey, Mexico and Mbabane, Swaziland, as well as delays related to host government permitting issues in Bishkek, Kyrgyzstan, according to State project documentation. Figure 12 summarizes schedule performance on the basis of construction duration for these 22 completed embassy construction projects. Our schedule assessment of 22 completed projects included no Excellence projects, as none had been completed as of the end of fiscal year 2017.

[49]In 2006, we reported that the SED and the design-build approach had contributed to significant progress in completing new embassies and reduced the average time to complete projects to 36.7 months. This was nearly 3 years faster than embassies built during the Inman era. See GAO-06-641.

[50]One project, N'djamena, was completed in 36.1 months.

Figure 12: Construction Durations for Completed Embassy and Consulate Projects by Fiscal Year Awarded, 2008–2014 in Months



Source: GAO analysis of Overseas Buildings Operations (OBO) contract and project data. | GAO-18-653

Notes: Duration is officially measured from “final notice to proceed”—sometimes referred to as “full notice to proceed”—to “substantial completion,” which generally establishes that the new facilities are ready for use by the Department of State. Under OBO guidance, substantial completion is the contractual milestone that transfers responsibility for maintenance and utilities to the department and begins the warranty period for systems and equipment.

Construction durations can be affected by factors not controlled by the U.S. government, such as host government relations, adverse security conditions, or border/port closures.

The figure excludes mini-compounds such as Bandar Seri Begawan, Brunei; Koror, Palau; Kolonia, Federated States of Micronesia; Malabo, Equatorial Guinea; and Suva, Fiji.

The time needed to construct the embassy compound in Khartoum, Sudan, does not reflect the total time needed as the project was stopped due, in part, to the holding of construction containers by the host government. The project was restarted under a new contract in 2008; thus, the time reflected includes only the construction duration under the second contract.

We did not assess the final schedule performance of the 21 construction projects ongoing at the end of fiscal year 2017 because there were at different stages of construction. As a result, it is too early to draw

conclusions regarding schedule performance of individual Excellence projects compared with SED projects. See appendix II for the schedule status of these projects as of the end of fiscal year 2017.

Staffing Workload and Contractor Collaboration Challenges Impede Efficiency of Project Delivery

After shifting to the use of more customized designs under Excellence, it is unclear if OBO's staffing levels, particularly in its Office of Design and Engineering (Design and Engineering), are sufficient to execute its full workload. Staffing workload challenges were cited by program stakeholders across the organization, but no strategic workforce analysis exists to fully assess OBO's human capital capacity against the full range of its real property responsibilities, including the CSCP. With regard to project implementation, formal partnering between OBO and its construction contractors could help avoid adversarial relationships that inhibit swift resolution of issues.

It Is Unclear If OBO's Staffing Is Commensurate with Its Workload under the Excellence Approach

OBO Faces Staffing Workload Challenges in Design and Other Offices

According to OBO officials, OBO's workload and responsibilities exceed its available staff. In April 2018, OBO officials told us the bureau's authorized federal staffing level—including both domestic and overseas positions—is 1,415 positions. However, according to OBO officials roughly 280 (about 20 percent) were vacant due to both attrition and State's recent hiring freeze.[51] OBO federal staff at that time consisted of approximately 1,135 people, including direct-hire civil service and Foreign Service staff,[52] as well as personal services contractors (PSC) whom

[51]State engaged in an agency-wide hiring freeze from approximately January 2017 to May 2018.

[52]OBO's Foreign Service staff are typically engineers or architects that serve as OBO Project Directors (PD) managing construction overseas or OBO Facility Managers assigned at posts and who oversee the facilities management and maintenance of U.S. embassies.

OBO defines as individuals who have direct employment contracts with State. In addition, OBO is supported by nearly 300 individuals who are employed by companies that provide those individuals to OBO as supplemental staff. Those 300 individuals are referred to by State as third-party contractors because their employment contracts are not with State but rather with their respective companies.

Design and Engineering is one of the key offices supporting Excellence. According to OBO budget planning documents and the Managing Director of the directorate that includes Design and Engineering,[53] this office has faced workload and staffing challenges for several years. Some OBO officials told us that the office's need for more staff has been ongoing since 2014, which roughly corresponds with OBO's full implementation of Excellence.[54] In 2015, the staff within Design and Engineering conducted a workload and workforce review in preparation for the office's annual, internal budget planning process.[55] Based on that review, the Director of Design and Engineering briefed OBO's Director and Deputy Director that some critical functions were not being performed or had been diminished, including quality design reviews (insufficient depth of review); advanced planning (master planning, feasibility studies); project analysis (scenario planning, life cycle analysis); and guidance to design firms (limited interactions).[56]

In the 2015 briefing, the Director of Design and Engineering proposed two courses of action to OBO's Director and Deputy Director: (1) workload prioritization or (2) workforce increase. The first approach sought to

[53]Design and Engineering is one of four offices under OBO's Program Development, Coordination, and Support directorate, which also includes the Office of Cost Management, the Office of Project Development and Coordination, and the Office of Special Projects Coordination.

[54]One senior OBO official also believed that Design and Engineering did not request appropriate staffing during the SED era.

[55]The workload analysis was generally undertaken by architects and engineers and consisted primarily of counting the number of projects in planning, design, and under construction, including new embassy construction projects, major embassy rehabilitations, major security upgrades, and smaller maintenance and post-generated projects. This analysis also considered other non-project initiatives, such as developing or updating design standards and guidance.

[56]Examples of other functions that were also identified as not performed or diminished included (1) supervisory coaching and mentoring; (2) research and development such as lessons learned and program evaluation; (3) process improvements and new initiatives in the areas of standards, guidelines, and technology; and (4) education and training.

identify critical workload responsibilities—such as new embassy construction—that the existing staff should prioritize over other responsibilities that may need to be addressed with additional staffing or outsourced to private industry. The second approach, increasing the workforce, proposed that OBO hire more Design and Engineering staff to support all the office's responsibilities. According to a senior OBO official, OBO's Deputy Director at the time determined the best course of action was to implement a workforce increase, and in 2016 he instructed Design and Engineering's Director to plan to increase the office's authorized staff from approximately 150 to 250 people over several years.[57] However, OBO officials told us this decision was a goal at that time and did not reflect any formal staffing authorization by OBO or State; for that reason, it was not reflected in any OBO human capital staffing assessment or plan. In the interim, until Design and Engineering could get authority and funding for more federal direct-hire or PSC positions, OBO planned to make increased use of third-party contractors. Since 2015, direct-hire authorized staffing levels for this office generally have not increased.

In April 2018, OBO officials indicated that Design and Engineering needed about 300 staff to meet the office's workload responsibilities. Design and Engineering's internal 2018 budget planning documents show that since fiscal year 2015, the office has had 154 authorized civil service and PSC positions.[58] However, in April 2018 OBO reported to us that Design and Engineering had filled only 108 of the 154 authorized positions,[59] amounting to a vacancy rate of roughly 30 percent. OBO also reported that Design and Engineering was using 31 temporary third-party contractors, for a total combined on-board federal and contractor staffing level of 139 positions. Design and Engineering's internal fiscal year 2018 budget planning documents show that the office proposed to increase its authorized staff level from 154 positions to 304 positions by 2020, effectively increasing by 50 positions each fiscal year.[60]

[57]The intent was to get to 250 people by hiring more PSC staff and some civil service staff.

[58]The 154 authorized positions included 111 civil service positions and 43 PSCs.

[59]The 108 filled positions included 80 civil service staff and 28 PSCs.

[60]The proposal would increase the authorized staffing levels to 204 staff in 2018, 254 in 2019, and 304 in 2020. These staffing levels would include both civil service and PSC positions.

According to senior OBO officials, requests for increased federal staffing for Design and Engineering and other OBO offices have generally not been approved since at least fiscal year 2015, in part, because of general budgeting and fiscal constraints. OBO officials indicated the denials of staffing requests were generally executive-level decisions made at different stages during the budget planning process within OBO, State, and OMB. In general, OBO officials characterized those decisions as common when agencies are under pressure to control program costs.

Design and Engineering Announcements

The following are examples of third-party contractor job announcements for positions intended to support the Office of Design and Engineering in the Bureau of Overseas Buildings Operations (OBO):

- **Senior Architect** – fills OBO "fluctuating skill needs and gaps" in architecture design, project planning, building code analysis, and construction design reviews; reviews plans, specification and technical reports; mentors more junior architects.
- **Senior Interior Designer** – serves as senior expert on interior design and space planning; reviews construction submittals; advises on contract bids, change orders, schedule extensions, cost increases; coordinates on planned embassy spaces with Diplomatic Security, the intelligence community, and OBO's construction contractors.

Source: January 2018 online job search websites. | GAO-18-653

As previously noted, Design and Engineering is utilizing private-sector companies to hire temporary third-party contractors in order to execute its workload and, in part, until OBO can receive authority to hire additional direct-hire staff. According to OBO officials, OBO in the past has primarily used third-party contractors to meet needs that were genuinely of a temporary nature, such as to conduct planning surveys and staff overseas projects during construction. More recently, however, OBO has begun to rely more on third-party contractors to provide key professional capabilities, as evidenced by some recent contractor hiring announcements for positions intended to support Design and Engineering (see sidebar).[61]

We previously reported that new embassies are state-of-art facilities that have unique security features and whose designs must be certified by State as meeting security standards prior to the start of construction.[62] Design reviews to assess proposed project designs in accordance with State standards and building codes are a key responsibility of Design and Engineering. Such reviews are important to the success of a construction project because insufficient design reviews by agency staff can lead to design errors and omissions that can affect project cost and schedule.

The Federal Facilities Council has reported that when constructing a building, federal agencies should maintain some level of design oversight to ensure that a facility is an acceptable balance of cost, schedule, quality, and performance.[63] The council also concluded that effective design review processes result in more comprehensive and accurate design and construction documents that, in turn, lower project costs. (See sidebar for additional information on the council's report.)

[61]In June 2018, a leading industry publication reported that professional services firms (third-party firms) in the construction industry were once thought of as entities hired by owners to keep an eye on contractors during the construction process. It indicated that public owners' lack of staff is resulting in many owners calling on third-party construction and project management firms to provide staff augmentation. See BNP Media, *Engineering News Record,* "ENR 2018 Top 100 Professional Service Firms," (June 13, 2018).

[62]GAO, *New Embassy Compounds: State Faces Challenges in Sizing Facilities and Providing for Operations and Maintenance Requirements*, GAO-10-689 (Washington, D.C.: July 20, 2010) and GAO-17-296.

[63]Ralph S. Spillinger, in conjunction with the Federal Facilities Council Standing Committee on Organizational Performance and Metrics, *Adding Value to the Facility Acquisition Process: Best Practices for Reviewing Facility Designs*, Federal Facilities Council Technical Report #139 (Washington, D.C.: National Academy Press, 2000).

Federal Facilities Council Study on Design Oversight

The Federal Facilities Council report indicated that to provide effective design oversight an agency's interest is best served if the in-house staff can fulfill the functions of a "smart buyer," whereby the agency retains in-house staff that understands the agency's mission, its requirements, and customer needs. The council noted that if the agency does not have the staff capacity to operate as a smart buyer, an agency risks project schedule and cost overruns, as well as facilities that do not meet performance objectives.

The Federal Facilities Council also reported that uncontrollable circumstances have resulted in nearly all agencies' engineering functions being contracted to outside consultants at one time or another. As long as sufficient skills are retained in-house to meet the smart buyer approach, according to the council report, there does not appear to be any greater risk from contracting out a broader range of design review functions including construction document reviews and code compliance. However, complex projects that include unique and specialized features of high mission relevance, such as high-security facilities, were an exception cited by the council. When federal agencies are building such unique facilities, the council advised that they retain key expertise in-house as core competencies, with design review a primary in-house responsibility.

Source: GAO summary of Federal Facilities Council Report | GAO-18-653

Construction contractors we spoke with expressed concerns about the quality of OBO's design reviews and capabilities to manage the amount of questions from construction contractors about OBO's Excellence designs. Two contractors believe OBO is using more third-party contractors to perform design reviews than it did previously and that some may lack specialized knowledge of embassy standards and security measures. The two contractors said that this may lead to lack of design consistency and continuity across projects. One construction contractor also indicated OBO takes more time to resolve design issues because it typically will consult with OBO's contracted Excellence design firm before answering a construction contractor's design-related question or approving a design change that may arise during construction.[64] In our 2016 survey, several OBO staff raised concerns regarding OBO's capability to perform design oversight with existing staff. Table 3 lists some of those selected staff comments.[65]

[64]Under the SED with design-build delivery approach, the construction contractor was generally responsible for the design and hired the design firm (not OBO); thus, design issues and questions could be resolved in a more efficient manner between OBO's on-site Project Director (PD) and the construction contractor and its own architect; there was less need for direct OBO involvement by OBO headquarters design and engineer staff, because a second (Excellence) design architect—contracted by State—was generally not used and thus was not part of the design review process. OBO also reports that OBO's Office of Design and Engineering is the authority for building code issues, thus changes need to be coordinated with OBO headquarters.

[65]GAO-17-296.

Table 3: Selected 2016 Survey Comments from Staff of the Bureau of Overseas Buildings Operations (OBO) regarding Design Review Workload and Staffing Challenges

- I need a master schedule of design-bid-build and bridging design reviews to help me schedule my time between design reviews, submittal reviews, and temporary duty assignments.
- It is a challenge when OBO does not do a good job of reviewing and commenting on errors and omissions in the initial bridging documents prepared by architects for design/build (bridging) contracts and the design documents for design-bid-build projects. This results in significant cost increases due to the poor design.
- OBO needs to hire more staff or hire firms to assist with bid documents as I have heard many times from personnel in OBO Washington that they are handling 10 projects and do not have sufficient time to do thorough reviews before the bid documents go out for bid.
- The volume of projects is excessive. Although reviews are done, project development moves along regardless of whether the right people have conducted a proper review.
- The design review process is too short given how much other work is due; the other way of putting it is that more staff could be reviewing designs to allow for a more thorough review.
- The deletion of standards has introduced the need for additional review time that has not been provided in the project time lines. Without standard specifications, drawings, details, etc., all aspects of the design need to be fully vetted and reviewed. Unfortunately, the time to review has not been increased, therefore, only high level systems receive attention during reviews, and much of the review slips through the cracks, un-reviewed.
- In general the "excellence" design process of starting each project from scratch, rather than using standard design templates, has not been efficient in terms of having to teach and argue with (design and construction) contractors on the fundamentals of embassy design, construction, occupant safety, and security. Many staff in our design group our handling up to five embassy projects at the same time, which are seldom coordinated in terms of review periods. This leads to errors and change orders. However, there are promising efforts underway to significantly increase the design staff to handle the increased workload.

Source: GAO analysis. | GAO-18-653

Note: Our 2016 survey solicited OBO staff's views—including contracted support staff—on the sufficiency of OBO's strategic vision, policies, procedures, and technical guidance for the Excellence approach as well as any particular efficiencies or challenges brought about by the approach. We sent the survey to 1,511 OBO staff, 705 (47 percent) of whom responded. The results of our survey provided measures of employees' views at the time they completed the survey in July and August 2016. Views expressed in the survey may not be representative of all OBO staff views on given topics. For further information about the survey methodology and results, see GAO, Embassy Construction: State Needs to Better Measure Performance of Its New Approach, GAO-17-296 (Washington, D.C.: Mar. 16, 2017).

OBO senior management stated that similar staffing challenges compared with workload also exist in OBO's Construction, Facility, and Security Management directorate.[66] According to OBO documentation the Office of Construction Management is authorized 111 direct hire Foreign Service Construction Engineers worldwide but as of March 2018, it had 86, amounting to about a 20 percent vacancy rate. Those direct-hire Foreign Service engineers typically serve overseas as Project Directors (PD) for an embassy construction project.

[66]This directorate includes three offices: Construction Management, Facility Management, and Security Management. Those three offices are organizationally at a comparable level with Design and Engineering, an office that falls under OBO's Program Development, Coordination, and Support directorate.

Other Third-Party Contractor Job Announcements

We found examples of third-party contractor job announcements intended to support the Bureau of Overseas Buildings Operations Office of Construction, Facility, and Security Management directorate:

- **Construction Management Program Analyst** – reports on projects' problem areas for resolution; monitors projects' financial progress; prepares change requests and contract modifications; documents scope, cost, or schedule changes; provides guidance and training to lower level analysts; ensures internal controls and data integrity.
- **Facility Manager** – serves on an interim basis at posts lacking a facility manager; deals with unusual or emergency facility-related conditions that may impact embassy operations; oversees the day-to-day safe operation and maintenance of embassy facilities; manages post's building maintenance staff; performs design reviews.
- **Physical Security Specialist** – reviews design plans, especially for sensitive embassy spaces; oversees transit security plans for sensitive project materials; determines on-site construction security staffing needs; serves on interagency security committees; prepares responses to State's Inspector General, GAO, and Congressional inquiries.

Source: January and April 2018 online job search websites. | GAO-18-653

According to the Office of Construction Management's 2018 internal budget planning documents, the office sought to covert 50 third-party contractors deployed overseas to direct-hire PSCs.[67] Those positions—typically civil, electrical, or mechanical engineers—serve as on-site technical staff under the PD, to oversee construction activities and respond to construction contractors' questions or proposed changes.

Similarly, OBO's Office of Facility Management reported to us that, for fiscal year 2018, it expected that it may be unable to fill 33 (about 15 percent) of its 224 authorized Foreign Service Facility Manager positions, at both newer and existing legacy embassies. Those positons serve as the single U.S. facilities officer overseeing primarily locally hired embassy staff that operate and maintain embassy building systems. As of March 2018, OBO reported it was trying to cover these positions through temporary staff assignments for 2 to 3 months. As with Design and Engineering, we found examples of positions within Construction, Facilities, and Security Management—including Facility Managers—where OBO was relying on third-party contractors to provide key professional capabilities (see sidebar).

State Lacks an OBO-Wide Workforce Analysis to Inform CSCP Resource Needs

Despite OBO-wide workload and staffing challenges, OBO cannot precisely quantify these challenges or their effects because it lacks a strategic workforce assessment of OBO-wide staffing levels and workload capacity needed to support the CSCP under Excellence. According to OBO, Excellence is a holistic effort to improve every aspect of OBO's operations, including real estate acquisition, security methods and technologies, cost management, construction management, and facilities management. OBO's "Guiding Principles for Excellence in Diplomatic Facilities" conveyed that delivering Excellence would be a comprehensive process that seeks to utilize the best methods, technologies, and staff abilities and that each office, person, and action in OBO contributes to the realization of this goal.[68] However, OBO's 2011 decision memo approving

[67]The justification indicated that Construction Management was utilizing third-party contractors, in part, due to the length of time necessary for hiring PSCs through human resources actions and due to increased workload. As we noted earlier, OBO officials also said increases to OBO staffing have generally not been approved since at least fiscal year 2015.

[68]U.S. Department of State, Bureau of Overseas Buildings Operations, *Overview: Excellence in Diplomatic Facilities*, (February 2014).

the shift to Excellence did not identify possible effects to OBO-wide workload, staff levels, and personnel costs, including likely costs to hire either more federal staff or third-party contractors.[69] In addition, the decision memo did not address whether the new design-centric program might affect the staffing needs to manage other OBO responsibilities, such as renovations and security upgrades to existing embassies.

As we have previously reported, the use of bridging and design-bid-build under Excellence entails a time and cost investment in design on the project's front-end.[70] When two contracts are utilized by OBO—one for design and one for construction—additional administrative and programmatic effort is needed to develop, award, and manage multiple contracts. Diplomatic Security officials also reported to us that reviewing customized Excellence designs increased their workload.[71]

In 1999, OPM published a five-step model that suggests agencies should define their strategic direction, assess their current and future workforces, and develop and implement action plans for closing identified gaps in future workforce needs.[72] Further, according to GAO human capital best practices, strategic workforce planning addresses two critical needs: (1) aligning an organization's human capital program with its current and emerging mission and programmatic goals and (2) developing long-term strategies for acquiring, developing, and retaining staff to achieve programmatic goals.[73] Without an OBO-wide analysis of workload capacity and existing staffing, State senior managers and key program

[69]OBO told us that third-party contractors generally cost more than a direct-hire civil service or PSC position.

[70]GAO-17-296. In a 2009 report to OBO, the American Institute of Architects indicated that Design Excellence would require more time spent during the planning and design process than using a standardized approach.

[71]One construction contractor reported to us that the contractual time for State to review a SED-based design and obtain a final security certification was 45 days because the SED was more recognizable by the security reviewers. The contractor indicated the amount of time generally set aside for State to review the contractor's bridging-based Excellence design and obtain final security certification is 90 days.

[72]In October 2002, OPM released a Human Capital Assessment and Accountability Framework that expands on and integrates previous guidance on workforce planning, such as the 1999 model, and other human capital elements of the President's Management Agenda.

[73]GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning,* GAO-04-39 (Washington, D.C.: Dec. 11, 2003).

stakeholders will lack essential information to make decisions about workload priorities, staffing resources, and budget needs pertaining to CSCP and OBO's Excellence approach.

Formal Partnering during Construction Could Help Avoid Collaboration Challenges That Affect Efficiency of Project Delivery

Working collaboratively as a team to efficiently deliver new embassies has been a challenge for OBO and some of its construction contractors. OBO officials said some construction contractors selected to build new embassies have struggled to deliver projects, in part because they had less experience in terms of the number of embassies they had built, or were new to the embassy program. Construction contractors have to learn a great deal of information very quickly—to include State security standards, design specifications, and operating procedures—and many do not succeed, according to these OBO officials. Of the six contractors involved with our nine project case studies, four of the five that we spoke with relayed concerns about poor working relationships with some OBO on-site Project Directors (PD) and that OBO was a difficult business partner,[74] similar to concerns raised about OBO that we have previously reported.[75] Formal construction partnering (partnering) is a recognized construction industry best practice to foster improved collaboration and problem solving and continues to be utilized by major federal construction agencies.[76]

[74]We spoke with only five of six contractors because the sixth contractor had not begun construction of the secure office building, as of September 2017. OBO reported to us that limited work had begun on the U.S. Marine security guard quarters, the support annex, and the pool in March 2017. According to OBO, that project was delayed for about a year due to a contract award protest by another prospective contractor.

[75]GAO, *Embassy Construction: Additional Actions Are Needed to Address Contractor Participation*, GAO-09-48 (Washington, D.C.: Jan. 16, 2009).

[76]Partnering as collaborative team-building process has been recognized by organizations such as the Associated General Contractors of America and the Construction Industry Institute. The latter is a consortium of more than a hundred owner, engineering-contractor, and supplier firms from both the private and public sector and includes U.S. federal agencies.

On-Site OBO-Contractor Relationship Is Important to Project Collaboration

Contractor and OBO officials stressed the importance of the on-site relationship between the OBO PD and the contractor in successfully completing projects. According to State policy, OBO's PDs are the Contracting Officer's Representative[77] at the site and have primary responsibility for overseeing the contractor.[78] The PD serves as State's principal technical contact for the construction contractor and reviews all change proposals. Per OBO guidance, the PD (under advisement with Design and Engineering) renders interpretations of the contract plans and specifications and acts as arbiter of any technical disputes with the contractor. In cases where the recommended proposal amount exceeds the PD's dollar-value authority for changes, the PD makes a recommendation for action to State's Contracting Officer in Washington, D.C.[79]

OBO and contractor officials indicated that OBO's PDs are critical to the success of embassy projects and noted that while some PDs make an active effort to collaborate with contractors, other PDs do not. Our interviews with OBO and contractor officials reflected that PDs who do not collaborate well can have a challenging relationship with the contractor that makes it difficult to reach timely solutions to project and contract issues. In addition, contractor officials stated that strained relationships with some PDs may be further exacerbated because OBO headquarters often takes too long to make decisions—in support of their PDs in the field—on proposed changes and additional work that State is considering or that contractors propose as being needed.[80] Three of the five

[77]State's Contracting Officer for embassy construction is located in State's Office of Acquisitions Management; OBO's PD—as the Contracting Officer's Representative—jointly reports to the Contracting Officer and OBO's Office of Construction Management.

[78]In general, the OBO PD's on-site staff assisting in overseeing the contractor includes a deputy construction manager, construction engineers, site security managers, cleared guards, and construction surveillance technicians.

[79]In general, PDs may have delegated authority from the Contracting Officer to approve contract changes up to a set amount. Under OBO guidance, PDs generally do not have authority to grant schedule extensions.

[80]One long-standing contractor attributed OBO headquarters delays since the implementation of Excellence, in part, to OBO hiring less experienced staff and using more contract employees who are not as familiar with OBO and Diplomatic Security requirements.

contractors we spoke with cited such concerns about PDs and OBO headquarters as a long-standing or systemic issue. Officials from one contractor indicated that when PD-contractor disagreements arise and combine with delays by OBO headquarters, an issue that could be resolved at a lower cost or schedule impact can become a critical problem leading to greater cost and schedule impacts for the government, the contractor, or both.

Senior OBO officials acknowledged differing styles and capabilities among OBO's PDs, as well as the need to improve response times in OBO headquarters. With regard to PDs, senior OBO officials stated that some PDs' working styles are more proactive in cooperatively seeking to resolve issues face-to-face and through meetings with the contractor's on-site team; conversely, other PDs' styles are more geared to corresponding with the contractor's team through written communication and contractual correspondence. One of these officials stated that he did not believe the latter style was as effective, but that it is sometimes needed when contract issues cannot be solved by the two sides.

Another OBO official stated that OBO needs to look beyond individuals' technical engineering or architectural skills and experience and examine their "soft skills"—such as communication abilities, problem-solving skills, and how they work with others—to better assess who might excel when OBO assigns staff to projects. According to OBO officials, it can be very challenging to determine whether and to what degree a PD is reasonably enforcing the contract and doing their best to collaborate with the contractor to resolve project issues that arise.[81]

OBO Headquarters-Contractor Response Times Are Also a Collaboration Issue

Regarding response times, senior OBO officials stated that OBO is working to improve turnaround on proposed changes during construction. However, they emphasized the necessity of PDs frequently having to go back to OBO headquarters to ensure an on-site change proposal is in accordance with OBO's contracted designer's intent as well as State's

[81]Other related comments were made to us in our discussions with OBO and contractor officials. Some OBO and contractor officials generally indicated that there are both good and bad PDs and good and bad contractors. One senior OBO official and one contract official indicated OBO rarely has removed a PD due to concerns they are not effective and are adversely affecting a project and oversight of a contract.

design and security standards. In addition, they stated that lack of timely responses can sometimes be the fault of the contractor, particularly if the contractor is less experienced with embassy construction or new to the program and unfamiliar with OBO's process requirements.

OBO now allows for more time to resolve contractor requests for equitable adjustment that involve increases to contract cost or schedule than it had in the past. In 2008, OBO guidance called for State to acknowledge in writing contractors' requests for equitable adjustments—due to cost or schedule changes—within 3 days and to seek to evaluate the merits of such requests and make final decisions within 55 days.[82] In 2016, State changed its guidance to allow 15 days to acknowledge contractors' requests for equitable adjustments and 90 days for State to make a final decision.[83] OBO documentation indicates that the process can take even longer than 90 days if State determines that the contractor has not provided enough information for State to assess the merits of the request for additional time or cost.[84] Two of the contractors we spoke with stated that excessive delays in responding to a request for an equitable adjustment can increase the likelihood of contractor-initiated litigation. With regard to changes initiated by State, contractors were also frustrated when OBO issues a request for proposal to a contractor—to provide a price and schedule for the prospective change—and then OBO does not make a timely decision as to whether it wants to implement the change.

OBO officials said they are trying to shorten the time it takes them to make decisions concerning contractors' requests for information, proposals for equitable adjustments to contract price or schedule, and OBO proposals to undertake additional work. In April 2018, OBO officials noted that they recently expanded the scope included in OBO's generic statement of work for "construction phase services" that it requests from contracted design firms. The responsibilities added to the statement of

[82]In general, State's response is prepared by the Contracting Officer with input from OBO's PD on-site. U.S. State Department, Overseas Buildings Operations, *2008 Construction and Commissioning Guidebook* (Washington, D.C.: 2008).

[83]U.S. State Department, Overseas Buildings Operations, *2016 Construction Management Guidebook* (Washington, D.C.: 2016).

[84]If State denies a request for an equitable adjustment, the contactor may request a meeting with OBO and State's Office of Acquisitions to review the denial. The contractor may also submit a certified claim requesting a final decision for the record; in such cases, the contractor may later pursue an outside review though mediation or litigation, according to OBO guidance.

work are an effort to utilize and leverage the design firms to provide more support to OBO's PDs in the field, enabling the PDs to respond to OBO contractors more quickly.

Case Studies Contained Examples of Both Adversarial and Cooperative Relationships

Three of our nine case-study projects (involving six contractors) had adversarial relationships between OBO and three of its contractors. In our discussions with both OBO and contractor officials, as well as a review of OBO and contractor documentation, we found that those relationships were characterized by poor on-site collaboration and claims of delays in acting on proposed changes that affected project efficiency. In all three cases, both parties took the position that it was the performance of the other party when dealing with challenges and changes that most impacted the project's progress. The federal contractor performance evaluations for these projects also reflected the strained relationships between OBO and the contractors. Two of these situations involved contractors less experienced with the CSCP. In five of our nine case studies, OBO PDs and the contractor generally had cooperative relationships that responded effectively to project issues and resolved conflicts successfully.[85] Four of these five projects involved the CSCP's two long-standing contractors. The third contractor, who reported a positive contractual relationship with OBO on one of our project case studies, indicated it had very poor relationship with OBO on its only other CSCP project.[86] Information on four of our case studies—two that had more adversarial relationships between State and the contractors and two that exhibited more cooperative relationships—is included in the text box, and appendix III contains more information on these projects and our other five construction case studies.

[85]One project (Port Moresby) had not progressed far enough, and thus we were unable to assess the relationship as either adversarial or cooperative. We also did not speak with the contractor for that project.

[86]The other project the contractor identified, which was not one of our case studies, was the new consulate in Mumbai, India. According to OBO, that contract was awarded in 2005, and the project was completed in 2011.

Example Case-Study Relationships between Overseas Buildings Operations (OBO) and Its Contractors

Bishkek, Kyrgyzstan: A poor working relationship between OBO and the contractor inhibited resolution of a variety of disagreements. These disagreements included responsibility for obtaining zoning approvals and building permits with the host government, and whether the contractor could remove a satellite dish in the construction zone. Issues regarding timeliness of decision-making by OBO headquarters and quality of contractor submissions were also raised on this project.

Jeddah, Saudi Arabia: This project was challenged by errors and omissions in the design provided to the contractor, according to OBO and contractor officials. Both OBO and the contractor acknowledged that a difficult working relationship slowed efforts to deal with such challenges. Disagreement also arose regarding timely response to proposed changes; the contractor maintained that OBO headquarters was delaying work due to slow decision-making, while OBO maintained that the contractor failed to mitigate schedule delays for which the contractor was responsible.

The Hague, Netherlands: Both OBO and the contractor said they had a good working relationship and indicated that OBO's Project Director and his on-site project architect enabled OBO to more collaboratively and effectively react to technical inquiries from the contractor. Both OBO and the contractor noted that the two sides worked cooperatively to resolve environmental issues and permitting issues raised by the local government.

Kyiv, Ukraine: Both OBO and the contractor observed that each side worked very cooperatively on-site and at the headquarters level to swiftly accommodate and mitigate the cost and schedule impact resulting from the addition of an office annex for the U.S. Agency for International Development.

Source: GAO. | GAO-18-653

Partnering Is a Recommended Practice Intended to Foster More Effective Project Collaboration

According to the Federal Facilities Council, facility acquisition traditionally has been an adversarial environment between facility owners and construction contractors.[87] The council also indicated conflicting interests between the parties can result in poor communication, poor problem solving, and poor results. Further, the council has reported that when multiple organizations make a commitment to work cooperatively toward a common objective utilizing teambuilding techniques on building projects, the practice is called "partnering."

OBO does not utilize formal partnering, though State's supplement to the Federal Acquisition Regulations System acknowledges that partnering

[87]Ralph S. Spillinger, in conjunction with the Federal Facilities Council Standing Committee on Organizational Performance and Metrics, *Adding Value to the Facility Acquisition Process: Best Practices for Reviewing Facility Designs*, Federal Facilities Council Technical Report #139 (Washington, D.C.: National Academy Press, 2000).

may be used in the context of alternative dispute resolution.[88] According to the State supplement, this partnering involves an agreement in principle to share the risks involved in completing a project, and to establish and promote a partnership environment. It notes that partnering itself is not a contractual agreement and it does not create any legally enforceable rights. Instead, partnering seeks to create a new cooperative attitude in completing government contracts. The three basic steps in partnering identified by State's supplement are as follows:

1. Establish the new relationship through personal contact among the principals for the government and the contractor before the work begins.
2. Prepare a joint statement of goals establishing common objectives in specific detail for reaching the goals.
3. Identify specific dispute prevention processes designed to head off problems, evaluate performance, and promote cooperation.

Both the General Services Administration (GSA) and the U.S. Army Corps of Engineers call for partnering as a preferred management process on all major projects as a cooperative approach with their contractors to resolve problems and reduce conflicts, litigation, and claims.[89]

- For example, GSA recommends formal partnering for all construction projects developed by its Public Building Services in excess of $10 million in estimated construction costs. One GSA executive official we spoke with cited partnering as a best practice that can mitigate cost growth and schedule delays by providing a more collaborative process to reach fair and equitable decisions faster to the benefit of both the government and the contractors.
- The Corps of Engineers has recommended formal and professionally facilitated partnering as an integral element on designated "mega projects," which generally are those costing in excess of $200 million, have schedules that exceed 2 years, or have national or international

[88]Title 48, Federal Acquisition Regulations System; Chapter 6, Department of State (DOS), Subchapter E, General Contracting Requirements, Sec. 633.214–70(c)(6), DOS Alternative Dispute Resolution program.

[89]Other federal agencies that have employed partnering include, but are not limited to, the National Aeronautics and Space Administration and the U.S. Naval Facilities Engineering Command.

significance, among other considerations.[90] The Corps of Engineers reports that partnering is an organized process that can remove organizational impediments to communication and is consistent with the government's implicit duty to act in a fair and reasonable manner.[91]

Long-Standing CSCP Contractors May Be Better Able to Informally Partner with OBO Than Less Experienced Contractors

As of the end of fiscal year 2017, there were five construction contractors building new embassies under the CSCP. For the 21 ongoing new embassy construction projects, 18 (approximately 85 percent) were under contract with 2 construction contractors who have historically received the majority (60 percent) of OBO construction contract awards since 1999. The 3 other projects were each being built by one of the contractors less experienced with embassy construction. Two of our case studies—Jeddah and Jakarta—included work begun by two earlier contractors that had been terminated by State, according to OBO officials.[92] Further, the two long-standing OBO construction contractors were awarded 9 of the 10 new embassy construction projects in fiscal years 2016 and 2017. In our discussions with OBO officials, they recognized that they have had persistent challenges in bringing new contractors into the CSCP but retain an interest in expanding OBO's contractor pool.

Left unaddressed, some contractors' frustrations with OBO projects may be a factor in shrinking State's contractor pool. Three of the five contractors we spoke with (all less experienced with embassy construction) indicated they will not be pursuing future embassy projects because they believe State has not acted as a fair partner in overseeing

[90]A 2016 Corps of Engineers policy update (*Engineering Construction Bulletin* [ECB], Number 2016-16) lists the typical attributes of a mega project; however, it also indicates the attributes are not firm requirements and the designation of a mega project is at the discretion of Directors of Civil Works and Military Programs.

[91]This 2017 policy (ECB, No. 2017-14) reemphasized the importance of partnering to Corps of Engineers projects and indicated that partnering shall be applied to the fullest extent practical and scaled to the size and complexity of work.

[92]We did not speak to those two terminated contractors; State reported to us that one contractor had been terminated for default and one terminated for convenience. We did speak with the two current contractors.

its embassy construction projects.[93] Examples of negative perceptions some of the contractors cited from their perspective included that State had not been fair in working with the contractors to resolve challenges such as design-related issues, security-related issues, government-directed changes, or unique issues posed by the countries in which the projects were located. Contractors said that such issues affected their and State's costs and schedules.

OBO officials acknowledged that OBO's relationships with some contractors have posed challenges and saw both parties as bearing some responsibility. They also acknowledged that two long-standing OBO contractors continue to build most new embassies, and they expressed an interest in expanding OBO's contractor pool. We reported similar collaboration concerns raised by OBO contractors in 2009 when we examined contractor participation in the embassy construction program and the decline in the number of contractors participating in the program.[94] In 2009, 10 of 17 construction contractors rated State as a poor or fair business partner. Of the 17 construction contractors surveyed in 2009, 3 had received about 62 percent of OBO's construction contract awards from 2001 through 2007. In general, many contractors at that time told us they were not making as much profit as anticipated and most contractors also expressed concerns about State's management of the program and State's on-site PDs.

Executive officers from one of OBO's two long-standing contractors stated that due to the firm's experience with CSCP, it is able to carry out informal partnering with OBO to better address project challenges. This firm knows OBO's requirements and processes, as well as who within OBO headquarters to call to discuss specific issues, if the firm believes that such issues are not being addressed in a timely manner by the PD or contracting officer. For example, this long-standing contractor said it was generally able to overcome a variety of project issues and disagreements in Pristina, Kosovo, through the firm's knowledge of, and informal partnering relationship with, OBO headquarters. The OBO PD and contractor's on-site project manager could not reach resolution on the cost or schedule impacts of a variety of issues including (1) the extent to

[93]Each of those 3 contractors had been contracted to build at least two embassies and raised concerns regarding OBO management of the other, non-case study projects during our interviews.

[94]GAO-09-48.

which State's approving the contractor's local-hired construction workers was delayed, (2) the timing and responsibility for bringing permanent power to the site, and (3) the extent to which there were differing site conditions requiring the contractor to excavate unsuitable soils and existing foundations.

In January 2018—after our September 2017 site visit to Pristina—this contractor's headquarters office was able to resolve some issues with OBO and State's Office of Acquisitions that otherwise had not been resolved by their on-site project manager and OBO's PD.[95] The firm's executive officers stated that contractors with personnel less experienced with the CSCP—including with OBO and Diplomatic Security requirements and procedures—do not have this in-depth knowledge and may experience greater challenges on their first few CSCP projects as a result. They suggested that OBO should utilize more formal partnering to bring new contractors into the program. They also cited the need to have both formal and informal processes for elevating and resolving issues in order to provide accountability at all levels and ensure that issues are addressed in a timely manner. The contractor believes that formal partnering could lessen the learning curve for new firms, reduce the conflicts between OBO PDs and the contractors' project managers on-site, and keep more firms in the program.

Formal partnering, particularly with firms that have less experience with embassy construction, could help avoid adversarial working relationships between OBO and contractors that inhibit swift resolution of, or even exacerbate, challenges experienced on already-complex projects. Where more cooperative project relationships—informal partnering—occurred on our case-study projects, either on-site between OBO's PD and the contractor or between OBO headquarters and the contractor, we found that this dynamic helped to more easily resolve challenges and facilitate project efficiency. In discussing the possible use of partnering on OBO projects, one senior OBO official reported that while OBO utilized formal partnering to a limited extent on some the CSCP's early projects—Nairobi, Kenya; Tunis, Tunisia; and Conakry, Guinea—he commented that he did not think it was very valuable. In his view, it seemed like the contractors at that time were using the partnering agreement to claim that OBO was not partnering properly. However, other OBO officials stated

[95]The contractor reported that it and State agreed to defer trying to resolve the issue on additional time or cost for asserted security delays by State in approving needed local construction workers.

that they understood the practice of partnering by some federal agencies has evolved since that time. OBO officials agreed that although OBO had not considered formal partnering recently, it could potentially be useful, particularly if tried on smaller projects with new contractors or those less experienced with embassy construction. They added that such piloting would have to be done judiciously to determine how it might best work. We note that two of those three early projects OBO identified as having used formal partnering included the current two long-standing contractors that have completed most of the CSCP embassy projects.

Conclusions

In passing the Secure Embassy Construction and Counterterrorism Act of 1999, one of the congressional findings was that, unless embassy vulnerabilities are addressed in a sustained and financially realistic manner, the lives and safety of U.S. employees in diplomatic facilities will continue to be at risk from further terrorist attacks. State's CSCP made steady progress through fiscal year 2017, completing 77 new embassies and starting construction on 21 more at a cost of just over $24 billion. However, State will not achieve its 2005 forecast for building 150 embassies by 2018 because progress has been hampered, in part, by unforeseen building requirements and inflation that were not originally factored into CSCP funding levels. These issues will affect State's progress as it continues to replace embassies that do not meet security standards. Because State does not currently intend to seek annual inflationary adjustments for CSCP, although individual projects do address inflation to some extent, the CSCP's pace of embassy production is likely to be reduced over time. As State continues to work with the Congress to chart the future course, priorities, and funding levels for the program, regular information on the effects of cost inflation would be helpful as stakeholders reassess the CSCP program's funding level from year to year.

Moreover, State plans to begin the construction of 25 new embassies within the next 5 years and has identified the need to replace nearly 50 additional embassies in later years. While the CSCP schedule identifies future embassy replacements, it does not address the projected cost and time needed to achieve the CSCP's ultimate critical goal of replacing embassies that do not meet State's security standards. Recognizing that precise estimates cannot be easily made for later years, even a notional long-term estimate of the CSCP's overall capital funding investment and time frames, along with an assessment of risk factors such as inflation,

would strengthen State's ability to support and sustain its funding needs, encourage dialogue with congressional committees, and promote consensus by decision makers in the executive and legislative branches on funding levels and expectations for program progress.

Additionally, State's shift to the Excellence approach was predicated on the idea that customized designs would produce embassy compounds that are more innovative, functional, and sustainable than those built using the SED approach, and would also be at least as secure and more cost efficient to operate. It is too early to tell whether this greater upfront investment in design will yield cost and schedule benefits during construction of Excellence embassies or over their life cycle. While past embassies have generally been completed within expected cost and schedule allowances, given the number of embassies yet to be built to meet urgent security needs amid a constrained resource environment, it remains incumbent upon State to realistically assess its ability under Excellence to deliver embassies as efficiently as possible. By comprehensively evaluating its human capital needs against CSCP priorities and other workload demands, OBO can provide program stakeholders—including State, OMB, and Congress—the ability to make fully informed choices as to the capacity of OBO's design and construction organization to support embassy production of these embassies in the near and longer term.

Furthermore, formal partnering could provide OBO with a tool to enhance collaboration both on-site and between contractors and OBO headquarters. This could mitigate the unforeseen issues that arise on all of these challenging overseas projects, but which may be more complicated to resolve for Excellence projects because each one is unique. Piloting a partnering program, particularly with newer or less experienced construction firms could also provide one option to facilitate State's long-standing goal of expanding its contractor base.

Recommendations for Executive Action

We are making the following four recommendations to State:

The Secretary of State should determine the estimated effects of cost inflation on planned CSCP embassy construction capacity and time frames and update this information for stakeholders on a regular basis, such as through the annual budgeting process. (Recommendation 1)

The Secretary of State should provide an analysis for stakeholders identifying those embassies that still need to be replaced to meet State's security standards and estimating total CSCP costs and projected time frames needed to complete those projects. (Recommendation 2)

The Secretary of State should ensure that the Director of OBO conducts an OBO-wide workforce analysis to assess staffing levels and workload capacity needed to carry out the full range of OBO's mission goals, to include the CSCP. Such an assessment could provide a basis for broader stakeholder discussion of OBO's human capital needs and potential prioritization of activities. (Recommendation 3)

The Secretary of State should ensure that the Director of OBO pilots formal construction partnering for the CSCP, particularly with construction firms that are new or less experienced with the program. (Recommendation 4)

Agency Comments and Our Evaluation

We provided a draft of this report to State for comment. State provided written comments that are reprinted in appendix IV. In its letter, State concurred with our four recommendations and described actions planned to address each of them. In addition, State made several observations, including that it has moved beyond Excellence to pursue several new initiatives that aim to lower project and long-term operations and maintenance costs. We acknowledge the continued evolution of State's CSCP. However, our recommendations transcend the pros and cons of any particular delivery method and will be helpful to State, and stakeholders, as it works to improve the design and construction of new embassies. State also provided technical comments on the draft, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees and the Secretary of State. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact either Brian M. Mazanec at (202) 512-5130 or at mazanecb@gao.gov or Lori Rectanus at (202) 512-2834 or at rectanusl@gao.gov. Contact points for our Office of Congressional Relations and Office of Public Affairs can be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

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Acting Director, International Affairs and Trade

Lori Rectanus
Director, Physical Infrastructure Issues

List of Requesters

The Honorable Bob Corker
Chairman
Committee on Foreign Relations
United States Senate

The Honorable Ron Johnson
Chairman
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Trey Gowdy
Chairman
The Honorable Elijah Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable Michael McCaul
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Committee on Homeland Security
House of Representatives
The Honorable Steve Russell
Chairman
The Honorable Stephen Lynch
Ranking Member
Subcommittee on National Security
Committee on Oversight and Government Reform
House of Representatives

The Honorable Darrell Issa
House of Representatives

Appendix I: Objectives, Scope, and Methodology

This report examines (1) the pace of the Department of State's (State) Capital Security Construction Program (CSCP) in constructing new embassies, (2) the cost and schedule performance of State's recent embassy construction projects, and (3) factors that have affected State's ability to deliver construction projects efficiently.

To conduct this review, we obtained information from agency planning, funding, and reporting documents and interviewed State officials within the Bureau of Overseas Buildings Operations (OBO); the Bureau of Diplomatic Security (Diplomatic Security); and the Office of Acquisitions Management. Within OBO, we spoke with officials from offices responsible for site acquisition, planning, project development, design and engineering, cost management, construction management, facility management, policy and program analysis, and financial management. We also interviewed officials from construction contractors that have constructed embassies for State.

To examine the pace of the CSCP, we reviewed OBO project completion data for projects awarded from fiscal year 1999 (after the two embassy bombings in Africa) through the end of fiscal year 2017. We then compared these data against the goals of the program as reported in State documentation, such as past budget justifications and long-term planning reports. We also compared completion data against CSCP funding levels since fiscal year 1999, and further compared those funding levels with recommendations in the Accountability Review Board reports from 1999 and 2012 (following terrorist attacks against U.S. facilities). We also examined OBO's CSCP schedule outlining embassies planned to begin construction through fiscal year 2022 and other embassies identified beyond that time frame. We further consulted GAO's guide to leading practices in capital decision-making[1] as well as budget guidance

[1]See GAO *Executive Guide: Leading Practices in Capital Decision-Making*; GAO/AIMD-99-32 (Washington, D.C.: December 1998).

from the Office of Management and Budget (OMB).[2] We also attempted to assess CSCP performance in moving U.S. government staff into secure facilities but found State's data unreliable for this purpose.

To examine the cost and schedule performance of State's recent embassy construction projects, we selected projects awarded from fiscal year 2008 through 2017. We chose fiscal year 2008 because that year OBO modified its Standard Embassy Design (SED) delivery program to allow for more bridging design to better tailor the SEDs to specific sites. This time frame would also capture Excellence-like projects awarded between the introduction of Excellence in 2011 and the full implementation of Excellence in 2014, as well as pure Excellence projects awarded in 2014 and later. Of the embassy construction projects awarded since fiscal year 2008, we identified 22 completed projects and another 21 underway.

To assess the cost performance of these projects, we used cost data drawn from the Federal Procurement Data System and back-checked against OBO-provided contract data, which we found to be sufficiently reliable for our purposes.[3] We then compared any increases in cost from the contract value at award to OBO's general cost contingency for unforeseen changes on embassy construction projects, which ranges from 5 to 10 percent. To assess schedule performance, we compared construction durations from contract documentation with a benchmark of 36 months.[4] We used that benchmark because, in the past, OBO has maintained that a SED would generally take no more than 36 months to

[2]See Executive Office of the President, Office of Management and Budget, *Preparation, Submission, and Execution of the Budget,* OMB Circular No. A-11 (Washington: D.C.: July 2017).

[3]When we refer to the value of construction contracts, depending on the contract's delivery method, this value may or may not include some design costs. In general, the contract value for a project executed under design-bid-build reflects only the cost to construct the project, as State separately contracts for the design. Whereas, for projects executed under design-build and design-build with bridging, generally the contract values reflect both costs for a contractor to complete a project's design and to construct the project, based on the SED or a partial bridging design.

[4]Duration is officially measured from OBO's "final notice to proceed"—sometimes referred to as "full notice to proceed"—issued to the contractor to "substantial completion," which generally establishes that the new facilities are ready for use by State. Under OBO guidance, substantial completion is the contractual milestone that transfers responsibility for maintenance and utilities to State and begins the warranty period for systems and equipment.

construct and that construction durations would not be any different under Excellence. This benchmark was further informed by past GAO reporting.[5] We did not assess the cost or schedule performance of the 21 projects still ongoing at the end of fiscal year 2017. Because these were ongoing projects at different stages of construction, we could not determine whether they would finish within their budget contingency, nor could we assess their final schedule performance. Furthermore, because no pure Excellence projects had been completed by the end of fiscal year 2017, we could not compare cost increases or schedule performance of Excellence projects with SED projects.

To examine factors that have affected State's ability to deliver construction projects efficiently, we selected nine construction case studies out of our universe of projects awarded in fiscal year 2008 through fiscal year 2015, and funded through CSCP.[6] Criteria for selection included projects with construction contract cost increases, actual or estimated, of more than 5 percent over the life of the contract projects, as well as projects whose construction duration exceeded, or was estimated to exceed, 36 months. We also sought to include as many different contractors, delivery types (e.g., design-bid-build), and construction approaches (e.g., Excellence) as possible. Our final nine construction case studies included projects in Kyiv, Ukraine; Monterrey, Mexico; Santo Domingo, Dominican Republic; Bishkek, Kyrgyzstan; Jakarta, Indonesia; Jeddah, Saudi Arabia; The Hague, Netherlands; Pristina, Kosovo; and Port Moresby, Papua New Guinea.[7] Because many of OBO's pure Excellence projects were more recently awarded, we also reviewed the design contracts for Hyderabad, India, and Beirut, Lebanon.

[5]In 2006, we reported that the SED and the design-build approach had made significant progress in completing new embassies and helped to reduce the average time to complete projects to 36.7 months. This was nearly 3 years faster than embassies built during the Inman era. See GAO, *Embassy Construction: State Has Made Progress Constructing New Embassies, but Better Planning Is Needed for Operations and Maintenance Requirements,* GAO-06-641 (Washington, D.C.: June 30, 2006).

[6]Although we included projects with construction contracts awarded in fiscal year 2016 in our initial data review, we determined that such projects had had too little time under construction to effectively assess implementation issues.

[7]Oslo, Norway, was initially one of our case studies. However, during our audit work, the contractor that built the embassy initiated litigation against State related to this project. Because it is generally our practice to refrain from auditing matters pending in litigation, we removed Oslo from our case-study list.

For each case study, we examined Federal Procurement Data System data, OBO project data and documentation, as well as official contract documentation—including modifications that involved changes in cost or schedule. Additionally, for each of our case studies, OBO compiled information from its Office of Project Development and Coordination, Office of Construction Management, Office Cost Management, and Office of Financial Management into project narratives. Each narrative was then cleared by project managers, project directors, office directors, and managing directors of the affected directorates. In general, we attribute information from these narratives to OBO. We also interviewed relevant OBO and contractor officials involved with the projects, including on-site personnel from both completed and ongoing projects. In September 2017, we conducted fieldwork in Jeddah, Jakarta, The Hague, and Pristina to observe and discuss construction progress with on-site U.S. embassy and contractor officials. U.S. embassy officials we spoke with included those responsible for construction, facilities maintenance, post management, and security.

To further explore issues arising from our case studies we obtained information from OBO planning, funding, and staffing documents and also interviewed State and contractor officials in Washington. We also reviewed the results of our 2016 survey of OBO staff.[8] Specifically, we have included narrative responses from that survey commenting on issues we encountered during our audit work for this report. In some cases we edited responses for clarity or grammar. Views expressed in the survey may not be representative of all OBO staff views on given topics.

We conducted this performance audit from April 2017 to September 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[8]This survey solicited OBO staff's views on the sufficiency of OBO's strategic vision, policies, procedures, and technical guidance for the Excellence approach as well as any particular efficiencies or challenges brought about by the approach. We sent the survey to 1,511 OBO staff, 705 (47 percent) of whom responded. The results of our survey provided measures of employees' views at the time they completed the survey in July and August 2016. For more information on our OBO staff survey, its results, and methodology, see GAO, *Embassy Construction: State Needs to Better Measure Performance of Its New Approach,* GAO-17-296 (Washington, D.C.: Mar. 16, 2017).

Appendix II: Cost and Schedule Status of Ongoing Embassy Construction Projects as of the End of Fiscal Year 2017

This appendix contains contract values and schedule information for 21 embassy construction projects that were ongoing as of the end of fiscal year 2017. Table 4 shows contract values for these projects, while figure 13 illustrates schedule information.

Table 4: Overseas Buildings Operations (OBO) Construction Contract Costs for Ongoing Embassy and Consulate Projects as of the End of Fiscal Year 2017

Dollars in millions

Project	Fiscal year of award	Project type; contract delivery method	Contract value at award	Contract value as of the end of fiscal year 2017
1. Jakarta, Indonesia	2012	Excellence-like; design-build, bridging	$302.4	$339.0
2. Jeddah, Saudi Arabia	2012	Standard Embassy Design design-bid-build	100.5	131.3
3. Nouakchott, Mauritania	2013	Standard Embassy Design design-build	130.7	133.5
4. The Hague, Netherlands	2013	Excellence-like; design-bid-build	125.0	131.7
5. Ashgabat, Turkmenistan	2014	neither Standard Embassy Design nor Excellence; design-build, bridging	196.5	197.3
6. Nuevo Laredo, Mexico	2014	Excellence; design-build, bridging	109.4	111.3
7. Pristina, Kosovo	2014	Excellence; design-build, bridging	158.4	159.6
8. Harare, Zimbabwe	2015	Excellence; design-build, bridging	199.2	203.8
9. Matamoros, Mexico	2015	Excellence; design-build, bridging	120.8	124.0
10. Niamey, Niger	2015	Excellence; design-build, bridging	145.6	156.6

Project	Fiscal year of award	Project type; contract delivery method	Contract value at award	Contract value as of the end of fiscal year 2017
11. Port Moresby, Papua New Guinea	2015	Excellence-like; Design-bid-build	95.0	102.5
12. Colombo, Sri Lanka	2016	Excellence; design-build, bridging	155.9	159.7
13. Dhahran, Saudi Arabia	2016	Excellence; design-bid-build	194.1	194.1
14. Hyderabad, India	2016	Excellence; design-build, bridging	203.1	203.1
15. Maputo, Mozambique	2016	Excellence-like; design-bid-build	181.8	184.4
16. Ankara, Turkey	2017	Excellence; design-bid-build	218.0	219.6
17. Asuncion, Paraguay	2017	Excellence; design-bid-build	165.8	165.8
18. Beirut, Lebanon	2017	Excellence; design-bid-build	613.6	609.5
19. Erbil, Iraq	2017	Excellence; design-bid-build	422.5	422.5
20. Guatemala City, Guatemala	2017	Excellence; design-build, bridging	287.6	287.6
21. Mexico City, Mexico	2017	Excellence; design-bid-build	554.7	554.7
Total			**4,680.6**	**4,791.6**

Source: GAO analysis of Department of State federally reported contract data and OBO project data. | GAO-18-653

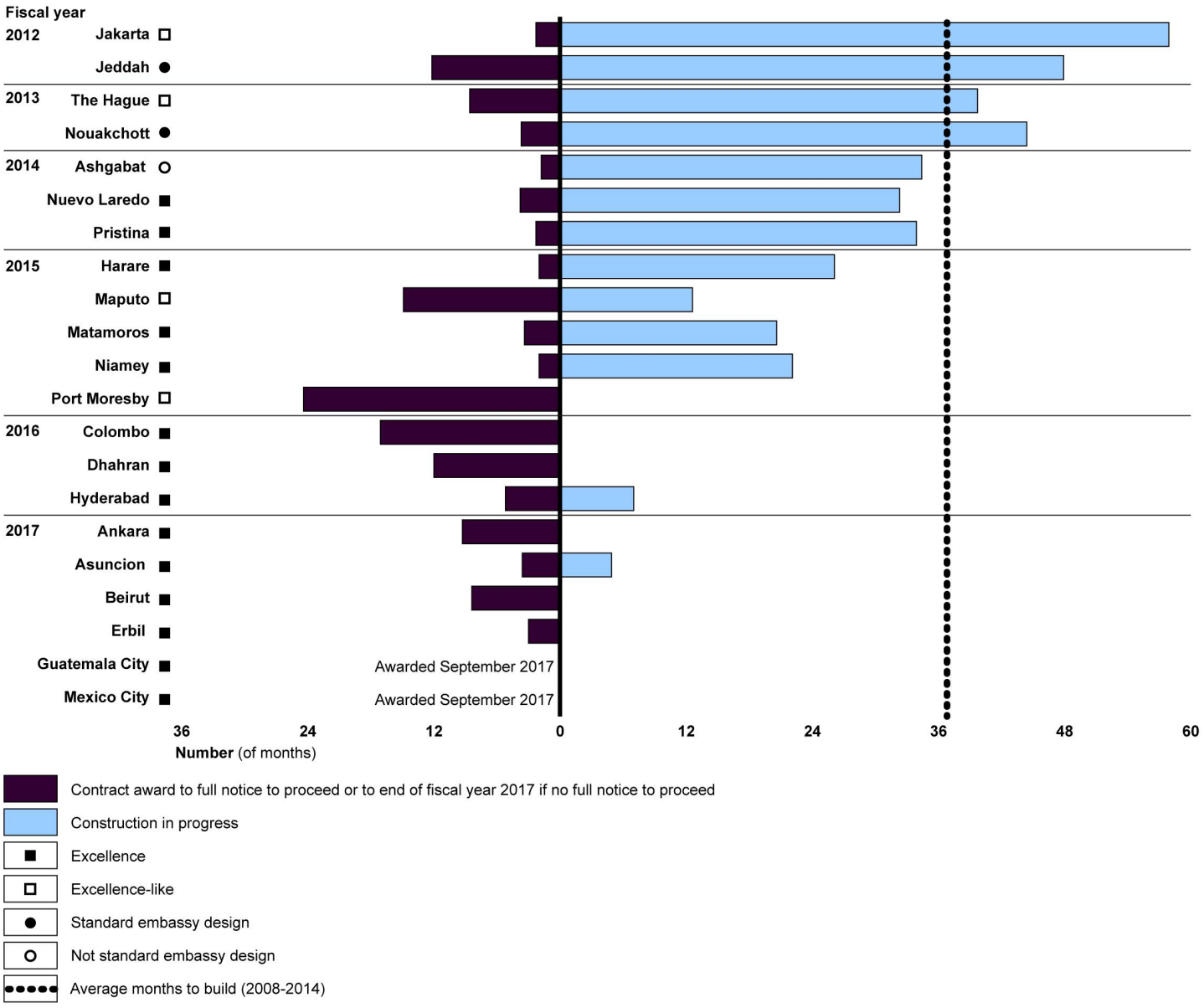
Notes: Award amounts are in nominal dollars and are not adjusted for inflation.

GAO case studies are highlighted in gray.

When we refer to the value of construction contracts, depending on the contract's delivery method (design-build, design-build with bridging, design-bid-build), this value may or may not include some design costs.

Excludes Islamabad, Pakistan. As of September 2018, projects in The Hague and Nuevo Laredo have been completed.

Figure 13: Construction Duration in Months for Ongoing Embassy and Consulate Projects, by Fiscal Year Awarded, 2012–2017, as of Fiscal Year 2017



Source: GAO analysis of Overseas Buildings Operations (OBO) contract and project data. | GAO-18-653

Notes: As of September 2018, projects in The Hague and Nuevo Laredo have been completed. Excludes Islamabad, Pakistan.

Appendix III: Embassy Construction and Design Case-Study Projects

This appendix contains information on selected U.S. Department of State (State) Bureau of Overseas Buildings Operations (OBO) case-study projects included in our review. Nine studies focus on the construction phase of the projects, and two are design case studies.[1] For each case study, we examined Federal Procurement Data System data, OBO project data and documentation, as well as official contract documentation—including modifications that involved changes in cost or schedule. We also interviewed relevant OBO and contractor officials involved with the projects, including on-site personnel from both completed and ongoing projects. For details on our selection of the projects and our case-study methodology, see appendix I.

For the nine construction case studies, we include timelines showing dates for notices to proceed, the original estimated completion dates, and either (a) the actual substantial completion dates (for projects completed as of end of September 2017) or (b) the scheduled completion date (for ongoing projects as of the end of September 2017). The start and end points by which State measures the schedule performance of a project are, respectively, the date when State issues a notice to proceed[2] and the date when it issues a notice of substantial completion.[3] During the course of a project, State may grant schedule extensions for reasons such as (1)

[1]The findings from our case studies are not generalizable across OBO's new embassy projects.

[2]In general, State issues one or more limited notices to proceed and a final notice to proceed to a construction contractor. For our cases studies, we obtained notice to proceed dates from OBO data and OBO project narratives. For original estimated completion dates, we relied upon OBO project narratives, which utilized this terminology.

[3]Substantial completion is the contractual milestone that generally establishes that the new facilities are ready for use by the U.S. Department of State (State) and, under OBO guidance, is the contractual milestone that transfers responsibility for maintenance and utilities to the department, beginning the warranty period for systems and equipment. It is also the contractual date State uses for assessing the delivery of the project in accordance with contract schedule.

changes (i.e., change orders); (2) government-caused delays (e.g., delays in issuing a notice to proceed to the contractor); (3) differing site conditions than represented in the contract; or (4) excusable delays (e.g., for circumstances that could not reasonably be foreseen or avoided).

Similarly, while the value of construction contracts increased for all of the construction case-study projects we reviewed, State typically reserves a contingency amount in its project budgets—ranging from 5 to 10 percent of the contract value at award—to cover unforeseen project changes and cost increases. OBO's overall project budgets also include funding for other nonconstruction costs and contracts, such as planning, design, and on-site project management and security. We are not reporting overall project budgets. As of August 2018, the only ongoing case studies that State reported to us for which they notified Congress of the need to reprogram funding to cover additional costs were Jakarta and Jeddah.

For each of the following case studies, OBO compiled information from its Office of Project Development and Coordination, Office of Construction Management, Office of Cost Management, and Office of Financial Management into project narratives. Each narrative was then cleared by project managers, project directors, office directors, and managing directors of the affected directorates. In our case studies, we generally attribute information from these narratives to OBO. For contract value at award and contract value as of the end of fiscal year 2017 we relied upon data from the Federal Procurement Data System. We used OBO narratives and project data and documentation as the basis for our description of the contract delivery type, the date of award, dates of issuance for notice to proceed and substantial completion, and original estimated completion date. The discussion in the following case studies of notable contract actions, such as modifications, requests for equitable adjustment, and terminations is based upon OBO project narratives and contract documentation, as well as statements by government and contractor officials. In some but not all cases, we had relevant contract documentation available to compare against OBO project data and documentation or what OBO officials told us.

Table 5 lists the case-study projects described in this appendix, ordered by the fiscal years in which the construction or design contracts were awarded.

Table 5: State Bureau of Overseas Buildings Operations New Embassy Projects Included as Case Studies

Construction case studies	Fiscal year of award	Status, end of fiscal year 2017
Kyiv, Ukraine	2008	Completed
Monterrey, Mexico	2009	Completed
Santo Domingo, Dominican Republic	2010	Completed
Bishkek, Kyrgyzstan	2011	Completed
Jakarta, Indonesia	2012	Under construction
Jeddah, Saudi Arabia	2012	Under construction
The Hague, Netherlands	2013	Under construction
Pristina, Kosovo	2014	Under construction
Port Moresby, Papua New Guinea	2015	Under construction
Design case studies		
Beirut, Lebanon	2014	Under construction
Hyderabad, India	2014	Under construction

Source: U.S. Department of State (State). | GAO-18-653

Construction Case Study: U.S. Embassy in Kyiv, Ukraine

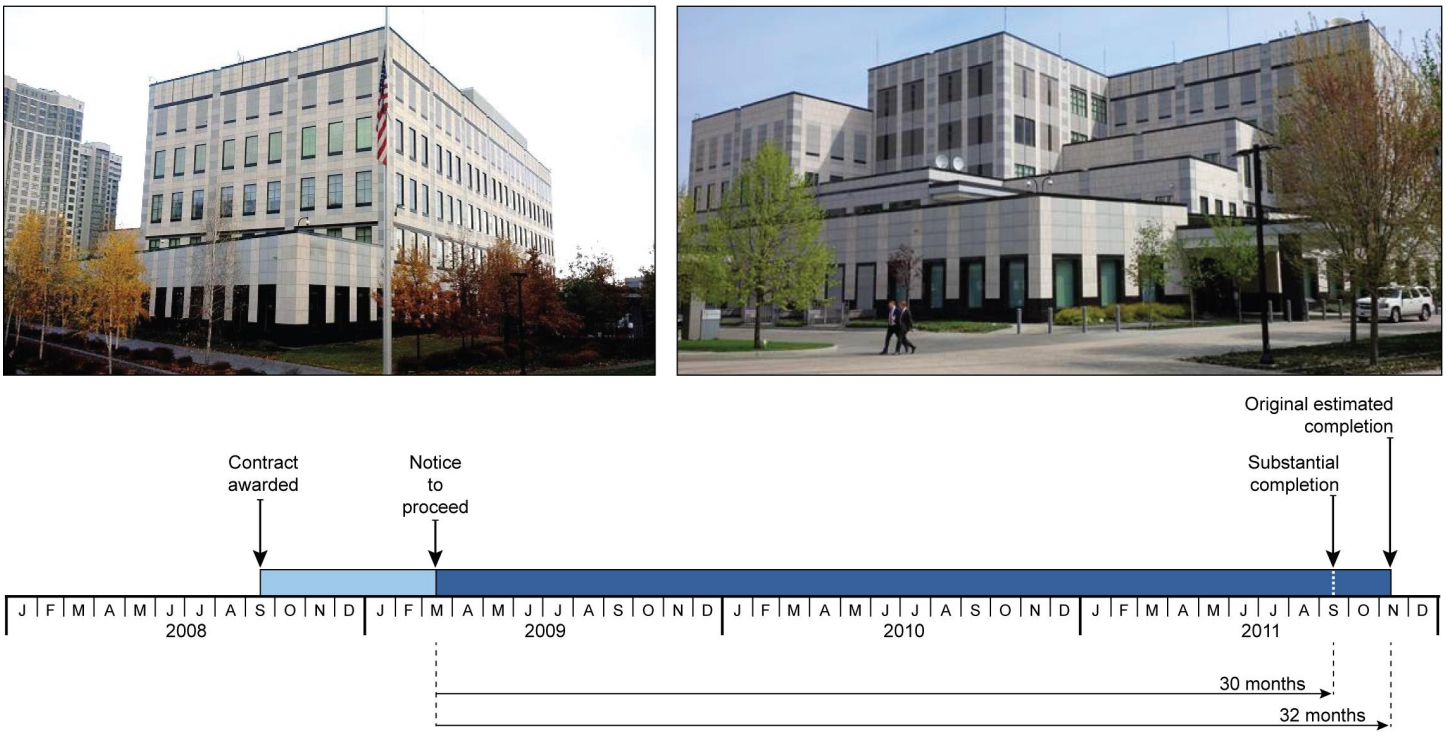
Project Overview

State established the U.S. Embassy in Kyiv in 1991 upon the dissolution of the Soviet Union. According to OBO, State originally redeveloped and rehabilitated an existing leased facility, built in 1950, to serve as the chancery office building, while post consular services, public diplomacy and the Marine security guard quarters were in leased facilities off-site. OBO reported that while security improvements were made at these locations over the years, none of these buildings fully satisfied the Secure Embassy Construction and Counterterrorism Act of 1999 security standards, such as the 100-foot setback from the street. In September 2008, State purchased a 10-acre site to build a new embassy compound.

A $209.9 million design-build contract for the new embassy was awarded in September 2008. The project was based on the Standard Embassy Design (SED). As of September 2017, the contract value was $238.6 million, an increase of $28.7 million or 13.7 percent. According to OBO, State issued a notice to proceed in March 2009, and the original estimated completion date was November 2011. Substantial completion was in September 2011, 2 months early.

Figure 14 shows two views of the new embassy and the timeline for the original schedule compared with the final schedule.

Figure 14: New U.S. Embassy in Kyiv, Ukraine: Representative Views and Timeline



Source: GAO analysis of U.S. Department of State (State) data, State (images). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

According to OBO, the most significant change to the contract was the addition of an annex for the U.S. Agency for International Development (USAID), at a cost of $28 million.[4] OBO reports that State granted the contractor a 12-month extension for adding the annex; however, the project was completed 2 months ahead of the original estimated contract completion date. Both State and contractor officials observed that each side worked very cooperatively to mitigate cost and schedule effects of adding the USAID office annex. The other major cost driver was a $4.6 million contract modification to address utility issues. One State official reported that site utility and below grade infrastructure requirements were challenging given the cold climate.

[4]Specific contract modifications discussed do not necessarily include all the modifications to the contract that added cost or credit to the final contract value or that changed the delivery schedule.

Construction Case Study: U.S. Consulate in Monterrey, Mexico

Project Overview

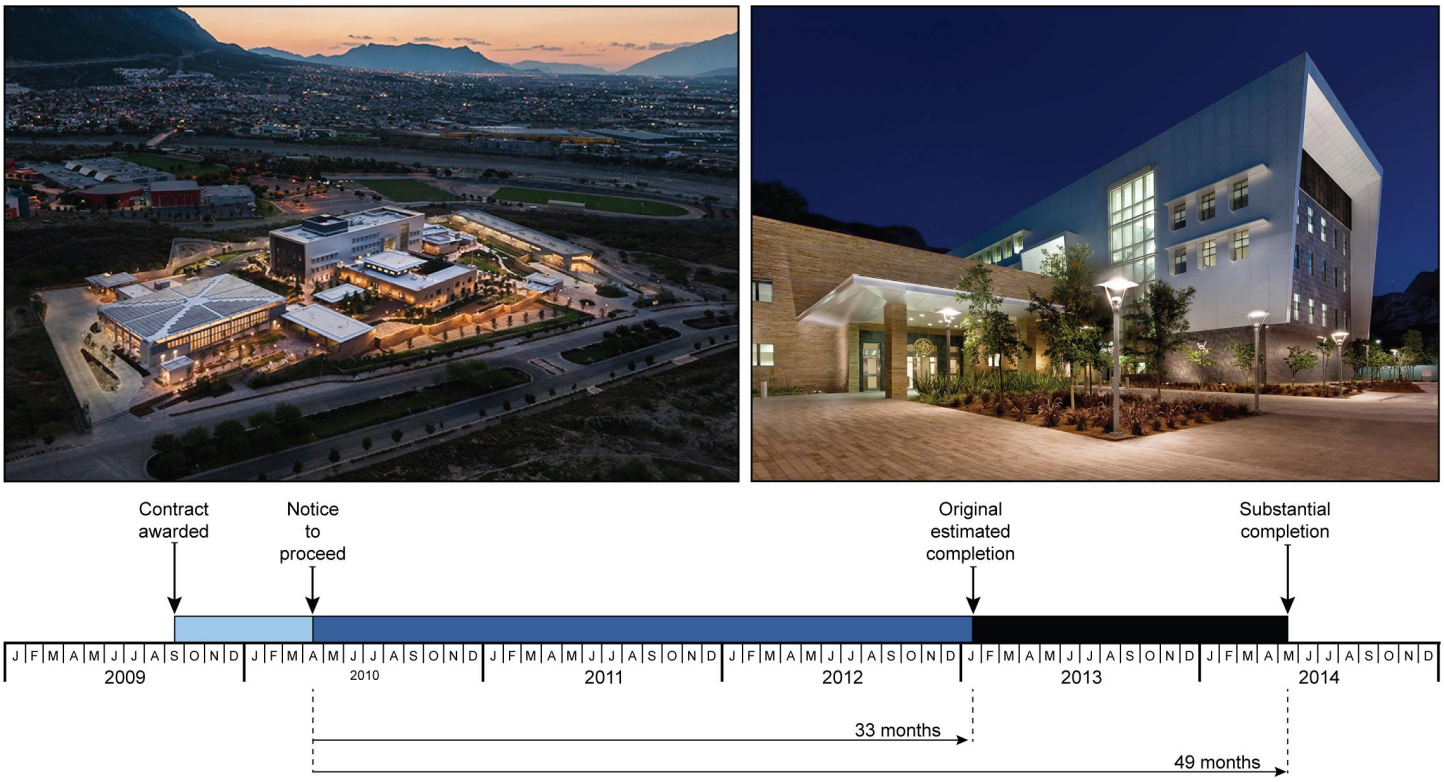
According to OBO, State had occupied the former U.S. consulate in Monterrey since 1969, and further, the facility did not meet security standards set by the Secure Embassy Construction and Counterterrorism Act of 1999. State documented shortcomings with the building's air conditioning and electrical systems. OBO documentation indicated the former site also lacked the space to accommodate staff growth in U.S. agencies' offices and the consulate's functions. OBO reported that consular demand for services had increased significantly—from 12 to 65 consular windows—and the consulate overall had added desks for 60 U.S. staff and 132 locally engaged staff.

In September 2009, State awarded a $101.9 million design-build contract for the new consulate based on a bridging design.[5] The bridging design was based on the standard embassy design. As of September 2017, the contract value was about $125 million, an increase of $23.1 million or about 23 percent. According to OBO, State issued the notice to proceed for the project in April 2010 and the original estimated completion date was January 2013. Substantial completion occurred in May 2014, 16 months after the original estimated completion date.

Figure 15 shows two views of the new consulate and the timeline for the original schedule compared with the final schedule.

[5]A bridging design is a project specific, partial design package to convey State's design vision and key design requirements.

Figure 15: New U.S. Consulate in Monterrey, Mexico: Aerial View, Main Entrance, and Timeline



Sources: GAO analysis of U.S. Department of State (State) data, State (images). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

According to State, the scope of work in the original contract for the compound included a consulate office building, vehicle maintenance building, access control facilities, recreational facility, parking structure, mail screening facility, site perimeter barrier, and associated security features as well as off-site roadway construction and improvements. OBO documentation shows the primary cost and schedule increase on the project was due to the addition of Marine security guard quarters; that contract modification increased the value of the contract by $16.3 million and also extended the length of the contract by 337 days.[6] OBO reported

[6]Specific contract modifications discussed do not necessarily include all the modifications to the contract that added cost or credit to the final contract value or that changed the delivery schedule.

that another contract modification—adding a photovoltaic power system to the project—increased the contract value by $2.3 million.

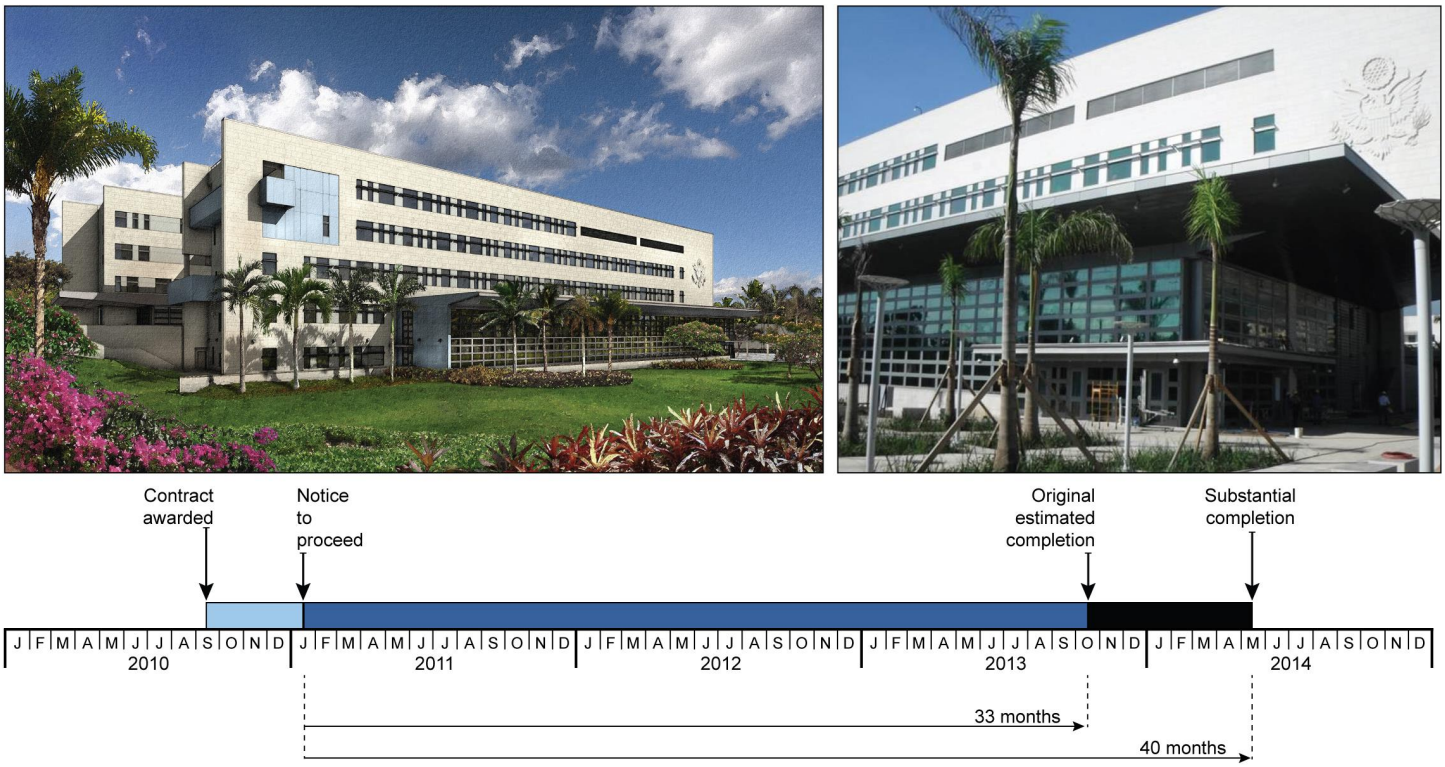
Construction Case Study: U.S. Embassy in Santo Domingo, Dominican Republic

Project Overview

According to State, it built the former U.S. embassy in 1950 to accommodate 75 staff. Prior to the construction of the new embassy, the U.S. mission comprised 17 U.S. government agencies employing hundreds of people working in eight office buildings throughout the city. OBO reported that most of those buildings did not meet security setback standards that Congress established in 1999 or fire and life safety codes.

According to OBO, in September 2010, State awarded a $148.8 million design-build contract for the new embassy based on a bridging design. The project was based on the SED. As of September 2017, the contract value was about $150.4 million, an increase of about 1 percent. According to OBO, State issued the notice to proceed for the project in January 2011 and the original estimated completion date was October 2013. Substantial completion occurred in May 2014, 7 months after the original estimated completion date. Figure 16 shows an architectural rendering and photograph of the new embassy office building, along with the timeline for the original schedule compared with the final schedule.

Figure 16: New U.S. Embassy in Santo Domingo, Dominican Republic: Architectural Rendering, View of the New Embassy Office Building, and Timeline



Sources: GAO analysis of U.S. Department of State (State) data, State (images). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

Five contract modifications totaling about $1.6 million accounted for most of the cost increase.[7] The largest modification totaled over $600,000, which OBO told us resulted from a need to increase switchgear capacity.[8] According to OBO, in the several years since substantial completion, the contract has not been closed, and unexpended funds remain. As a result,

[7]Specific contract modifications discussed do not necessarily include all the modifications to the contract that added cost or credit to the final contract value or that changed the delivery schedule.

[8]In an electric power system, a switchgear is the combination of electrical disconnect switches, fuses, or circuit breakers used to control, protect, and isolate electrical equipment. Switchgears are used both to de-energize equipment to allow work to be done and to clear faults downstream.

the final contract value may change. OBO reported that the contractor had submitted one outstanding request for equitable adjustment for about $450,000. Further, on its side, the U.S. government is withholding around $7 million for liquidated damages, punch list deficiencies, and warranty items.[9]

Construction Case Study: U.S. Embassy in Bishkek, Kyrgyzstan

Project Overview

According to OBO, State established the U.S. embassy in Bishkek in 1991 after the dissolution of the Soviet Union. Specifically, a pre-engineered factory-manufactured building was shipped to Bishkek and assembled on an 11-acre, U.S. government-owned site in 1996. OBO reported that by 2008, the U.S. diplomatic mission had outgrown the 1996 facility, and in 2009 it became clear that, in addition to new facilities, significant security upgrades were needed to meet current security standards.

The new embassy project was to include a chancery (office annex), utility building, Marine security guard quarters, compound access control facilities, support buildings (warehouse and shops), and surface parking. A $116.8 million design-build with bridging contract for the new embassy was awarded in April 2011. The project was based on the SED. As of September 2017, the contract value was about $123.3 million, an increase of $6.5 million, or about 5.6 percent.[10] According to OBO, State issued the notice to proceed for the project in July 2012, and the original estimated completion date was December 2014. Substantial completion occurred in March 2017, 27 months after the original estimated completion date.

[9]OBO rejected the contractor's last application for payment because the contractor had not completed punch list items. OBO awaits the contractor's formal response to move forward with closing the contract and making final payment.

[10]Final contract value for Bishkek may change. As of September 2017, OBO reported that there were requests from the contractor for additional costs of over $70 million and that these were subject to ongoing negotiations.

Figure 17 shows the 1996 chancery office building, the new chancery office building, and the timeline for the original schedule compared with the final schedule.

Figure 17: U.S. Embassy in Bishkek, Kyrgyzstan: Original Chancery Office Building, New Chancery Office Building, and Timeline

Sources: GAO analysis of U.S. Department of State (State) data, State (images). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

A number of factors contributed to increases in contract cost and schedule for this project. For example, according to OBO, off-site electrical power upgrades required a $2 million contract modification for switchgear installation and building a redundant power line to a substation 3 kilometers away from the new embassy compound.[11] OBO also

[11]Specific contract modifications discussed do not necessarily include all the modifications to the contract that added cost or credit to the final contract value or that changed the delivery schedule.

reported that one contract modification extended the schedule by 37 days and added $3.4 million to the contract because State temporarily halted the contractor's work in some areas of the building due to Bureau of Diplomatic Security (Diplomatic Security) requirements. According to State and contractor officials, challenges to the project included (1) a six-phase construction plan to accommodate building on an operational compound; (2) frequent staff changes (including four on-site OBO project directors, two OBO construction executives at headquarters, and many contractor staff changes) and poor relations between OBO and the contractor; and (3) disagreement regarding OBO and contractor roles and responsibilities (including, for example, responsibility for obtaining zoning permits).

Construction Case Study: U.S. Embassy in Jakarta, Indonesia

Project Overview

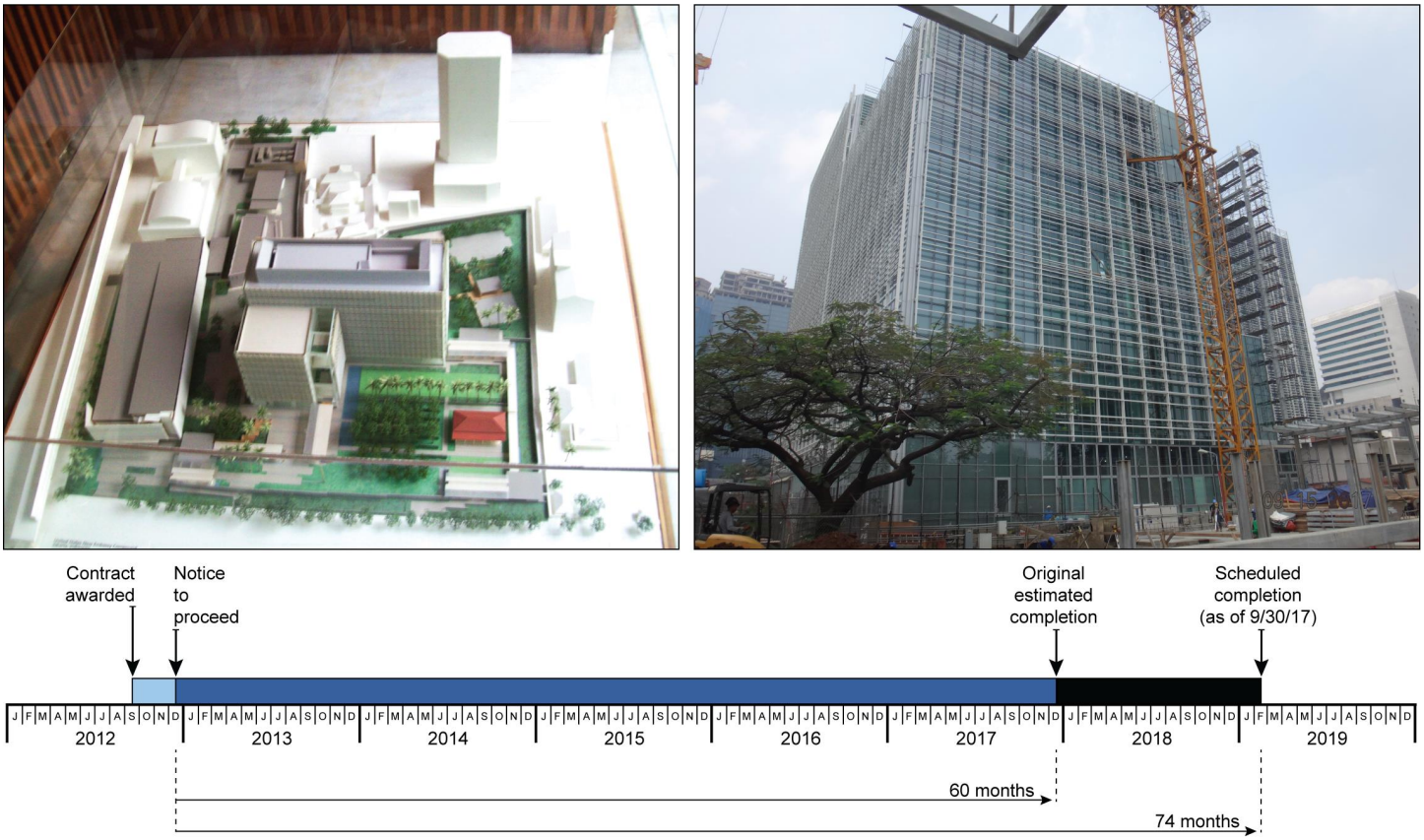
According to OBO, the U.S. government-owned chancery in the Indonesian government center in Jakarta was built in the 1950s, and its mechanical, electrical, and plumbing systems are outdated, inefficient, and expensive to operate. State decided to build a new, secure embassy on the current embassy site. When completed, the embassy compound will include a chancery, Marine security guard quarters, support facilities, preserved historic structures, community facilities, and parking.

A $302 million design-build with bridging contract for the new embassy was awarded in September 2012. The project was guided by State's Excellence in Diplomatic Facilities principles but was awarded before OBO fully implemented Excellence in 2014. As of September 2017, the contract value was $339 million, an increase of $37 million, or 12 percent. According to OBO, State issued a notice to proceed for the project in December 2012, and the original estimated completion date was December 2017. OBO reported to us that by September 2017 the scheduled completion date had been extended to February 2019, 14 months after the original estimated completion date.[12]

[12]As of the end of August 2018, the Federal Procurement Data System showed the contract value had further increased to $349.7 million (or about 15.6 percent).

Figure 18 shows a model of the embassy compound, the new chancery office building under construction and the timeline for the original schedule compared with the schedule as of the end of September 2017.

Figure 18: U.S. Embassy Compound in Jakarta, Indonesia: Architectural Model, View of the New Chancery Office Building under Construction (2017), and Timeline



Sources: GAO analysis of U.S. Department of State data, GAO (images). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

Before the current construction contract for the new embassy on the existing embassy compound, State separately contracted for the construction of temporary office buildings to relocate staff during construction. According to OBO, the work on the temporary office buildings fell behind the contracted schedule and would not be completed before the new embassy contractor's arrival on-site. Consequently, State

terminated the first contract for temporary buildings and awarded the remaining work to the current contractor.

OBO encountered significant challenges due to its decision to employ a glass curtain-wall system for the new embassy's chancery office building.[13] OBO project documentation shows the use of the customized glass exterior wall designed for the embassy significantly impacted cost and schedule after contract award, adding at least $18 million to the cost and 180 days to the schedule. OBO's decision to employ a unique glass curtain-wall system for this project and subsequent questions raised by Diplomatic Security about the design led OBO to modify the contract to add (1) $2.2 million and 180 days to explore alternative designs and conduct redesign work in order to obtain Diplomatic Security approval, (2) $13.3 million so that a dedicated facility could be established in the United States to securely fabricate the glass curtain wall before secure shipment to the site, and (3) $3 million to have cleared American workers install portions of the glass curtain wall.[14] OBO had not previously employed such a system in a completed embassy project and could not provide us with documentation analyzing the risks of such a feature to cost and schedule—which might have included potential delays to get Diplomatic Security's approval of the design—compared with conventional concrete construction.[15]

As of the end of September 2017, OBO reported that State and the contractor had agreed to extend substantial completion to February 2019 after settling the contractor's request for equitable adjustment, which had claimed that five events delayed construction: (1) the late turnover of unimpeded access to the early site work; (2) the redesign of compound access facilities; (3) the redesign of portions of controlled areas of the

[13]A curtain wall is defined as a thin, usually aluminum-framed wall, containing in-fills of glass, metal panels, or thin stone. The framing is attached to the building structure and does not carry the floor or roof loads of the building.

[14]The total impact attributable to the exterior glass curtain wall is unclear, as glass curtain-wall issues were included in a larger contract modification that covered multiple issues. While the construction contract was awarded in 2012, the security certification of the project's design was not obtained until 2015.

[15]State was concurrently employing a glass curtain-wall system in the construction of a new U.S. embassy in London. The use of that system was the subject of a State Inspector General's review. See U.S. Department of State, Office of Inspector General, *Audit of the Construction Contract Award and Security Evaluation of the New Embassy Compound London*, Report Number: AUD-CGI-15-31 (Washington, D.C.: July 2015).

building; (4) additional time for the certification of security requirements, specifically related to the curtain-wall system; and (5) design changes to the curtain-wall system itself.[16]

Post officials also expressed concerns that this new embassy compound was originally planned to accommodate only the U.S. embassy to Indonesia. Subsequently, State opened a permanent mission to the Association of Southeast Asian Nations in Jakarta to be collocated within the new embassy. Because of this and other staff growth, U.S. embassy officials told us that the new embassy will have little to no room for future growth.

Construction Case Study: U.S. Consulate in Jeddah, Saudi Arabia

Project Overview

According to OBO, the current consulate built in 1952 served as the chancery before the U.S. embassy moved to Riyadh in 1984. In 2004 an attack on the consulate resulted in the deaths of five employees and wounded many more. The new Jeddah compound will include a consulate office building, staff housing, ambassador's residence, consul general's residence, Marine security guard quarters, and various supporting facilities.

OBO reported that construction of the new consulate started under a design-build contract awarded in 2007, but the construction contractor was terminated-for-default in 2012, leaving State with a partially built project.[17] In September 2012 State awarded a $100.5 million construction contract for the new compound to a second contractor. The project was based on the SED. As of September 2017, that second contract value was $131.3 million, an increase of $30.8 million, or 30.6 percent.

[16]Specific contract modifications discussed do not necessarily include all the modifications to the contract that added cost or credit to the final contract value or that changed the delivery schedule.

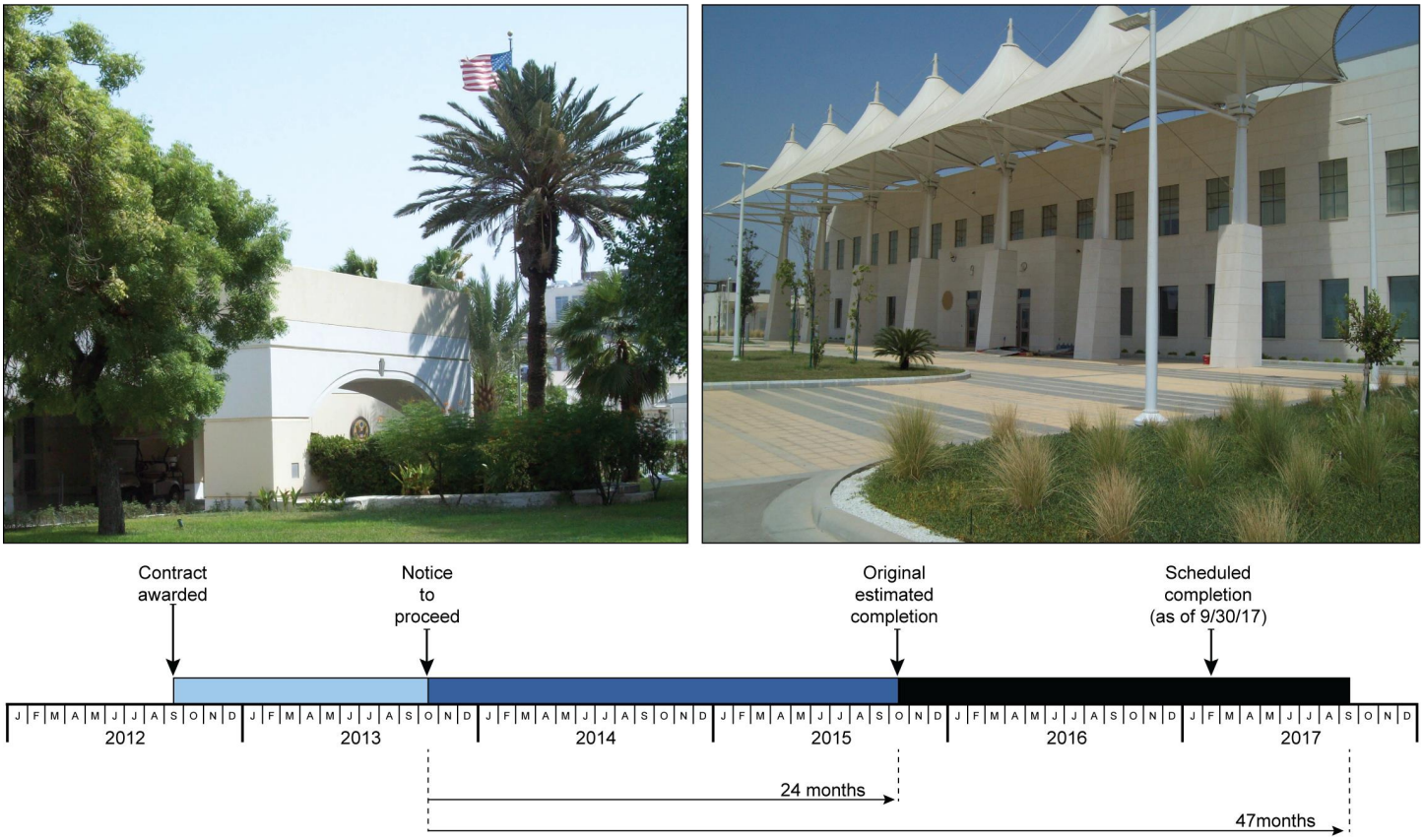
[17]The Federal Procurement Data System indicates that the initial 2007 design-build contract value was awarded for $122.3 million. The final 2007 contract value after termination and subsequent deobligation of funds was approximately $63.1 million. We did not conduct a review of that earlier 2007 contract and termination actions.

According to OBO, State provided notice to proceed in October 2013 and the estimated completion date was October 2015. According to State documentation, this completion date was subsequently extended to February 2017. State and contractor officials told us that, at the end of September 2017, a modification was pending that would further extend the schedule to January 2018, 27 months after the original estimated completion date.[18]

Figure 19 shows the existing consulate, the new consulate office building under construction, and the timeline for the original schedule compared with the schedule as of the end of September 2017.

[18]As of the end of August 2018, the Federal Procurement Data System showed the contract value had further increased to $135.8 million (about 35 percent) and the contract schedule was extended to April 2018.

Figure 19: U.S. Consulate, Jeddah, Saudi Arabia: Existing U.S. Consulate, View of New Consulate under Construction (2017), and Timeline



Sources: GAO analysis of U.S. Department of State (State) data, GAO (images). | GAO-18-653

Note: State's Bureau of Overseas Buildings Operations reported that at the end of September 2017, a modification was pending that would further extend the schedule to January 2018.

Contributors to Contract Cost or Schedule Changes

According to OBO, State hired a design firm—previously a subcontractor of the first construction contractor—to finish the design so that contract bids could be solicited from new contractors to complete the project. In doing so, State effectively changed the project delivery method from design-build to design-bid-build, whereby it directly contracted the design firm to finish the construction documents and then contracted a construction firm to build the project.

Both State and contractor officials reported to us that this project was consistently challenged by design errors and omissions. According to OBO, approximately $14 million of the nearly $31 million cost increase—and 131 calendar days—were due to issues with this project's design.

According to State and contractor officials, the project was generally completed in March of 2017, which both sides termed "virtually substantially complete." However, they stated that significant issues with the consulate building's cooling and fire suppression systems effectively prevented OBO from contractually accepting the project as complete and allowing consulate staff to move in. As of September 2017, State and the contractor could not provide a firm date for when they expected consulate staff to be able to occupy the new compound.

Both OBO and contractor officials acknowledged that a difficult working relationship slowed efforts to deal with project challenges. For example, they stated the project had at least four different OBO project directors. One OBO official characterized the collaboration on the project by State, the contractor, and State's designer as "having a lot of conflicts" and said that as problems with the project arose during construction, all parties "dug their heels in." In September 2017, one official indicated the then temporary Project Director had improved the working relationship with post and the contractor and was doing his best to work through the current issues and delay. Disagreement also arose regarding timely response to proposed changes; the contractor maintained that OBO headquarters was delaying work due to slow decision-making, while OBO maintained that the contractor's proposals did not meet requirements.

The functionality of the completed compound may also be affected by several issues. According to post officials, after the February 2015 closure of the U.S. Embassy in Yemen, State relocated some of those staff to Jeddah, requiring the conversion of five newly built apartments into office space. Post officials also reported that the original plan for the staff apartments was predicated on the post remaining an unaccompanied duty assignment whereby U.S. staff may not bring family members. Those officials expressed concern that space would become limited because family members are now allowed to accompany Foreign Service Officers to Jeddah. An additional concern was that the consulate was originally intended to provide consular services only for U.S. citizens but was now authorized to issue nonimmigrant visas for Saudis seeking to travel to the United States, which post officials predicted would increase consular traffic flow beyond the new building's intended volume.

Construction Case Study: U.S. Embassy in The Hague, Netherlands

Project Overview

According to OBO, the previous U.S. embassy in The Hague was located on a downtown square opposite the Netherlands Parliament. Completed in 1959, the chancery sat directly adjacent to a major road and sidewalks and did not meet State security standards set by the Secure Embassy Construction and Counterterrorism Act of 1999.

The new embassy compound is located within the municipality of Wassenaar, adjacent to The Hague. The compound includes a chancery office building, Marine security guard quarters, support buildings, and parking. According to OBO, the design phase included a lengthy site planning, landscape design, and architectural design period due to local ordinances and stringent permitting requirements.[19] OBO reported that this design contract was awarded in November 2012, and the design was completed in July 2013. The project delivery method was design-bid-build.

A $125 million construction contract for the new embassy was awarded in September 2013. As of September 2017, that contract value was $131.7 million, an increase of about $6.7 million, or approximately 5 percent. According to OBO, State issued a notice to proceed for the project in June 2014, and the estimated completion date was June 2017. In September 2017, OBO reported that it and the contractor had extended the contract completion date to July 2017. In addition, as of September 2017, OBO and the contractor were negotiating over further cost and schedule changes.[20]

[19]According to State, the Wassenaar city government was heavily involved in the permitting of the design of the new embassy compound.

[20]As of the end of August 2018, the Federal Procurement Data System showed the contract value had further increased to $133.6 million (or about 6.9 percent) and the contract schedule was extended to October 2017. State reported the new embassy opened for business in January 2018.

Figure 20 shows a historical photo of the 1959 embassy, the new embassy under construction, and a timeline showing the original schedule compared with the schedule as of the end of September 2017.

Figure 20: U.S. Embassy, The Hague, Netherlands: Former U.S. Embassy, Built in 1959 (Historical Photo), the New U.S. Embassy under Construction, and Timeline

Sources: GAO analysis of U.S. Department of State (State) data, photos: State (left), GAO (right). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

According to OBO, the official permit for construction was received in August 2013, with an effective date of September 2013. However, the permit was issued with a number of conditions that OBO reported took approximately 9 months for State to resolve and resulted in a delay of full

notice to proceed until June 2014.[21] Both OBO and the contractor said that the two sides worked cooperatively to resolve permitting issues raised by the local government. Based on OBO reporting, these issues contributed, in part, to over $1 million in cost modifications on the contract. Further, technical omissions that were not discovered during design review resulted in changes to sprinklers, fire alarms, security window treatments, and classified data interconnections. According to OBO, these late changes resulted in further requests for time extensions from the contractor.

In addition, according to OBO, State did not plan for the colocation of one tenant agency onto the compound (8 people) and a second tenant agency increased its staffing by approximately 40 percent (19 people). Because of those staffing changes, post officials reported that there is no additional space for future growth in the new compound.

Construction Case Study: U.S. Embassy in Pristina, Kosovo

Project Overview

According to OBO, State established this post in 1999 as a U.S. liaison office during the military intervention in Kosovo by North Atlantic Treaty Organization forces. When the U.S. government opened the post, OBO reported that it assembled a number of contiguous residential properties under short-term leases and closed the adjacent streets. State designated the post as an embassy in 2008. Figure 21 shows some of the existing houses that State converted for use as the embassy.

[21]State officials indicated the city of Wassenaar required that more structural steel be added and that one wing of the building needed to be shifted by 5 feet to avoid impinging on a protected green zone. Also, changes had to be made to storm water drainage, and modifications were needed to a temporary bridge to support construction activities on the site.

Figure 21: Existing U.S. Embassy Pristina, Kosovo: Representative Existing Facilities (2017), Assembled from Contiguous Houses

Source: GAO. | GAO-18-653

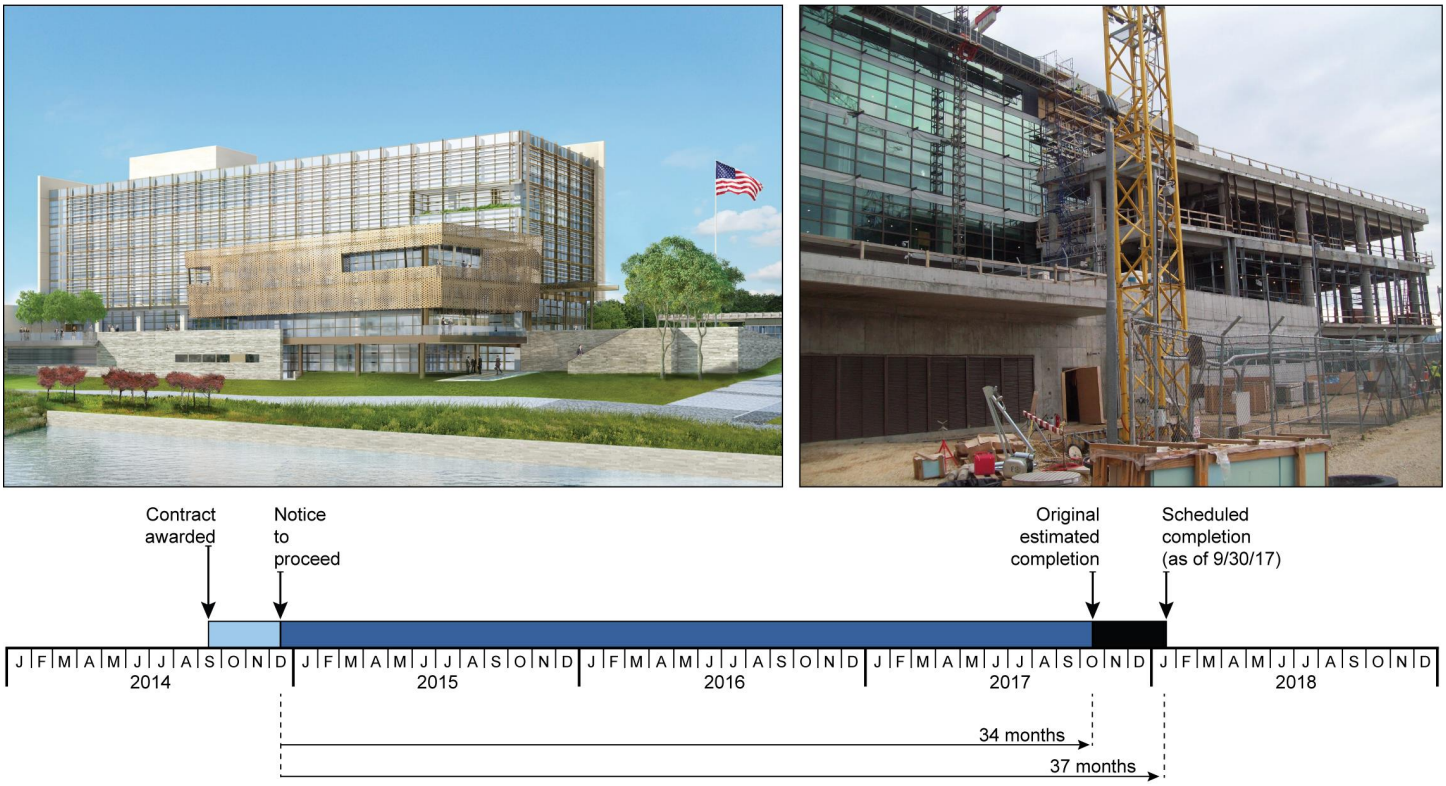
In September 2014, State awarded a $158.4 million design-build contract for the new embassy under a bridging design.[22] The new embassy is one of the first projects fully designed and constructed under the Excellence approach. As of September 2017, that contract value was $159.6 million, an increase of less than 1 percent. According to OBO, State issued a notice to proceed for the project in December 2014, and the original estimated completion date was October 2017. As of September 2017, completion was scheduled for January 2018, 3 months after the original estimated completion date).[23]

Figure 22 shows an architectural rendering of the new embassy, a photo of it under construction, and a timeline for the original schedule compared with the schedule as of the end of September 2017.

[22]The separately contracted bridging design was prepared from April 2013 to March 2014.

[23]As of the end of August 2018, the Federal Procurement Data System showed the contract schedule was extended to June 2018.

Figure 22: New U.S. Embassy in Pristina, Kosovo: Architectural Rendering, View of Embassy under Construction (2017), and Timeline



Sources: GAO analysis of U.S. Department of State (State) data, images: State (left), GAO (right). | GAO-18-653

Contributors to Contract Cost or Schedule Changes

According to OBO, the largest change in cost resulted from State adding additional security cameras to improve monitoring of the compound and its facilities. In a separate change, OBO also granted the contractor a schedule extension of 98 days to account for changes in security requirements at project startup and funds to include adjustments made by State to the locations of the recreation facility, pool, and other items relative to the perimeter security wall.

As of September 2017 in our interviews with them, the OBO Project Director and contractor's on-site Project Manager could not reach resolution on the cost or schedule impacts of a variety of issues. These included (1) the delay in State's approving the contractor's locally hired construction workers, (2) the timing of and responsibility for bringing permanent power to the site, and (3) site condition issues related to unsuitable soils and existing foundations.[24]

Construction Case Study: U.S. Embassy in Port Moresby, Papua New Guinea

Project Overview

According to OBO, the current U.S. embassy is housed in a building constructed in 1970 in Port Moresby's business district. The lease will expire in September 2020. Furthermore, the facility is overcrowded, functionally deficient, and does not meet the latest security standards.

Also according to OBO, in 2009 the U.S. government acquired a 7.26-acre site for a new embassy compound through a long-term lease from the government of Papua New Guinea. State planned for the new embassy to be a standard secure mini-compound and awarded a construction contract in late 2011 with an estimated completion date in mid-2014. However, according to a State official, because the embassy

[24]In January 2018—after our September 2017 site visit—the contractor's headquarters office told us that headquarters managers were able to resolve some issues with OBO and State's Office of Acquisitions that otherwise had not been resolved on-site.

requirements changed, State decided to terminate the contract for the convenience of the government.[25]

The project delivery method is design-bid-build.[26] A $95 million construction contract for the new embassy was awarded in September 2015. As of September 2017, that contract value was $102.5 million, an increase of $7.5 million, or about 8 percent. According to OBO, State issued the notice to proceed for the project in March 2017, after a delay of about a year due to another prospective contractor disputing the contract award. As of September 2017, the estimated completion date remained unchanged at September 2019.[27]

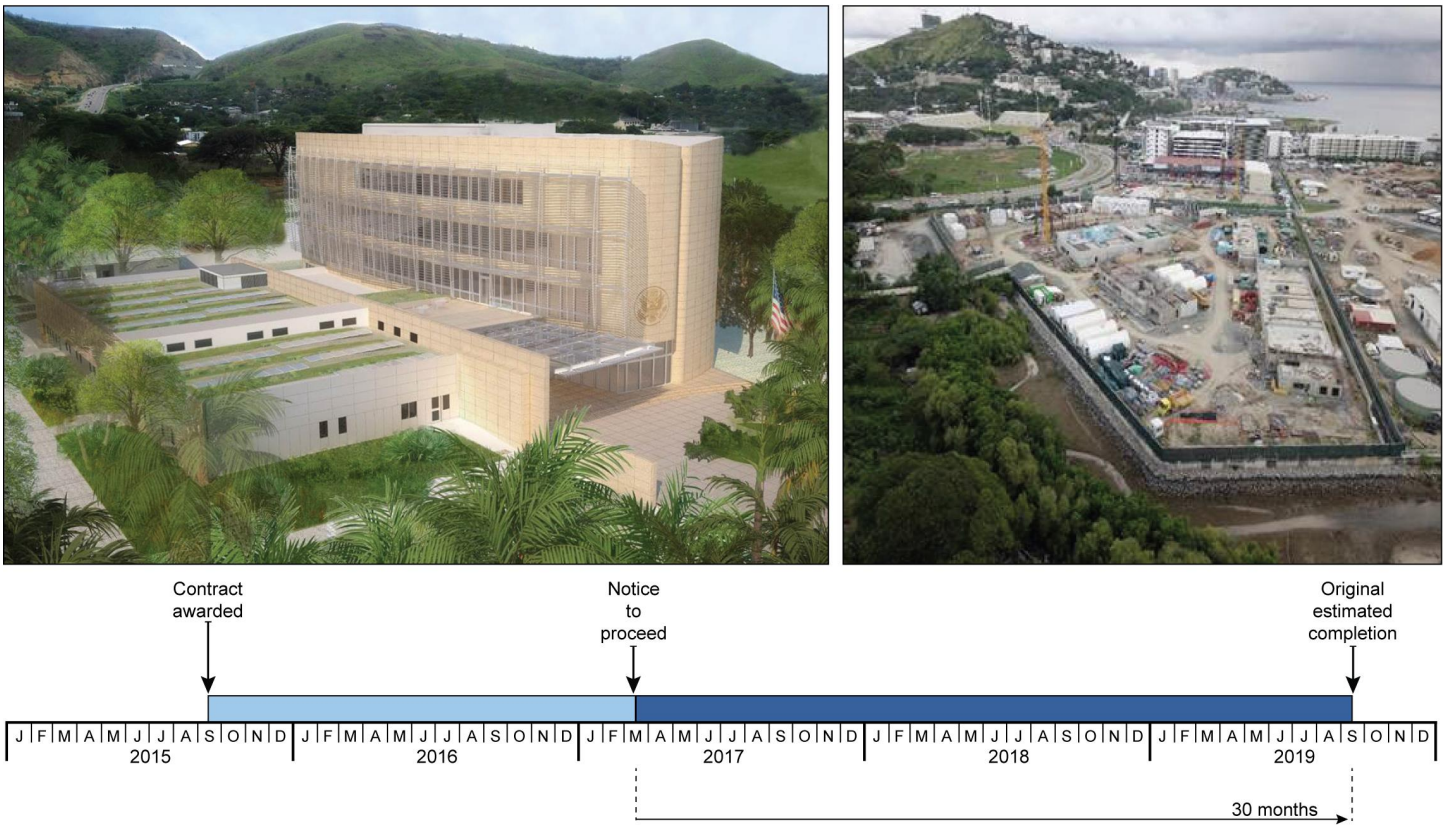
Figure 23 shows an architectural rendering of the new embassy, an aerial view of the embassy under construction, and the timeline for the schedule as of the end of September 2017.

[25]The Federal Procurement Data System indicates that the initial contract value was awarded for $50.2 million. The final contract value was approximately $31.4 million. We did not conduct a review of that contract.

[26]According to OBO data, the separately contracted design was prepared from April 2014 to June 2015. The design was guided by State's Excellence in Diplomatic Facilities principles but was awarded before OBO fully implemented Excellence in 2014.

[27]As of the end of August 2018, the Federal Procurement Data System showed the contract value had further increased to $103.8 million (or about 9.2 percent).

Figure 23: New U.S. Embassy Port Moresby, Papua New Guinea: Architectural Rendering, Aerial View of the Construction Site, and Timeline



Sources: GAO analysis of U.S. Department of State (State) data, images: State. | GAO-18-653

Contributors to Contract Cost and Schedule Changes

According to OBO, in 2013, after the initial contractor had completed approximately 40 percent of the project, State changed the project scope: (1) Staffing was increased from 47 desks to 77 desks, which could not be accommodated in the standard secure mini-compound; (2) classified information processing was added as a new requirement; and (3) a Marine security guard detachment was assigned to post, requiring the addition of a residence for them. Due to these new requirements, according to a State official, State decided to terminate the contract for the convenience of the government.

According to OBO, the embassy compound was redesigned under a design contract to accommodate the new project scope. The redesign

contract lasted 14 months, from April 2014 to June 2015. OBO reported that when the first contractor stopped work on the standard secure mini-compound, the concrete structures for all buildings on the compound had been completed. The new design, finished in June 2015, added a four-story office tower next to the existing chancery structure, with additional general work areas, and new controlled access areas. The redesigned site also added a nine-bed Marine security guard quarters, enlarged the building for the warehouse and shops, and added upgraded community facilities. According to OBO, further cost increases could accrue because of damage to government-provided equipment left by the first contractor, which may need to be re-purchased.

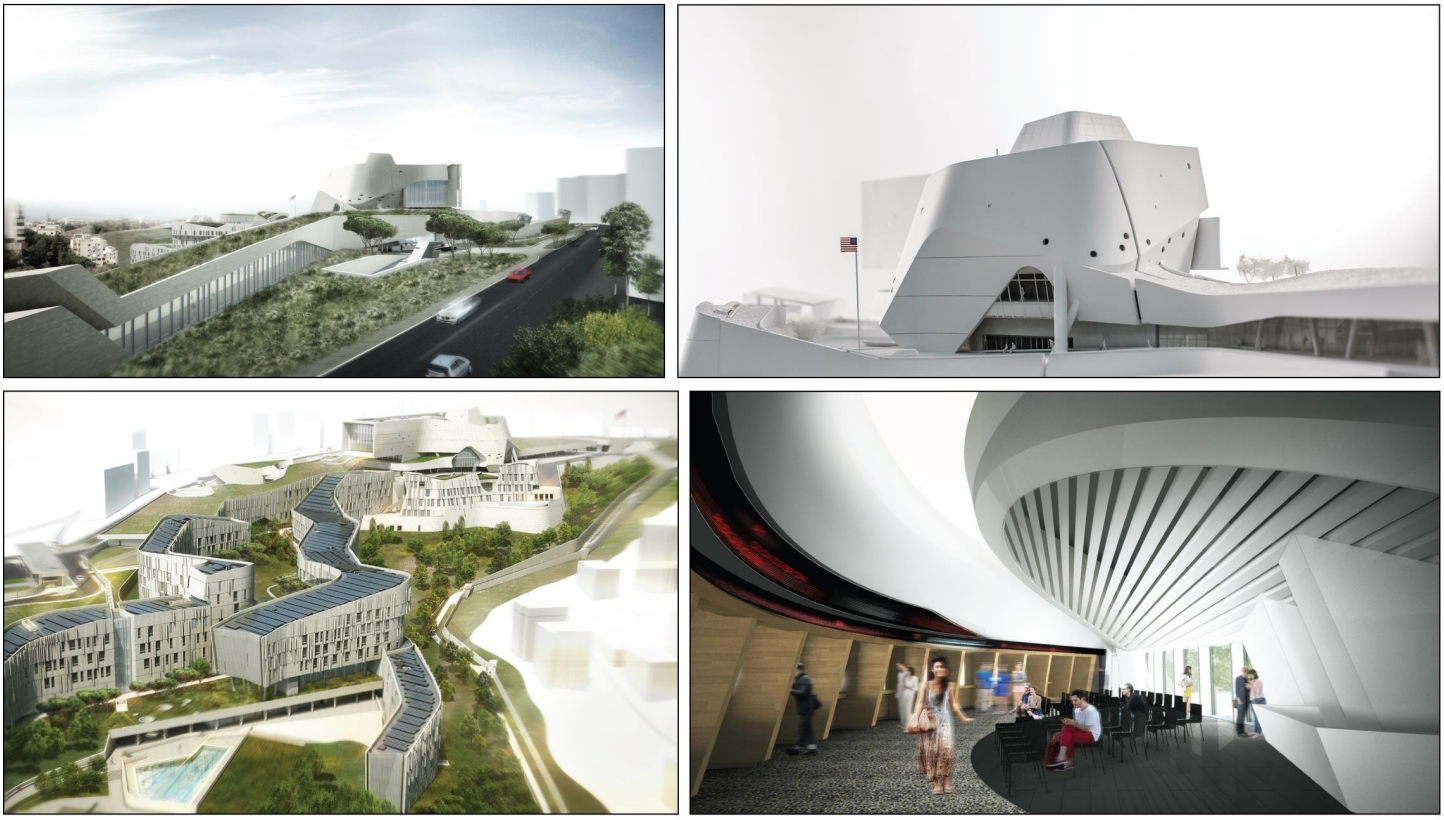
Design Case Study: U.S. Embassy in Beirut, Lebanon

Project Overview

According to OBO, the embassy currently operates out of a nearly 18-acre compound in East Beirut consisting of a mixture of office and residential facilities that are both government-owned and leased. According to State, this site is severely cramped and does not meet current security standards.

The new embassy site consists of just over 44 acres situated on a steep hilltop area near the existing U.S. embassy. State typically seeks to build new embassy compounds on 10 acres of land. OBO noted to us the new compound will include a chancery office building, staff residences, support buildings such as a warehouse and recreation facility, and Marine security guard quarters. Figure 24 shows architectural renderings of the new embassy.

Figure 24: New U.S. Embassy Beirut, Lebanon: Clockwise from Upper Left, Architectural Design—Street View, Chancery Office Building, Consular Waiting Room, and Staff Apartments



Source: U.S. Department of State. | GAO-18-653

Background on the Design

The design contract for this design-bid-build project was awarded in September 2014 for $39.6 million. Project documentation indicates the design process included the development of three initial concepts, which were reviewed by OBO's Industry Advisory Group and OBO senior management. OBO reported a single design concept was selected in January 2015 for further development. The design firm then developed a schematic design (less than 35 percent design) that OBO indicated was approved by the OBO Director in March 2015.

The design proceeded through design development (35 percent) and construction document development (60 percent and 90 percent); OBO reported to us the final construction documents were completed in April

2016.[28] Following completion of the 100 percent design and subsequent contract solicitation activities, in December 2016 State awarded a $613.3 million construction contract to build the new embassy. As of September 2017, a notice to proceed for construction had just been issued.[29]

Contributors to Design Contract Cost Changes

OBO reported that the 100 percent design was completed in April 2016 (19 months after contract award).[30] OBO reports that final design cost by itself was $45.3 million, amounting to a $5.7 million, or about 14.5 percent, increase over the original design contract value. OBO documentation shows the increase in the cost for the project's design was, in part, attributed to added design for temporary construction support facilities—to include both temporary office space and 40 secure housing units—that would be needed on-site by State's project management team during the construction. However, the total contract cost as of the end of fiscal year 2017 was $58 million, about 46.5 percent more than the original contract value. This larger value includes approximately $13 million primarily for "Title II, construction phase services." Through these services, the design firm provides technical support to OBO during construction to answer the construction contractor's questions about the design and generally to support OBO's review of the construction contractor's material samples, drawings, building systems and product data, test and inspection reports, and any design changes or substitutions.

State's estimated construction costs increased during the project's design from approximately $500 million to over $660 million due to what OBO reports were challenging site conditions that required the extensive use of retaining walls and engineered foundation systems. Additional perimeter security in the form of guard towers was also added. OBO indicated these scope changes required additional design and increased the construction cost estimate.

[28]Diplomatic Security approved the design as meeting State's security requirements in March 2016.

[29]OBO documentation indicates the construction is anticipated to be complete in 2022.

[30]Originally, OBO had planned for the 100 percent design to be completed in 18 months.

Design Case Study: U.S. Consulate, in Hyderabad, India

Project Overview

Established in 2009, the U.S. consulate general in Hyderabad is the first new U.S. diplomatic post to open in India since India's independence in 1947. According to OBO, in 2007 the U.S. government leased the current 4-acre consulate property—that was once used as a palace—for use as an interim consulate location. OBO indicated the new consulate will be built on a 12.3-acre site located in Hyderabad's financial and high-tech districts. Further, the new compound will include a consulate office building, three compound access facilities, a support annex to include a warehouse, a recreation facility, and Marine security guard quarters. Figure 25 shows the existing interim consulate and an architectural rendering of the new consulate.

Figure 25: U.S. Consulate Hyderabad, India: Existing Consulate and Architectural Rendering of the New Consulate

Source: U.S. Department of State. | GAO-18-653

Background on the Design

State issued a task order for the design of the project in September 2014 with the intent that the project would be a design-bid-build project and that the design firm OBO tasked would prepare a 100 percent design. OBO indicted the construction contract for the project was planned to be

awarded in fiscal year 2017.[31] However, after beginning initial design, OBO determined that changing the delivery method from design-bid-build to design-build with bridging would allow for an earlier construction contract award in fiscal year 2016.

With this change in the project delivery method, the design task order was modified such that OBO's design firm would provide bridging documents—roughly a 35 percent design—rather than a 100 percent design. The bridging documents would then be used by the design-build construction contractor to complete the design and construct the project. The design firm that had been tasked by OBO to prepare the bridging documents would also (1) review and process design submittals from the design-build contractor, (2) answer any request for information about the bridging design intent, and (3) ensure the design intent represented by the bridging design was maintained throughout design development by the design-build contractor.

Contributors to Design Contract Cost or Schedule Changes

According to OBO, the bridging design was completed in April 2016 (19 months after the initial contract task order).[32] As noted earlier in this report, OBO project documentation shows the initial design of the building's unique exterior screen concerned OBO management, leading to more design development by the contract architect, further review by OBO's design staff, and added cost. OBO senior management expressed concerns about the look of the screen, mainly that the screen was too traditional compared with the spirit of the design of the building and the rest of the campus and that the pattern of the screen needed more variation for daylight and views.

To respond to these concerns, OBO issued two contract modifications to OBO's architect for additional design work for the exterior screen. According to OBO, subsequent design development for three alternatives for the screen contributed an additional design cost of about $750,000, raising the final bridging design cost to approximately $10.5 million. That

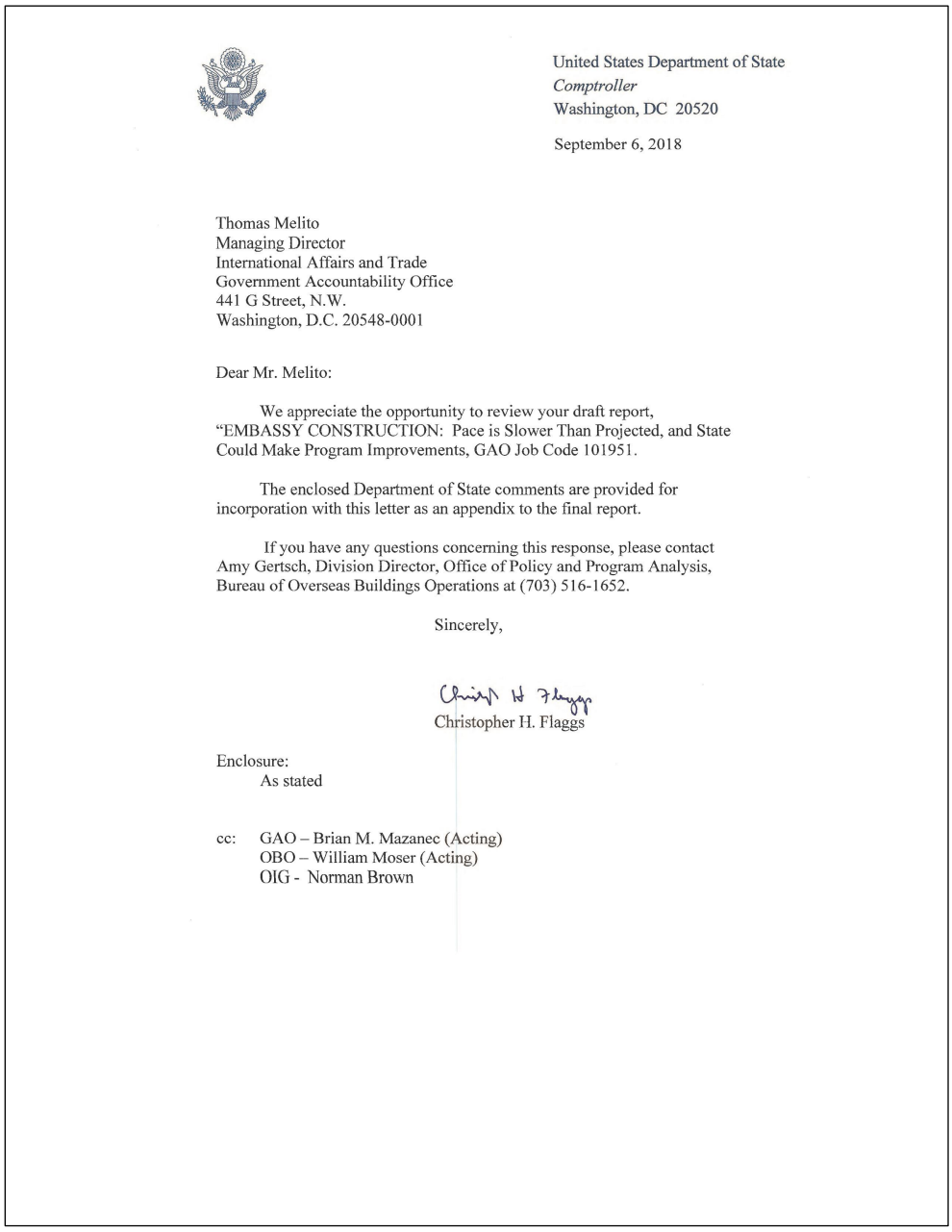
[31]Originally, OBO had tasked the design firm to prepare a 100 percent design at a cost of $11.9 million.

[32]OBO reported it had originally planned for the 100 percent design to be completed in 21 months.

amount does not include the roughly $816,000 for the design firm to provide additional support services during construction, of which OBO reports a minor portion is attributable to ensuring the construction contractor achieved the design intent for the exterior screen. According to OBO data, the design-build contract to complete the design and build the project was awarded in September 2016 at a value of $203 million. OBO also reported the design-build contractor received full notice to proceed with construction in March 2017. As of the end of September 2017, the project was still under construction.[33]

[33]OBO documentation indicates the construction is anticipated to be complete in 2020.

Appendix IV: Comments from the U.S. Department of State



United States Department of State
Comptroller
Washington, DC 20520

September 6, 2018

Thomas Melito
Managing Director
International Affairs and Trade
Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548-0001

Dear Mr. Melito:

We appreciate the opportunity to review your draft report, "EMBASSY CONSTRUCTION: Pace is Slower Than Projected, and State Could Make Program Improvements, GAO Job Code 101951.

The enclosed Department of State comments are provided for incorporation with this letter as an appendix to the final report.

If you have any questions concerning this response, please contact Amy Gertsch, Division Director, Office of Policy and Program Analysis, Bureau of Overseas Buildings Operations at (703) 516-1652.

Sincerely,

Christopher H. Flaggs

Enclosure:
As stated

cc: GAO – Brian M. Mazanec (Acting)
OBO – William Moser (Acting)
OIG - Norman Brown

State Department Response to GAO Report

EMBASSY CONSTRUCTION: Pace is Slower Than Projected, and State Could Make Program Improvements
(GAO-18-653, GAO Code 101951)

Thank you for the opportunity to comment on your report *"Embassy Construction: Pace is Slower Than Projected, and State Could Make Program Improvements"*.

Recommendation 1: The Secretary of State should determine the estimated effects of cost inflation on planned CSCP embassy construction capacity and time frames and update this information for stakeholders on a regular basis, such as through the annual budgeting process.

Response: State concurs with GAO's recommendation and will determine the estimated effects of cost inflation on planned Capital Security Construction Program (CSCP) embassy construction capacity and time frames and update this information for stakeholders on a regular basis, such as through the annual budgeting process.

Recommendation 2: The Secretary of State should provide an analysis for stakeholders identifying those embassies that still need to be replaced to meet State's security standards and estimating total CSCP costs and projected time frames needed to complete those projects.

Response: State concurs with GAO's recommendation and will provide an analysis for stakeholders identifying those embassies that still need to be replaced to meet State's security standards and estimating total CSCP costs and projected time frames needed to complete those projects.

Recommendation 3: The Secretary of State should ensure that the Director of OBO conducts an OBO-wide workforce analysis to assess staffing levels and workload capacity needed to carry out the full range of OBO's mission goals, to include the CSCP. Such an assessment could provide a basis for broader stakeholder discussion of OBO's human capital needs and potential prioritization of activities.

Response: State concurs with GAO's recommendation and will conduct an OBO-wide workforce analysis to assess staffing levels and workload capacity needed to carry out the full range of OBO's mission goals, to include the CSCP.

Recommendation 4: The Secretary of State should ensure that the Director of OBO pilots formal construction partnering for the CSCP, particularly with construction firms that are new or less experienced with the program.

Response: State concurs with GAO's recommendation and will pilot a formal construction partnering for the CSCP.

Additional Observations

In addition to the recommendations, OBO offers the following observations on the draft report:

- OBO notes all discussions regarding the Excellence initiative should be framed as past tense. OBO's CSCP has been continually evolving and improving since its inception in 1999. The CSCP has included the Standard Delivery System (SDS), Standard Embassy Design (SED), and the Excellence in Diplomatic Facilities Initiative (Excellence). Each has provided insight into the evolution and future development of the program, with the goal of ensuring diplomatic facilities are safe, secure, functional, and sustainable while adhering to scope, schedule, and budget. OBO has taken the lessons learned from our experience with SDS, SED, and Excellence to focus on several new initiatives that aim to lower project and long-term facility operations and maintenance costs.
- By 2014, OBO hired design firms to develop bridging documents that were informed by (but were not strictly limited to) the SED's "two-bar solution" as a starting point for new embassy and consulate designs.
- OBO uses the Top 80 list to develop and adjust the CSCP schedule, which prioritizes embassy and consulate project awards for the current fiscal year and for each of the next five fiscal years. Projects planned for beyond that timeframe are broadly categorized in an "out-year" category. The rolling six-year CSCP schedule supports project planning and is not intended as a budget document.

Conclusion: The Department appreciates the opportunity to comment on the draft report and is committed to implementing the four recommendations as a part of our continued efforts to improve our Capital Security Construction Program. We look forward to receiving the published report and updating you on our progress.

Appendix V: GAO Contacts and Staff Acknowledgments

GAO Contacts

Brian M. Mazanec, (202) 512-5130 or mazanecb@gao.gov.
Lori Rectanus, (202) 512-2834 or rectanusl@gao.gov.

Staff Acknowledgments

In addition to the contacts named above, Leslie Holen (Assistant Director), Michael Armes (Assistant Director), David Hancock, John Bauckman, and Eugene Beye, made key contributions to this report. David Dayton, Justin Fisher, Alex Welsh, and Neil Doherty provided technical assistance.

Appendix VI: Accessible Data

Data Tables

Data Table for Figure 6: Cumulative Capital Security Construction Program Funding and Completed Embassies and Consulates, Fiscal Years 1999–2017

Fiscal year	Cumulative number of completed new embassy or consulate compounds	Cumulative funding across fiscal years (Dollars in billions)
1999	0	$0.3
2000	0	$0.6
2001	1	$1.1
2002	2	$2.0
2003	5	$2.6
2004	6	$3.5
2005	12	$4.9
2006	21	$6.0
2007	31	$7.2
2008	35	$8.2
2009	42	$10.4
2010	47	$11.7
2011	58	$13.1
2012	63	$14.1
2013	67	$16.0
2014	70	$17.9
2015	72	$19.8
2016	73	$22.0
2017	77	$24.2

Data Table for Figure 7: Capital Security Construction Program Embassy and Annex Completions, Fiscal Years 2001–2017

Fiscal year	New embassy or consulate compounds	Annexes or acquired buildings
2001	1	0
2002	1	1
2003	3	3
2004	1	1
2005	6	2
2006	9	4
2007	10	6
2008	4	3
2009	7	0
2010	5	1
2011	11	1
2012	5	2
2013	4	2
2014	3	2
2015	2	0
2016	1	0
2017	4	0

Data Table for Figure 8: Capital Security Construction Program (CSCP) Annual Funding Compared with Accountability Review Board Recommended Funding Levels, Fiscal Years 1999–2017 (Dollars in thousands)

Fiscal year	Direct appropriations to State, including State's cost-sharing funds since 2005	Other U.S. agencies' cost-sharing funds	Supplemental appropriations (e.g. Baghdad; Kabul; Islamabad)	Overseas contingency operations (e.g., Kabul; Islamabad)	2012 Benghazi Accountability Board Recommendation, $2.2B starting in 2015	2005 Capital Security Cost-Sharing goal of $1.4B annually beginning in 2009, after an phase-in from 2005 to 2008
1999	$300,000	$0	$0	$0	$0	$0
2000	$300,000	$0	$0	$0	$0	$0
2001	$513,867	$0	$0	$0	$0	$0
2002	$665,000	$0	$200,500	$0	$0	$0
2003	$604,594	$0	$61,500	$0	$0	$0
2004	$753,388	$0	$63,900	$0	$0	$0
2005	$774,831	$108,988	$592,000	$0	$0	$280,000
2006	$799,852	$249,092	$0	$0	$0	$560,000
2007	$799,852	$374,292	$0	$0	$0	$840,000
2008	$562,110	$441,776	$0	$0	$0	$1,120,500
2009	$800,525	$468,288	$962,800	$0	$0	$1,400,000
2010	$752,800	$597,357	$0	$0	$0	$1,400,000
2011	$705,700	$604,178	$0	$0	$0	$1,400,000
2012	$579,200	$427,596	$0	$0	$0	$1,400,000
2013	$428,157	$272,441	$0	$1,227,030	$0	$1,400,000
2014	$1,383,000	$572,366	$0	$0	$0	$1,400,000
2015	$986,500	$899,832	$0	$0	$2,200,000	$1,400,000
2016	$403,799	$1,123,070	$0	$611,201	$2,200,000	$1,400,000
2017	$115,700	$1,184,000	$0	$902,800	$2,200,000	$1,400,000

Data Table for Figure 12: Construction Durations for Completed Embassy and Consulate Projects by Fiscal Year Awarded, 2008–2014 in Months

Fiscal Year	Post	Duration of construction in months	Design classification
	Average Months To Build (Fiscal years 2008-2014)	36.2	
2014	Ndjamena	36.1	Excellence-like
2013	Paramaribo	29.6	Excellence-like
2012	Cotonou	29.2	SED
	Mbabane	48.2	Excellence-like
2011	Bishkek	55.8	SED
	Rabat	32.1	Not SED
	Oslo	59.2	Excellence-like
	Vientiane	33.0	SED
2010	Dakar	32.3	SED
	Libreville	24.4	SED
	Santo Domingo	39.9	SED
2009	Monrovia	32.1	SED
	Belgrade	43.6	SED
	Bujumbura	34.3	SED
	Monterrey	48.8	SED
	Guangzhou	45.4	Not SED
2008	Lusaka	27.5	SED
	Khartoum	20.2	SED
	Bucharest	32.6	SED
	Djibouti	33.3	SED
	Dubai	29.1	SED
	Kyiv	29.9	SED

Data Table for Figure 13: Construction Duration in Months for Ongoing Embassy and Consulate Projects, by Fiscal Year Awarded, 2012–2017, as of Fiscal Year 2017

Fiscal Year contract awarded	Post	Months: Contract award to full notice to proceed or to end of fiscal year 2017 if no full notice to proceed	Months: Construction in progress	Not-SED, SED, Excellence-like, Excellence
2012	Jeddah	12.2	47.9	SED
	Jakarta	2.3	57.9	Excellence-Like
2013	Nouakchott	3.7	44.4	SED
	The Hague	8.6	39.7	Excellence-Like
2014	Nuevo Laredo	3.8	32.3	Excellence
	Pristina	2.3	33.9	Excellence
	Ashgabat	1.8	34.4	Not SED
2015	Port Moresby	24.4	0.0	Excellence-Like
	Matamoros	3.4	20.6	Excellence
	Niamey	2.0	22.1	Excellence
	Maputo	14.9	12.6	Excellence-Like
	Harare	2.0	26.1	Excellence
2016	Dhahran	12.0	0.0	Excellence
	Hyderabad	5.2	7.0	Excellence
	Colombo	17.1	0.0	Excellence
2017	Guatemala City	0.0	0.0	Excellence
	Mexico City	0.0	0.0	Excellence
	Erbil	3.0	0.0	Excellence
	Beirut	8.4	0.0	Excellence
	Asuncion	3.6	4.9	Excellence
	Ankara	9.3	0.0	Excellence
2008-2014	Average months to build 2008-2014	36.7		

Agency Comment Letter

Text of Appendix IV: Comments from the U.S. Department of State

Page 1

Dear Mr. Melito:

We appreciate the opportunity to review your draft report, "EMBASSY CONSTRUCTION: Pace is Slower Than Projected, and State Could Make Program Improvements, GAO Job Code 101951.

The enclosed Department of State comments are provided for incorporation with this letter as an appendix to the final report.

If you have any questions concerning this response, please contact Amy Gertsch, Division Director, Office of Policy and Program Analysis, Bureau of Overseas Buildings Operations at (703) 516-1652.

Sincerely,

Christopher H. Flaggs

Enclosure: As stated
cc: GAO - Brian M. Mazanec (Acting)
OBO- William Moser (Acting)
OIG - Norman Brown

Page 1

EMBASSY CONSTRUCTION: Pace is Slower Than Projected, and State Could Make Program Improvements (GAO-18-653, GAO Code 101951)

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Recommendation 1:

The Secretary of State should determine the estimated effects of cost inflation on planned CSCP embassy construction capacity and time frames and update this information for stakeholders on a regular basis, such as through the annual budgeting process.

Response:

State concurs with GAO's recommendation and will determine the estimated effects of cost inflation on planned Capital Security Construction Program (CSCP) embassy construction capacity and time frames and update this information for stakeholders on a regular basis, such as through the annual budgeting process.

Recommendation 2:

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Response:

State concurs with GAO's recommendation and will provide an analysis for stakeholders identifying those embassies that still need to be replaced to meet State's security standards and estimating total CSCP costs and projected time frames needed to complete those projects.

Recommendation 3:

The Secretary of State should ensure that the Director of OBO conducts an OBO-wide workforce analysis to assess staffing levels and workload capacity needed to carry out the full range of OBO's mission goals, to include the CSCP. Such an assessment could provide a basis for broader stakeholder discussion of OBO's human capital needs and potential prioritization of activities.

Response:

State concurs with GAO's recommendation and will conduct an OBO-wide workforce analysis to assess staffing levels and workload capacity

needed to carry out the full range of OBO's mission goals, to include the CSCP.

Page 1

Recommendation 4:

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Response:

State concurs with GAO's recommendation and will pilot a formal construction partnering for the CSCP.

Additional Observations

In addition to the recommendations, OBO offers the following observations on the draft report:

- OBO notes all discussions regarding the Excellence initiative should be framed as past tense. OBO's CSCP has been continually evolving and improving since its inception in 1999. The CSCP has included the Standard Delivery System (SDS), Standard Embassy Design (SED), and the Excellence in Diplomatic Facilities Initiative (Excellence). Each has provided insight into the evolution and future development of the program, with the goal of ensuring diplomatic facilities are safe, secure, functional, and sustainable while adhering to scope, schedule, and budget. OBO has taken the lessons learned from our experience with SDS, SED, and Excellence to focus on several new initiatives that aim to lower project and long-term facility operations and maintenance costs.
- By 2014, OBO hired design firms to develop bridging documents that were informed by (but were not strictly limited to) the SED's "two-bar solution" as a starting point for new embassy and consulate designs.
- OBO uses the Top 80 list to develop and adjust the CSCP schedule, which prioritizes embassy and consulate project awards for the current fiscal year and for each of the next five fiscal years. Projects planned for beyond that timeframe are broadly categorized in an "out-year" category. The rolling six-year CSCP schedule supports project planning and is not intended as a budget document.

Conclusion:

The Department appreciates the opportunity to comment on the draft report and is committed to implementing the four recommendations as a part of our continued efforts to improve our Capital Security Construction Program. We look forward to receiving the published report and updating you on our progress.

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