



DEPARTMENT OF THE ARMY
U.S. ARMY AUDIT AGENCY
Office of the Deputy Auditor General
Acquisition and Logistics Audits
3101 Park Center Drive
Alexandria, VA 22302-1596

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SAAG-IMT

2 September 2004

MEMORANDUM FOR The Director, The Army Basing Study Group

SUBJECT: Validation of Army Capacity Data for Base Realignment and Closure 2005, Headquarters and Support Activities Joint Cross-Service Group (Project Code A-2003-IMT-0440.046), Audit Report: A-2004-0484-IMT

1. You asked us to validate Army responses to the capacity data call that The Army Basing Study Group and six Joint Cross-Service Groups¹ will use for Base Realignment and Closure (BRAC) 2005 analyses. This is our report on the validation of Army capacity data call responses to questions the Headquarters and Support Activities Joint Cross-Service Group was interested in.
2. Generally, Army installation and leased properties' certified responses to capacity data call questions in the samples we validated were adequately supported with appropriate evidentiary matter and were accurate based on the criteria we applied. However, in some instances Army activities could not support their responses to the questions and did not accurately answer all questions. Details of our validation are in enclosure 1. The scope of our validation for the Headquarters and Support Activities Joint Cross-Service Group capacity questions is in enclosure 2. A flowchart of the 2005 Army basing study process is in enclosure 3.
3. We discussed these results with key personnel at the Army activities. They took corrective actions for the problems we identified and submitted certified changes to the Study Group for answers we identified as requiring correction. We also discussed these results with the Army representative on the Headquarters and Support Activities Joint Cross-Service Group. Consequently, this report does not contain any recommendations and is not subject to the official command-reply process described in AR 36-2.

¹ The Study Group did not collect capacity data for a seventh group—the Intelligence Joint Cross-Service Group. Accordingly, we will report data validation results for that group to the Deputy Chief of Staff, G-2.

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4. We appreciate the courtesies and cooperation extended to us during the capacity data validation. If you have any questions or need additional information, please contact Lawrence Wickens at 703-696-9769, Clarence Johnson at 410-278-4287, or me at 703-681-6020. We can also be contacted via e-mail at lawrence.wickens@aaa.army.mil, clarence.johnson@aaa.army.mil, or david.branham@aaa.army.mil.

FOR THE AUDITOR GENERAL:

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DAVID H. BRANHAM
Program Director
Installation Studies

CF:

Office of the Inspector General, DOD
Army Representative, Headquarters and Support Activities Joint
Cross-Service Group (Colonel Carla Coulson)

**VALIDATION OF ARMY CAPACITY DATA FOR
BASE REALIGNMENT AND CLOSURE 2005
HEADQUARTERS AND SUPPORT ACTIVITIES
JOINT CROSS-SERVICE GROUP**

WHAT WE VALIDATED

You asked that we validate Army installation and leased properties' responses to the capacity data call that The Army Basing Study Group and six Joint Cross-Service Groups will use for BRAC 2005 analyses. Our validation efforts focused on determining if responses were adequately supported and accurate. This enclosure summarizes the results of our validation efforts for Army capacity data that the Study Group collected, certified and provided to the Headquarters and Support Activities Joint Cross-Service Group. We will also include these results in our overall summary report on the capacity data call and the 2005 Army basing study process.

BACKGROUND

The Secretary of Defense initiated BRAC 2005 on 15 November 2002. The Secretary of the Army established the Deputy Assistant Secretary of the Army (Infrastructure Analysis) to lead the Army's efforts to support BRAC 2005. The Deputy Assistant Secretary directs The Army Basing Study Group, an ad hoc, chartered organization that serves as the Army's single point of contact for planning and executing the Army's responsibilities in the development of BRAC 2005 recommendations. The Study Group will gather and analyze certified data to assess the capacity and military value of Army installations, evaluate base realignment and closure alternatives, and develop recommendations for BRAC 2005 on behalf of The Secretary of the Army. The BRAC 2005 process requires certification of all data from Army installations, industrial base sites and leased properties; Army corporate databases; and open sources. A flowchart of the 2005 Army basing study process is at enclosure 3.

Enclosure 1

SCOPE AND METHODOLOGY

The Army's inventory included 88 installations and 11 leased properties that met the BRAC 2005 threshold for study. For the capacity data call, the Study Group sent each installation a total of 552 questions: 548 questions to answer, if applicable, and 4 questions pre-populated from Army databases. The Study Group also sent selected questions from the Headquarters and Support Activities Joint Cross-Service Group to each leased property. During our validation efforts, we visited 31 installations and 2 leased properties and validated responses to a sample of 127 questions the Headquarters and Support Activities Group was interested in: 18 that we judgmentally selected for validation at each installation we visited, plus a random selection of the remaining questions. (The number of capacity questions answered and the number of responses we validated at each installation is at enclosure 2.) We also validated responses to all questions sent to the two leased properties we visited. We tested 553 of 1,981 total responses for adequacy of support and 464 responses for accuracy. In addition, we reviewed all 1,956 responses to questions the Headquarters and Support Activities Group was interested in that Army activities answered as "not applicable" to determine if that answer was appropriate. We did not validate Army installations' answers to the 37 Headquarters and Support Activities Group questions included in the supplemental capacity data call issued on 9 July 2004.

We conducted our review from April to August 2004 in accordance with generally accepted government auditing standards, which include criteria on the adequacy and appropriateness of evidentiary matter, accuracy and management controls. We assessed the accuracy of answers using these specific criteria:

- For questions with a single answer and minimal support requirements, we did not allow any margin for error except for answers reporting square footage.
- For questions with answers involving square footage, we defined significant errors as greater than 10 percent.
- For questions with multiple answers and single answers with voluminous supporting documentation, we allowed errors up to 25 percent in the samples we reviewed, provided the errors were not significant (determined by auditor judgment except for answers reporting square footage).

We did not rely on computer-generated data to validate responses from Army corporate databases, but instead validated the accuracy of the data by comparison with the activities source documents or physical attributes. When practicable, we also validated responses from other databases in the same manner. For all other responses, we worked with the installation administrators to obtain the evidence needed to answer our objectives.

We also evaluated the activities compliance with the Study Group's Internal Control Plan, but we will address those results in our overall reports on the capacity data call and the 2005 Army basing study process.

OBJECTIVE AND CONCLUSION

We established one objective for our validation of Headquarters and Support Activities Joint Cross-Service Group capacity data. Here is that objective and our conclusion:

Objective: To determine if Army installation and leased properties' certified responses to capacity data call questions the Headquarters and Support Activities Group had an interest in were adequately supported with appropriate evidentiary matter and were accurate.

Conclusion: Generally, certified responses from Army installations and leased properties to capacity data call questions the Headquarters and Support Activities Group was interested in were adequately supported with appropriate evidentiary matter and were accurate, based on the criteria we applied to responses in our samples. In addition, we concluded that the "not applicable" responses were appropriate. However, in some instances Army activities could not support their responses to capacity questions and did not accurately answer all questions. We discussed the potential risk of using inaccurate or inconsistent data in the Headquarters and Support Activities Group's analyses with the group's Army representative. The representative responded that the group acted to mitigate the potential risk.

Adequate Support. Of the 553 responses we validated for adequacy of support, 481 responses were adequately supported with

appropriate evidentiary matter. The 72 other responses were not adequately supported for several reasons. For example, Army activities submitted answers that differed from the supporting evidence, or functional responders did not gather supporting documentation or retain the documentation. Responses to 4 questions frequently were not adequately supported (at more than 3 of the 31 installations):

- Facilities currently under construction (no. 22).
- Lodging facilities (no. 307).
- Designated medical facilities for mobilized Reserve Component service members (no. 341).
- Building space used by the supply and storage activities (no. 635).

The Army activities we visited satisfactorily corrected most of the problems we identified with supporting documentation.

Accuracy. Of the 464 responses we validated for accuracy, 310 responses were accurate. Answers were not accurate for the remaining 154 questions for several reasons. For example, Army activities inappropriately included or excluded facilities in square footage compilations, used undocumented estimating methods that could not be used to replicate certified answers, and made mathematical errors. Responses to 13 judgmentally selected questions frequently were inaccurate (at more than 3 of the 31 installations). The 13 questions included the 4 questions that were not adequately supported and 9 others related to:

- Facility square footage (no. 11).
- Ammunition storage facility managed and/or controlled by the installation (no. 20).
- Total gross square feet of owned, military construction, administrative space that will be completed on the installation during FY 04 (no. 304).
- Authorized personnel of the Service/agency-level information technology enterprise activities involved in providing and maintaining long-haul strategic information systems/networks/communications services (no. 324).

- Authorized personnel dedicated to the daily monitoring, maintenance, and operation and security of the Service/agency-level information technology enterprise activities strategic information systems/networks/communications services (no. 327).
- Installation mobility maintenance facilities (no. 343).
- Military and civilian personnel authorized, to include contractor full-time equivalents occupying government space and performing nonappropriated fund accounting functions (no. 374).
- Facility square footage for installation maintenance ground vehicles/components commodity group (nos. 486 and 487).

In addition, responses to one of the randomly selected questions (no. 303)—which asked for the gross square footage of administrative space and a personnel and occupancy breakdown for each building—was not accurate at three of the four installations where we validated the response to the question. The Army activities we visited corrected the answers that were not accurate, recertified them and resubmitted responses to the Study Group. The Study Group, in turn, provided the corrected and recertified responses to the Headquarters and Support Activities Group.

Potentially Misinterpreted. We also determined that Army installations may not have consistently interpreted and answered eight questions (nos. 303, 304, 307, 324, 327, 341, 343, and 374) in accordance with question amplification and clarification guidance. As discussed in the preceding paragraphs, responses to question nos. 307 and 341 frequently were not supported or accurate, and responses to question nos. 303, 304, 324, 327, 343, and 374 frequently were not accurate. Consequently, we concluded that the Headquarters and Support Activities Group had reduced assurance that responses from all Army installations that answered these eight questions were consistent and reliable.

Potential Risk. In our opinion, the Headquarters and Support Activities Group would have assumed a higher degree of risk if it used in its analyses Army responses that frequently were inaccurate or responses to questions that Army installations did not consistently answer. We discussed the potential risk with the Army representative on the Headquarters and Support Activities Group to determine what actions—if any—the group needed to take for the 14 questions we identified with systemic data problems. The Army representative responded that the group will not use the data in the responses to

question nos. 20, 374, 486, 487 and 635. Although the Army representative initially expressed a need for this data before the capacity data call, the representative said the group will not use the data in its analyses. In addition, the group will:

- Use the data in the responses to question nos. 11, 303, 307, 341 and 343. Because the group recognized that the data was questionable, it asked the Study Group to obtain data clarifications for responses to these and other questions.
- Use the data in the responses to question nos. 22, 304, 324 and 327. The group did not request any data clarification for responses to these questions because it did not notice any data inconsistencies when reviewing the Army installation responses.

Although the group did not obtain clarification for question nos. 22, 324 and 327, the magnitude of the errors should not significantly affect the group's analyses. The differences between what we validated and what installations reported were relatively minor (less than 34 authorizations for question nos. 324 and 327, and less than 20,000 square feet for question no. 22) at the installations we visited. However, the magnitude of the errors was more significant for question no. 304—from 48,000 to 263,000 square feet—at the installations we visited, and data from all Army installations could affect the group's analyses. Consequently, the group plans to review data from this question for consistency and possible clarification. When necessary, the group will submit specific data calls for this data during scenario development.

In our opinion, these actions acknowledged the potential risk and should help mitigate the risk of using inaccurate or inconsistent data responses in the Headquarters and Support Activities Group's analyses.

**SCOPE OF VALIDATION FOR HEADQUARTERS AND SUPPORT ACTIVITIES
JOINT CROSS-SERVICE GROUP CAPACITY QUESTIONS**

Installation/Activity	Headquarters and Support Activity Facilities*	Total Questions Answered	Judgmental Sample	Random Sample	Total Responses Validated**
Aberdeen Proving Ground	X	67	7	7	14
Anniston Army Depot		46	7	7	14
Blue Grass Army Depot		55	9	7	16
Corpus Christi Army Depot		64	6	12	18
Detroit Arsenal		48	6	10	16
Fort Belvoir	X	58	8	4	12
Fort Benning	X	83	12	7	19
Fort Bliss	X	72	12	6	18
Fort Bragg	X	67	10	7	17
Fort Campbell	X	71	11	6	17
Fort Drum	X	67	10	3	13
Fort Eustis	X	70	12	12	24
Fort Gordon	X	78	10	5	15
Fort Hood	X	71	12	7	19
Fort Huachuca	X	76	9	10	19
Fort Lee	X	73	11	5	16
Fort Lewis	X	75	10	9	19
Fort McCoy	X	68	10	7	17
Fort Rucker	X	73	11	8	19
Fort Sam Houston	X	71	11	9	20
Fort Shafter		51	9	16	25
Fort Stewart/Hunter Army Airfield	X	72	9	7	16
Lima Army Tank Plant		41	6	13	19
McAlester Army Ammunition Plant	X	55	7	5	12
Picatinny Arsenal		56	9	5	14
Radford Army Ammunition Plant		32	4	13	17
Red River Army Depot	X	43	4	7	11
Redstone Arsenal	X	68	8	10	18
Schofield Barracks	X	68	9	10	19
Tobyhanna Army Depot	X	64	7	8	15
Tripler Army Medical Center		45	6	6	12
Hoffman Complex–Human Resources Command (lease)		19	19	0	19
Army Test and Evaluation Command (lease)		14	14	0	14
Totals		1,981	305	248	553

* "X" represent installations that the Army representative identified as having facilities for headquarters and support activities.

** Responses to all questions selected judgmentally were validated for accuracy and adequacy of evidentiary matter. Responses to all questions selected randomly were validated for adequacy of support. When time permitted, we also validated the responses for accuracy.

Enclosure 2

**DELIBERATIVE DOCUMENT – FOR DISCUSSION PURPOSES ONLY
Do Not Release Under the Freedom of Information Act**

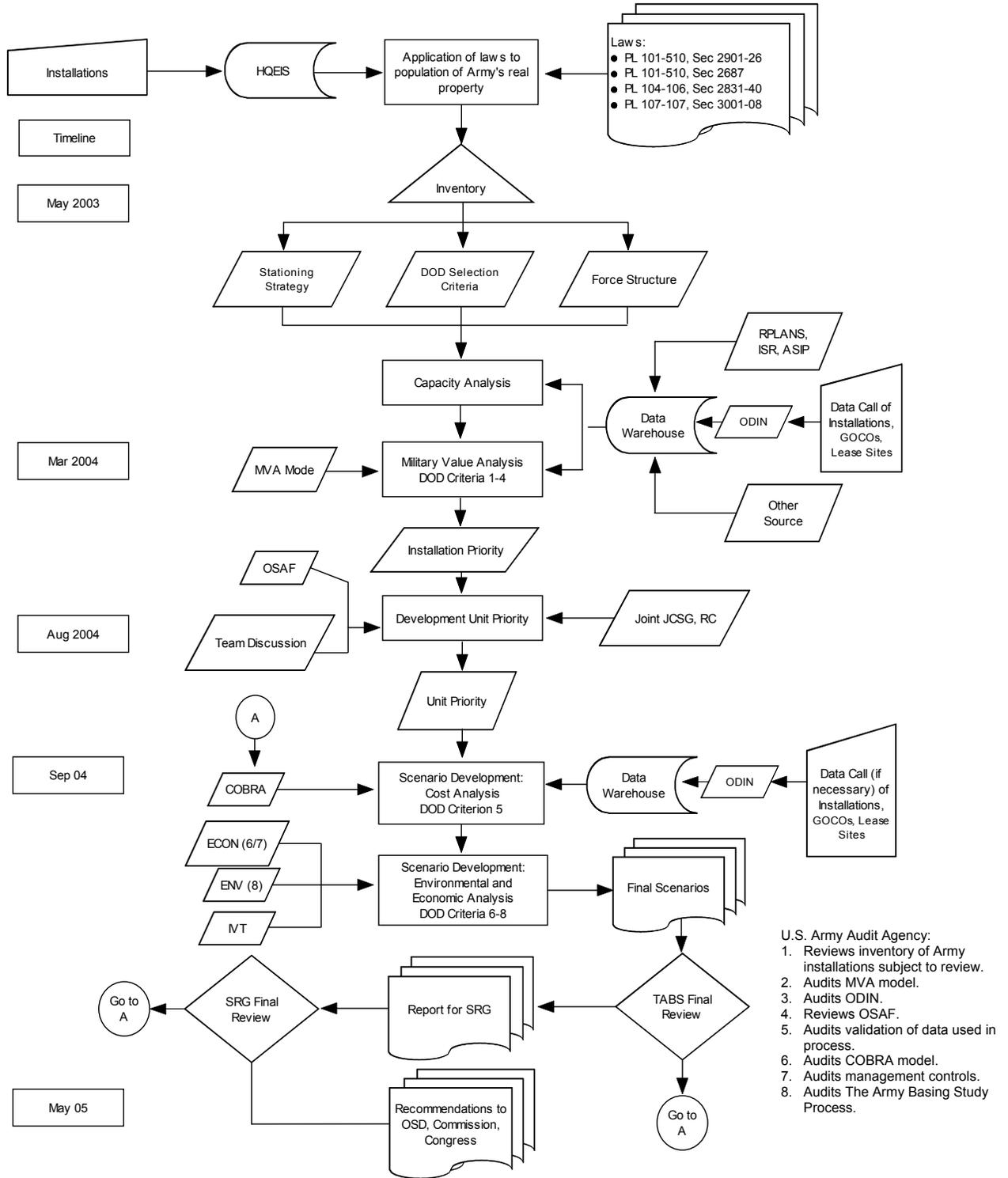
Acronyms and Abbreviations Used:

ASIP = Army Stationing and Installation Plan
 COBRA = Cost of Base Realignment Action Model
 ECON = Economic Model
 ENV = Environmental Model
 GOCO = Government-Owned, Contractor-Operated
 HQEIS = Headquarters Executive Information System

ISR = Installation Status Report
 IVT = Installation Visualization Tool
 JCSG = Joint Cross-Service Group
 MVA = Military Value Analyzer Model
 ODIN = Online Data Interface Collection
 OSAF = Optimal Stationing of Army Forces

OSD = Office of the Secretary of Defense
 PL = Public Law
 RC = Reserve Components
 RPLANS = Real Property Planning and Analysis System
 SRG = Senior Review Group

FLOWCHART OF 2005 ARMY BASING STUDY PROCESS



Enclosure 3