

November 2009

BUREAU OF PRISONS

Methods for Cost Estimation Largely Reflect Best Practices, but Quantifying Risks Would Enhance Decision Making





Highlights of [GAO-10-94](#), a report to congressional committees

Why GAO Did This Study

The Department of Justice's (DOJ) Federal Bureau of Prisons (BOP) is responsible for the custody and care of about 209,000 federal inmates—a population which has grown by 44 percent over the last decade. In fiscal years 2008 and 2009, the President requested additional funding for BOP because costs for key operations were at risk of exceeding appropriated funding levels. GAO was congressionally directed to examine (1) how BOP estimates costs when developing its annual budget request to DOJ; (2) the extent to which BOP's methods for estimating costs follow established best practices; and (3) the extent to which BOP's costs for key operations exceeded requested funding levels identified in the President's budget in recent years, and how this has affected BOP's ability to manage its growing inmate population. In conducting our work, GAO analyzed BOP budget documents, interviewed BOP and DOJ officials, and compared BOP's cost estimation documentation to criteria in GAO's *Cost Estimating and Assessment Guide*.

What GAO Recommends

GAO recommends that BOP (1) conduct an uncertainty analysis quantifying the extent to which its operational costs could vary due to changes in key cost assumptions and submit the results, along with budget documentation, to DOJ; and (2) improve documentation of calculations used to estimate its costs. BOP agreed with GAO's recommendations.

[View GAO-10-94 or key components.](#)
For more information, contact David C. Maurer at (202) 512-9627 or maurerd@gao.gov.

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Methods for Cost Estimation Largely Reflect Best Practices, but Quantifying Risks Would Enhance Decision Making

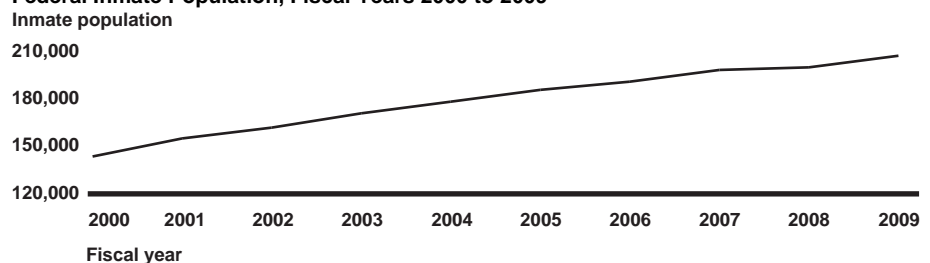
What GAO Found

BOP uses three general steps to estimate costs for its annual budget submission: (1) estimating cost increases to maintain service levels, such as inmate medical care and utilities; (2) projecting inmate population changes for the budget year and for several years into the future using a modeling program that incorporates data on the current inmate population and estimated incoming population and associated sentences; and (3) estimating costs to both provide additional capacity to house projected inmate population growth and implement new programs, such as activating new prisons.

BOP's methods for cost estimation largely reflect best practices outlined in GAO's *Cost Estimating and Assessment Guide*. BOP followed a well-defined process for developing a mostly comprehensive, well documented, accurate, and credible cost estimate for fiscal year 2008. For example, BOP used relevant historical cost data and considered adjustments for general inflation when estimating costs for its budget request to DOJ. Moreover, BOP's methods for projecting inmate population changes were accurate, on average, to within 1 percent of the actual inmate population growth from fiscal year 1999 to August 2009. Still, BOP could strengthen its methods in two ways. First, BOP has not quantified the level of confidence associated with its cost estimate. While not required by the Office of Management and Budget or DOJ, conducting an uncertainty analysis of this kind is a best practice. By providing the results of such analysis to DOJ, BOP officials could share advance information on the probability and associated risks of operating expenses exceeding enacted funding levels. Second, during our review of documentation for BOP's fiscal year 2008 cost estimate, in some cases we required the guidance of BOP budget analysts to identify backup support because the documentation was insufficient to allow someone unfamiliar with the budget to locate detailed corroborating data. By documenting all steps, BOP would be better positioned to recreate its budget cost estimates in the event of attrition among those who initially developed them.

According to BOP, from fiscal years 2004 through 2008, costs for non-salary inmate medical care and utilities exceeded funding levels in the President's budget request by about \$131 million and \$55 million, respectively. As a result, BOP has faced funding gaps in its operations account that has left it with limited flexibility to manage its continually growing inmate population.

Federal Inmate Population, Fiscal Years 2000 to 2009



Source: GAO analysis of BOP data.

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Abbreviations

B&F	Buildings and Facilities
BOP	Federal Bureau of Prisons
DOJ	Department of Justice
M&R	Maintenance and Repair
OMB	Office of Management and Budget
S&E	Salaries and Expenses

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United States Government Accountability Office
Washington, DC 20548

November 10, 2009

The Honorable Barbara Mikulski
Chairman
The Honorable Richard Shelby
Ranking Member
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Alan B. Mollohan
Chairman
The Honorable Frank R. Wolf
Ranking Member
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Committee on Appropriations
House of Representatives

The Department of Justice's (DOJ) Federal Bureau of Prisons' (BOP) mission is to protect society by confining offenders in the controlled environments of prisons and community-based facilities that are safe, humane, cost-efficient, and appropriately secure. As of October 1, 2009, BOP was responsible for overseeing a total federal inmate population of approximately 209,000—a population which has grown by 44 percent since fiscal year 2000.¹ In recent years, BOP has faced challenges in meeting its operational workload responsibilities to manage this growth. In fiscal year 2008, DOJ reported to the Office of Management and Budget (OMB) that BOP would be unable to operate at the funding levels in its appropriation because costs for key operations were at risk of exceeding appropriated funding levels. BOP reported that it again anticipated a funding gap in fiscal year 2009, and in response, Congress provided appropriations above the amount requested in the President's budget.

¹Inmate population data as reported by BOP. Of the total inmate population, approximately 172,500 federal inmates—83 percent—were housed in 115 BOP-operated facilities throughout the country. The remaining inmates were housed primarily in contract confinement (i.e., facilities and halfway houses, operated by private contractors or state/local governments).

This report responds to congressional direction in the explanatory statement accompanying the Omnibus Appropriations Act, 2009.² In accordance with this explanatory statement, and in consultation with the House and Senate Appropriations Committee staff, we are reporting on BOP's methods for cost estimation, including the pricing of utilities and inmate medical care costs. Specifically, we address issues pertaining to (1) how BOP estimates costs when developing its annual budget request to DOJ; (2) the extent to which BOP's methods for estimating costs follow established best practices or guidelines; and (3) the extent to which BOP's costs for key operations exceeded requested funding levels identified in the President's budget in recent years, and how this has affected BOP's ability to manage its growing inmate population. On September 10, 2009, we provided a briefing to staff of the House and Senate Appropriations Subcommittees on Commerce, Justice, Science, and Related Agencies. Prior to this briefing, we provided a draft of the briefing to responsible DOJ and BOP officials, who generally agreed with our findings. This report (1) provides a summary of our briefing and (2) transmits recommendations that we are making to the Attorney General of the United States. The full briefing, including our scope and methodology, is reprinted as appendix I. Written comments from DOJ are reprinted as appendix II.

To address these objectives, we analyzed BOP documentation to obtain information on the guidelines and processes BOP used to estimate costs in its annual budget submission, including annual DOJ and BOP budget development guidelines and memorandum and OMB's Circular A-11.³ We also analyzed available documentation, such as the formulas BOP used to compute its fiscal year 2008 budget cost estimate, and compared the documentation BOP used to develop its fiscal year 2008 budget cost estimate to criteria for cost estimating best practices identified in GAO's *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*.⁴ Additionally, we reviewed BOP documentation of operations costs for inmate medical care and utilities

²H. Comm. on Appropriations, 111th Cong., Committee Print on H.R. 1105 / Public Law Number 111-8 at 274 (2009), accompanying the Omnibus Appropriations Act, 2009 (Pub. L. No. 111-8, 123 Stat. 524 (2009)).

³Office of Management and Budget, *Preparation, Submission, and Execution of the Budget*, Circular No. A-11 (Washington, D.C.: Executive Office of the President, June 2008).

⁴GAO, *GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*, [GAO-09-3SP](#) (Washington, D.C.: March 2009).

and compared these costs to the amount of funding requested in the President's annual budget submission to Congress for BOP (known as the President's budget). Finally, we interviewed cognizant BOP and DOJ budget development officials to obtain information about BOP's budget cost estimating methods and the factors contributing to BOP's operational costs exceeding funding levels, and how this has affected BOP's ability to manage its growing inmate population. Through document reviews and interviews with agency officials knowledgeable about controls in place to maintain the integrity of BOP cost and inmate population data that BOP reported using to estimate costs for its annual budget submission to DOJ, we determined that the data were sufficiently reliable for the purposes of this report.

We conducted this performance audit from May 2009 to November 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the work to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.

BOP Estimates Costs for Its Annual Budget Using Three General Steps

When developing its annual budget submission, BOP uses three general steps to estimate costs for its two budget accounts—the Salaries and Expenses account (known as its operational budget) and its Buildings and Facilities account.⁵ First, BOP estimates cost increases for maintaining the current level of services for operations as provided in the prior year's enacted budget.⁶ These include costs to address mandatory staff pay raises and benefit increases, inmate medical care, and utilities. BOP primarily analyzes historical obligations from the past five years to identify average annual operating cost increases. BOP also considers economic indicator information to estimate general inflationary cost increases, using data

⁵The Salaries and Expenses account includes sub-accounts covering costs for staffing, inmate medical care, food, and utilities. From fiscal years 1999 through 2008, these expenses comprised about 90 percent of BOP's budget—in fiscal year 2009, staffing costs for employee salaries accounted for about 60 percent of the Salaries and Expenses account. The Buildings and Facilities account has sub-accounts covering costs for design and construction of new facilities and modernization and repair of existing facilities.

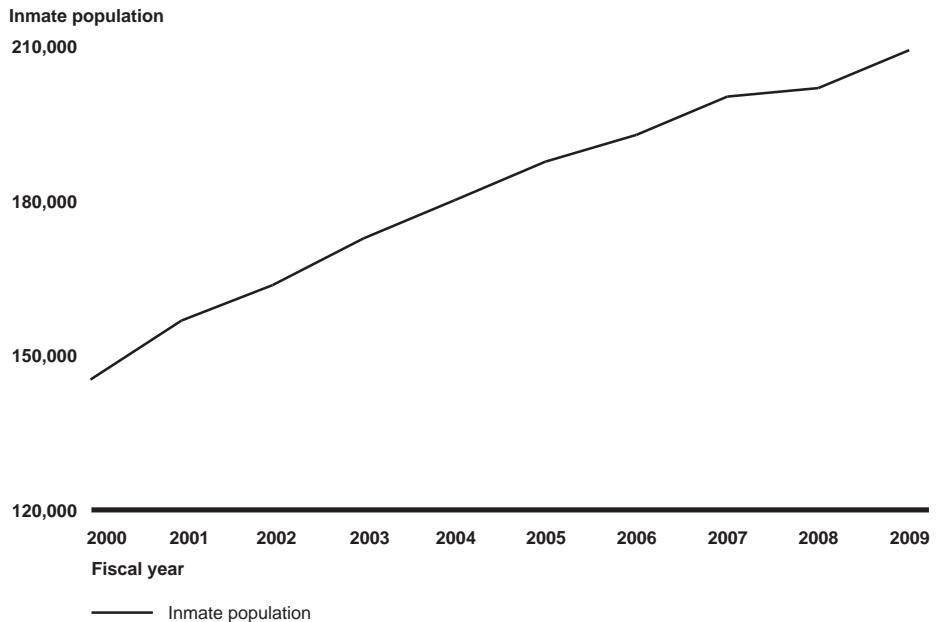
⁶BOP officials reported that during years in which a continuing resolution is in effect, they must use the prior year's budget request submission to DOJ as the baseline because of delays in the enactment of the budget.

from the Bureau of Labor Statistics Consumer Price Index, among other sources.

Second, BOP projects inmate population changes for the budget year and for several years into the future. BOP uses a modeling program that identifies each inmate as a unique record tied to variables such as conviction year, sentence term, and conviction type, with data obtained from a variety of sources, including the Administrative Office of the U.S. Courts, the U.S. Sentencing Commission, and the Executive Office for U.S. Attorneys. The model identifies the number of inmates currently in BOP's system and the length of those inmates' sentences, as well as the number of inmates estimated to enter the BOP system and the length of their sentences. For example, for the fiscal year 2010 annual budget submission, BOP projected a net growth in its inmate population of 4,500 inmates.

Third, BOP estimates costs to both house the projected number of new inmates, including building and facility requirements, and fund any new initiatives. According to BOP, a rising inmate population is the primary driver of new service costs (see figure 1 for graph showing federal inmate population growth from fiscal years 2000 through 2009). Thus, for any budget year, BOP uses inmate population projections to determine the necessary bedspace to house additional inmates. BOP estimates these associated incarceration costs by (1) determining how to distribute the incoming prisoners across newly activated facilities, existing facilities, or contract facilities; and (2) calculating staffing and other operational costs to manage the additional inmates at its facilities. BOP also identifies and estimates costs for new initiatives, such as the activation of a new BOP facility, by reviewing the proposals submitted by its divisions and regional offices, as well as historical data on costs for implementing such initiatives.

Figure 1: Federal Inmate Population Growth, Fiscal Years 2000 through 2009



Source: GAO analysis of BOP data.

For its Buildings and Facilities account, BOP identifies new program costs associated with new construction and maintenance and repair of existing facilities. Using its long-term inmate population projections, BOP considers new construction proposals based on need, funding, and the anticipated speed of construction. BOP estimates construction costs largely by using analogous building costs for similar security level facilities, as well as considering assumptions, such as the rate of inflation and when potential construction would begin. BOP ranks maintenance and repair proposals by assigning safety the highest priority and estimates costs based on information it obtains from a construction cost estimation company.

BOP's Methods for Estimating Costs Largely Reflect Best Practices

BOP's methods for estimating costs in its annual budget requests to DOJ largely reflect the best practices outlined in GAO's *Cost Estimating and Assessment Guide*. Specifically, BOP followed a well-defined process for developing a mostly comprehensive, well documented, accurate, and credible cost estimate for fiscal year 2008.⁷ For example, BOP used relevant historical cost data and considered adjustments for general inflation when estimating costs for its budget request to DOJ. Moreover, BOP's methods for projecting inmate population changes have been largely accurate. For example, we found BOP's projections were accurate, on average, to within 1 percent of the actual inmate population growth from fiscal year 1999 through August 20, 2009.

We identified two areas where BOP could strengthen its methods for estimating costs in its annual budget submission. First, according to best practices described in GAO's *Cost Estimating and Assessment Guide*, it is better for decision makers to know the range of potential costs that surround an estimate and the reasons behind what drives that range rather than just having a point estimate from which to make their decision. An uncertainty analysis provides a range of costs that span a best and worst case spread. While not required by OMB or DOJ in annual budget development guidance, conducting an uncertainty analysis of this kind is a best practice. BOP has not conducted an uncertainty analysis, and therefore has not quantified the level of confidence associated with its cost estimate. By providing the results of such analysis to DOJ, BOP officials could share advance information on the probability and associated risks of operating expenses exceeding enacted funding levels—a situation BOP faced in fiscal year 2008.

Second, during our review of documentation for BOP's fiscal year 2008 cost estimate, we sometimes required the guidance of BOP budget analysts to identify backup support. This was because the documentation BOP provided was insufficient to allow someone unfamiliar with the budget to locate detailed corroborating data. For example, in reviewing BOP's fiscal year 2008 cost estimate for a health service initiative related to expanding kidney dialysis treatment for inmates, we required a budget official's assistance in locating supporting formulas used to calculate the

⁷GAO's *Cost Estimating and Assessment Guide* identifies 12 practices that are the basis for effective cost estimation. We associate these practices with four characteristics: accurate, well documented, credible, and comprehensive. If followed correctly, these practices should result in reliable and valid cost estimates that (a) can be easily and clearly traced, replicated, and updated; and (b) enable managers to make informed decisions.

estimate. Best practices for cost estimation include providing enough detail so that the documentation serves as an audit trail that allows for clear tracking of cost estimates over time. By documenting all steps for developing its budget cost estimate, BOP would be better positioned to recreate its estimates in the event of attrition within its budget office among those who developed initial budget cost estimates.

In providing feedback on our initial findings, BOP budget officials indicated that taking these steps would strengthen their methods for estimating costs in their annual budget submission to DOJ.

Costs for Key Operations Have Exceeded the Funding Levels Requested in the President's Budget in Recent Years

BOP's costs for key operations to maintain basic services, such as those for inmate medical care and utilities, exceeded the funding levels requested in the President's budget from fiscal years 2004 through 2008, limiting BOP's ability to manage its growing inmate population. During this period, BOP's annual non-salary inmate medical care and utilities costs exceeded funding levels in the President's budget request by a total of about \$131 million and \$55 million, respectively, largely due to inflation and inmate population growth.⁸

- According to BOP, from fiscal years 2004 through 2008, BOP's annual non-salary inmate medical care costs increased by a total of about \$146.5 million. In contrast, during this period, the President's budget requested funding increases for non-salary inmate medical care totaling approximately \$15.4 million.
- According to BOP, from fiscal years 2004 through 2008, BOP's annual utilities costs increased by a total of \$87 million. In contrast, during this period, the President's budget requested funding increases for utilities totaling approximately \$31.6 million.

Table 1 compares BOP's rates of annual cost growth due to inflation and inmate population growth with the President's budget requests for funding for non-salary inmate medical care and utilities from fiscal years 2004 through 2008.

⁸Non-salary inmate medical care costs refer to the amount BOP spends on pharmaceuticals, medical supplies, and outside medical care—community hospital services and a portion of guard escort service and a portion of salaries (overtime). In fiscal year 2008, non-salary inmate medical care and utilities costs were \$430.5 million and \$234 million, respectively.

Table 1: Comparison of BOP's Average Annual Rate of Cost Growth Due to Inflation and Inmate Population Growth and Average Annual Funding in President's Budget Request for BOP, Fiscal Years 2004 through 2008

	Average annual rate of cost growth incurred by BOP, fiscal years 2004 through 2008	Average annual rate of funding growth in President's budget request, fiscal years 2004 through 2008
Inmate medical care (non-salary)	8.7%	0.9%
Utilities	9.8%	3.2%

Source: GAO analysis of BOP data.

When BOP has not received funding to cover the operational cost increases it has incurred, in some years it has used Salaries and Expenses funding planned for other areas to cover these costs. For example, one of BOP's highest priorities is to increase staffing levels of corrections officers. However, BOP officials reported using Salaries and Expenses account funds initially planned for hiring additional corrections officers in fiscal years 2008 and 2009 to instead cover base operations cost increases related to inmate medical care, utilities, and personnel salary and benefit adjustments that were unfunded in the President's budget requests.

As with any other DOJ component, BOP's budget requests are governed by DOJ and OMB budget development guidance. For example, DOJ budget development guidance for fiscal years 2008 and 2009 required components to limit cost growth for current services to no more than 4 percent greater than prior year levels. DOJ reported that this guidance was a general instruction given to all components, but recognized that BOP is different because its costs are less discretionary since BOP does not control the number of inmates for which it must care. In this way, DOJ reported that it did not automatically reject budget submissions from BOP that exceeded the cap, but instead required BOP to submit substantive information to justify need.

DOJ also reported that OMB does not automatically provide funds for inflationary cost increases. DOJ cited OMB policy stating that inflationary adjustments for discretionary costs (such as utilities) can include some, all, or no allowance for inflation. DOJ officials reported that OMB typically does not include general inflationary adjustments that DOJ submits on behalf of BOP.

Nonetheless, DOJ has reported to OMB that other DOJ components could reduce operations, implement across-the-board hiring freezes, and implement policy changes that would reduce costs if faced with funding shortfalls similar to what BOP has faced in its operations budget. However, DOJ reported that BOP has already implemented significant reductions to programs and streamlined and centralized administrative functions to eliminate 2,300 positions. DOJ also reported that BOP has limited flexibility because almost all of BOP's operational costs are devoted to staff salaries and provision of services. According to BOP data, in fiscal years 2007 and 2008, 99.5 percent of BOP's Salaries and Expenses budget was fixed for its operations for paying staff salaries and providing services to house and care for the inmate population.

Conclusions

In each of the last 2 fiscal years, BOP has needed additional funding to meet its operating costs for managing its growing inmate population. However, we found that BOP's cost estimation methods largely reflect GAO's cost estimating best practices. Furthermore, BOP officials reported, and DOJ officials acknowledged, that BOP has already implemented significant reductions in operations costs, such as by eliminating positions and centralizing administrative functions. Given BOP's unique responsibility for managing this population, and its limited discretion when costs for key operations exceed funding levels, it is especially important for BOP to develop accurate cost estimates and clearly convey to decision makers the potential risk of costs exceeding funding levels.

In light of these circumstances, BOP's budget cost estimation practices could be strengthened in two ways. First, although BOP is not required to report in its annual budget submission the extent to which actual costs may be expected to vary from cost estimates, we have identified the provision of an uncertainty analysis as a best practice. If BOP identified its level of cost estimation confidence and provided this information to DOJ, DOJ could more fully understand the range of potential costs—and the potential need for more funding—if estimating assumptions for key cost drivers, such as inmate population growth, do not hold true.

Second, by improving documentation of all steps for developing its cost estimate, BOP would be better positioned to re-create its estimates in the event of attrition within its budget office among those who developed initial cost estimates.

Recommendations for Executive Action

To improve transparency in BOP's cost estimation process, as well as DOJ's annual budget formulation and justification process, and to provide DOJ with more detailed information to consider when deliberating its budget proposal for BOP, we recommend that the Attorney General take the following two actions:

- instruct the BOP Director to require the BOP budget staff to conduct an uncertainty analysis quantifying the extent to which operations costs could vary due to changes in key cost assumptions and submit the results along with budget documentation to DOJ so that DOJ could be aware of the range of likely costs and BOP's associated confidence levels; and
- instruct the BOP Director to require the BOP budget staff to improve documentation of calculations used to estimate its costs.

Agency Comments

We provided a draft of this report to DOJ for its review and comment. The BOP Director provided written comments on this draft and concurred with our findings and recommendations. BOP stated that including the results of an uncertainty analysis in the budget document would provide DOJ, OMB, and Congress better context for decision making and stated that it would include such analysis in preparation of its 2012 budget submission. BOP also stated that if time permits, it would work with DOJ and OMB to incorporate an uncertainty analysis into the President's 2011 budget. BOP's comments are reproduced in appendix II.

We are sending copies of this report to the Attorney General and interested congressional committees. In addition, this report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

Should you or your staff have any questions concerning this report, please contact me at (202) 512-9627 or by e-mail at maurerd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix III.

A handwritten signature in black ink, reading "David C. Maurer". The signature is written in a cursive style with a long, sweeping underline.

David C. Maurer
Director, Homeland Security and Justice Issues

Appendix I: Briefing Slides to Congressional Staff



Briefing on Federal Bureau of Prisons Methods for Estimating Costs

**Prepared for the
Senate and House Appropriations Committees**

**Subcommittees on
Commerce, Justice, Science,
and Related Agencies**



Briefing Overview

- Introduction
- Objectives, Scope, and Methodology
- Results in Brief
- Background
- Findings
- Conclusions
- Recommendations
- Agency Comments
- Appendix I



Introduction

In recent years, the Department of Justice's (DOJ) Federal Bureau of Prisons (BOP) has faced challenges in meeting its operational workload responsibilities for overseeing the federal inmate population. In fiscal year 2008, DOJ reported to the Office of Management and Budget (OMB) that BOP would be unable to operate at the funding levels in its appropriation because costs for key operations were at risk of exceeding appropriated funding levels. BOP reported that it again anticipated a funding gap in fiscal year 2009, and in response Congress provided appropriations above the amount in the President's budget request.

- Fiscal year 2008: BOP received a total of \$296.3 million in funding after its initial appropriation was enacted, including \$109.2 million transferred from other DOJ accounts, \$178 million from the Supplemental Appropriations Act, 2008 and \$9.1 million relating to the Global War on Terrorism in the Supplemental Appropriations Act, 2008.¹
- Fiscal year 2009: BOP received a total of \$160 million in funding above the President's request through the Omnibus Appropriations Act, 2009² and \$5 million through the Supplemental Appropriations Act, 2009.³

¹ Pub. L. No. 110-252, 122 Stat. 2323 (2008).

² Pub. L. No. 111-8, 123 Stat. 524 (2009).

³ Pub. L. No. 111-32, 123 Stat. 1859 (2009).



Objectives, Scope, and Methodology

Objectives

The explanatory statement accompanying the Omnibus Appropriations Act, 2009 directed GAO to review BOP's methods for determining resource requirements.⁴ We designed our reporting objectives to answer the following three questions:

1. How does BOP estimate costs when developing its annual budget request to DOJ?
2. To what extent do BOP's methods for estimating costs follow established best practices or guidelines?
3. To what extent have BOP's costs for key operations exceeded requested funding levels identified in the President's budget in the last five fiscal years, and how has this affected BOP's ability to manage its growing inmate population?

⁴ H. Comm. on Appropriations, 111th Cong., Committee Print on H.R. 1105 / Public Law Number 111-8 at 274 (2009) accompanying Pub. L. No. 111-8, 123 Stat. 524 (2009).



Objectives, Scope, and Methodology

Scope and Methodology: Objective 1

To determine how BOP estimates costs when developing its annual budget request to DOJ, we

- analyzed BOP documentation, including budget development guidelines, planning documents, and memorandum to obtain information on the steps BOP uses to estimate costs and the information BOP considers when doing so;
- reviewed OMB and DOJ budget development guidance, including OMB's Circular A-11 and DOJ annual budget development guidelines, to obtain information on federal budget formulation standards and requirements BOP must follow in preparing its annual budget request to DOJ,⁵ and
- interviewed cognizant program officials from BOP's Administration Division, including senior officials from BOP's Budget Development Office and Capacity Planning Branch, to learn about BOP's methods for estimating costs. We also interviewed cognizant program officials from BOP's Office of Research and Evaluation to obtain information on BOP's methods for estimating inmate population increases.

⁵Office of Management and Budget, *Preparation, Submission, and Execution of the Budget*, Circular No. A-11 (Washington, D.C.: Executive Office of the President, June 2008).



Objectives, Scope, and Methodology

Scope and Methodology: Objective 2

To determine the extent to which BOP's methods for estimating costs follow established best practices or guidelines, we

- analyzed available documentation, including BOP's fiscal year 2008 budget cost estimate and other relevant agency documentation, such as the formulas BOP used to compute its fiscal year 2008 budget cost estimate;
- interviewed cognizant program officials from BOP's Administration Division, including the Budget Development Chief, to understand how BOP developed its budget cost estimates and to identify supporting budget development documentation; and
- compared the documentation BOP used to develop its fiscal year 2008 budget cost estimate with criteria for cost estimating best practices identified in GAO's *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*.⁶

⁶ GAO, *GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*, GAO-09-3SP (Washington, D.C.: March 2009).



Objectives, Scope, and Methodology

Scope and Methodology: Objective 3

To determine the extent to which BOP's costs for key operations exceeded funding levels requested in the President's budget over the past five fiscal years and how this has affected BOP's ability to manage its growing inmate population, we

- reviewed BOP documentation, including reported obligations costs for maintaining key operations, and compared these costs to requests for funding in the President's annual budget submission to Congress for BOP;
- interviewed BOP budget development officials, as well as budget development officials from the DOJ Justice Management Division, to obtain information on the factors officials reported contributing to BOP's operational costs exceeding funding levels.



Objectives, Scope, and Methodology

Scope and Methodology

- To assess the reliability of the information we obtained about BOP's methods for estimating costs for its annual budget submission, we compared the documents BOP provided supporting its budget estimates for fiscal years 2004 to 2008 with information contained in the President's budget request for BOP for those years to determine the consistency of the information.
- We also interviewed agency officials knowledgeable about controls in place to maintain the integrity of (1) inmate population and sentenced offender data BOP used to populate its inmate population projection model for fiscal years 1999 to 2009 and (2) data on annual operations costs BOP reported between 2004 and 2008, including inmate medical care and utilities. As a result, we determined that the data were sufficiently reliable for the purposes of this report.



Objectives, Scope, and Methodology

Scope and Methodology

We conducted this performance audit from May 2009 to September 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the work to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.



Results in Brief

- BOP develops its annual budget request to DOJ using three general steps: (1) estimating cost increases needed to maintain current service levels; (2) projecting inmate population changes; and (3) estimating costs to provide additional capacity to house inmate population growth and implement new programs.
- BOP's methods for cost estimation largely reflect best practices outlined in GAO's *Cost Estimating and Assessment Guide*. BOP followed a well defined process for developing a mostly comprehensive, well-documented, accurate, and credible cost estimate for fiscal year 2008; however, BOP has not quantified the level of confidence associated with its cost estimate. While not required by OMB or DOJ, conducting uncertainty analyses of this kind is a best practice. By providing the results of such analyses to DOJ, BOP officials could share advance information on the probability and associated risks of operating expenses exceeding enacted funding levels—a situation BOP faced in fiscal year 2008.



Results in Brief

- BOP's costs for key operations to maintain basic services, such as those for inmate medical care and utilities, have exceeded the funding levels requested in the President's budget over the last 5 fiscal years, and this has limited BOP's ability to manage its growing inmate population. According to BOP, between fiscal years 2004 and 2008, costs for non-salary inmate medical care and utilities exceeded funding levels in the President's budget request by about \$131 million and \$55 million, respectively.



Results in Brief

To improve transparency in BOP's cost estimation process, as well as DOJ's annual budget formulation and justification process, we plan to make two recommendations to the Attorney General

1. instruct the BOP Director to require BOP budget staff to conduct an uncertainty analysis quantifying the extent to which operational costs could vary due to changes in key cost assumptions—and submit the results, along with budget documentation, to DOJ so that DOJ can be aware of the range of possible costs and BOP's confidence levels associated with each point along the range;
2. instruct the BOP Director to require the budget staff to improve documentation of calculations used to estimate its costs.

DOJ and BOP generally agreed with our findings and provided technical comments, which we integrated into our findings as appropriate.

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Background – BOP’s Mission

BOP’s mission is to protect society by confining offenders in the controlled environments of prisons and community-based facilities that are safe, humane, cost-efficient, and appropriately secure.

- As of October 1, 2009, BOP was responsible for overseeing a total federal inmate population of approximately 209,000.
- Approximately 172,500 federal inmates—83 percent—were housed in 115 BOP-operated facilities throughout the country. The remaining inmates were housed primarily in contract confinement (private facilities and halfway houses, operated by contractors or state/local governments).



Background – Federal Budget Formulation Process

Through the multi-phase federal budget formulation process, BOP is required to identify resource requirements and estimate costs for its annual budget request to DOJ. This process is guided by OMB, which makes decisions on executive agencies' budgets and submits them as the "President's Request" to Congress. Key steps in this process involve:

- OMB issuing Circular A-11 to federal agencies, providing detailed instructions for submitting budget data and materials, as well as criteria for developing budget submissions;
- DOJ issuing to all components its annual budget development guidelines;
- BOP submitting its budget request to DOJ's Justice Management Division about a year and a half prior to the budget year in question;

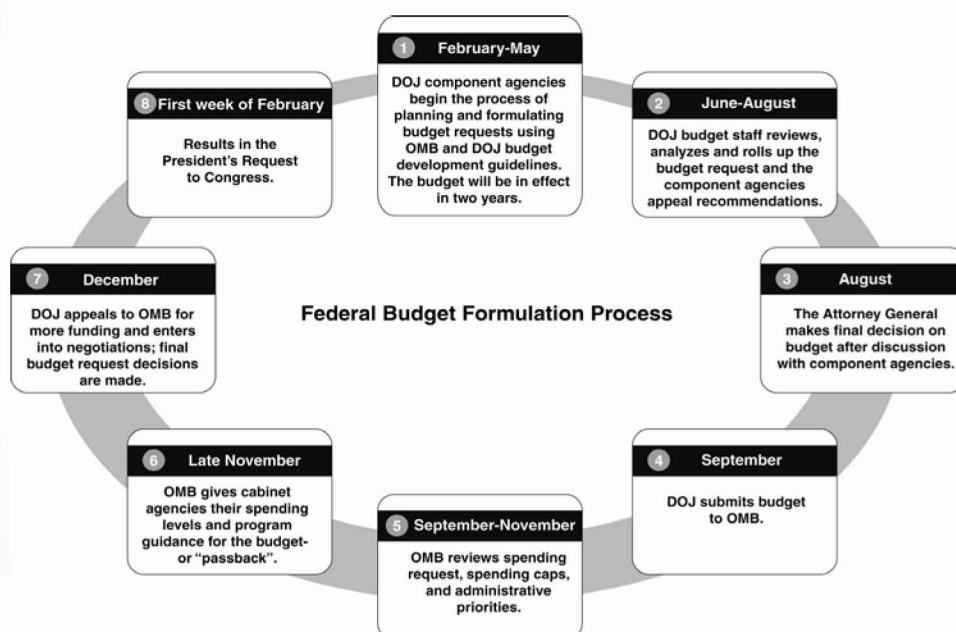


Background – Federal Budget Formulation Process

- The Attorney General analyzing all DOJ components' budget requests in light of department-wide priorities and compiling and submitting the DOJ annual budget submission to OMB; and
 - OMB making final decisions on all agencies' budgets and submitting the President's Request to Congress, which aggregates submissions for all of DOJ's components, including BOP.
- Figure 1 provides a high-level overview of this process.

Background – Federal Budget Formulation Process and OMB, DOJ, and BOP Roles

Figure 1



Source: GAO analysis of BOP information.



Background – BOP’s Budget Composition

BOP’s appropriated budget is comprised of the Salaries and Expenses (S&E) and Buildings and Facilities (B&F) accounts.

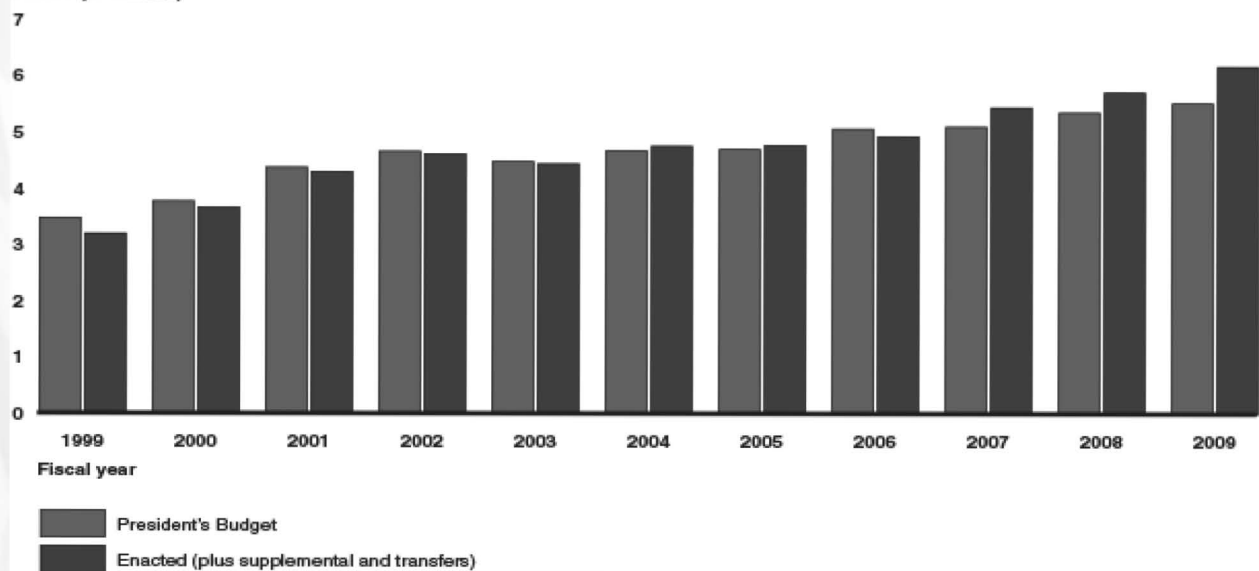
- The S&E account—known as BOP’s operations budget—includes sub-accounts covering costs for staffing; medical care; food; and utilities, such as water and gas. In fiscal year 2009, staffing costs for employee salaries comprised about 60 percent of this account.
- The B&F account has sub-accounts covering costs for design and construction of new facilities and modernization and repair (M&R) of existing facilities.
- S&E expenses have accounted for the vast majority of BOP’s annual enacted budget from fiscal years 1999 through 2008—averaging about 90 percent.
- The President’s fiscal year 2010 budget request for BOP’s S&E and B&F accounts totals \$6.1 billion, which is 23 percent of DOJ’s \$26.7 billion budget.
- Figure 2 compares the President’s request for BOP to its enacted funding levels from fiscal year 1999 through 2009, and figure 3 shows the composition of the President’s request (S&E versus B&F) for BOP over the same period.



Background – President’s Budget Request vs. Enacted Budget for BOP, Fiscal Years 1999 through 2009

Figure 2

Dollars (in billions)



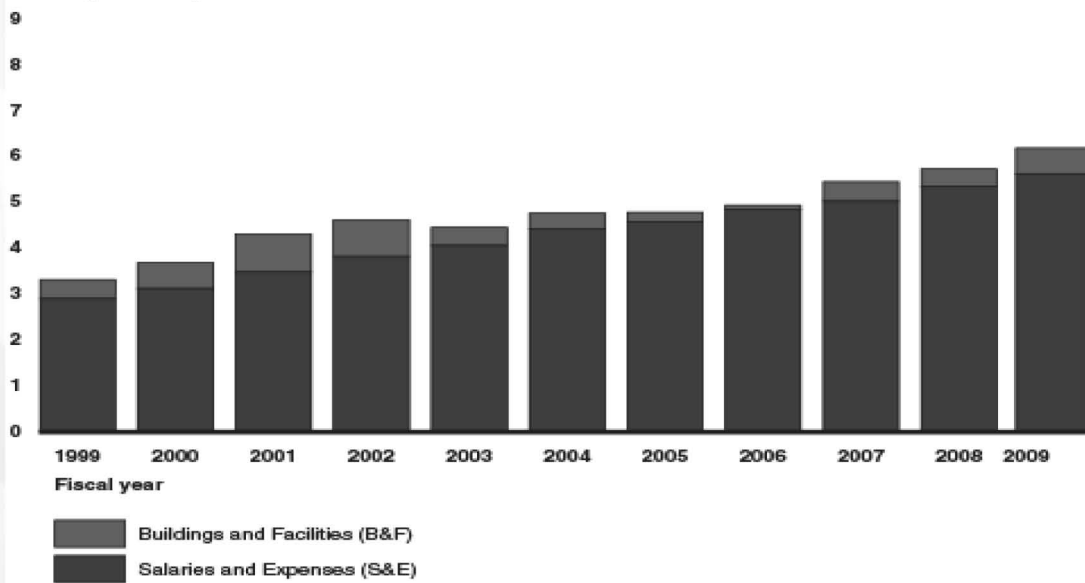
Source: GAO analysis of BOP data.



Background – President’s Budget Requests for BOP: S&E and B&F Accounts, Fiscal Years 1999 to 2009

Figure 3

Dollars (in billions)



Source: GAO analysis of BOP data.



Background – BOP’s Challenges

- From fiscal years 2000 through 2009, BOP’s total inmate population level increased by 44 percent—from 145,125 to 209,027. BOP estimates that the total inmate population will continue to rise by about 4,500 inmates per year over the next decade.
- During this period, BOP reports that crowding levels (the percentage of inmates housed in facilities above the rated capacity for safe and secure incarceration) have grown.⁷ BOP currently reports a system-wide crowding rate of 37 percent—more than double the rate (15 percent) that BOP has determined to be its long-term target for reducing overcrowding.
- According to BOP, as inmate population and crowding have increased, BOP’s overall inmate to staff ratio increased by nearly 18 percent from fiscal year 2000 to 2008, from 4.13 to 1 to 4.86 to 1. BOP reports that this has caused a significant reduction in its ability to effectively supervise inmates in its facilities.

⁷ According to BOP, rated capacity is intended to reflect the number of inmates that the facility was meant to house safely and securely and with adequate access to services providing necessities for daily living and programs designed to support inmates’ crime-free return to the community.



Background – BOP’s Challenges

- A 2005 BOP study found that an increase in crowding levels or inmate to staff ratios leads to an increase in serious violence among inmates.⁸
- As of August 1, 2009, BOP reported being staffed at 34,829—about 88 percent of its authorized Full Time Equivalent (FTE) staffing level of 39,692. About half of its authorized positions are for corrections officers.
- Figure 4 compares BOP S&E staffing levels to its inmate population beginning in fiscal year 2000.

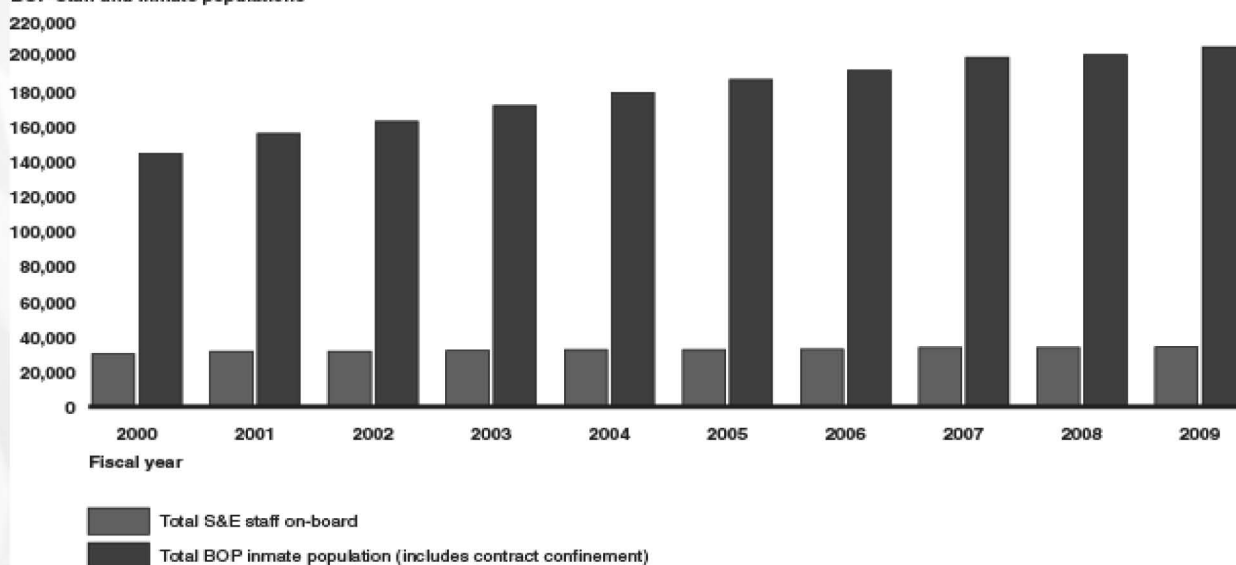
⁸ Department of Justice, Federal Bureau of Prisons, *The Effects of Crowding and Staffing Levels in Federal Prisons on Inmate Violence Rates* (Washington, D.C., 2005).



Background – BOP’s Inmate and Staffing Levels, Fiscal Years 2000 to 2009

Figure 4

BOP Staff and Inmate populations



Note: Fiscal year 2009 data based on projections provided by BOP on August 20, 2009.
Source: GAO analysis of BOP data.

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Objective 1 – How does BOP estimate costs when developing its annual budget submission?

BOP estimates costs using three general steps:

Step 1: BOP estimates the costs necessary to maintain operations for existing workload requirements (current services) by using the prior year's request or enacted budget as a baseline.⁹

Step 2: BOP projects inmate population changes for the budget year.

Step 3: BOP estimates costs to accommodate projected inmate population growth, including the provision of new programs, such as activation of a new BOP prison facility, for the budget year.

⁹ BOP officials reported that during years in which a continuing resolution is in effect, they must use the prior years' budget request submission to DOJ as the baseline because of delays in the enactment of the budget.



Objective 1 – Estimating Costs to Maintain Current Services (S&E Account)

First, BOP estimates cost increases for maintaining the level of services—operational costs—provided in the prior year’s enacted budget for the S&E account.

- These costs include adjustments to address mandatory staff pay raises and benefit increases, inmate medical care, and utilities across BOP’s 115 facilities.
- BOP primarily analyzes historical obligations from the last 5 years to identify average annual operating cost increases.
- BOP also considers economic indicator information to estimate general inflationary cost increases, using data from the Bureau of Labor Statistics Consumer Price Index and other sources.



Objective 1 – Projecting Population Changes

Second, BOP projects inmate population changes for the budget year, and for 9 years into the future.

- BOP uses a modeling program that identifies each inmate as a unique record tied to variables such as conviction year, sentence term, and conviction type.
- BOP's model uses data and information from a variety of sources, including the Administrative Office of the U.S. Courts, the U.S. Sentencing Commission, and the Executive Office for U.S. Attorneys to identify
 - Number of inmates currently in prison and the length of their sentences, and
 - Number of inmates estimated to enter prison and the length of their sentences.
- For the fiscal year 2010 annual budget submission, BOP projected a net growth of 4,500 inmates.



Objective 1 – Estimating Costs to Provide Additional Capacity

Third, BOP estimates costs to both house the projected number of new inmates, including building and facility requirements, and fund any new initiatives.

- According to BOP, a rising inmate population is the primary driver of new service costs.
 - For the budget year, BOP uses inmate projections to determine necessary bedspace to house additional inmates.
 - For future years, BOP uses inmate projections to plan for long term capacity needs, including new construction and arrangements for contract confinement.
- BOP estimates the associated incarceration costs by (1) determining how to distribute incoming prisoners across newly activated facilities, existing facilities, or privately operated facilities, and (2) calculating staff and other operational costs at each facility type.
- BOP identifies and estimates costs for new initiatives/program increases, such as activation of a new BOP prison facility, by reviewing the proposals submitted by its divisions and regional offices, and historical data.



Objective 1 – Estimating Costs to Provide Additional Capacity (B&F Account)

BOP also identifies new program costs associated with its B&F account, including new construction and M&R.

- Using its long term population projections, BOP considers new construction proposals based on need, funding, and the anticipated speed of construction.
 - BOP estimates construction costs (for new prisons or expansions to existing facilities) largely by using analogous building costs for similar security level facilities. Cost estimates are also based on assumptions, including the rate of inflation and when construction will begin.
 - M&R project proposals are ranked by assigning safety the highest priority, with lesser importance given to improving accessibility and updating facilities more than 50 years old. BOP estimates costs for replacement values through information it obtains from a construction cost estimation company.
 - Since fiscal year 2005, OMB has placed a moratorium on new BOP prison construction because OMB has focused on contracting with private prisons to address bedspace needs. However, BOP has identified new construction plans and included proposals for new construction as part of its capacity plan.¹⁰

¹⁰ According to BOP, the only new construction funding requested by the administration since fiscal year 2005 has been for completion of an ongoing prison project in Mendota, California.



Objective 2 – To what extent do BOP’s methods for estimating costs follow established best practices or guidelines?

BOP’s methods for estimating costs in its annual budget requests to DOJ largely reflect the four best practices outlined in GAO’s *Cost Estimating and Assessment Guide*.

- GAO’s *Cost Estimating and Assessment Guide* has identified 12 practices that are the basis for effective cost estimation.¹¹ We associate these practices with four characteristics: accurate, well documented, credible, and comprehensive. OMB endorsed this guidance as being sufficient for meeting most cost estimating requirements, including for budget formulation.
- If followed correctly, these practices should result in reliable and valid cost estimates that (a) can be easily and clearly traced, replicated, and updated; and (b) enable managers to make informed decisions.

¹¹ See appendix I for a description of these cost estimating practices.



Objective 2 – Extent To Which BOP’s Cost Estimation Methods Reflect GAO’s Cost Estimation Best Practices

As table 1 illustrates, we found that BOP’s methods for estimating costs met one and substantially met three of these four practices. The following explains the definitions we used in assessing BOP’s methods for estimating costs in its annual budget submission to DOJ:

Met – BOP provided complete evidence that satisfies the entire criterion;

Substantially Met – BOP provided evidence that satisfies a large portion of the criterion;

Partially Met – BOP provided evidence that satisfies about half of the criterion;

Minimally Met – BOP provided evidence that satisfies a small portion of the criterion;

Not Met – BOP provided no evidence that satisfies any of the criterion.

- DOJ officials reported being satisfied with BOP’s cost estimation methods, noting that they could not identify any area needing improvement.



Objective 2 – BOP’s Methods for Estimating Costs in its Annual Budget Requests to DOJ Largely Reflect GAO Best Practices

Table 1: Extent to Which BOP’s Cost Estimating Methods Reflect GAO Best Practices

Best practice	Explanation	Satisfied?
Accurate	The cost estimates should provide for results that are unbiased and should not be overly conservative or optimistic. In addition, the estimates should be updated regularly to reflect material changes in the program, and steps should be taken to minimize mathematical mistakes and their significance. Among other things, the estimate should be grounded in a historical record of cost estimating and actual experiences on comparable programs.	Met
Well documented	The cost estimates should have clearly defined purposes and be supported by documented descriptions of key program or system characteristics. Additionally, they should capture in writing such things as the source data used and their significance, the calculations performed and their results, and the rationale for choosing a particular estimating method. Moreover, this information should be captured in such a way that the data used to derive the estimate can be traced back to, and verified against, their sources. The final cost estimate should be reviewed and accepted by management.	Substantially met

Source: GAO analysis.



Objective 2 – BOP’s Methods for Estimating Costs in its Annual Budget Requests to DOJ Largely Reflect GAO Best Practices

Table 1 (continued)

Best practice	Explanation	Satisfied?
Credible	The cost estimates should discuss any limitations in the analysis performed due to uncertainty surrounding data or assumptions. Further, the estimates' derivation should provide for varying any major assumptions and recalculating outcomes based on sensitivity analyses, and their associated risks/uncertainty should be disclosed. Also, the estimates should be verified based on cross-checks using other estimating methods and by comparing the results with independent cost estimates.	Substantially met
Comprehensive	The cost estimates should include both government and contractor costs over the program's full life cycle, from the inception of the program through design, development, deployment, and operation and maintenance to retirement. They should also provide an appropriate level of detail to ensure that cost elements are neither omitted nor double counted and include documentation of all cost-influencing ground rules and assumptions.	Substantially met

Source: GAO analysis.



Objective 2 – BOP’s Cost Estimating Methods Met Characteristics for Accuracy

Consistent with best practices, BOP used relevant historical cost data and considered adjustments for general inflation when estimating costs for its fiscal year 2008 budget request to DOJ, and its methods for projecting inmate population have been largely accurate.

- BOP officials reported estimating costs for medical care and utilities for the budget year in question based on historical obligations over the prior three to five years. For example, BOP provided documentation that officials reported using to develop BOP’s fiscal year 2009 inmate medical care cost estimate showing BOP’s annual non-salary inmate medical care costs had increased an average of about 10 percent annually between fiscal years 2003 and 2005.¹²

¹² Non-salary inmate medical care costs refer to the amount BOP spent on pharmaceuticals, medical supplies, and outside medical care (community hospital services and a portion of guard escort service and a portion of salaries (overtime)).



Objective 2 – BOP’s Cost Estimating Methods Met Characteristics for Accuracy

- BOP’s total inmate population projections were accurate, on average, to within 1 percent of the actual inmate growth from fiscal year 1999 to August 20, 2009.
 - BOP overestimated the inmate population for 8 of the 11 fiscal years reviewed.
- Figure 5 compares BOP’s projected population levels as reflected in the President’s request compared to the actual inmate populations at the end of each fiscal year, 1999 to 2009 (projected).
- Table 2 presents the difference between the projected and actual population increases.

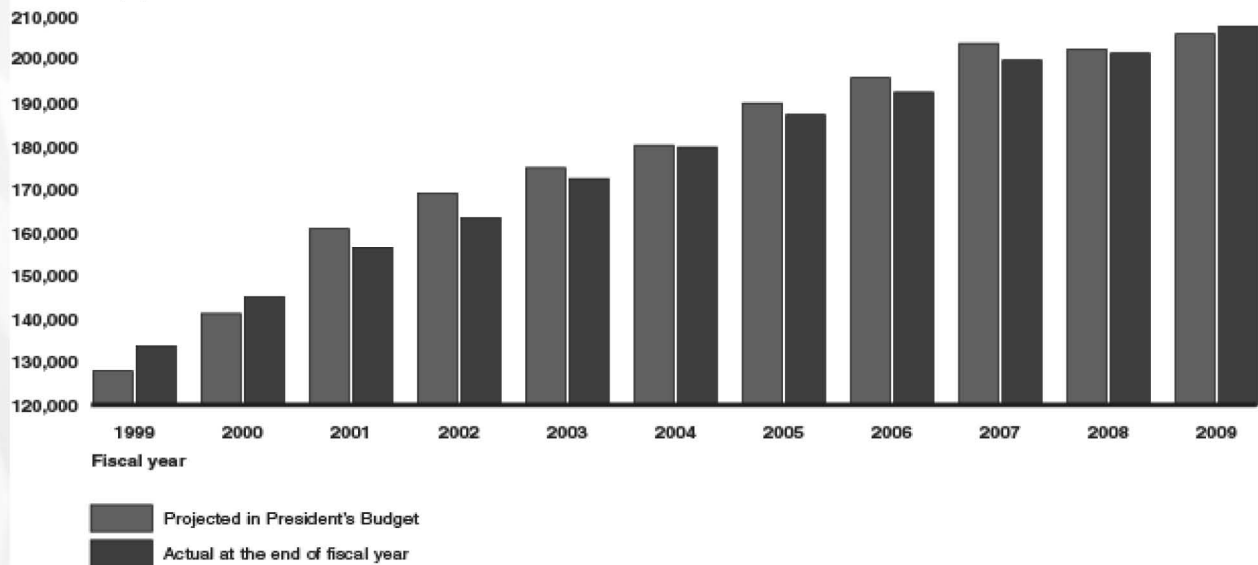
33



Objective 2 – BOP's Population Projections Have Been Largely Accurate

Figure 5

BOP inmate population



Note: Actual inmate population for fiscal year 2009 as of August 20, 2009.

Source: GAO analysis of BOP data.

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Objective 2 – BOP’s Population Projections Have Been Largely Accurate

Table 2

Fiscal year	Inmate population level		Difference
	Projected	Actual	
1999	127,902	133,689	-5,787
2000	141,282	145,125	-3,843
2001	160,919	156,572	4,347
2002	169,217	163,436	5,781
2003	175,126	172,499	2,627
2004	180,279	179,895	384
2005	190,004	187,394	2,610
2006	195,972	192,584	3,388
2007	203,880	200,020	3,860
2008	202,584	201,668	916
2009	206,165	207,872	-1,707

Note: Actual inmate population for fiscal year 2009 as of August 20, 2009.
Source: GAO analysis of BOP data.

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Objective 2 – BOP’s Cost Estimating Methods *Substantially Met* Characteristics for Being Well Documented

Consistent with best practices, BOP clearly defined the purpose of its cost estimates, and its calculations and results substantially met characteristics for being well documented.

- We reviewed BOP’s fiscal year 2008 budget request to DOJ and supporting documentation and found budget officials had documented the formulas they used to calculate cost elements for new initiatives, such as activation-related costs for a new prison facility planned to open in the budget year.
- In some cases, however, we required the guidance of BOP budget analysts to identify backup support because the documentation was insufficient to allow someone unfamiliar with the budget to locate detailed corroborating data. For example, in reviewing BOP’s fiscal year 2008 cost estimate for a health service initiative related to expanding kidney dialysis, we required a budget official’s assistance in locating supporting formulas used to calculate the estimate. Best practices include providing enough detail so that the documentation serves as an audit trail to allow for clear tracking of cost estimates over time.
- Documenting all steps for developing its cost estimate would better position BOP to recreate its estimates in the event of attrition within its budget office among those who have developed initial cost estimates.

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Objective 2 – BOP’s Cost Estimating Methods *Substantially Met* Characteristics for Credibility

Consistent with best practices, BOP performed independent government cost estimates related to constructing new prisons and used historical data to estimate key operational costs, including utilities and inmate medical care, and its calculations and results substantially met characteristics for credibility.

- BOP performed cross-checks by benchmarking new estimates against historical data, such as by estimating medical care costs based on cost obligations in recent years and developed numerous risk analyses and impact scenarios of funding cuts.
- Although not required to do so by OMB or DOJ annual budget development guidelines, BOP did not perform an uncertainty analysis consistent with best practices to quantify the risk associated with changes to various assumptions that drive its cost estimates.¹³ Major assumptions include the inmate population projection; inflation indices for medical care and utilities; and annual salary increases.
- Such an analysis would help provide DOJ, Congress, and other stakeholders with information to determine the probability that costs for key operations, such as inmate medical care and utilities, may exceed funding levels requested in the President’s budget.

¹³ An uncertainty analysis provides a range of costs that span a best and worst case spread. According to best practices, it is better for decision makers to know the range of potential costs that surround an estimate and the reasons behind what drives that range rather than just having a point estimate from which to make their decision.



Objective 2 – BOP’s Cost Estimating Methods *Substantially Met* Characteristics for Being Comprehensive

Consistent with best practices, BOP detailed pertinent costs related to its S&E and B&F accounts across sub-accounts. This level of detail helped ensure that no cost elements were omitted or double counted in its budget request submission to DOJ, and that BOP’s calculations and results substantially met characteristics for comprehensiveness.

- BOP relied on ground rules and assumptions, such as using inmate population projections to drive cost estimates for capacity needs and using historical obligation trends to estimate growth for utilities and inmate medical care costs.
- However, as noted earlier, BOP did not determine risk distributions for all assumptions, which would enable it to perform an uncertainty analysis for key cost elements.



Objective 3 – To what extent have BOP’s costs for key operations exceeded requested funding levels in the President’s budget in the last five fiscal years, and how has this affected BOP’s ability to manage its growing inmate population?

Costs for key operations to maintain basic services, such as those for inmate medical care and utilities, have exceeded the funding levels requested in the President’s budget over the past five fiscal years, and this has limited BOP’s ability to manage its growing inmate population.

- From fiscal years 2004 through 2008, the funding levels requested in the President’s budget for BOP have been insufficient to cover annual cost growth for maintaining existing services, including inmate medical care and utilities. Moreover, population adjustment funding—necessary to cover expenses associated with housing a growing inmate population in BOP-operated facilities—has not consistently been included in the President’s budget, with BOP receiving no funding adjustments in some years.
- As a result, BOP has faced funding gaps in its operations account that has left it with limited flexibility to manage its continually growing inmate population.



Objective 3 – Costs to Maintain Key Operations and Accommodate a Growing Inmate Population Have Exceeded Funding Levels Requested in the President’s Budget

BOP’s annual cost growth to maintain key operations exceeded annual funding adjustments requested in the President’s budget from fiscal years 2004 through 2008. For example, during this time, costs for non-salary inmate medical care and utilities exceeded funding levels by about \$131 million and \$55 million, respectively. BOP attributed the cost growth to inflation and inmate population growth.¹⁴

Medical care costs: From fiscal year 2004 through 2008, BOP’s annual non-salary inmate medical care costs increased by about \$146.5 million. In contrast, during this period, the President’s budget requested funding cost adjustments for non-salary inmate medical care totaling about \$15.4 million.

¹³ In fiscal year 2008, non-salary inmate medical care and utilities costs were \$430.5 million and \$234 million, respectively.



Objective 3 – Costs to Maintain Key Operations and Accommodate a Growing Inmate Population Have Exceeded Funding Levels Requested in President’s Request

Utilities costs: From fiscal year 2004 through 2008, BOP’s annual utilities costs increased by a total of \$87 million. In contrast, during this period, the President’s budget requested funding cost adjustments for utilities costs totaling about \$31.6 million.

- Table 3 compares the rates of BOP’s average annual cost growth for non-salary inmate medical care and utilities to average rates of annual funding adjustments requested in the President’s budget, from fiscal year 2004 through 2008.



Objective 3: Historical Cost Growth Has Exceeded Funding Adjustments in the President's Request

Table 3

	Average annual rate of cost growth incurred by BOP, fiscal years 2004 through 2008	Average annual rate of funding growth in President's budget request, fiscal years 2004 through 2008
Inmate medical care (non-salary)	8.7%	0.9%
Utilities	9.8%	3.2%

Source: GAO analysis of BOP data.

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Objective 3 – Costs to Accommodate a Growing Inmate Population and Maintain Staffing Levels Have Exceeded Funding Adjustments Requested in the President’s Budget, According to BOP

In some years, the President’s request for BOP has included funding adjustments for marginal costs associated with inmate population growth in existing BOP facilities.¹⁵ However, BOP budget officials reported that this cost adjustment has not included necessary funding to hire additional correctional officers to maintain inmate to corrections staff ratios and effectively manage the new population.

- For example, the most recent institution population adjustment request, in fiscal year 2009, included \$17.1 million to house a projected net increase of 1,807 inmates in existing BOP facilities.¹⁶
- In fiscal year 2009, BOP reported an inmate to corrections officer ratio of about 10 to 1 (the number of inmates supervised per corrections officer).
- BOP budget officials reported that BOP would need to hire 180 additional corrections officers to maintain this ratio for the 1,807 new inmates. However, according to salary and benefits cost assumptions provided by BOP budget officials, the staffing portion of the adjustment provided funding equivalent to staffing 46 additional corrections officers.

¹⁵Marginal costs include providing security, food, medical care, clothing, unit management, education, records, and maintenance associated with additional inmates entering existing BOP facilities.

¹⁶BOP uses a standard DOJ marginal cost per inmate rate. In fiscal year 2009, this rate was \$9,483.



Objective 3 – Because BOP’s Operations Funding Has Not Kept Pace with Annual Growth, BOP Continues to Face Challenges Managing its Growing Inmate Population

When BOP has not received funding to cover operational cost increases it has incurred, in some years BOP had used S&E funding planned for other areas to cover these costs.

- Though one of BOP’s highest priorities is to increase staffing levels of corrections officers, BOP officials report using S&E funds in fiscal years 2008 and 2009 initially planned for hiring additional officers to instead cover base operations cost increases related to inmate medical care, utilities, and personnel salary and benefit adjustments that have been unfunded in the President’s budget requests.
- In the President’s fiscal year 2010 budget request, \$70 million is included as a line item for additional BOP staffing. However, BOP officials reported that this funding, if received, is to be used, in part, to cover existing employees’ mandatory pay and benefit increases, and other operations cost increases.



Objective 3 – BOP Has Limited Flexibility in Managing Funding Gaps

As with any other DOJ component, BOP's budget requests are governed by standard DOJ and OMB budget development guidance.

- For example, DOJ budget development guidance for fiscal years 2008 and 2009 instructed components to limit cost growth for current services to no more than 4 percent greater than prior year levels.
- DOJ reported that the 4 percent cap guidance is a general instruction given to all components but recognizes that BOP is different because its costs are less discretionary. Furthermore, DOJ reported that it did not automatically reject budget submissions from components that exceeded the cap, but instead required components to submit substantive information to justify need.



Objective 3 – BOP Has Limited Flexibility in Managing Funding Gaps

- DOJ reported that OMB does not automatically provide funds for inflationary cost increases. DOJ cited OMB policy stating that inflationary adjustments for discretionary costs (such as utilities) can include some, all, or no allowance for inflation. DOJ officials reported that OMB typically does not include general inflationary adjustments that DOJ submits on behalf of BOP when it formulates the President's request.
- However, DOJ has reported to OMB that, if faced with funding shortfalls similar to what BOP has faced in its operations budget, other DOJ components could reduce operations, implement across-the-board hiring freezes, and implement policy changes that would reduce costs. However, with almost all of its S&E costs fixed,¹⁷ DOJ reported that BOP has limited flexibility in these areas, and has already implemented significant reductions to programs, such as streamlining and centralizing administrative functions to eliminate 2,300 positions.

¹⁷ According to BOP data, in fiscal years 2007 and 2008, 99.5 percent of BOP's S&E budget was fixed—that is, for paying staff salaries, and providing services to house and care for the inmate population.



Conclusions

In each of the last 2 fiscal years, BOP has needed additional funding to meet its operating costs.

- However, we found that BOP's cost estimation methods either met or substantially met GAO's cost estimating best practices.
- Further, BOP officials report, and DOJ officials acknowledged, that BOP has already implemented significant reductions in programs by eliminating positions and centralizing administrative functions.
- In addition, the current level of overcrowding within BOP facilities presents an already serious safety challenge. Given BOP's unique responsibility for managing this population, it has limited discretion when costs for key operations exceed funding levels.

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Conclusions

In light of these circumstances, BOP's budget cost estimation practices could be strengthened in two ways:

- First, although BOP, like other DOJ agencies, is not required to report the extent to which actual costs may be expected to vary from cost estimates, we have identified the provision of an uncertainty analysis as a best practice. If BOP identified its level of cost estimation confidence and provided this information to DOJ, DOJ could more fully understand the range of potential costs—and the potential need for more funding—if estimating assumptions for key cost drivers, such as inmate population growth, do not hold true.
- Second, by improving documentation of all steps for developing its cost estimate, BOP would be better positioned to recreate its estimates in the event of attrition within its budget office among those who have developed initial cost estimates.



Recommendations

To improve transparency in BOP's cost estimation process, as well as DOJ's annual budget formulation and justification process, and to provide DOJ with more detailed information to consider when deliberating its budget proposal for BOP, we recommend that the Attorney General of the United States take the following two actions:

- instruct the BOP Director to require the BOP budget staff to conduct an uncertainty analysis quantifying the extent to which operations costs could vary due to key cost assumptions changing and submit the results along with budget documentation to DOJ so that DOJ could be aware of the range of likely costs and associated confidence levels; and
- instruct the BOP Director to require the BOP budget staff to improve documentation of calculations used to estimate its costs.



Agency Comments

- We provided a draft of this report to DOJ and BOP for review and comment. We also verbally described our findings and proposed recommendations to DOJ and BOP officials in a meeting on August 31, 2009. Additionally, we received technical comments from DOJ and BOP, which we incorporated where appropriate.
- DOJ and BOP generally agreed with the findings. DOJ and BOP will formally review our recommendations when we submit our final product in fall 2009.
- We made several requests to meet with OMB, but we were unable to schedule a meeting during our review.

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Appendix I – GAO’s 12 Step Cost Estimating Practices

Initiation and research

Your audience, what you are estimating, and why you are estimating it are of the utmost importance

Assessment

Cost assessment steps are iterative and can be accomplished in varying order or concurrently

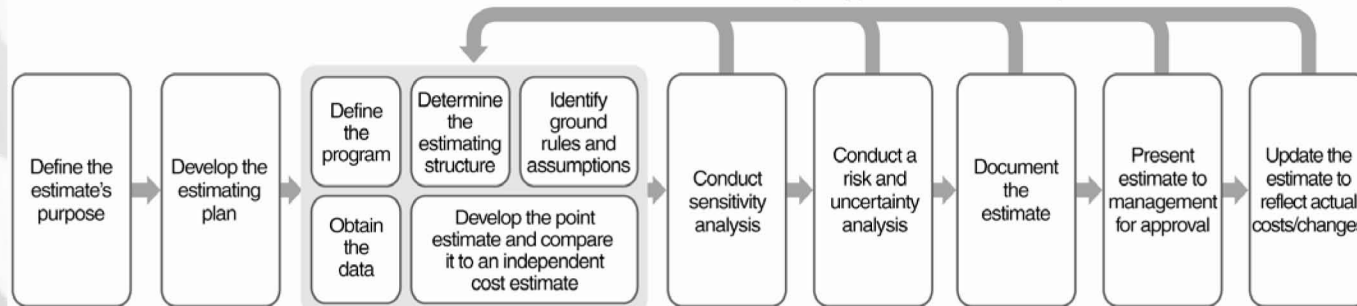
Analysis

The confidence in the point or range of the estimate is crucial to the decision maker

Presentation

Documentation and presentation make or break a cost estimating decision outcome

Analysis, presentation, and updating the estimate steps can lead to repeating previous assessment steps



Source: GAO.

Appendix II: Comments from the Department of Justice, Federal Bureau of Prisons

Appendix II: Comments from the Department of Justice, Federal Bureau of Prisons



U.S. Department of Justice

Federal Bureau of Prisons

Office of the Director

Washington, DC 20534

November 4, 2009

David C. Maurer, Director
Homeland Security & Justice Issues
U.S. Government Accountability Office
Seattle, WA 98104

Dear Mr. Maurer:

The Bureau of Prisons (BOP) appreciates the opportunity to formally respond to the Government Accountability Office's draft report entitled Bureau of Prisons: Methods for Cost Estimation Largely Reflect Best Practices, but Quantifying Risks Would Enhance Decisionmaking. We have completed our review of the information reflected in the report and offer the following comments.

First, we concur with the GAO assessment and its findings that the BOP process is "well defined", and that the data and estimates are "well documented, accurate and credible". Furthermore, we agree with GAO that funding gaps in the BOP operations account have left the BOP "... with limited flexibility to manage its continually growing inmate population." Finally, we concur with the two GAO recommendations as explained below.

Recommendation 1: Instruct the BOP Director to require the BOP budget staff to conduct an uncertainty analysis quantifying the extent to which operations costs could vary due to changes in key cost assumptions and submit the results along with budget documentation to DOJ so that DOJ could be aware of the range of likely costs and BOP's associated confidence levels.

Response: The BOP agrees with this recommendation. To increase transparency, BOP believes that including the results of uncertainty analysis in the budget document will provide all decisionmakers (DOJ, OMB, and the Congress) better context for decisionmaking. The BOP already provides in its Buildings and

**Appendix II: Comments from the Department
of Justice, Federal Bureau of Prisons**

Facilities Budget a range of potential project costs, which alerts the decisionmaker to potential cost fluctuations such as those we have seen in the past few years. The BOP looks forward to working with the GAO and learning more about the analysis program they recommend.

The BOP will accomplish this recommendation with its 2012 budget cycle beginning in the Spring Call, and if time permits, the BOP will work with the DOJ and OMB to incorporate it into the President's 2011 Budget.

Recommendation 2: Instruct the BOP Director to require the BOP budget staff to improve documentation of calculations used to estimate its costs.

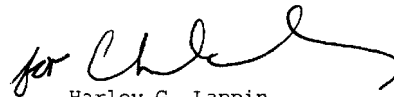
Response: The BOP agrees with this recommendation. To increase transparency, it is critical that the reader/evaluator of the budget request be provided sufficient information to understand how the mandatory costs (i.e., medical, utility, food expenses) were derived and how capacity and staffing changes will need to be adjusted accordingly.

The BOP's corrective action is to include its multi-year population projection table (Budget year + 5) and corresponding crowding table which demonstrate how the request supports the projected population and how it tracks with the growth. In addition, pertinent annualization and inflation factors from BOP supporting documentation will be included to make the budget request more transparent and easier to understand.

Finally, consistent with the discussion in the GAO report, the BOP proposes to add historical spending information graphics for mandatory expenses such as pay increases, medical, utilities and food costs. This would provide additional context and insight for the reader.

If you have any questions regarding this response, please contact VaNessa P. Adams, Assistant Director, Program Review Division, at (202) 616-2099.

Sincerely,


Harley G. Lappin
Director

**Appendix II: Comments from the Department
of Justice, Federal Bureau of Prisons**

cc: Richard Theis, Assistant Director
Audit Liaison Group, JMD

Appendix III: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments

In addition to the contact named above, Joy Gambino, Assistant Director, and Jay Berman, Analyst-in-Charge, managed this assignment. Pedro Almoguera, Tisha Derricotte, Geoffrey Hamilton, Marvin McGill, Karen Richey, Adam Vogt, and Melissa Wolf made key contributions to this report.

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