

GAO

Report to the Honorable
Andy Jacobs, Jr., House of
Representatives

February 1989

ARMY PROCUREMENT

Fort Benjamin Harrison's Commercial Activity Study Should Be Redone or Updated



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**National Security and
International Affairs Division**

B-230646

February 24, 1989

The Honorable Andy Jacobs, Jr.
House of Representatives

Dear Mr. Jacobs:

This report responds to your request that we evaluate the ongoing commercial activity study for base support operations at Fort Benjamin Harrison, Indiana. It discusses whether Fort Benjamin Harrison's study complies with applicable procedures and regulations and whether the study will achieve the desired results. Our report also addresses the question of whether Fort Benjamin Harrison has gathered sufficient data to permit converting the planned cost-plus-award-fee contract to a fixed-price contract when such action is determined to be advantageous to the government.

Results in Brief

We found that Fort Benjamin Harrison's study does not comply, in all respects, with applicable procedures and regulations. Specifically, the study is based on work load data that is not current and, as a result, may not accurately reflect the work to be performed. Unless the study is redone or updated, the Army will not have adequate assurance that contractor and in-house proposals are representative of the work to be performed. In addition, if a contract is awarded, Fort Benjamin Harrison officials plan to use a cost-type contract. The Federal Acquisition Regulation (FAR) generally encourages the use of fixed-price contracts. However, Fort Benjamin Harrison officials have not collected all the data needed to permit the use of a fixed-price contract.

The results of our review are summarized in this letter and are discussed more fully in appendix I. Our objectives, scope, and methodology are discussed in appendix II.

Background

Fort Benjamin Harrison initiated its "commercial activity study" in August 1983 to determine whether required services such as maintenance for buildings, grounds, and utilities could be provided more economically by private contractors. Such studies are required by Office of Management and Budget (OMB) Circular A-76. Both OMB Circular A-76 and Army Regulation 5-20 require that all known and anticipated changes be included in work load data contained in the commercial activity study.

Fort Benjamin Harrison issued its request for contractors' proposals on May 1, 1987. Responses from contractors are currently being evaluated by an Army board, and a comparison with in-house costs is scheduled for March 1989. Original and revised milestone dates for these key events and others are listed in appendix III. If a contract is awarded, the base contract period is expected to be from December 1, 1989, to September 30, 1990, with four option periods extending through September 30, 1994. In the event of such a contract, about 300 government workers would be reassigned to other work, or their employment would be terminated. However, displaced government employees have the right of first refusal to job openings under a contract if they are qualified for the positions.

Commercial Activity Study Based on Outdated Work Load Data

Fort Benjamin Harrison initiated the commercial activity study in August 1983. While the study has continued through 1988, the work load data, which constitutes significant input to the study and to the request for contractor proposals, has been updated to include only fiscal year 1985 information. As a result, more recent facility changes, such as facility expansion and the replacement of antiquated barracks with new energy-efficient housing, have not been recognized. These changes could substantially affect the amount and type of repairs and maintenance required. Thus, there is inadequate assurance that the contractors or the in-house work force have submitted proposals on work that will be required during the performance period. Army Regulation 5-20 and the Army's Training and Doctrine Command's (TRADOC) policy require that current data be used and that it be representative of the work to be performed.

Fort Benjamin Harrison's Chief of Staff decided not to update work load data beyond fiscal year 1985 because he considered fiscal years 1986 and 1987 to be abnormal due to the effort required to support the Pan American games. He was concerned that an analysis of this data to eliminate the abnormal work would further delay the study. Department of Defense (DOD) and Army officials said that they believe that, even though the study has not been updated since 1985, the work load data used is "reasonably" current and accurate and that any necessary updates can be made later if a contract is awarded.

Our analysis of the type and extent of the facility changes that have occurred since fiscal year 1985 shows that they are of a permanent type and will probably have a continuing effect on the maintenance and support work to be performed. For example, since fiscal year 1985, new

construction has totaled over 350,000 square feet, and 27 old buildings, with a total of about 139,000 square feet of space, have been demolished.

Data Needed to Permit Fixed-Price Contracting

If a contract is awarded, Fort Benjamin Harrison anticipates using a cost-plus-award-fee contract extending up to 5 years. The FAR encourages the use of fixed-price contracts as generally being in the government's interest. Fort Benjamin Harrison officials proposed the use of a cost-type contract because the data needed to define the work to be performed in sufficient detail for fixed-price contracting had not been collected. According to one Fort Benjamin Harrison official, systems are in place to collect the necessary data but, because of the elimination of administrative positions, only about 70 percent of the data is routinely collected. However, the Fort Benjamin Harrison Chief of Staff stated that if a contract is awarded, it may be possible to use contractor data to award a fixed-price contract at a later date. DOD and Army officials generally agreed that Fort Benjamin Harrison should collect the data needed to permit fixed-price contracting.

Conclusions

Fort Benjamin Harrison's study is based on outdated work load data, which may no longer be representative of the work to be performed. As a result, Fort Benjamin Harrison officials do not have adequate assurance that the commercial activity study will help them identify the most favorable method (in-house or contract) of performing the work. We believe that Fort Benjamin Harrison needs to initiate a new study or modify its existing study to reflect changes to the work load that have occurred since fiscal year 1985. This action is needed to assure all involved, including the affected employees at Fort Benjamin Harrison and potential contractors, that the commercial activity study has been conducted in full compliance with regulations and that it will result in the work's being performed in the most efficient and cost-effective manner.

If a contract is awarded, Fort Benjamin Harrison officials plan to use a cost-type contract because the data needed to permit fixed-price contracting has not been collected. Even though the FAR generally encourages the use of fixed-price contracts, we recognize that it might not be possible to collect the necessary data in time to award a fixed-price contract initially. The FAR does allow the use of cost-plus-award-fee contracts in such cases. We believe, however, that Fort Benjamin Harrison should begin to collect the data necessary for a fixed-price contract.

Once this data is collected, the Army will have the opportunity to use whichever method of contracting best fits the circumstances. If this data is not collected, the Army will not have the option to award a fixed-price contract.

Recommendations

We recommend that the Secretary of the Army direct the Commanding General of Fort Benjamin Harrison to take the following actions concerning the ongoing commercial activity study and possible contract award:

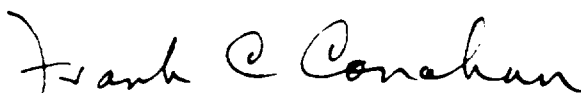
- Prepare a new or modify the existing commercial activity study in accordance with OMB and Army regulations, using work load data that accurately projects the work likely to be required during the period under consideration.
- Begin to collect the work load information needed to permit the award of a fixed-price contract in the event that the Army determines that this method of contracting is advantageous to the government.

As requested, we did not obtain official agency comments on this report. However, we discussed its contents with Fort Benjamin Harrison, Army Headquarters, and DOD officials and incorporated their views where appropriate.

As arranged with your office, we are sending copies of the report to interested congressional committees, other Members of Congress, and the Secretaries of Defense and the Army. Copies will be made available to other parties upon request.

This report was prepared under the direction of Richard Davis, Director, Army Issues. Other major contributors are listed in appendix IV.

Sincerely yours,



Frank C. Conahan
Assistant Comptroller General

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Abbreviations

DOD	Department of Defense
FAR	Federal Acquisition Regulation
GAO	General Accounting Office
OMB	Office of Management and Budget
TRADOC	Training and Doctrine Command

Fort Benjamin Harrison's Commercial Activity Study

The Office of Management and Budget (OMB) states that, as a general policy, the government should rely on the private sector for products and services when they are available, cost-effective, and consistent with other requirements. To implement the policy, OMB's Circular A-76 requires each agency to review commercial activities once every 5 years to determine whether it is more economical to retain commercial work in-house or to contract the work to private companies. The required review consists of two major parts:

- a management study that develops a most efficient in-house organization and becomes the basis for an in-house estimate and
- a performance work statement that describes the work required, provides the criteria on how quality will be measured, and serves as the basis for contractor bids.

The activity responsible for evaluating commercial activities conducts the management study and develops the performance work statement. As part of the management study, it prepares a most efficient organization document, which contains an estimate of the lowest number and the types of employees required to perform the functions described in the work statement. From this data and other estimated costs associated with in-house performance, the total estimated cost for in-house performance is prepared. For contractor performance, the selected bid or offer (the proposal most favorable to the government) is added to other estimated costs, such as contract administration, to develop a total estimated cost for contracting out. OMB's Cost Comparison Handbook, a supplement to the Circular, furnishes the guidance for computing cost comparison amounts. Department of Defense (DOD) Instruction 4100.33 and Army Regulation 5-20 furnish additional implementation guidance.

Circular A-76 further requires an independent review of the in-house and contract cost estimates to ensure that they are based on the same scope of work and include all significant costs. For the Army, this independent review is conducted by the Army Audit Agency.

The responsible activity (in this case, Fort Benjamin Harrison) then compares the two estimates to determine which alternative is more cost-effective. If the total estimated cost to contract out shows a savings of more than 10 percent of the estimated in-house personnel costs, a contract is awarded, and the government work force is reassigned, or employees' positions are terminated. Employees whose positions have been terminated have the right of first refusal to job openings under the contract. If the functions remain in-house, the activity performing those

functions is required to realign itself to conform with the most efficient organization document to ensure that the anticipated cost savings are realized.

Work Load Data Used to Support A-76 Process Is Too Old

Current, accurate, and relevant data is essential to the OMB Circular A-76 process in order to ensure equitable cost comparisons. According to Army Regulation 5-20, the importance of using current cost data can not be overemphasized since it is used as the basis for future years' costs. The Army's Training and Doctrine Command (TRADOC) also recognizes the importance of using current and relevant data in commercial activity studies. In a March 13, 1985, message concerning cost data perishability and work load validation, TRADOC emphasized that in-house cost estimates should be based on the most current relevant data that can be obtained. TRADOC also emphasized that work load data is only viable as long as it is reasonable, current, and reflects what the work load will likely be during the contract performance period.

Fort Benjamin Harrison's study is based on fiscal year 1985 work load data. Work load changes occurring after that time are not included. The Fort Benjamin Harrison Chief of Staff decided not to update the work load data to include changes occurring after September 30, 1985, because (1) he considered fiscal years 1986 and 1987 to be abnormal work years due to the effort required to support the 1987 Pan American games held in nearby Indianapolis and (2) he did not want to further delay completion of the study.

Since fiscal year 1985, Fort Benjamin Harrison has undergone the major facility changes shown in table I.1. The impact of the changes on the type of repairs, maintenance, and other support activities required will likely, in our opinion, be of a permanent nature. Further, they could substantially alter the scope of work that will be required during the performance period. For example, a modernization program has increased net building space by 212,410 square feet. New construction totaled 351,229 square feet, and 27 old buildings containing 138,819 square feet have been demolished. New construction included four modern barracks, totaling 273,620 square feet.

Appendix I
 Fort Benjamin Harrison's Commercial
 Activity Study

Table I.1: Facility Changes at Fort Benjamin Harrison Completed Between Fiscal Years 1986 and 1988

	October 1985	September 1988	Increase
Square feet of building space	4,471,099	4,683,509	212,410
Square feet of surfaced areas	126,103	136,904	10,801
Parking spaces	13,194	13,904	710
Linear feet of utilities	1,026,257	1,108,055	81,798
Troop capacity of barracks	2,533	3,365	832

In addition, Fort Benjamin Harrison has initiated other projects, such as the following, which will affect the work load during the contract performance period:

- A 70,400-square-foot barracks is being constructed to replace eight temporary World War II buildings that contained open bay living areas, group latrines, and antiquated heating, plumbing, and electrical systems. These temporary buildings had been generating excessive repair and maintenance costs.
- A 270-unit substandard family housing project with inadequate electrical, plumbing, and heating systems is being upgraded to include the installation of central air conditioning and other energy-related improvements. This modernization effort will reduce energy consumption, maintenance, and repair.
- Central air conditioning is planned for 45 other family housing units, which will require maintenance and repairs not included in the performance work statement.
- Extensive repair work (including the removal of asbestos; the modification of heating, ventilating, and air conditioning systems; and changes to the lighting and fire protection systems) is planned for the Army Finance Center, a 1.6 million-square-foot building. The impact of this work on the performance work statement has not been determined.

As early as September 1986, Fort Benjamin Harrison officials recognized that, because of delays being encountered, the fiscal year 1985 work load data was becoming old. In a message to TRADOC, a Fort Benjamin Harrison official expressed concern that the fiscal year 1985 data might not fit TRADOC's most current and relevant criteria much longer. At that time, however, the Fort Benjamin Harrison official concluded that efforts required to redo the study would outweigh the benefits.

In November 1986, TRADOC replied that it appeared that the problems causing the delay would soon be resolved. TRADOC did not, however,

respond directly to the issue of whether fiscal year 1985 work load data met TRADOC's criteria for current and relevant data.

Completion of the Study Has Been Delayed

Fort Benjamin Harrison initially planned to complete its commercial activity study by March 1987, but several factors caused delays. It is not possible to reconstruct the precise periods of delay attributable to each, but important factors involved (1) support for the 1987 Pan American games, which diverted resources and personnel; (2) the delayed approval of required administrative documents; and (3) the discovery and correction of numerous errors and inconsistencies in key study documents.

In August 1987 the Pan American games were held in nearby Indianapolis, Indiana. Fort Benjamin Harrison housed athletes during the games, and the Fort's public works personnel were involved in many support activities, such as the design, inspection, and installation of electrical facilities. In December 1985, a decision was made to delay the solicitation of proposals until after the games in order to avoid the possibility of a transition to a contractor right at the critical time for the Pan American games.

At times during the study, administrative delays occurred because OMB revised cost factors needed to compile the in-house estimate. For example, the process was delayed until January 1987, because OMB was establishing retirement cost factors for employees hired after 1983 under the Federal Employees' Retirement System Act of 1986. Further delays were encountered in obtaining required approvals from headquarters. For example, it took Fort Benjamin Harrison 13 months and seven revisions to obtain the Army's approval of one key study document.

The study was further delayed because key documents (the management study and the performance work statement) contained significant errors, omissions, and inconsistencies. Several amendments, issued between August 1986 and September 1988, were needed to resolve problems such as the following:

- The Army Audit Agency identified numerous task and work load inconsistencies between the management study and the performance work statement. For example, the management study showed that the Buildings and Grounds Branch of the Public Works Division had completed 5,541 service orders during fiscal year 1985, but no comparable work load data was in the performance work statement. Consistency between

the two documents is needed to ensure that both the in-house estimate and the contractor proposals are based on the same scope of work.

- The Army Audit Agency also found that work load data was included in the performance work statement for services no longer required. For example, maintenance work was included for an ice skating rink that no longer existed. The performance work statement should not include work unless it is expected to be performed during the contract performance period.
- Fort Benjamin Harrison's employees provided input showing that property lists in the performance work statement were incomplete. Accurate property lists are important in order for contractors to estimate the volume of future repair work.
- The performance work statement contained incorrect page and paragraph citations throughout, which made it difficult to understand the services required.

Problems Still Exist in the Performance Work Statement

The amendments to the performance work statement corrected many of the study's deficiencies. However, other problems were not corrected. In December 1987, the Army board responsible for evaluating contractor proposals found that the performance work statement still needed clarification on services required and contained inconsistent work load data. For example, the board noted that the performance work statement

- included a statement that road shoulders should be maintained to protect the basic pavement structure, eliminate traffic hazards, and provide proper drainage but did not describe the work required;
- required storm drainage systems to be inspected once each quarter but did not describe the type of inspection or the specific areas that needed inspection;
- expected contractors to respond within 24 hours to requests for additional grounds maintenance caused by special events but did not identify the special events or the specific work required; and
- indicated that utility cuts in pavements needed to be made and repaired 46 times a year but did not indicate the average length, width, or depth of the cuts.

We confirmed that these issues remain unresolved. In addition, we found numerous inconsistencies in the revised quality assurance plan, the part of the performance work statement that is used to determine whether services performed meet the work requirements. The plan contains (1) conflicting criteria on how quality will be measured, (2) different

work load requirements than those given in other sections of the performance work statement, and (3) vague or incorrect descriptions of how work should be inspected.

Fort Benjamin Harrison officials responsible for the commercial activity study are aware that problems still exist. They advised us that a management decision had been made to generally not correct the deficiencies identified by the Army board until after contract award or retention of the work in-house. However, deficiencies in the quality assurance plan will be corrected prior to the cost comparison.

Data Not Developed to Permit the Use of a Fixed-Price Contract

Fort Benjamin Harrison officials proposed the use of a cost-plus-award-fee contract on this solicitation because they believed that, with the limited data available, (1) work requirements were too difficult to articulate and (2) specific quantitative or objective work measurement was not feasible. The Chief of the Public Works Division informed us that, because of a reorganization that eliminated administrative positions, Fort Benjamin Harrison has less capability today to accumulate the data needed to solicit proposals on a fixed-price basis than it had when the original study began. If a contractor is selected to provide maintenance services, the only alternative, without definitive work load data, will be to exercise follow-on options on a cost-reimbursement basis.

Cost-reimbursement contracts shift much of the cost risk to the government. The Federal Acquisition Regulation (FAR) encourages the use of fixed-price contracts as generally being in the government's interest. However, cost-plus-award-fee contracts are considered suitable when the following three conditions are met:

“(i) The work to be performed is such that it is neither feasible nor effective to devise predetermined objective incentive targets applicable to cost, technical performance or schedule;

“(ii) The likelihood of meeting acquisition objectives will be enhanced by using a contract that effectively motivates the contractor toward exceptional performance and provides the Government with the flexibility to evaluate both actual performance and the conditions under which it was achieved; and

“(iii) Any additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits.”

The FAR also cautions that the contract amount, performance period, and expected benefits should be sufficient to warrant the additional administrative effort and cost involved. It further states that contracting officers should avoid the protracted use of a cost-reimbursement contract after experience provides a basis for firmer pricing.

The Department of the Army distributes guidance for the collection of performance data and the development of staffing standards to control manpower and equipment. Included are guidance on the distribution and use of available man-hours in work centers and detailed policies and procedures for the development of manpower staffing. The Chief of the Public Works Division informed us that Fort Benjamin Harrison has systems in place to collect the data needed to solicit a fixed-price contract but, because of the elimination of administrative positions, only about 70 percent of the data is routinely collected. Data not routinely collected includes a full and accurate accounting of the time spent on specific repairs, maintenance, and support activities. Fort Benjamin Harrison officials, however, did not provide us with any evidence that it would not be possible to collect the data needed to permit fixed-price contracting.

Agency Views and Our Evaluation

We discussed the results of our review with DOD, Department of the Army, and Fort Benjamin Harrison officials who agreed that (1) the study is based on fiscal year 1985 work load data, (2) major facility changes have occurred since fiscal year 1985, and (3) problems still exist in explaining the work required under the proposed contract. The officials disagreed, however, with our recommendation to prepare a new study or modify the existing one using work load data that projects the work likely to be required during the period under consideration. They believe that the work load data is "reasonably" current and accurate and that any differences can be corrected after contract award or retention of the work in-house.

Although there have been significant facility changes at Fort Benjamin Harrison since 1985, base officials have not assessed the impact of these changes on the work load data used in the study. Accordingly, we continue to believe that the study should be updated or redone so that the Army can ensure that contractor and in-house bids are representative of the work likely to be required during the proposed performance period.

DOD and Army officials expressed general agreement with our position on the need for Fort Benjamin Harrison to collect the data necessary to

**Appendix I
Fort Benjamin Harrison's Commercial
Activity Study**

permit fixed-price contracting. Once this data is collected, Army managers will have the option to award either a cost or a fixed-price type of contract.

Objectives, Scope, and Methodology

Our objective was to review Fort Benjamin Harrison's performance of a "commercial activity study" of its base support functions. Specifically, we sought to determine whether Fort Benjamin Harrison personnel had reasonably complied with prescribed regulations and procedures for conducting such a study and whether the study had achieved or substantially achieved the desired results.

In performing our work, we considered all the allegations concerning this study that were identified in Fort Benjamin Harrison's records or otherwise documented or brought to our attention by concerned parties. We did not, however, conduct an in-depth investigation of every allegation identified. We judgmentally categorized these allegations and considered their overall potential impact on the performance of the study and the study's results. A number of the allegations were related directly or indirectly to the basic study's deficiencies discussed in this report, particularly the age of the source data and the errors and omissions in that data.

We interviewed Fort Benjamin Harrison personnel responsible for the study as well as officials of the union that represents employees working at Fort Benjamin Harrison. We reviewed documentation at Fort Benjamin Harrison, including the management study, the performance work statement, and their amendments. We also reviewed the independent audit report and working papers prepared by the Army Audit Agency on the study and interviewed the auditor-in-charge of the audit. We analyzed the work load data that formed the basis for the study and other key indicators to determine whether significant changes had occurred since the study began.

As our criteria for evaluating the content and timing of commercial activity studies, we used OMB Circular A-76. Department of Defense Instruction 4100.33 and Army Regulation 5-20 provided additional implementation guidance. We used the FAR to evaluate whether cost-plus-award-fee options would be appropriate for the proposed contract.

As requested, we did not obtain official agency comments on this report. However, we discussed the results of our analyses, as well as other information, with Fort Benjamin Harrison, Army Headquarters, and Department of Defense officials. We considered their views in preparing this report.

We conducted our review from June 1988 through December 1988 in accordance with generally accepted government auditing standards.

Milestone Schedule

Milestone	Original		Revised	
	Start	End	Start	End
Management study	Aug. 1983	Nov. 1984	Aug. 1983	Dec. 1986
Performance work statement	Oct. 1983	Feb. 1985	Oct. 1983	June 1986
In-house costing	Dec. 1983	Jan. 1985	Dec. 1983	Feb. 1987
Acquisition plan	Oct. 1983	Mar. 1985	Oct. 1983	Mar. 1987
Solicitation/evaluation	Sept. 1985	June 1986	May 1987	Mar. 1989
Independent audit	Jan. 1985	Dec. 1985	May 1987	Nov. 1987
Contract award or cancellation of solicitation		• Oct. 1986		• July 1989
Decision/implementation		• Mar. 1987		• Sept. 1989

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