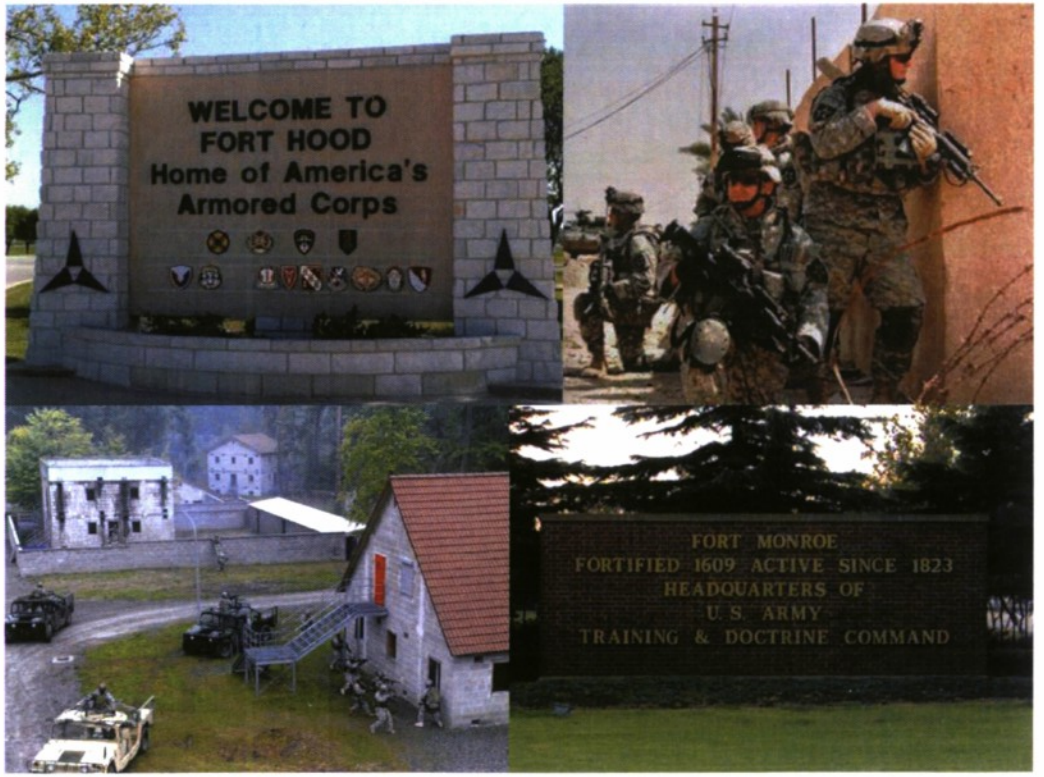
Army Science Board Final Report
FY2008 Summer Study

October 2009

ARMY GENERATING FORCE CENSUS UTILIZATION



Department of the Army
Assistant Secretary of the Army
(Acquisition, Logistics and Technology)
Washington, D.C. 20310-0103

DISCLAIMER

This report is the product of the Army Science Board (ASB). The ASB is a Federal Advisory Committee established to provide independent advice to the Secretary of the Army (SA) and the Chief of Staff, Army (CSA). Statements, opinions, conclusions and recommendations contained in this report are those of the ASB and do not necessarily reflect the official position of the United States Army or the Department of Defense.

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MEMORANDUM FOR: ACTING ASSISTANT SECRETARY OF THE ARMY FOR ACQUISITION, LOGISTICS AND TECHNOLOGY

SUBJECT: Army Science Board Study on Army Generating Force Census Utilization

I am pleased to forward the final report of the Army Science Board Study on Army Generating Force Census Utilization. The report offers important considerations for the Army in the use of the Generating Force Census in the Enterprise Resource Determination Process.

One of the most important decisions made regularly by the Army is the allocation or apportionment of appropriated funding between the Operational Force (e.g., the Table of Organizational and Equipment Army) and the Generating Force (sometimes termed synonymously as the "Institutional Army", organized under Tables of Distribution and Allowances). The Army's major challenge in managing today's Contingency requirements is to appropriately fund each Force so they can efficiently execute their missions. This study makes recommendations on a number of issues related to using the Generating Force Census analytical tools and their data to improve Total Army Analysis decision processes.

I endorse the study's recommendations and encourage you to incorporate them into the Army's Total Army Analysis and the Manpower Management and Accounting processes.

Frank H. Akers, Jr.
Chair, Army Science Board

CONTENTS

GENERATING FORCE CENSUS UTILIZATION STUDY

EXECUTIVE SUMMARY

Mr. Peter Kunkel, Office of the Assistant Secretary of the Army, Financial Management and Controller (OASA (FM&C)), asked the Army Science Board (ASB) in June 2007 to assess the uses for the results of a census of the Army Generating Force, whose missions include recruiting, training, equipping, and supplying support to the Army Operating Force

The Generating Force Census (GFC) was conducted by an Army contract during 2007–08 to help the Army leadership better understand the functions, personnel strength, structure, and composition of the Generating Force. The first phase was completed in November 2008.

An ASB 2008 Summer Study panel was formed to determine key uses for the results of the census. The panel specifically focused on how the Army could use the census in dealing with issues and analyses involving manpower, personnel, force composition and sizing, and programming and budgeting work. Major study recommendations are:

1. Use the results of the census to develop a systematic set of quantifiable relationships within the Generating Force and between the Operating Force and the Generating Force including:

    - Develop tools (manpower and budget capability) for risk calculations and benchmarking (skills, force composition, and functional analysis).

    - Create databases for forecasting and planning, and establish performance metrics.

- Institute processes for validating functions (e.g., manpower estimating relations) and military and civilian manpower planning, budgeting, and execution.

- Develop an organization for force and manpower management in conjunction with balanced funding and manpower allocations between the Generating and Operating Forces to maximize total force performance

2. Conduct specific future studies using the census to benefit both Headquarters, Department of the Army (HQDA) and subordinate commands including:

    - Develop a deterministic decision process reflecting manpower shortfalls, risks, and interfaces for use in resource allocation between Generating and Operating Forces—benefits HQDA processes and subordinate commands.

    - Develop and refine Generating Force functional measurements for use in resource allocation.

    - Design an approach to integrate military and civilian manpower in the Planning, Programming, Budgeting, and Execution System (PPBES).

Overall, the study provided unique insights into the way military, civilian, and contract manpower are managed and resourced. The ASB analysis illuminated resourcing problems in the Generating Force, including priority establishments vis-à-vis the Operating Force and managing and resourcing civilian manpower, which need to be better addressed in Army procedures and policy.

Army Science Board

Generating Force Census Utilization
2008 Summer Study

July 24, 2008

Study Co-Chairs:

Max Noah, Dick Ladd, John Matsumura

BACKGROUND

In June 2007, Mr. Peter Kunkel, OASA, Financial Management and Controller (FM&C), proposed a project to develop a manpower database for the Army Generating Force that would include military, government civilians, and contractors. The database would be linked to functions performed.

The Assistant Secretary of the Army (FM&C) joined with G37FM (Force Management) to conduct an annual Generating Force Census (GFC) to update the database. The Army's G37FM is responsible for manpower databases and accounting. A contract was let to build the database, and a General Officer's Steering Committee (GOSC) was formed at HQDA and included G3; ASA (FM&C); G1, ASA, Manpower and Reserve Affairs (M&RA); and the Assistant Chief of Staff for Installation Management (ACSIM.

The Army Science Board (ASB) was asked to make recommendations for future studies based on use of the GFC. In the course of this study, a number of important issues and problems in the way the Army functions were revealed. The most important of these issues were in—

- The way civilian and contractor resource elements are managed and accounted for.

- The methods or lack thereof used in determining if the Generating Force is properly resourced to support the Operating Force.

Briefing Outline

- **Purpose and Introduction**
- GF Support to OF
- GFC Summer Study Issues
  - GFC Functional Analysis Uses
  - Manpower Management
  - Enterprise Resource Determination Process
- Recommendations

OVERVIEW

The ASB examined the structure of the GF and its applicability to Army business with a primary focus on the resource area of manpower. The following topics were addressed:

- How the GFC is organized and the basis for the data
- Relationships of the GF to the OF
- Utilization of the GFC

  (1) Use in a model to analyze allocation of resources to GF in support of OF.

  (2) Civilian and contractor manpower management and issues.

  (3) Use in Total Army Analysis (TAA) process and manpower allocation.
- Recommendations on how to use the GFC

This report has four parts: the Final Briefing and three appendices (D, E, and F), each presenting greater detail of specific issues. As appropriate, the briefing charts are annotated.

Purpose of ASB Summer Study

- The Army Science Board (ASB) has been asked to make recommendations for future studies based on the Army Generating Force Census (GFC) study
- GFC study:
  - Sponsored by the ASA (FM&C) and the G3/5/7 to support the CSA's sixth initiative: "Adapt Army Institutions to Support an Expeditionary Army at War"
  - Links an exhaustive and exclusive taxonomy of Army generating force functions from AR 10-87 and GO 3 to Unit Identification Codes (UICs) and people performing those functions in the following categories:
    (1) Active Duty Soldiers
    (2) Mobilized Reserve Component Soldiers
    (3) Army Civilian
    (4) Contractors (Civilian Manpower Equivalents (CMEs))
  - Database being developed by contract using files containing required, authorized positions, and on-hand personnel. GFC to be completed November 2008

Purpose of ASB Summer Study

The Terms of Reference (TOR) for the GFC Utilization Summer Study is shown in Appendix A. Slide 32 shows how the Summer Study panel answered the required elements of the TOR.

The primary thrust of the GFC was to link Army GF functions to manpower categories using a taxonomy based on Army Regulation 10–87, "Major Army Commands in the United States," for Army subordinate commands and General Order 3 (GO3), "Assignment of Functions and Responsibilities Within Headquarters, Department of The Army" for HQDA—all elements of the GF.

The contractor screened and defined functions in conjunction with G37FM and, using manpower and personnel databases shown on Slide 33, matched the various categories of manpower to the functions. The Army is also planning to link manpower to OSD functions.

GFC Study Membership

CO-CHAIRS

Max Noah **Dick Ladd** **John Matsumura**

MEMBERS

Staff Assistant
Rachel Gerstein-ASB

John Barnes
Ruby DeMesme
Frank Distasio
John Farr
Stan Frager
Valerie Gawron
Paul Greenberg
Harold Mabrey
Harry West

Study Manager
Justin Bringhurst– ASB

Approach

- For information and background, GFC Study Members:
  - Researched current regulations and documents
  - Visited Army Secretariat and Staff agencies, selected ACOMs, ASCCs, DRUs, other Services and industry
- For potential future studies using GFC, the study members focused on:
  - Generating Force (GF) functions plus manpower and resource allocation process including benchmarking
  - GF capabilities to support the Operating Force (OF)
  - Types of follow-on analysis and benefits of GFC in the future
  - Additional ways to measure the performance of future GFC studies
  - Additional data requirements (and the owners of the data) for follow-on GFC studies
  - Agencies benefiting the most from follow-on census studies

Approach

The GFC team researched documents on the Army manpower process and interviewed knowledgeable persons at the following agencies and commands:

ASA (FM&C), ASA (M&RA), G1, G3/5/7/FM, G8, USASAMA, USAFMSA, FORSCOM, TRADOC, AMC, USASOC, MEDCOM USACE, USARC, IMCOM

Informal contacts with services and agencies outside the Army were also made.

Briefing Outline

- Purpose
- **GF Support to OF**
- GFC Summer Study Issues
  - GFC Functional Analysis Uses
  - Manpower Management
  - Enterprise Resource Determination Process
- Recommendations

Army Organizations

Two General Classifications of Organizations:

Operating Forces – Conduct the Fighting Mission

(BCTs and support brigades organized under Tables of Organization and Equipment (TOE))

Generating Forces – Support the Operating Force and Other Missions

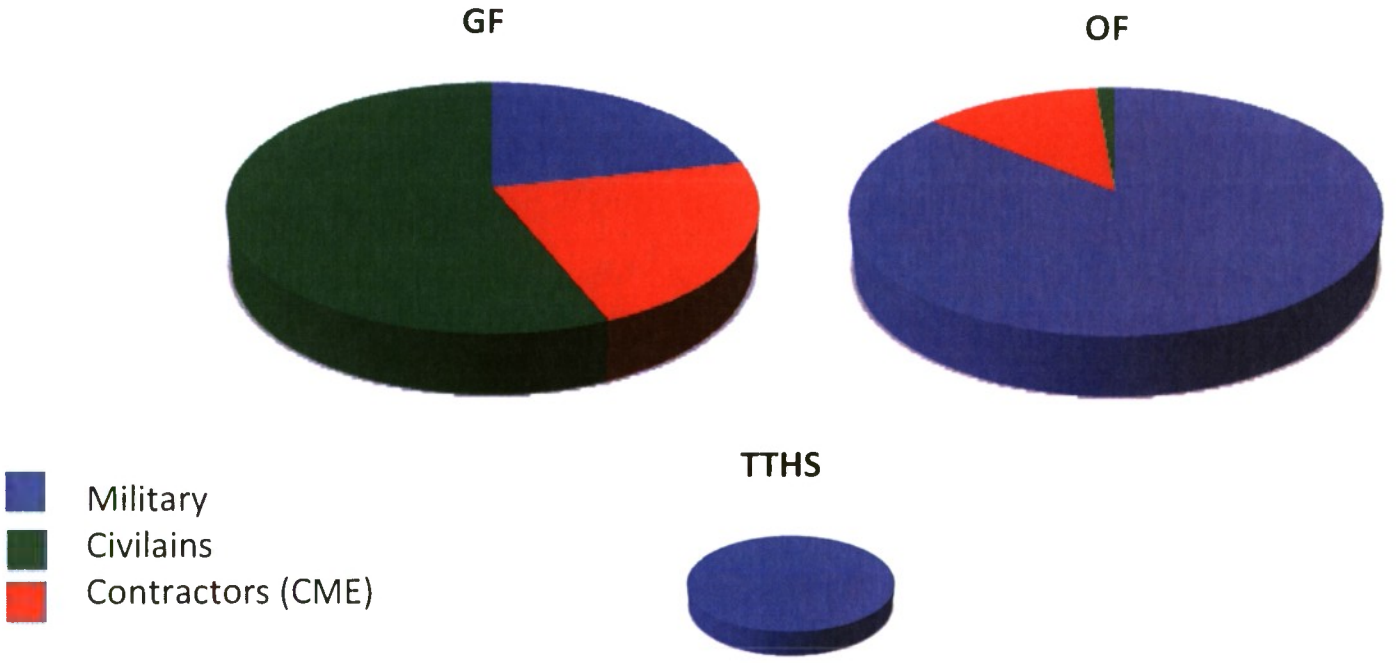
(Three Army Commands (ACOM), Nine Army Service Component Commands (ASCC), Eleven Direct Reporting Units (DRU) organized under Tables of Distribution and Allowances (TDA))

Army Organizations

The Army's OF is essentially composed of TOE units, mostly military organizations designed to fight and support the fight. If the Army force structure were shaped like a spear, the OF would clearly be the head of the spear, with maneuver units at the very tip supported by fires, maneuver support, and sustaining units.

The Army GF (sometimes called the institutional force) is functionally organized to support and enable the OF. It is primarily TDA units and agencies—the shaft of the spear.

Relative Size and Content of the Army
(2008 Manpower)

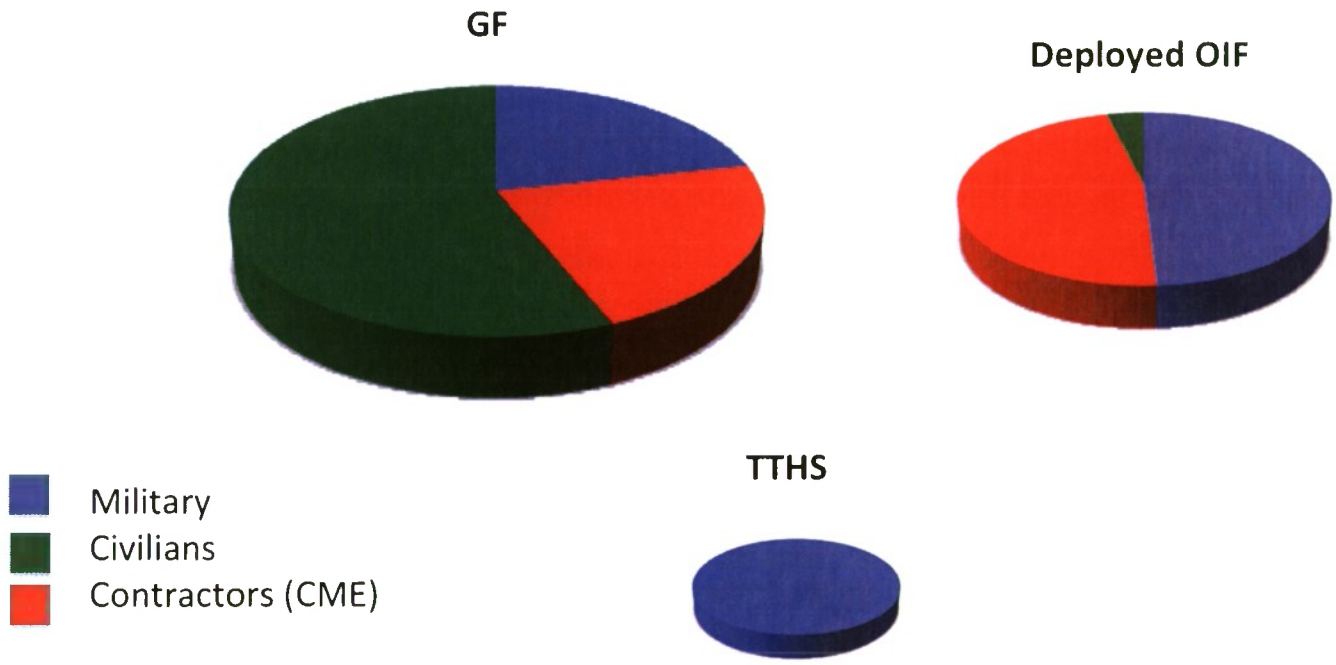


Relative Size and Content of the Army

The size of the GF and OF in gross manpower numbers (just under one million not counting activated Guard and Reserve) is roughly the same not counting trainees, transients, holdees, and students (TTHS). However, the OF contains substantially more military and has a sizeable contractor force directly supporting units in combat zones.

The GF contains a much lower number of military and consists largely of civilians and contractors. The low number of military in the GF was an issue in 2008.

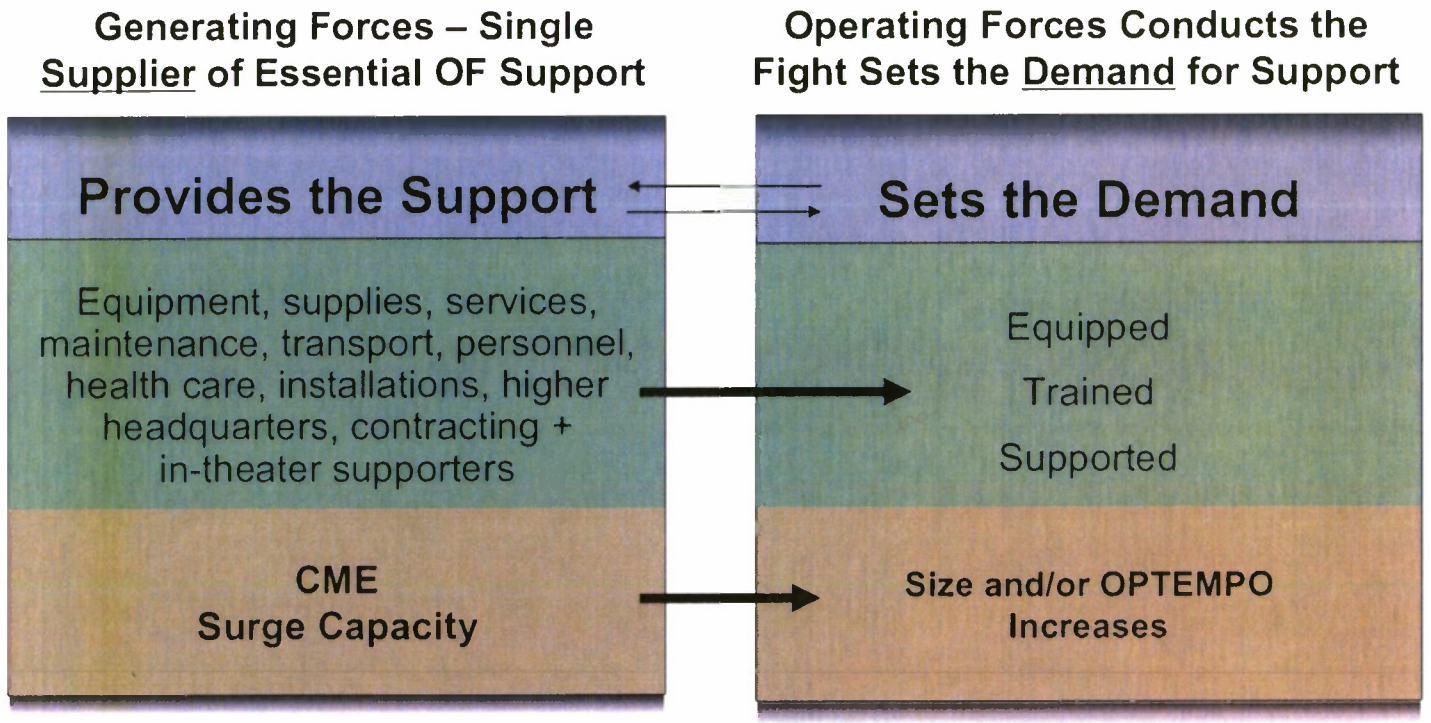
Relative Size and Content of the Army
(2008 Manpower)



The Relative Size and Content of the Army

OF is strongly dependent on contractor support in Operation Iraqi Freedom (OIF) deployment.

Relationship of GF to OF "Supply and Demand"



OF Cannot Function Without GF

Relationship to GF and OF "Supply and Demand"

The GF has always supported the OF and operates on the principles of supply and demand in peacetime operations and wartime surges. The vast majority of the GF support is provided by elements outside the theater of operations. However, direct support in the theater of operations exists either by "tele-operations" (e.g., medical support) or by sending experts to advise on activities and equipment (e.g., NET).

Army GF Organizations

Headquarters, Department of the Army:

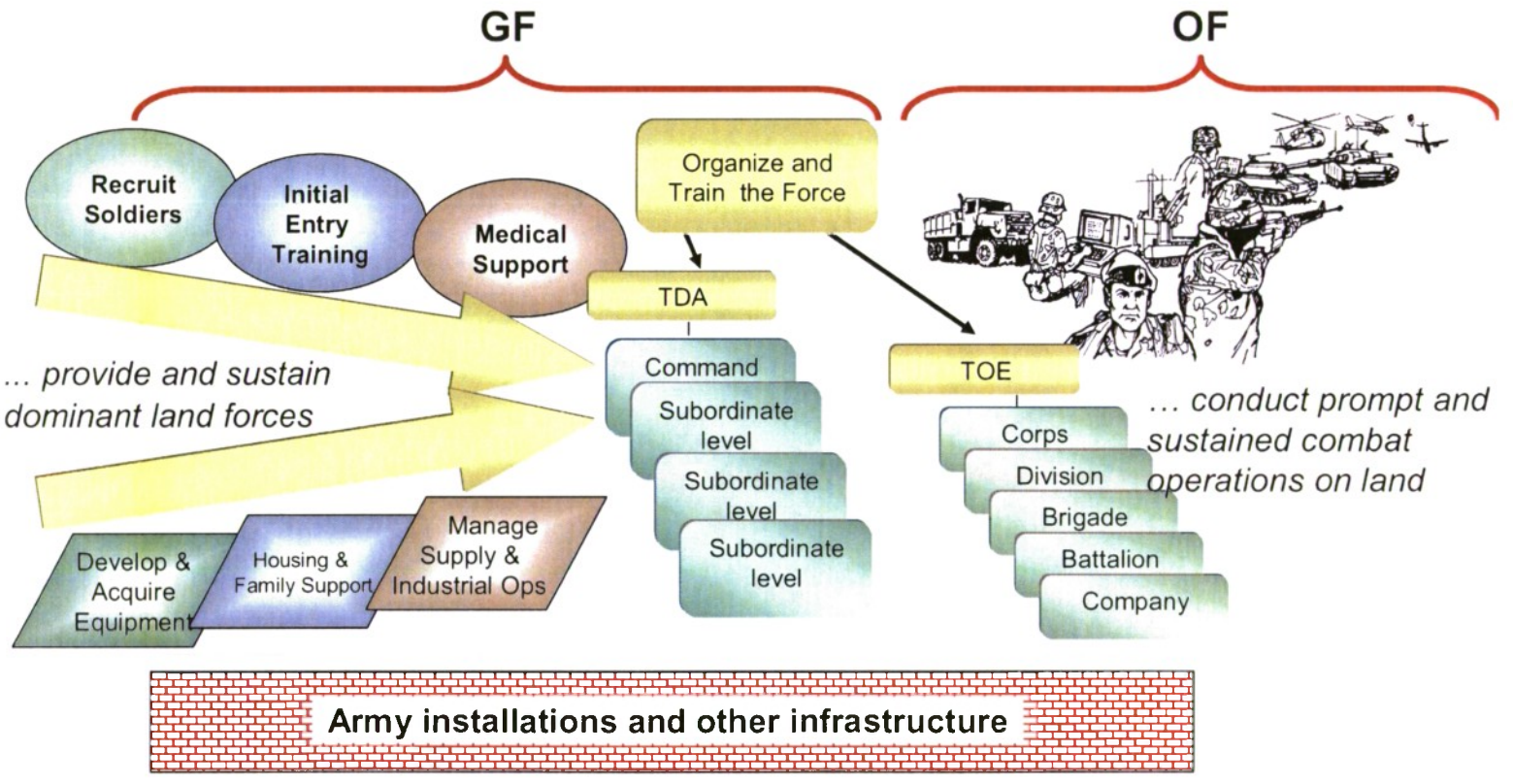
ASA (FM&C)	ASA (ILE)
ASA (M&RA) (USASAMA)	ASA (ALT)
G1	G2
G3 (G3/5/7/FM, USAFMSA)	G4
G8 (PAE, CAA)	G6

- **Army Commands (ACOM):**
  - US Army Forces Command (FORSCOM)
  - US Army Training and Doctrine Command (TRADOC)
  - US Army Material Command (AMC)
- **Army Service Component Commands (ASCC):**
  - U.S. Army Central (USARCENT)
  - U.S. Army North (USARNORTH)
  - U.S. Army South (USARSO)
  - U.S. Army Europe (USAREUR)
  - U.S. Army Pacific (USARPAC)
  - Eight U.S. Army (EUSA)
  - U.S. Army Special Operations Command (USASOC)
  - Military Surface Deployment and Distribution Command (SDDC)
  - U.S. Army Space and Missile Defense Command/Army Strategic Command (USASMDC/ARSTRAT)

Note: Study members visited units in red

- **Direct Reporting Units (DRU):**
  - US Army Network Enterprise Technology Command/9th Signal Command (NETCOM/9thSC(A))
  - US Army Medical Command (MEDCOM)
  - US Army Intelligence and Security Command (INSCOM)
  - US Army Criminal Investigation Command (USACIDC)
  - US Army Corps of Engineers (USACE)
  - US Army Military District of Washington (MDW)
  - US Army Test and Evaluation Command (ATEC)
  - US Army Military Academy (USMA)
  - US Army Reserve Command (USARC)
  - US Army Acquisition Support Center (USAASC)
  - US Army Installation Management Command (IMCOM)

GF and OF Functional Relationships



GF and OF Functional Relationships

The GF supports the OF with functions that enable and support OF preparation for and conduct of the fight. Generally, GF units are organized by function.

GF and OF Force Development

	GF	OF
TAA	No analysis	Full analysis
Capabilities	Functional support mission	Combat mission
Organization	TDA based on command plan from GF Commands	TOE based on centralized modeling and simulation by HQDA & TRADOC
Manpower Authorizations	TDA basis for civilians	TOE for military manpower
Personnel O/H	Civilian personnel hired using allocated operating account funds	Military personnel assigned IAW Army personnel policies

GF and OF Force Development

GF and OF development processes center on the conduct of the Total Army Analysis procedures, which have been conducted periodically in the past. For 2009 and beyond, TAA will be conducted annually in conjunction with Program Objective Memorandum (POM(builds and reviews.

During the TAA process (see Backup Slide 34, top diagram), the OF is thoroughly analyzed and developed to meet Army missions based on detailed analyses at the Army Center for Army Analysis (CAA). The GF is analyzed mainly at the subordinate commands and changes proposed to HQDA, but no detailed analysis is done. In 2008, more attention was paid to analyzing the GF than in past years.

GF organizational changes are made incrementally from what the unit had the previous year, with little or no analysis done at HQDA.

Military spaces are allocated by G37FM based on Chief of Staff, Army (CSA) guidance and assigned by G1.

Civilian spaces are programmed against authorizations agreed by G1 but are funded separately in the program–budget process often leaving authorized spaces unfunded and requiring funding tradeoffs at subordinate Army commands. *This is a major shortcoming in the way the Army does business.*

Contract manpower (civilian manpower equivalents (CMEs)) where specifically authorized (e.g., for base operations support (BASOPS) contracts) is funded, but large amounts of contractor manpower is only counted as used—not managed.

General Observations

- OF cannot exist without GF!
- OF is intensely managed and well-resourced by HQDA over time with well known functions and purposes
- GF is intensely managed by each type Army Subordinate Command with HQDA oversight
- Both civilian and contractor manpower are a very important element of GF force development
- A properly developed GFC can improve decision makers management capabilities with regards to the GF and OF

General Observations

To date, the manpower accounting in HQDA could be rated good to excellent for military manpower, but for civilians and CME it is lacking.

A major problem in the past is that we have not properly managed civilian or CMEs. Hence, there has been little reason to keep track of them. A disciplined GFC and resulting database will help in providing accurate data for proper management.

Briefing Outline

- Purpose and Study Focus
- GF Support to OF
- **GFC Summer Study Issues**
  - **GFC Functional Analysis Uses**
  - Manpower Management
  - Enterprise Resource Determination Process
- Recommendations

GFC Functional Analysis Uses

Issue 1 addresses the need for a model to relate GF capability outputs to OF needs using a Generating Force Census (GFC) database as input. Issue 1 is discussed in more detail in Appendix D.

GFC Functional Analysis Uses

Issue: Models using data and relationships (census to functions to capability) do not exist to benchmark GF and assess the risk to the OF

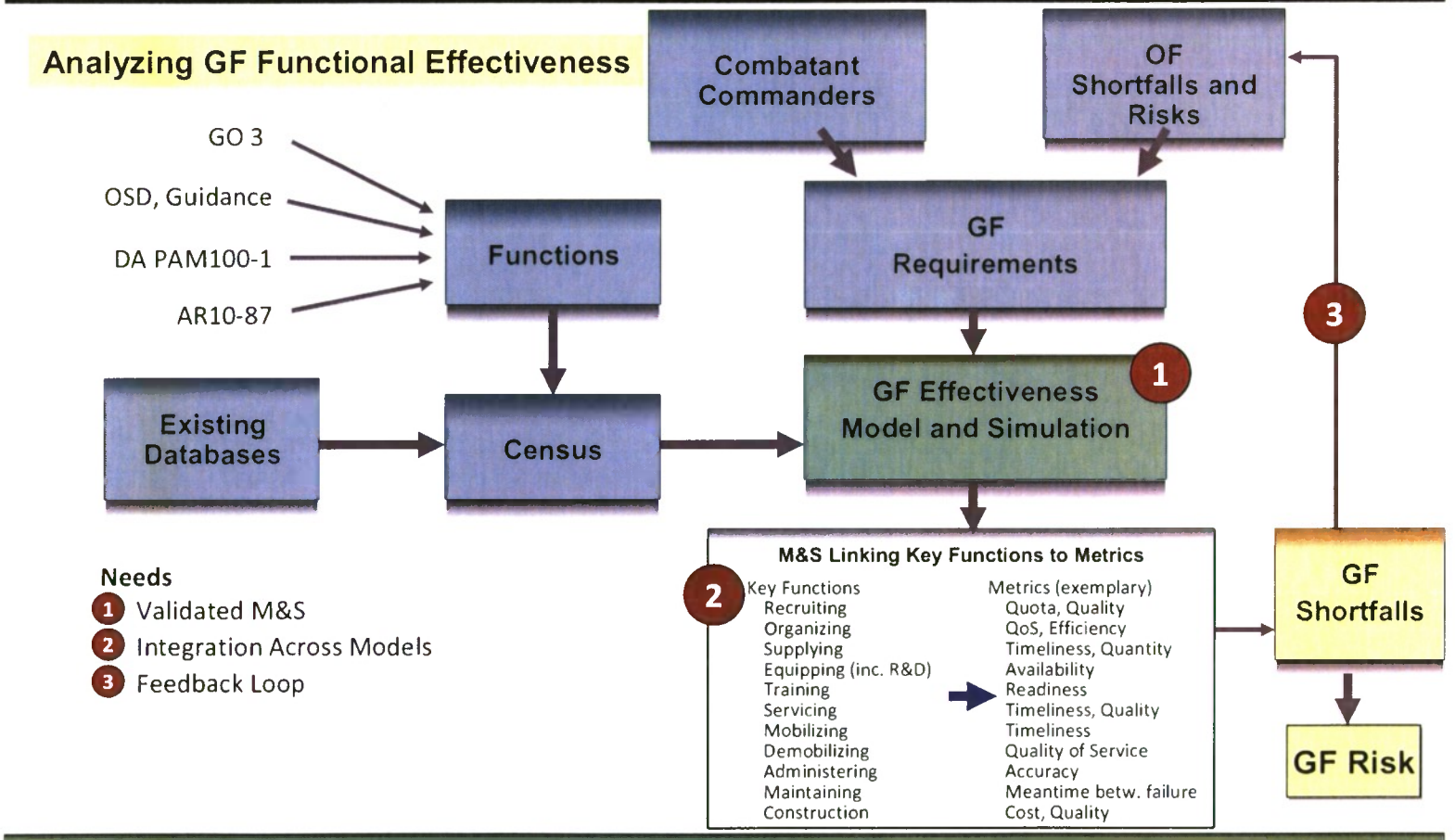
Findings:

- Integrated analytic tools exist to help the OF with planning
  - Models representing force properties
  - Force effectiveness models and simulations
- Similar integrated tools do not exist for the GF
  - Legacy databases exist within subordinate commands
  - Methodologies to use databases exist but have not been "operationalized"

GFC Functional Analysis Uses

The GFC provides resources and functions to link to capabilities.

GFC Functional Analysis Uses
(continued)



GFC Functional Analysis Uses (continued)

A procedural model can be developed to examine the capabilities that the GF can provide to the OF versus the resources provided to the GF. The GFC provides the basis for data input to the central GF Effectiveness Model and Simulation.

The model operates on an iterative procedure in which OF shortfalls and risks are reflected by GF requirements, which in the GF Effectiveness Model determine functional capabilities. Shortfalls are either taken as a risk or fed back into the OF as a shortfall and the process repeats. This should aid in the determination of how resources in the GF should flow to accomplish desired support of the OF.

GFC Functional Analysis Uses
(continued)

Recommendations:

- Develop a suite of tools to
  - Assess risk to OF and GF as a function of resources
  - Optimize mix of manpower
  - Assist decision-making in HQDA

Functional analysis is well defined for the OF - nothing comparable exists for sizing the GF

GFC Functional Analysis Uses (continued)

Appendix D presents a detailed discussion of this issue.

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- Purpose and Study Focus
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Manpower Management

Issue 2 addresses the issues in civilian and CME management; this is discussed in detail in Appendix E.

Manpower Management

Issue: Management of the Army Civilian Force is decentralized to multiple offices resulting in mismatches of manpower levels and dollars

Findings:

- No direct correlation between the military and civilian force management systems and practices
- Civilian force:
  - Size and structure not commensurate with the "Growing the Army" initiative
  - Not fully funded to support the OF
- Manpower authorizations primarily based on prior year budgets rather than deterministic requirements

Manpower Management

Civilians and CMEs are mainstays of the GF. The proponency for management of civilians appears to be split among G37FM, which manages requirements, G1, which manages authorizations, and Plans, Analysis, and Evaluation/Defense Acquisition Board (PAE/DAB), which funds civilians. Although the Army seeks to manage civilian career programs to some degree, the management of civilians, except for senior executive service (SES) personnel, is left to business as usual. They are managed as a commodity, not as a profession as soldiers.

Civilian strength has not grown with the military—size based on previous year's programs. When military strength decreases in a command, commensurate civilian strength is not automatically increased. Attempts at civilian strength increases are not matched with funds. Commands subordinate to HQDA are left to find tradeoffs to pay for civilians.

Currently, no human capital plan exists.

Manpower Management
(continued)

Recommendations:

- Develop a system for integration of military and civilian manpower planning and management to include program, budget formulation, and execution
- Develop a capability to determine the appropriate mix of civilian skills required to support current and future missions
- Link civilian manpower funding to civilian requirements and authorizations during budget process
- Add data requirements in GFC for individual function skill identifiers using OSD function codes

Manpower Management (continued)

As with the military, civilian strength should be linked to capability requirements and have a centralized career management path. A central civilian manpower office needs to be designated at HQDA. Civilian authorizations and funding should be linked during the PPBES process.

Appendix E discusses this issue in detail.

Manpower Management

Issue: Use of CMEs in the U.S. Army is unclear

Findings:

- GF and OF both dependent on CMEs
- CMEs comprise both surge elements and steady-state roles
  - Routine contract services (e.g., food services, facility maintenance)
  - Combat service support for OF (e.g., LOGCAP)
- Army contracts containing CMEs do not specify manpower numbers
  - CME data are derived from contract labor hours reported
- CMEs account for a large portion of the civilian manpower costs

Recommendations:

- Continue CME reporting to build data for GFC
  - To better forecast required CME costs
  - To estimate CME surge requirements
- Use manpower benchmarking to manage the GF civilian and CME composition

Manpower Management

Contractor manpower equivalents fall into several categories: programmed: A76 service contracts), surge (Logistics Civilian Augmentation Program (LOGCAP)), and staff support (indefinite delivery, indefinite quantity (IDIQ)) services.

The current CME report is compiled from reports required as part of service contracts on the number of man-years worked. It is kept by ASA M&RA. Although the report is probably the best approach currently available to account for CMEs, it still is subject to problems in accuracy because there is no sure way to count CME man-years.

A forecast of CMEs for FY08–13 showed approximately 170,000 at a total cost of $58.6 billion.

Note: Although not discussed in this paper, when the new Army accounting system—General Fund Enterprise Business System (GFEBS)—goes on line, it can be used to account for civilians and CMEs much more accurately using standard fiscal accounting codes. This promising development should help immensely to alleviate inaccuracies in manpower accounting where people are paid from different appropriation accounts.

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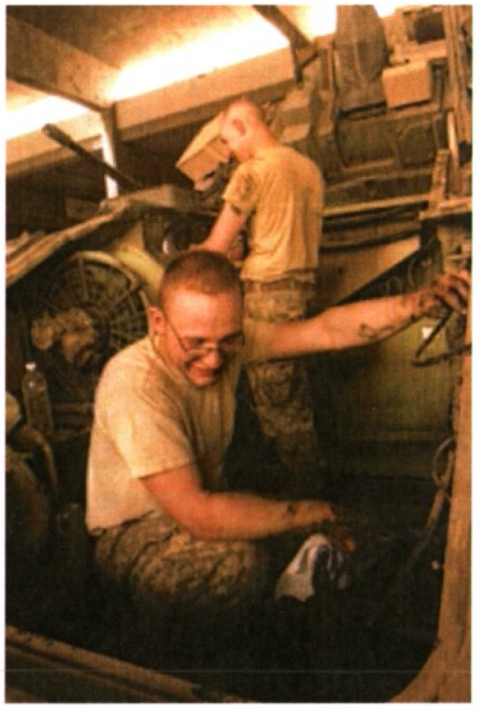
- Recommendations



Enterprise Resource Determination Process

Issue 3 addresses the need for better measures to be used in TAA for the GF and the necessity for including analysis of the GF in more detail. This issue is discussed in more detail in Appendix F.

Enterprise Resource Determination Process

Issue: GF funding is what remains after funding the OF and is not based on set of functional, OF support relations.

Findings:

- Total Army Analysis (TAA) Total Army Analysis (TAA):
  - Requirements Determination Phase:
    - GF input is based primarily on existing TDA unit structure, NOT business or allocation rules
    - Determination of warfighting requirements and "required MTOE/TDA force file" NOT rigorous consideration of balance of "supply/demand" GF/OF
  - Resource Determination (Conference) Phase:
    - GF funding allocation criteria lacking – functional requirements not well-defined
- Force Feasibility and Leadership (GOSC) review seeks to resolve contentious issues
  - Decisions on resourcing GF appear to be qualitative judgements based on perceived GF unit needs and those expressed by GF subordinate commanders

Risk taken in the GF manifests itself over time in the OF

Enterprise Resource Determination Process

A TAA is the primary means of determining the Army's Future Force structure and focuses on military spaces. But the TAA also addresses mission accomplishment, albeit currently, mainly on warfighting missions. In this vein, the makeup and needs of the GF to support the OF appear to be left to the GF subordinate commands to maintain their Tables of Distribution and Allowances (TDA), and these are accepted prima face as representative of the resources needed to support the OF. But there is no analysis of the adequacy of the TDA to do this in the TAA process. In 2008, a closer look at GF needs was undertaken by G37FM with the subordinate commands, but much remains to be done.

Enterprise Resource Determination Process (continued)

Functional determinations in GFC will support analysis in TAA

IMCOM has a fully developed "Common Levels of Support" service delivery tool that links 490 services delivered to dollars, service quality and "risk"

	President's Budget	Low Amber	High Amber/ Low Green	Green
	4474M	5274M	5673M	6246M
BASOPS				
08 Military Personnel Services				
09 Substance Abuse				
12 Sports, Recreation, and Libraries				
13 Business Operations				
17 Administrative Services				
18 Information Assurance				
19 Automation				
23 Ammunition Supply Services				
24 Retail Supply				
25 Central Issue Facility				
26 Asset Management				
27 Materiel Support Maintenance				
28 Transportation Services				
29 Food Services				
30 Laundry and Dry Cleaning Services				

Functional tools necessary to support TAA resourcing decisions for GF in POM

Enterprise Resource Determination Process (continued)

A critical part of manpower and budget formulation and resource allocation is to be able to link mission accomplishment directly to resources. The Installation Management Command (IMCOM) does this using functional descriptions of services and products provided and color coding resource levels required to provide or not provide the service or product.

If a resource-versus- mission coding and setup similar to that shown were applied to all subordinate commands, HQDA would better understand the detail of GF missions.

Enterprise Resource Determination Process (continued)

Recommendations:

- Charter study to develop/refine GF functional designations and processes which have measurable outputs
- Based on "evolved function/services" list, develop (red/yellow/green) GF risk assessment tool useful in TAA process and discussions with OSD and ACOMs
- Develop more rigorous functional analytical process to link GF capability to provide support to OF and use in the TAA process

Enterprise Resource Determination Process (continued)

Recommendations

Appendix F presents a detailed discussion of this issue.

Briefing Outline

- Purpose and Study Focus
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  - GFC Functional Analysis Uses
  - Manpower Management
  - Enterprise Resource Determination Process
- **Recommendations**

Major GFC Study Recommendations

Use the mature GFC to develop a systematic set of quantifiable relationships within the GF and between the OF and GF considering:

Tools (manpower and budget capability)

- Risk calculations
- Benchmarking (skills, force composition and functional analysis)

Data

- Databases for forecasting and planning
- Performance metrics

Processes

- Validated functions (e.g., manpower estimating relations)
- Military and civilian manpower planning, budgeting and execution

Organization

- Force and manpower management
- Balanced funding and manpower allocations between GF and OF to maximize total force performance

Major GFC Study Recommendations

The GFC will serve as a baseline compilation of manpower to mission by function. This is a very important database for the Army.

GFC Study Recommendations (Continued)

Specific Future Studies for the GFC and Agencies that Benefit

- Determine relationships between GF and OF and develop a deterministic decision process to reflect manpower shortfalls, risks, and interfaces for use in resource allocation analysis

  Recommended Action: G3 w/PAE Benefits: HQDA, Subordinate Commands

- Develop and refine GF functional designations and processes with measureable outputs for use in resource allocation analysis

  Recommended Action: G3 w/PAE Benefits: HQDA, Subordinate Commands

- Design an approach to integrate military and civilian manpower planning and management systems, to include program, budget formulation and execution

  Recommended Action: G3 w/PAE, ASA (FM&C), ASA (M&RA), G1

  Benefits: HQDA, Subordinate Commands

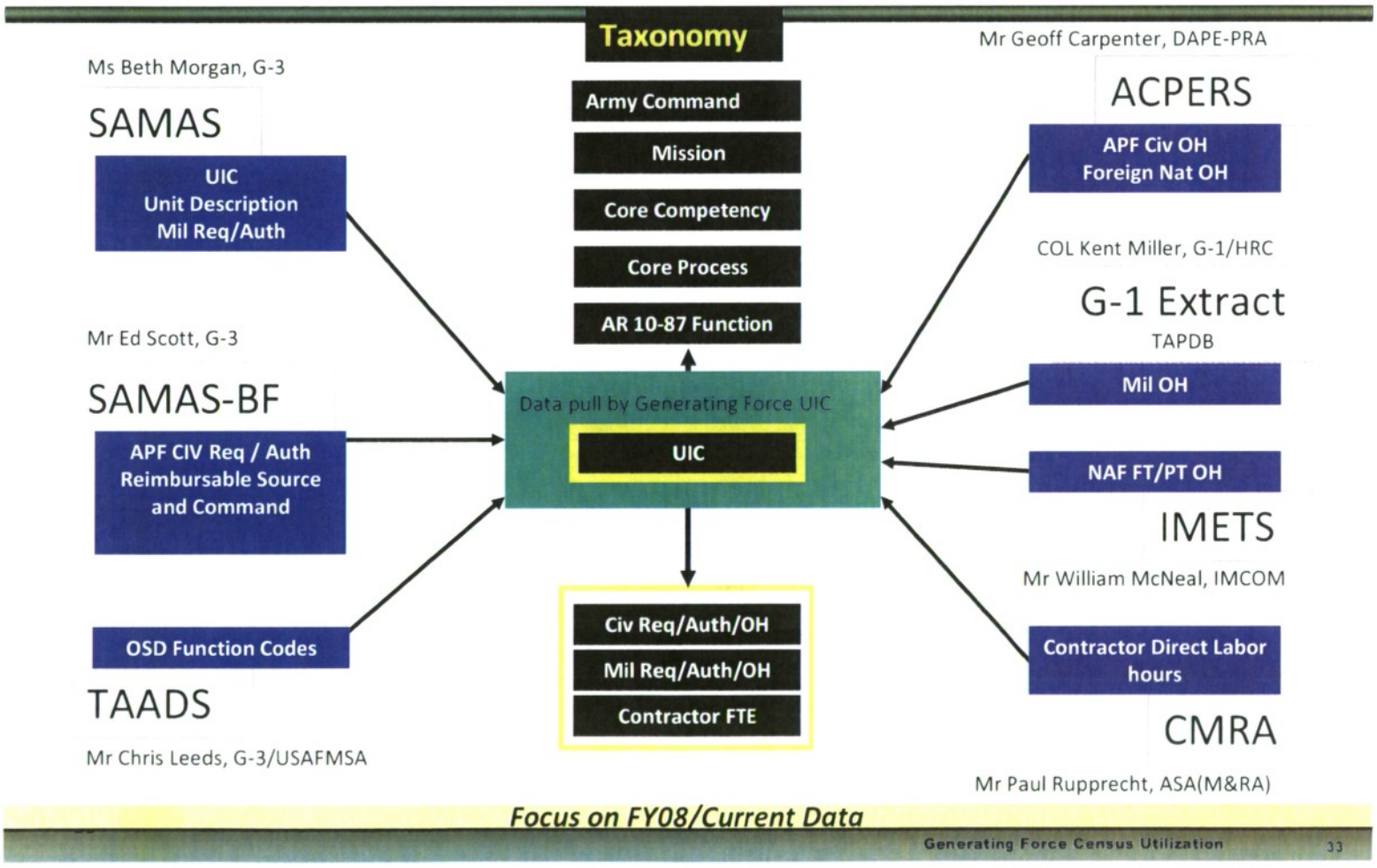
GFC Study Recommendations

An important aspect in accomplishing the individual recommendations is the proper assignment of each to an HQDA staff section for implementation.

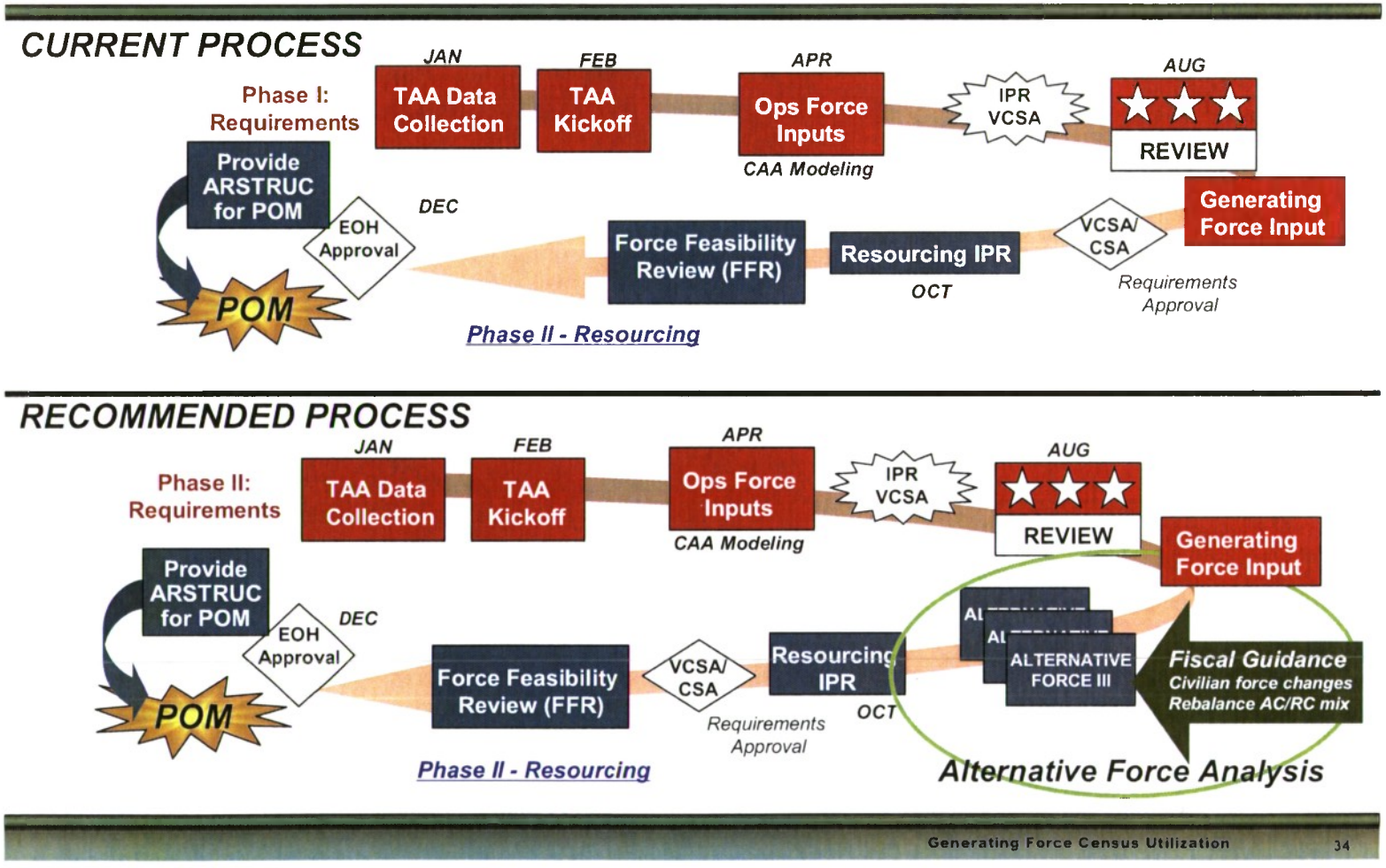
Army Science Board

Backup

Army GFC Methodology



Total Army Analysis (TAA)
2005 ASB Study



Total Army Analysis

This slide was first presented in a 2005 ASB Summer Study on Best Practices. The top diagram shows the TAA process at that time, which is very little changed from today. Note that GF inputs are considered at one point but with little or no analysis especially when compared to the extensive OF analysis.

The bottom diagram recommends consideration of various alternatives based on fiscal guidance before going to the leadership for decision. This could also be facilitated by a GFC database, which should provide a greater opportunity for more analysis of GF requirements and funding.

Appendix A

TERMS OF REFERENCE

DEPARTMENT OF THE ARMY
WASHINGTON DC 20310-0103

MAR 28 2008

Dr. Frank H. Akers, Jr.
Chairmen, Army Science Board
2511 Jefferson Davis Highway, Suite 11500
Arlington, Virginia 22202

Dear Dr. Akers:

I request that the Army Science Board (ASB) make recommendations for future use ot the Army Generating Force Census (GFC). This usage should be guided by, but not necessarily limited by, the Terms of Reference described below:

Background: The U.S. Army has a well defined functional structure for the Operational Force, (i.e., the Table of Organization and Equipment Army). Force development and torce management efforts over the last decade have culminated in a modularized brigade-centric force structure that is at the core of an expeditionary U.S. Army committed to a persistent conflict.

At the direction of the Secretary of Defense, the Senior Army Leadership has begun to focus further on the functions and design of the Generating Force (sometimes termed synonymously as the "Institutional Army"). General Cesey, upon assuming his Chief of Staff, Army duties, instituted seven initiative working groups to address his focus for chenging end improving the U.S. Army's abilities to meet its strategic requirements and demands. The sixth initiative was to: "Adapt Army Institutions to Support an Expeditionary Army at War." The U.S. Army GFC Study, which is sponsored by the Assistant Secretary of the Army tor Financial Management and Comptroller (ASA(FM&C)) and the G-3/5/7 is part of this effort.

The GFC Study will link an exhaustive and exclusive taxonomy of U.S. Army generating torce functions to Full Time Equivalents (FTEs) performing those functions to determine which ere performed by: (1) Active Duty Soldiers, (2) Mobilized Reserve Component Soldiers, (3) U.S. Army civilians, and (4) contractor FTEs. The FTEs will be eligned to their required functions by unit identification code, and organized into a database to be used in assessments of Generating Force structure and resources. Such a census database constitutes a necessary first step to future "troops to task" optimization.

The census contract is being conducted in three stages: (1) to elign functional metrics, (2) to gain percentage split between unit locations, end (3) will complete the final alignment. Current schedule envisions third stage completion in November 2008. An annual rerun of the census is expected.

Issues for the ASB:

(a) The GFC will help the Army Leadership understand the size, structure, composition, and cost ot the Generating Force. However, the U.S. Army believes that once the Census is completed, its utility mey be expanded to examine other complex problems. I request the ASB make recommendations tor future studies for the Army GFC. Based on the most mature version of the Census, these future studies should be described in terms of purpose, metrics and expected use of processes, metncs, models and timeliness/accuracy to achieve desired results, e.g., demographic layouts, manpower functional mixes, job specialty distributions, etc.

(b) Based on the analyses, essess the tollowing:

(1) What U.S. Army agencies could benefit the most from follow-on Census studies;

(2) The types of follow-on analysis and the benefits of further study;

(3) Additional ways to measure the performance ot future studies; and

(4) Any additional data requirements (and the owners of the data) tor follow-on studies.

Study Sponsorship: The ASB study is sponsored by the ASA(FM&C) and the Director of Force Management in the Office ot the Deputy Chiet ot Staff for Operations (G-3/5/7).

Study Duration: A briefing will be provided by July 24, 2008. The final report should be provided by October 15, 2008.

Sincerely,

Dean G. Popps
Acting Assistant Secretary of the Army
(Acquisition, Logistics and Technology)

Purpose of ASB Summer Study

- The Army Science Board (ASB) has been asked to make recommendations for future studies based on the Army Generating Force Census (GFC) study
- GFC study:
  - Sponsored by the ASA (FM&C) and the G3/5/7 to support the CSA's sixth initiative: "Adapt Army Institutions to Support an Expeditionary Army at War"
  - Links an exhaustive and exclusive taxonomy of Army generating force functions from AR 10-87 and GO 3 to Unit Identification Codes (UICs) and people performing those functions in the following categories:
    (1) Active Duty Soldiers
    (2) Mobilized Reserve Component Soldiers
    (3) Army Civilian
    (4) Contractors (Civilian Manpower Equivalents (CMEs))
  - Database being developed by contract using files containing required, authorized positions, and on-hand personnel. GFC to be completed November 2008

Appendix B

LIST OF PARTICIPANTS

GFC Study Membership

CO-CHAIRS

Max Noah **Dick Ladd** **John Matsumura**

MEMBERS

Staff Assistant
Rachel Gerstein-ASB

John Barnes
Ruby DeMesme
Frank Distasio
John Farr
Stan Frager
Valerie Gawron
Paul Greenberg
Harold Mabrey
Harry West

Study Manager
Justin Bringhurst– ASB

Appendix C

GLOSSARY OF ABBREVIATIONS

ABBREVIATIONS AND ACRONYMS

AC	active component
ACOM	Army command
ACPERS	Army Civilian Personnel System
ACSIM	Assistant Chief of Staff for Installation Management
AFMC	Army Force Management Category
AFP	annual funding program
AMSCO	Army Management Structure Code
AoA	analysis of alternatives
APS	Army prepositioned stocks
AR	Army Regulation
ARNG	Army National Guard
ASA	Assistant Secretary of the Army
ASB	Army Science Board
ASCC	Army Service Component Command
ATEC	Army Test and Evaluation Command
BASOPS	base operations support
BCT	Brigade Combat Team
CAA	Center for Army Analysis
CASTFOREM	Combined Arms and Support Task Force Evaluation Model
CBA	capabilities-based assessment
CCP	Concept Capability Plan
CDD	Capability Development Document
CME	contractor manpower equivalent
CMRA	Contract Manpower Reporting Application
CSA	Chief of Staff, Army
CTC	Combat Training Center
DAB	Defense Acquisition Board
DASA	Deputy Assistant Secretary of the Army]
DOTMLPF	doctrine, organization, training, materiel, leader development, personnel, and facilities
DRU	direct reporting unit
EOH	Executive Office of the Headquarters (Army)
FAD	fund authorization document
FD	Force Development
FFR	Force Feasibility Review
FFRDC	federally funded research and development center
FHMA	Family Housing Management Account
FM&C	Financial Management and Controller
FORSCOM	Forces Command
FTE	full-time equivalent
G-3/5/7	Deputy Chief of Staff for Operations
GF	Generating Force
GFC	Generating Force Census
GFEBS	General Fund Enterprise Business System
GO3	Army General Order 3; "Assignment of Functions and Responsibilities Within Headquarters, Department of The Army"—a general order directing the structure and organization of Army Headquarters
GOSC	General Officer(s) Steering Committee
HQDA	Headquarters, Department of the Army
IAW	in accordance with
ICD	Initial Capabilities Document
IDA	An FFRDC, Institute for Defense Analyses
IDIQ	indefinite delivery, indefinite quantity
IMCOM	Installation Management Command
IMETS	Integrated Meteorological System
IPR	in process review
ITT	Inter/Intra Theater Transfer
JMRC	Joint Multinational Readiness Center

KBR	Kellogg, Brown and Root
LOGCAP	Logistics Civil Augmentation Program
M&RA	Manpower and Reserve Affairs
M&S	modeling and simulation
MOS	military occupational specialty
MPA	manpower authorization (Army)
MPANG	manpower authorization (Army National Guard)
MPAR	manpower authorization (Army Reserve)
MTBF	mean time between failure
MTOE	modified TOE
NAF	non-appropriated funds
O/H	overhead
OASA	Office of the Assistant Secretary of the Army
OF	Operating Force
OMA	operation and maintenance (Army)
OMANG	operation and maintenance (Army National Guard)
OMAR	operation and maintenance (Army Reserve)
OPTEMPO	operational tempo
OSD	Office of the Secretary of Defense
OSDPE	Office of the Secretary of Defense program element
PAE	program analysis and evaluation
PBG	program–budget guidance
PEG	program evaluation group
PEO	program executive office(r)
POM	Program Objective Memorandum
PPBES	Planning, Programming, Budgeting, and Execution System
R&D	research and development
RAND	An FFRDC corporation
RDTE	research, development, test, and evaluation
RMT	Resource Management Tool
SECARMY	Secretary of the Army
SES	senior executive service
TAA	Total Army Analysis
TAADS	The Army Authorization Documents System
TDA	Tables of Distribution and Allowances
TOE	Tables of Organization and Equipment
TOR	Terms of Reference
TRAC	TRADOC Analysis Center
TRADOC	Training and Doctrine Command
TRM	Training Resource Methodology
TTHS	trainees, transients, holdees, and students
TTP	tactics, techniques and procedures
UIC	unit identification code
USAREUR	United States Army Europe

Appendix D

FUNCTIONAL ANALYSIS USES

Appendix D
Functional Analysis Uses

Generating Force Census Utilization

1

The appendix was written by John Farr, Valerie Gawron, and John Matsumura. The quantitative examples in this section that assessed data in the census were taken from a briefing titled "Preliminary Analysis of Generating Force Census Utilization Data," by Frank Camm and Wade Markel of the RAND Corporation, July 2008.

GFC Functional Analysis Uses

Issue: Data, relationships (census to functions to capabilities), and models do not exist to benchmark GF and assess the risk to the OF

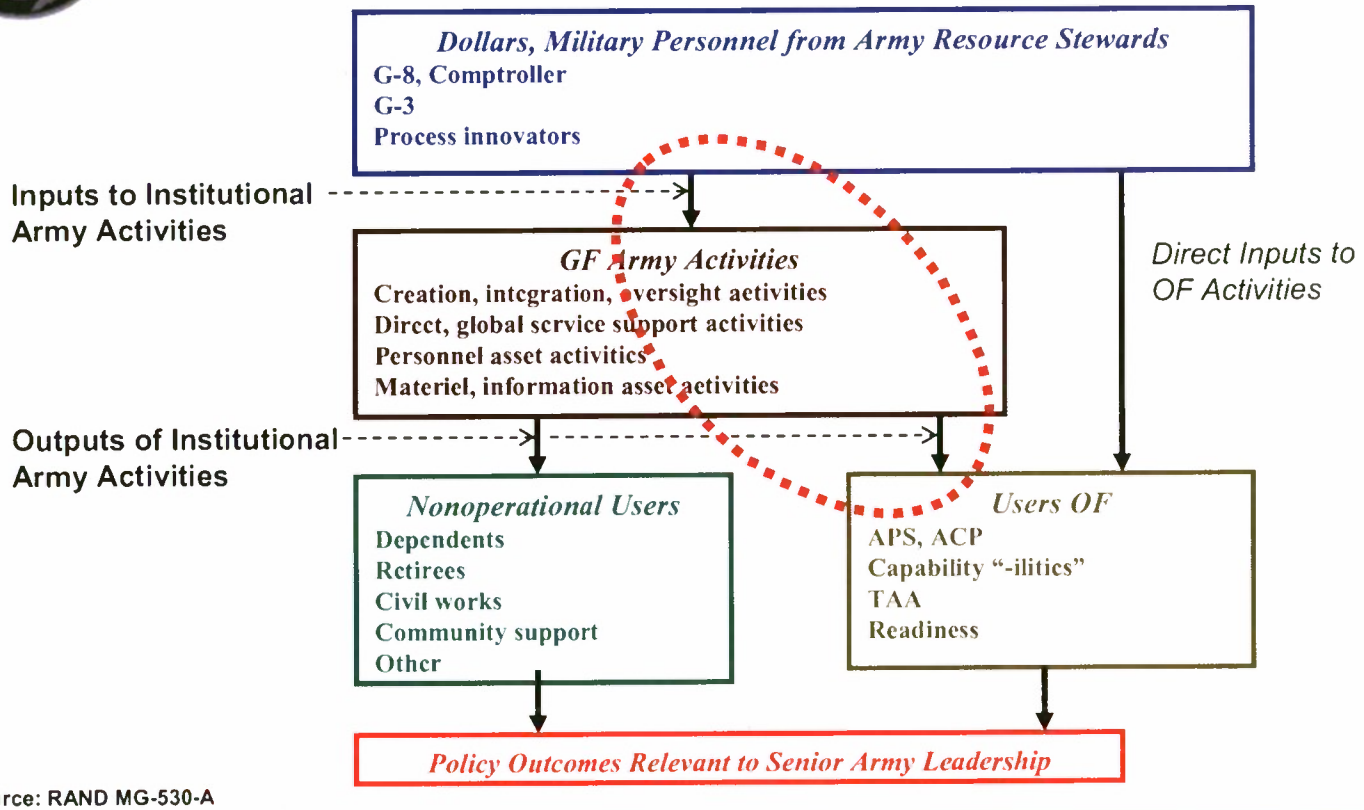
Finding:

- Integrated analytic tools exist to help the OF with planning
  - Models representing force properties
  - Force effectiveness models and simulations
- Similar integrated tools do not exist for the GF
  - Legacy databases exist within subordinate commands
  - Methodologies to use databases exist but have not been "operationalized"

The OF has numerous agencies that help shape the warfighting forces: TRADOC Analysis Center (TRAC), Center for Army Analysis (CAA), RAND Corporation, and others. Some limited quantitative analysis is typically conducted to help with shaping the GF; however, this analysis tends to be a stove-piped process. Effectively, much of the shaping of the GF is driven by historical requirements. Whether during surge (war) and downturns, it is not well understood how this affects the ability of the GF to conduct its mission.

Functional Analysis Uses

Relationships Relevant to Alignment of Institutional Activities



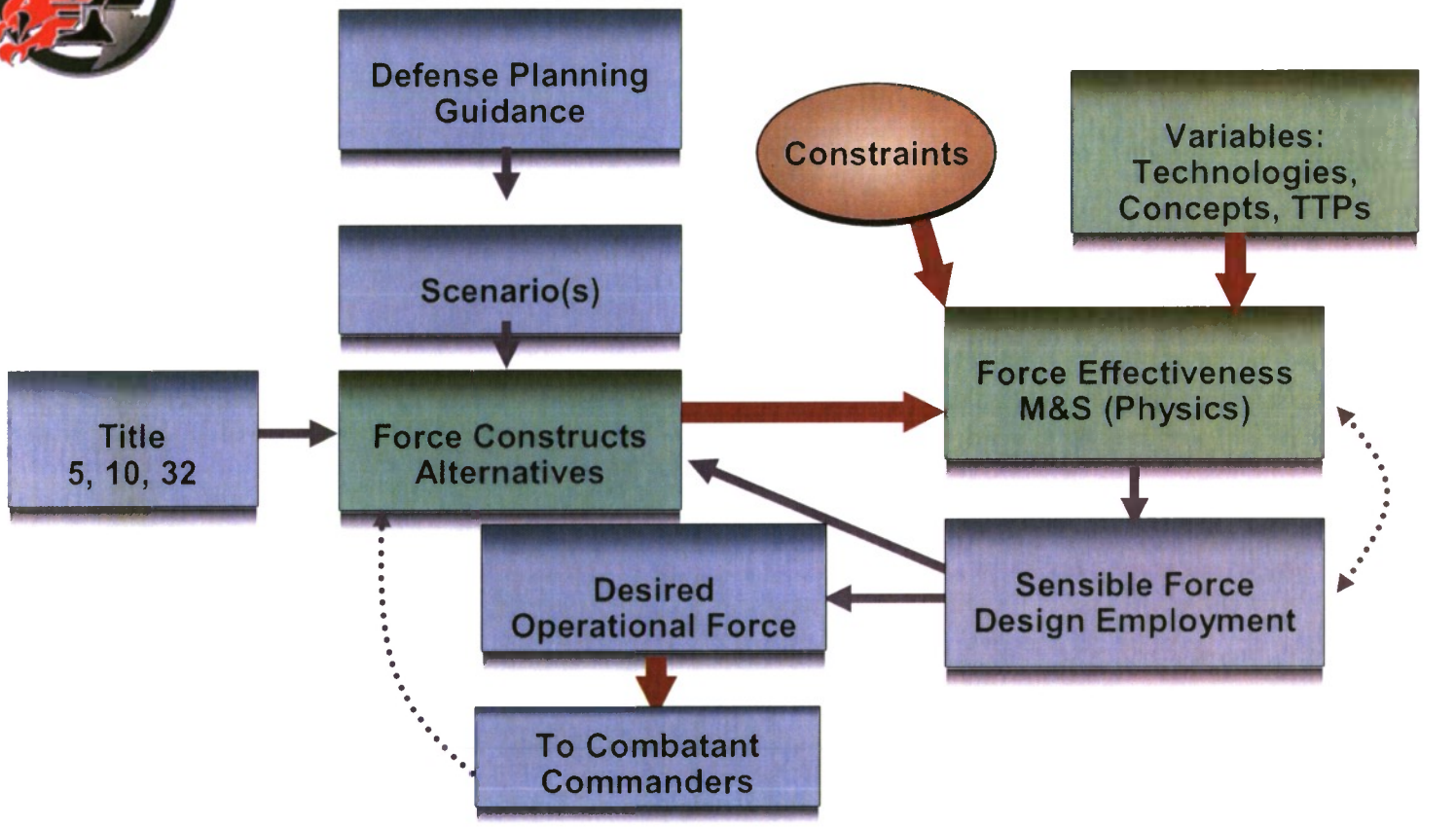
Source: RAND MG-530-A

Generating Force Census

Utilization

The ability to produce outputs is determined by the flow of resources. This chart represents a broad, top-down roadmap of the flow of resources within the Department of the Army. As the diagram shows, in some cases, resources flow directly to the OF; in others, they flow through the GF. The bulk of the resources that flow into the GF usually are designed to improve the effectiveness of the OF. Although the flow is represented statically, in reality continuous feedback occurs to close gaps and minimize risk to the OF.

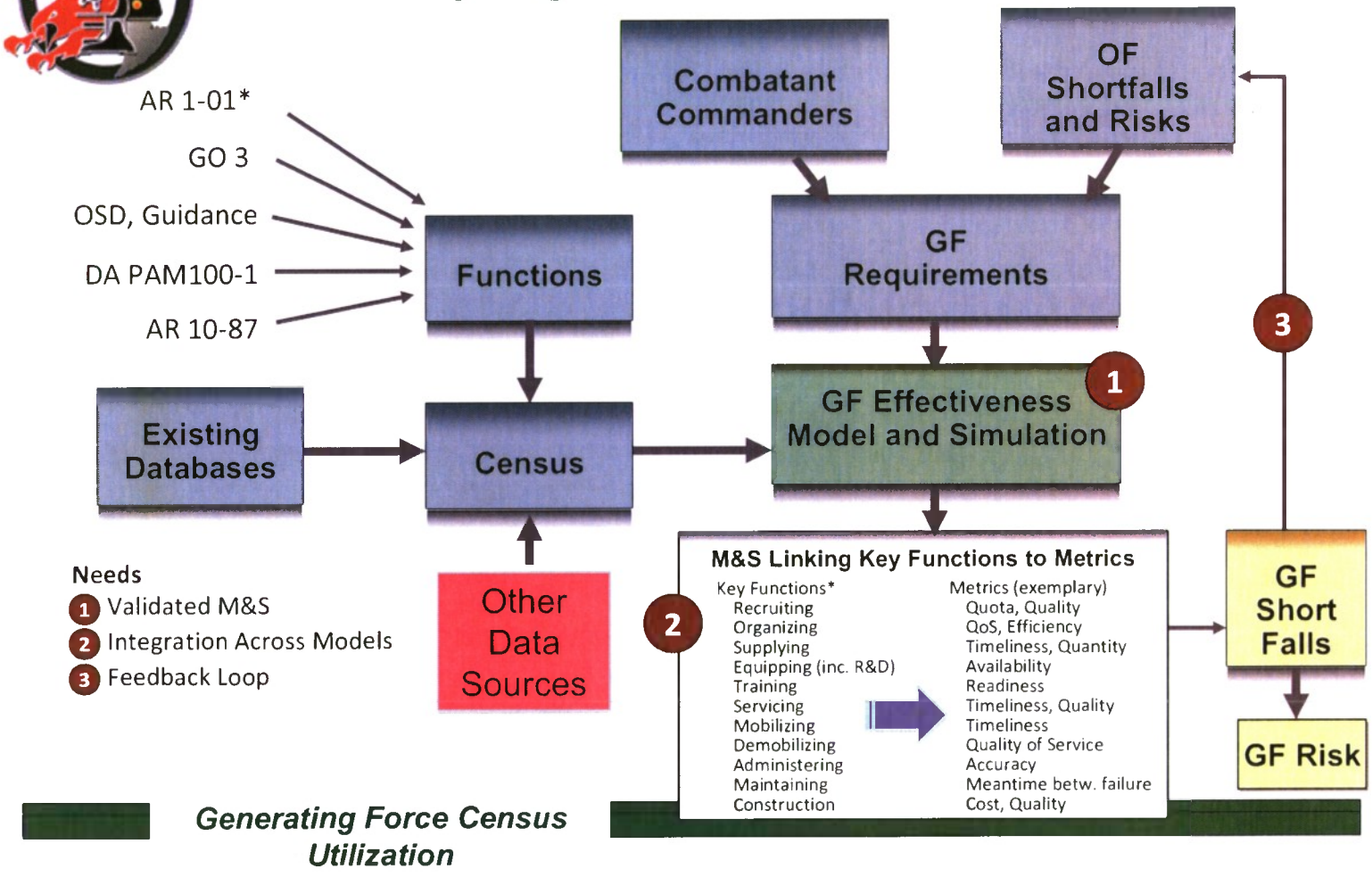
Assessing OF Effectiveness Process



Generating Force Census
Utilization

For example, the CAA uses force effectiveness (combat) models and simulations at various levels to support detailed force planning decisions. "What If" analyses study causalities, time-to-battle completion, logistics requirements, etc. In another example, blast models are used to predict the severity and types of injuries to Soldiers in an engagement. These numbers are included in a lookup table in CASFOREM to predict OF effectiveness. How GF outputs such as training, doctrine, casualty care, family support, R&D, etc., affect OF effectiveness are not well understood.

GFC Functional Analysis Uses Analyzing GF Functional Effectiveness



This flowchart illustrates how the GFC could be used to help design the GF and the impact on the OF. The key functions are derived from AR 10–87 and FM1–01; these are associated with key metrics that could be used as model outputs for determining shortfalls. At a broad level, the key challenge is to determine how GF shortfalls affect the OF's ability to conduct the warfighting mission. At a more detailed level, the key challenge is to develop a means for integrating the development of the various GF functions.

Components of "GF Effectiveness" Model

	Key Functions	Capabilities Based Models
Strategy and Force Development	Generation of Doctrine Conversion of S&T Info Capabilities Testing and Evaluation	War games (People, MOS) Tech Maturation (Tech, Readiness Level) Constructive, Virtual Live Testing (Compliance/Effects)
Manpower and Facilities	Recruiting and Retention Training Army Infrastructure and Community	Manpower (Quota/Percentages) Proficiency (Number Certified) Quality of Life (Compliance, Morale)
Logistics Support	Mobilization Maintenance and Service Repair	Readiness/Avail (MTBF, Time to Return to Service)

Output: Proficient/Trained Units

Stove-piped: ad hoc, very specific

Generating Force Census Utilization

A GF effectiveness model might have three components: 1) strategy and force development, 2) manpower and facilities, and 3) logistics support. These are grouped based on key functions that need to be performed by the GF. The capabilities-based models must map functions to capabilities to conduct meaningful analysis, and more importantly, should be integrated.

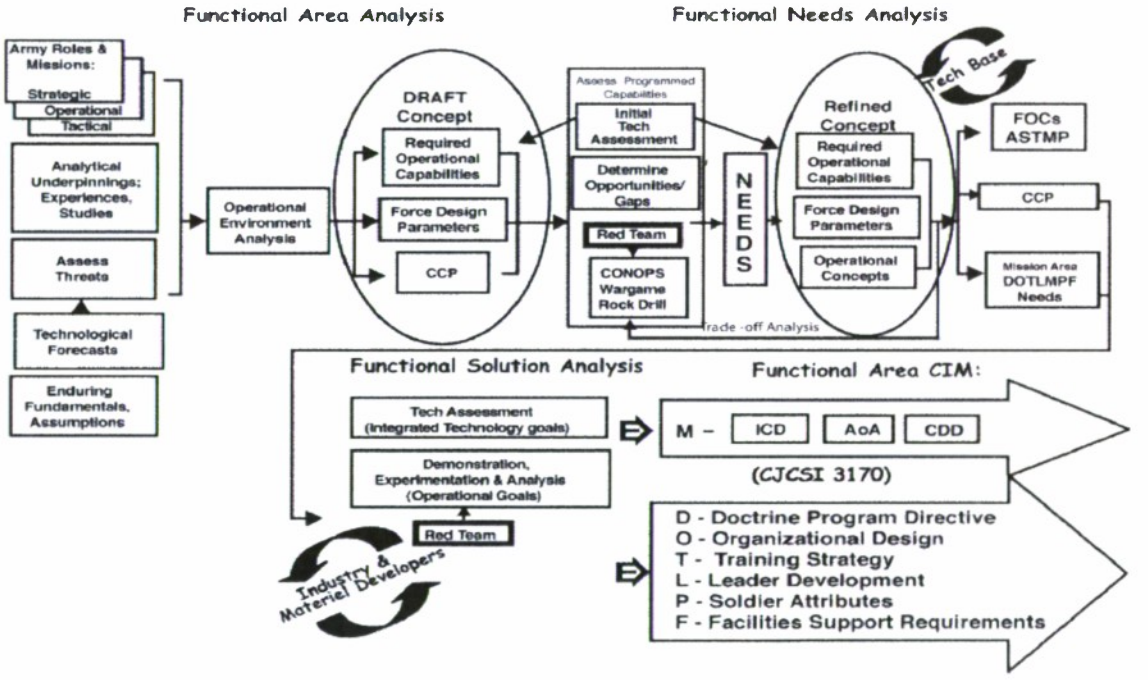
Develop Functional Mapping and Tools

Recommendation:

- **Develop a suite of tools to**
  - **Assess risk to OF and GF as a function of resources**
  - **Optimize mix of manpower**
- **Without functional relationships we cannot benchmark and assess quality**
- **Follow on to census work must map to functions to understand "who is doing what"**
  - **OSD and Army functions exist - need to get a handle on fidelity and map to capabilities**

Functional analysis is well defined for the OF - nothing comparable exists for sizing the GF

Functional analysis capability has existed and continues to evolve for the OF. This has been expanded to capabilities-based assessment (CBA) processes that include functional area, needs, and solution analyses. (See figure below; Source: *How the Army Runs: A Senior Leader Reference Handbook*, 2007-2008, Army War College, 13 December, 2007, page 52.)



Priorities for Follow-On Census Analysis

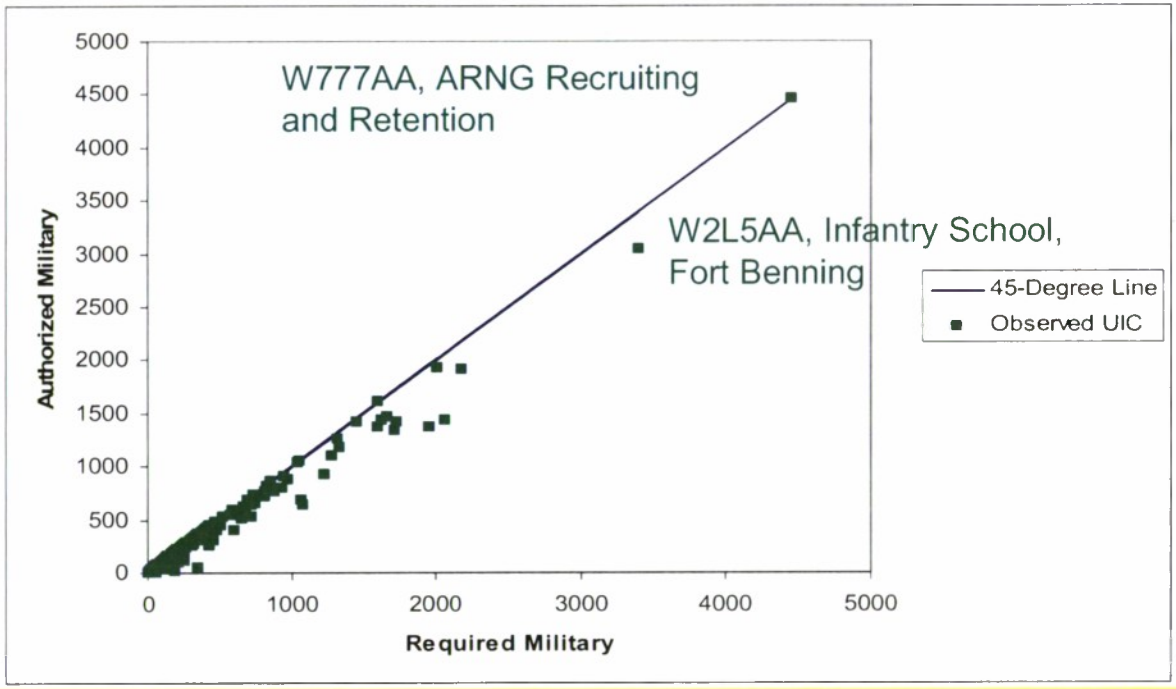
- Census
- Benchmarking/Comparative Analysis*
- Forecasting

*Benchmarking is when you compare your processes and organizational performance with that of other organizations and try to improve the standard of the process you follow to improve quality and performance of the system, product, services etc.

Next to tracking resources, the single greatest benefit of the GFC will be to provide a means for benchmarking. Some examples of benchmarking that might be of interest include:

- Military/civilian/CME mix for unit identification codes (UICs) conducting similar functions
- Efficiency of similar UICs
- Under and over resourcing of UICs
- Tracking resources to functions of UICs.

Census Example: Comparing Authorized and Required Personnel



There are no UICs with more military authorized than required

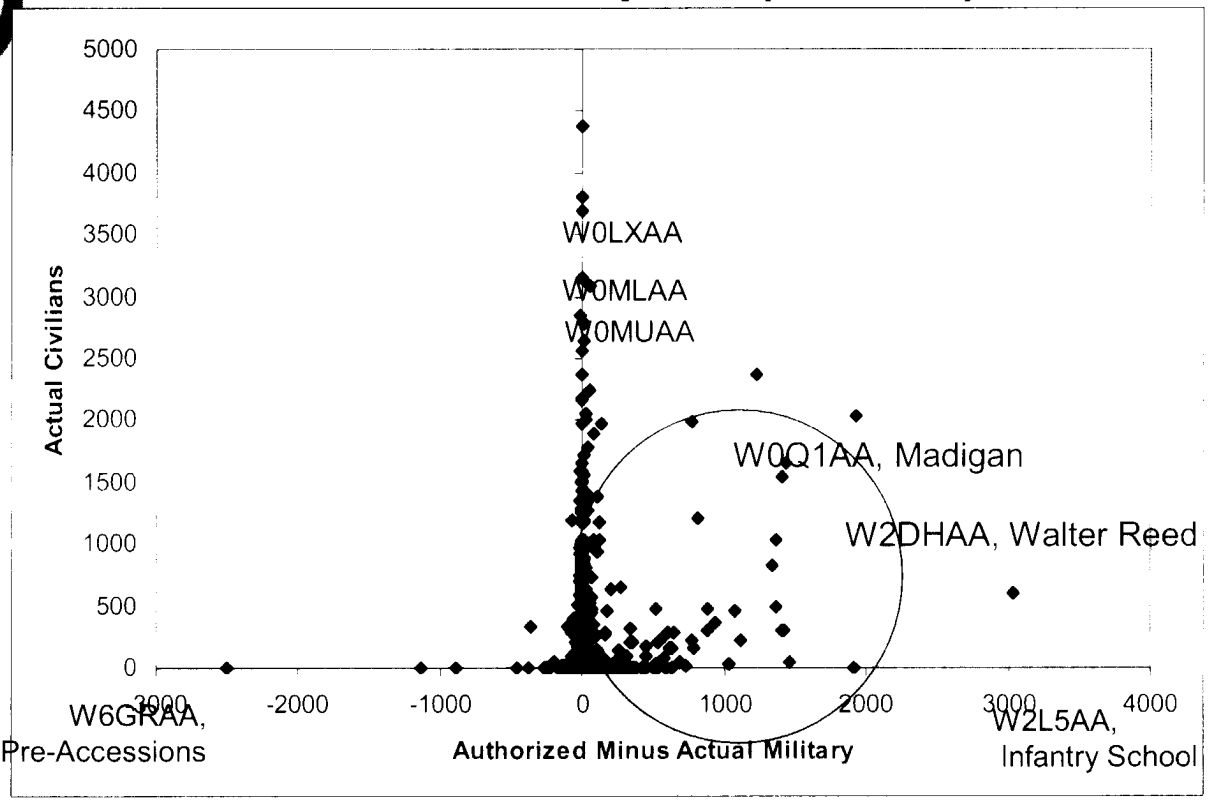
Source: RAND Analysis, Version 1 of census

Generating Force Census Utilization

As a first-order validity check on the data (version 1 of the census), authorized military can be compared to required military across the GF. As expected, in no cases do the authorized exceed the required personnel.

The sample census analyses that follow in the subsequent charts were conducted by RAND; these examples demonstrate the types of information that could be developed. Additionally, although this is a preliminary analysis, it is demonstrative of the types of quantitative validity checks that could be performed on the census data.

Census Examples (Cont'd)



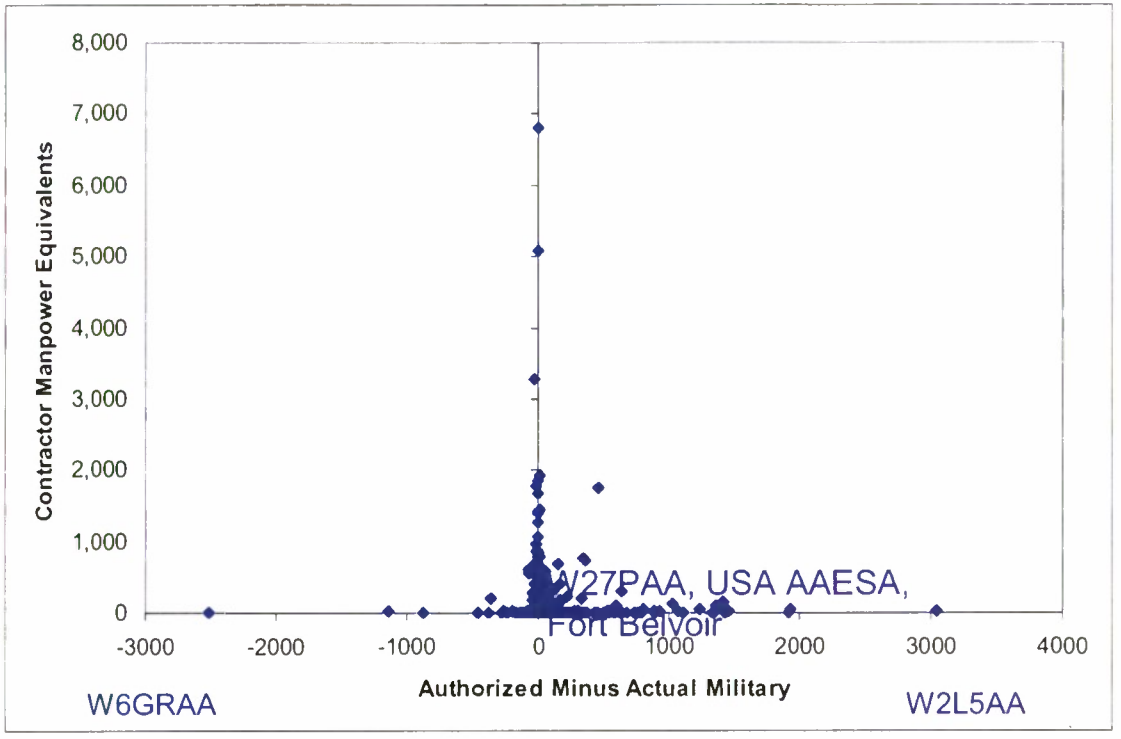
Civilians may replace authorized, but absent, military in some UICs

Source: RAND Analysis, Version 1 of census

Generating Force Census Utilization

In the above example, the GF model would have predicted the number and types of personnel, services, and facilities required to care for casualties predicted by OF models. The figure shows that Walter Reed understaffed by roughly 2,000 persons to meet the needs of the predicted casualties. This shortfall increases the time and probability of return to service, which in turn increases the risk to the OF.

Census Examples (Cont'd)



Rarely did CMEs replace authorized military within UICs

Source: RAND Analysis, Version 1 of census

In this figure, an effort to correlate the difference between authorized and actual military to CME was performed. In cases where there were large gaps between authorized and actual, it appears that gaps were not (generally) filled by CME additions to the respective units.

Census Examples (Cont'd)

- At least half of contract billets support deployed forces from UICs in the U.S.
  - LOGCAP accounts for 63K of 153K CMEs in "Generating Force"
  - Top 30 contracts include another 11K CMEs supporting deployed forces from a distance
- Many other contract billets appear to support activities located separately from contracting office

Contract billets are linked to contracting UICs, not UICs using contract services

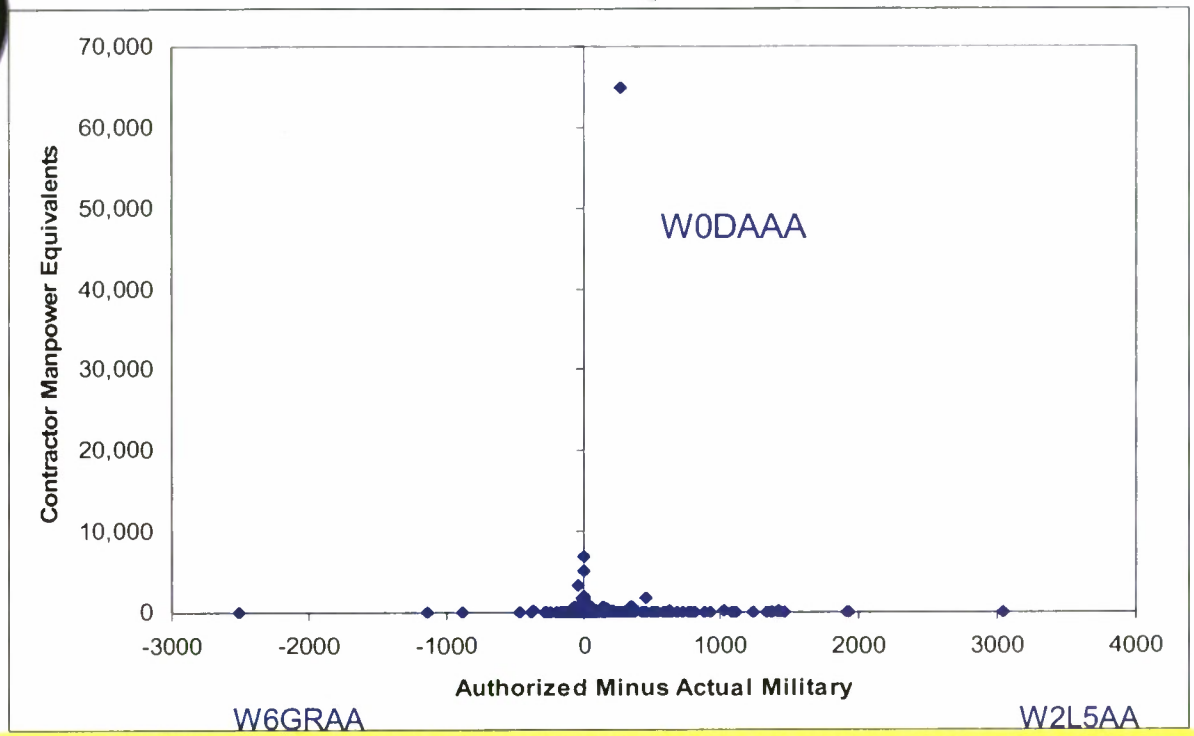
Source: RAND Analysis, Version 1 of census

Another benefit of a complete census dataset is the ability to assess the utilization of contractor support. For example, a breakdown by CME is shown below (Source: RAND).

Contractor, Contract Activity	Location of Contract Office	# CMEs
KBR LOGCAP	Sustainment Command	62,811
ITT maintenance shop in theater	Sustainment Command	5,680
L-3 translation services in theater	HQ INSCOM	1,720
ITT comms support in theater	HQ NETCOM	1,491
ITT maintenance of prepositioned stock	Sustainment Command	1,170
Dyncorp guard services	Army Central Command	459

"Generating Force" Contracts Directly Supporting Deployed Forces among 30 Largest Contracts

Census Examples (Cont'd)

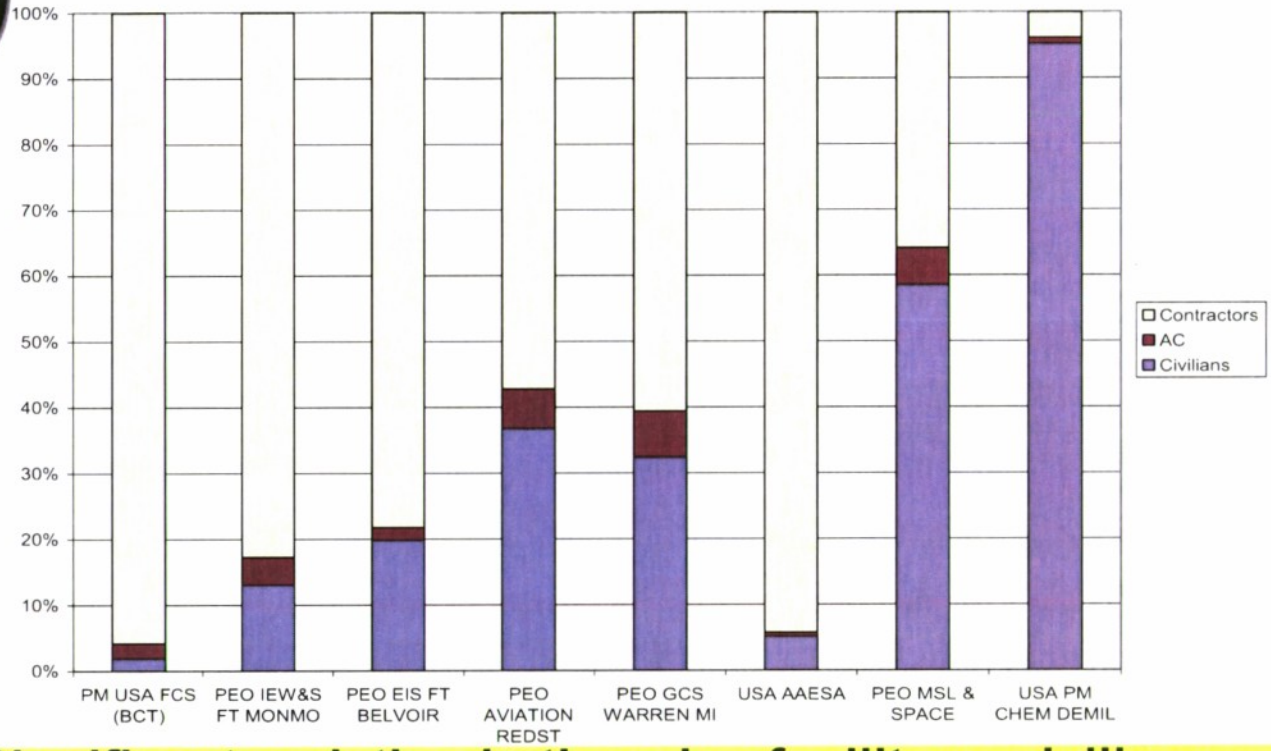


Over 40% of Army CMEs are on the KBR Logistics Support Contract

Source: RAND Analysis, Version 1 of census

An analysis of the distributions of CMEs within UICs helps to illustrate where resources are being allocated. The above chart depicts the magnitude of the KBR logistics support contract relative to other contracts.

Census Examples (Cont'd)

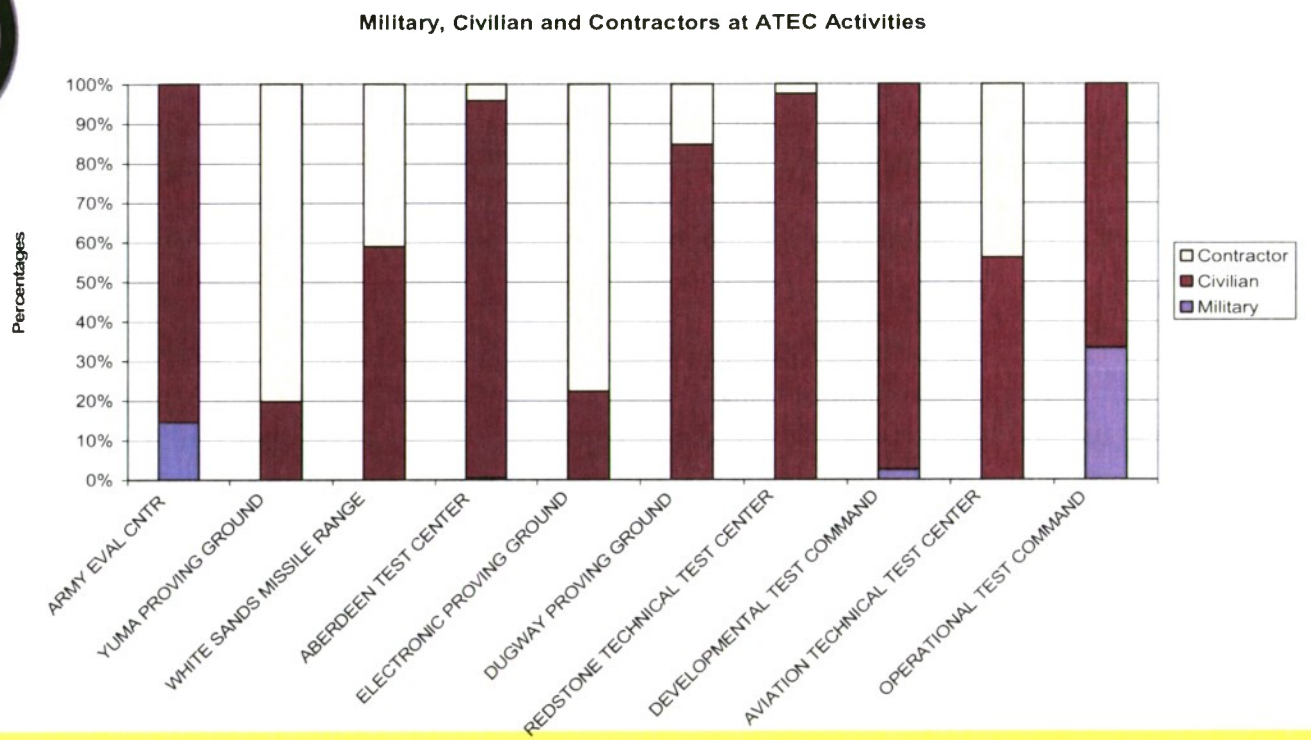


Significant variation in the mix of military, civilians and contractors at PEOs

Source: RAND Analysis, Version 1 of census

Similar organizations within the GF can also be compared by composition of military, civilians, and CMEs. In the chart above, the program executive offices are shown by entries into version 1 of the CALIBRE census. This analysis was conducted by RAND. This type of analysis should be used to identify facilities that operate outside the norm and that warrant further investigation.

Census Examples (Cont'd)

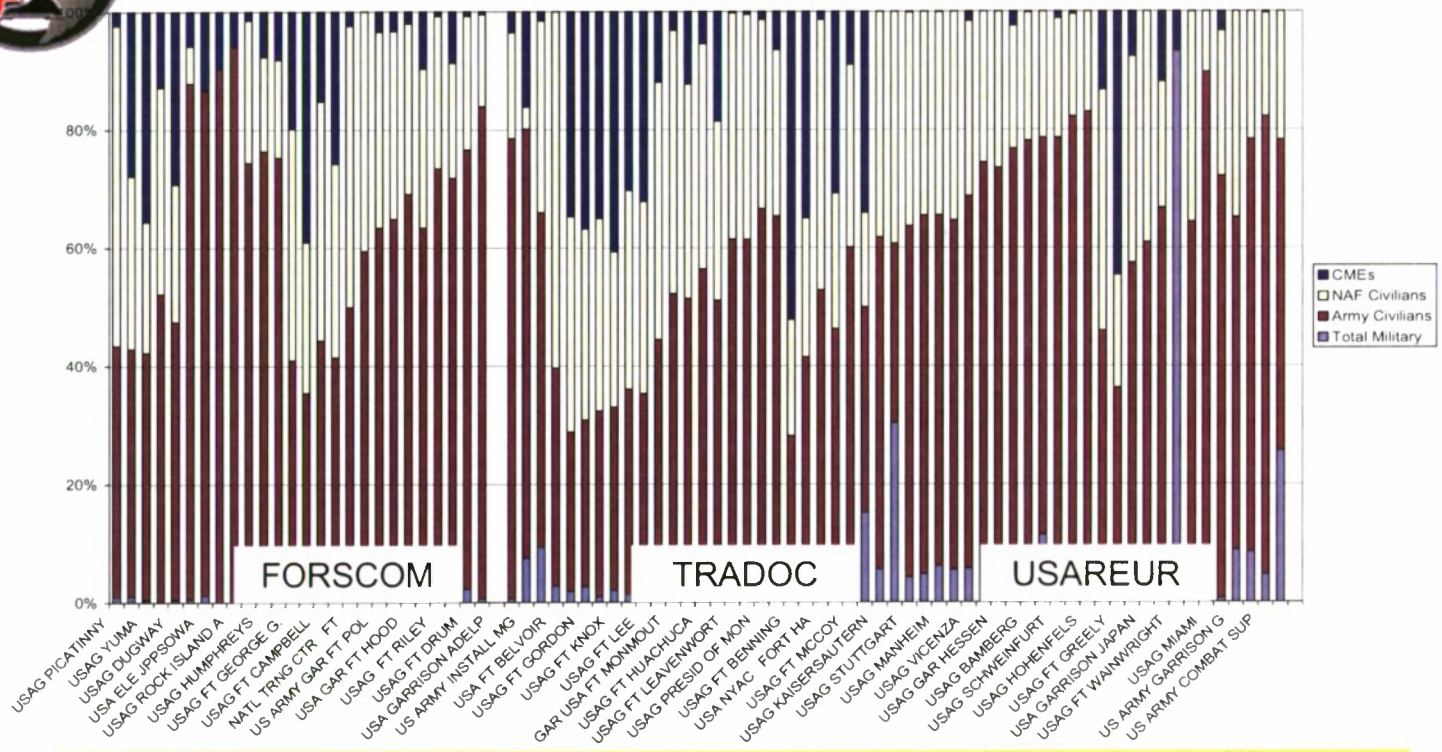


Mix of military, civilians and contractors varies widely at ATEC activities

Source: RAND Analysis, Version 1 of census

Composition can be compared at Army test and evaluation centers as well. As the chart illustrates, there is a fair amount of variation across these centers.

Census Examples (Cont'd)



Significant variation in the mix of military, civilians and CMEs in Army garrisons

Source: RAND

Generating Force Census Utilization

This chart (taken from a briefing titled "Preliminary Analysis of Generating Force Census Utilization Data," by the RAND Corporation, July 2008) is a comparison of the mix at U.S. Army garrisons ("Garrison comparison by ACOM DRU"). Again, garrisons seem to vary significantly in their use of contractors, even when supporting the same major command (e.g., TRADOC, FORSCOM). There is more variation within FORSCOM than TRADOC, and more in TRADOC than in USAREUR. This could be related to each garrison's orientation and the function of its tenants.

Census Examples (Cont'd)

- Both share the function "National Sustainment Process Owner"
  - Newport Army Depot is 97% contractor (524 of 542)
  - Corpus Christi Army Depot is 7% contractor (277 of 2970)

Significant variations in the mix at Newport Army Depot and Corpus Christi Army Depot

Source: RAND Analysis, Version 1 of census

In some cases, extreme differences can be found in the composition of organizations. For example, the version 1 of the census suggests that the Newport Army Depot is 97 percent contractor based. In comparison, Corpus Christi Army Depot is only 7 percent contractor based.

Census Examples (Cont'd)

- Includes all UICs and functions related to CTC mission at an installation
- Division of responsibilities (and manning) differs at each installation

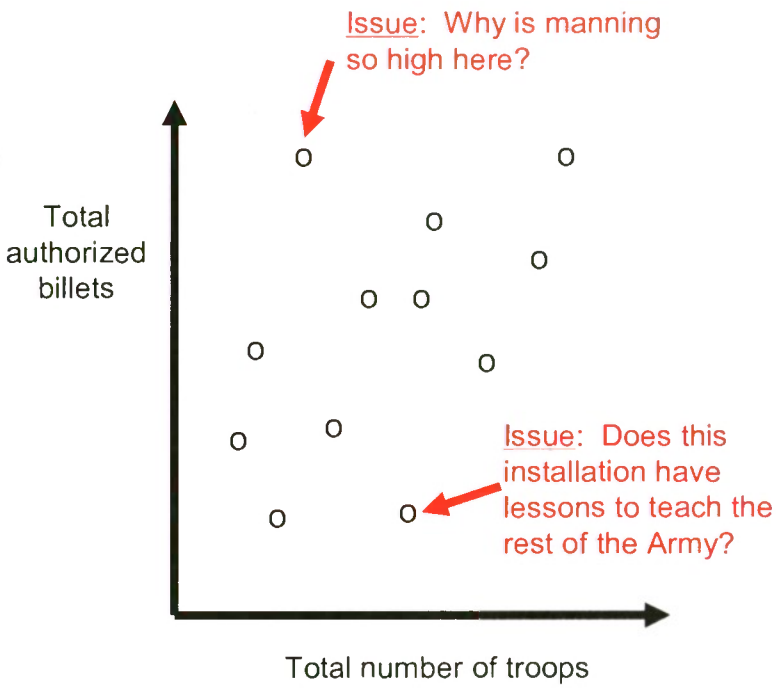
Mix of Military, Civilians and Contractors Differs Significantly at CTCs

Source: RAND Analysis, Version 1 of census

This benchmarking data show that several types of costing modeling are being used. For example, why is the JMRC >60 percent CME? Obviously, something other than cost is used to operate these facilities.

Benchmarking Can Be Used to Explore Performance

- Likely candidates: Compare similar installations within FORSCOM, then TRADOC
- Identify total authorized billets at each installation: Military + Civilian + CME
- Identify likely drivers of authorized billets. e.g.:
  - FORSCOM: Number of troops
  - TRADOC: Number of students
- Relate authorized billets to drivers
- Goal: Use benchmarking to identify installations with best practices or where manpower could fall



Reference: Joseph Bolten, Edward Keating and John Halliday, *Understanding and Reducing the Costs of FORSCOM Installations* (1996)

As the above chart illustrates, by taking census-derived data, the process of comparing performance can be initiated. To an extent, it may be possible to determine what combination of capabilities is most effective, and perhaps more importantly, why.

RAND Analyses of Preliminary Generating Force Data

- The quality of data varies significantly by source, command and component – future censuses will test whether data in current Army systems are accurate and could yield internally consistent views of the GF
- Nonetheless, the aggregate data are accurate enough to build a simple enterprise-wide model of the GF that shows how changes in OF capabilities, structure and requirements should affect various components of the GF
- The proportion of military, civilians, and CMEs varies significantly in GF organizations *which share the same function – If* these anomalies persist in subsequent versions of the study, there are opportunities to improve the cost-effectiveness of selected activities in the GF

In summary, the preliminary look at version 1 of the census indicated the following: 1) the original data sources may be incomplete or inconsistent across UICs, 2) there are large variations in composition of UICs responsible for similar functions, and 3) with such large-scale integrated datasets, it is possible to do some comparative analyses that could lead to improvements in the GF. These analyses could be performed relative to the GF, where units with similar functions are compared and analyzed, or the analyses could involve benchmarking with like external, perhaps commercial, enterprises.

Appendix E

MANPOWER MANAGEMENT AND ACCOUNTING

Appendix E
Manpower Management and Accounting

Generating Force Census Utilization

1

Manpower Management and Accounting is an important element of Army resource management second only to fund management in priority and is critical to maintaining a Generating Force Census (GFC) with any credibility.

Considering the four manpower categories of the GFC (active military, reserves, civilians, and contractors) and their accounting, the military active and reserve force structure accounts are in relatively excellent condition. Both are intensely managed by the G1, M&RA, and The Human Resources Command plus both are funded by a dedicated account that allows accurate tracking and management.

In contrast, the Army civilian force structure accounts are relatively poorly managed and only partially resourced with funding often required on the margin. Worse is the accounting for contracted manpower measured in Civilian Manpower Equivalents (CME) depending on an almost gratuitous reporting process. Both civilian and CME manpower are funded by functional budget accounts for the budget functions performed in the account (i.e., RDTE, FHMA, or OMA). Also, Army civilian manpower has been at a relatively steady level at approximately 243,400 for FY 07, FY 08, and FY 09 while the active military force structure has increased.

Civilian Manpower Management

Issue: Management of the Army Civilian Force is decentralized to multiple offices resulting in mismatches of manpower levels and dollars

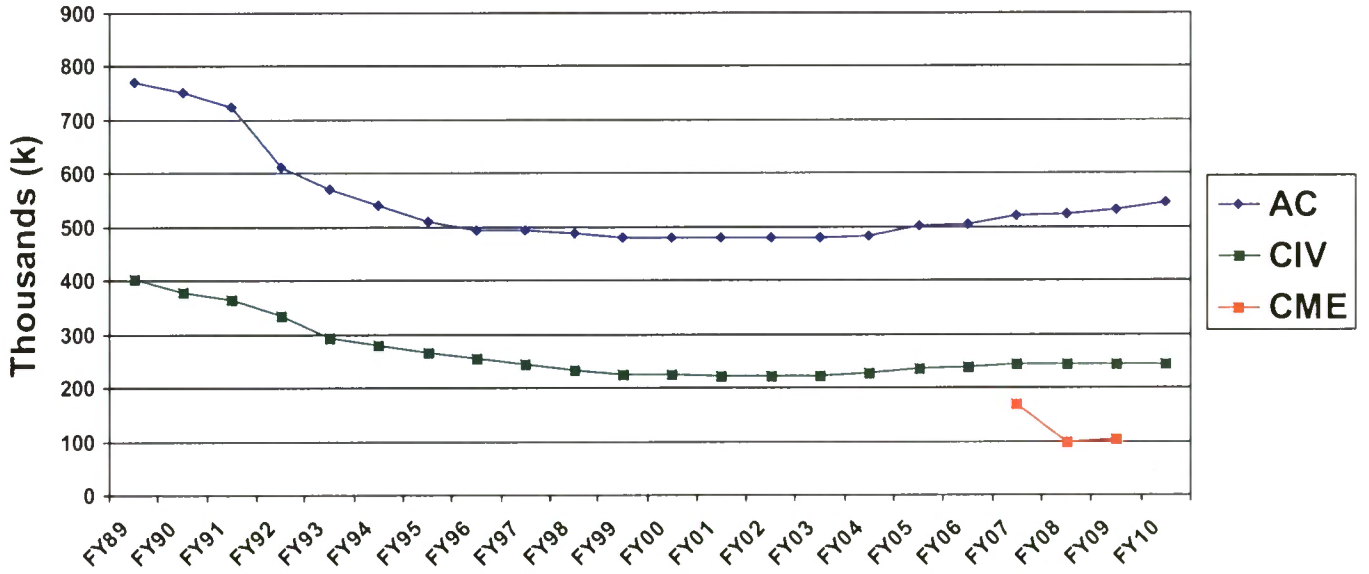
Findings:

- No direct correlation between the military and civilian force management systems and practices
- Civilian force size and structure are not commensurate with changing requirements of "Growing the Army" initiative
- Civilian spaces are not fully funded to perform the GF support functions
- Manpower authorizations are primarily based on prior year budgets rather than deterministic requirements

Management of civilian force management is fragmented in HQDA. Several HQDA offices manage the size and structure of the civilian force during the planning, programming and budget development phases of the PPBES—G1, ASA (M&RA), G3, PAE, and ASA (FM&C). During the *planning phase,* civilian force structure is not considered in the Total Army Analysis assessment. During the *programming phase,* the prior-year civilian force size is the primary driver of the analysis of the civilian force structure. No workload management tools are used by the PA&E to evaluate the "required" size and structure of the civilian force. During both the *programming* and *budget development* phases, funding of civilian pay competes with other requirements through the PEG process; and for new, approved civilian force structure, it does not match the approved force structure. There are no deterministic manpower/workload management processes to determine the "required" size and structure of the civilian force during any of the three management phases described in this summary.

Civilian Manpower Management (Cont'd)

Army Manpower Trends



Note: Civilian manpower requirements are steady state FY07 through FY10 while AC strength increases from 522k to 547k.

Generating Force Census Utilization

Historically, the active military force structure and the civilian force structure of the Army have decreased and increased in a similar manner over time. From FY 05 through FY 10, however, the civilian force is at a relative steady state while the active military force is growing. This fact has been noted in a January 2008 GAO report wherein GAO states, "The number of Army civilians to be hired is likely understated."

Contractor manpower equivalents (CMEs) are now being reported. The orange line on the chart indicates the levels reported and planned.

Civilian Manpower Management (Cont'd)

Recommendations:

- Develop a system for integration of military and civilian manpower planning and management to include program, budget formulation, and execution
- Develop a capability to determine the appropriate mix of civilian skills required to support current and future missions
- Link civilian manpower funding to civilian requirements during budget process
- Add data requirements in GFC for individual function skill identifiers using OSD function codes

Deterministic manpower and workload processes should be used in all phases of the Army's PPBES including the Total Army Analysis (TAA). That will put the Army on track to convert to a new set of manpower determination capabilities that establish the size and structure of the civilian force during all phases of the PPBES. Several manpower requirements-based capabilities are in place or are being developed. Considerations are being made by several study groups to use GFEBS historical data to assist in the determination of Army civilian manpower requirements. Several alternations to GFEBS include civilian force structure requirements and costs. One of the options being considered is the SAP Human Capital module in GFEBS. In addition, the Resource Management Tool (RMT) has capabilities that could also assist in the determination of future civilian force structure requirements. The Army is studying that option since it would be a deterministic capability to plan for the future size and structure of the civilian force.

Contractor Manpower Equivalents

Data Collection and Management

Issue: Policy for use of and accounting for CMEs in the U.S. Army is unclear

Findings:

- GF and OF dependent on CMEs
- CMEs comprise both surge elements and steady-state roles
  - Routine contract services (e.g., food services, facility maintenance)
  - Combat service support for OF (e.g., LOGCAP)
- Army contracts containing CMEs do not specify manpower numbers
  - CME data are derived from contract labor hours reported
- CMEs account for a large portion of the civilian manpower costs

Civilian manpower equivalent is the manpower measure for contractor manpower providing services to the Army. This includes support contracts for services on installations, for overseas logistics support, on technical contracts, etc.

Reporting of CMEs is performed by OASA M&RA by entering provisions in contracts requiring manyears of labor to be reported to OASA M&RA. While admittedly an awkward process,, it is the best that can be done until a system such as GFEBS is developed that can account for resource expenditures tagged to contract manhours/ mandays.

CME's are now being reported in two categories: "in theater" and "not in theater." The first CME report directed by the Secretary of the Army provided the following CME data for FY 07:

CMEs in theater	75,319
CMEs not in theater	95,611

Total FY 07 costs for the CME labor force was $58.5 billion

Borrowed GF Manpower

- GF manpower frequently tasked to provide direct, on-site support to Operating Force elements
- Cross-tasking creates vacancies which impinge on GF functions needed to support OF requirements
- In some cases, training staff operating at 60% of authorized manpower

Impact of cross-tasking on ability of GF to support OF not measured today—not provided for or offset in resourcing process

Field interviews by the panel revealed that GF manpower is frequently tasked to provide direct, on-site support to OF elements. Although such support may be expected with an Army at war, it impacts the ability of the GF to meet the demands and requirements of the OF. In some cases, this cross-tasking created significant vacancies in GF staffing. By way of illustration, the panel observed cases in which training staffs were operating at 60 percent of authorized manpower. Over time, without a complete understanding of manning levels within the GF (the goal of the census), leaders are unable to make informed decisions on alternative courses of action necessary to ensure support of the deployed OF.

Contractor Manpower Equivalents (Cont'd)
Data Collection and Management

Recommendations:

- Continue CME reporting to build data for GFC
  - To better forecast required CME costs
  - To estimate CME surge requirements
- Use manpower benchmarking to manage the GF civilian/CME composition
- Assign civilian manpower accounting function to G3/5/7

To ensure that the civilian force structure and the CME force structure are based on Army "requirements" by fiscal year, the Army should assign the force planning function to an office in G 3/5/7, specifically, FD. Since that office is responsible for military force structure, it should plan for the related civilian force structure and CME force structure so that the aggregate human resource requirements for the Army are balanced and adequate to meet Army requirements in the most cost-effective mix.

Appendix F

ENTERPRISE RESOURCE DETERMINATION PROCESS

Appendix F

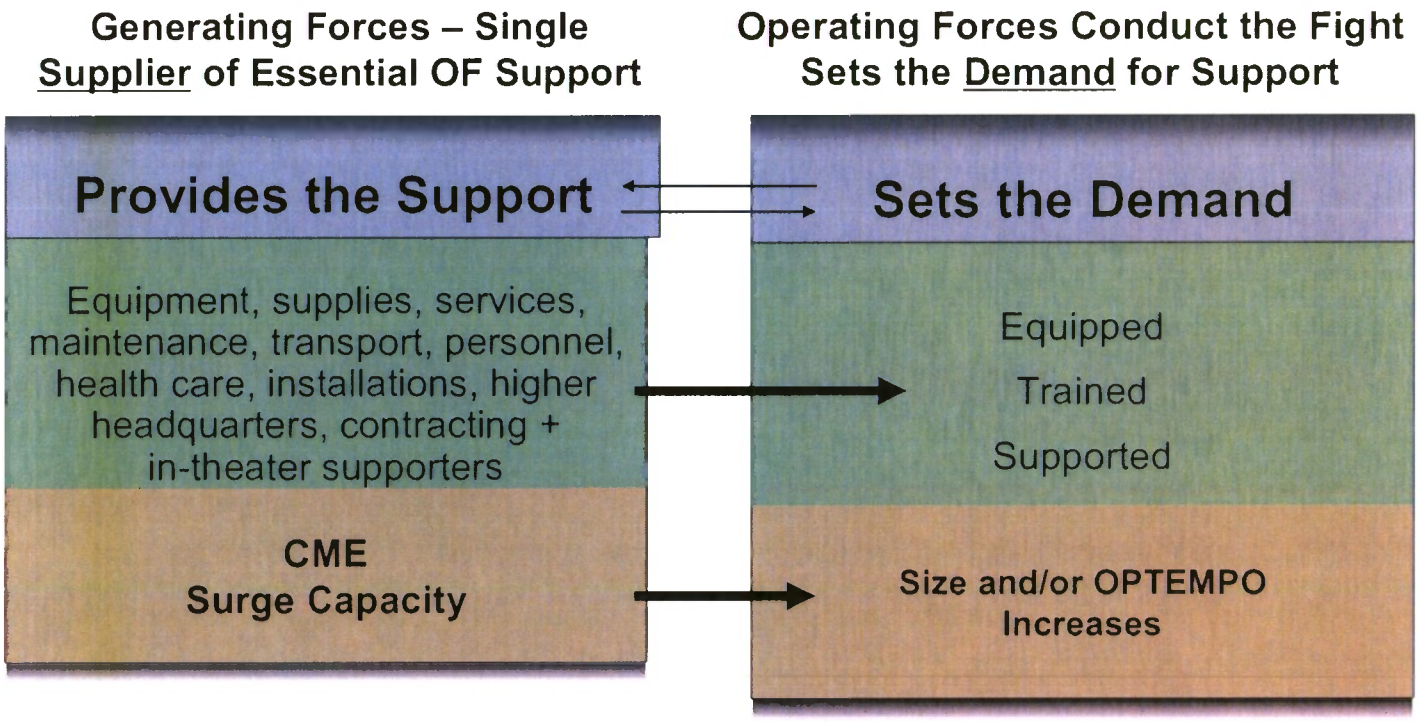
Enterprise Resource Determination Process

One of the most important decisions made regularly by Army management is the allocation or apportionment of appropriated funding between the Operating Force and the Generating Force.

Army resource decision-makers need effective tools that can be applied to the funding and manpower allocation process to ensure that resources are effectively balanced across Generating Force and Operating Force requirements.

The Generating Force Census will be one of the tools available to Army leaders to assist in a more effective allocation of resources and in the measurement of consequences of decisions made in the Enterprise Resource Allocation Process. The two major components of that process include the Army Total Army Analysis (TAA) and the Planning, Programming, Budgeting and Execution System (PPBES).

Relationship of GF to OF "Supply and Demand"



Surge $ funding

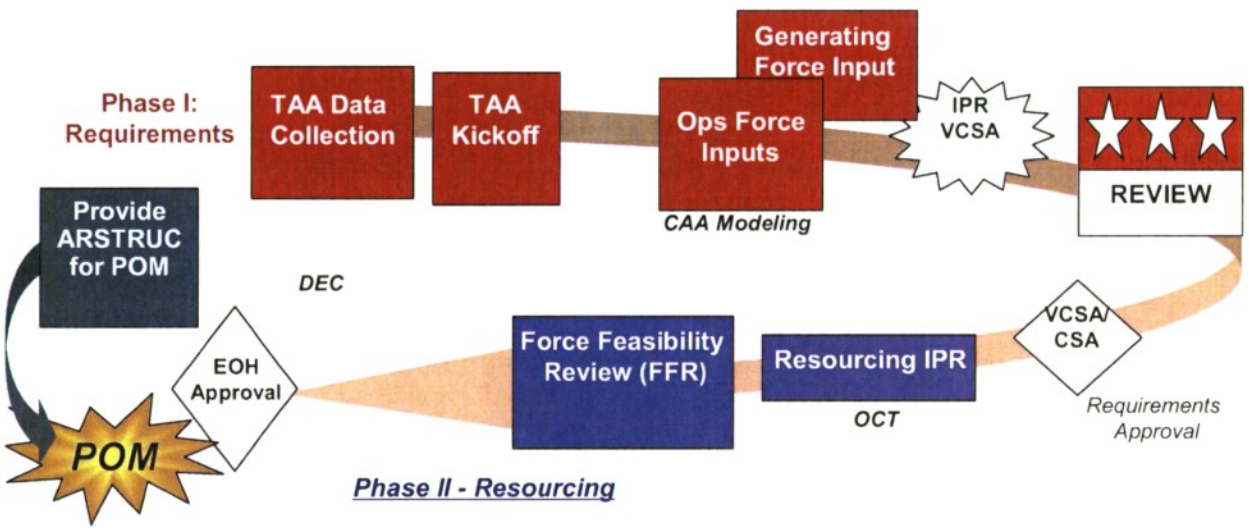
OF Cannot Function Without the GF

There is a direct and enduring link between the Operating Force and the Generating Force. The Operational Force is dependent on the Generating Force to provide training, equipment, and other resources necessary for it to operate effectively now and in the future. The relationship is one of "supply and demand." The nation's strategic imperatives establish "demands" for the OF that must be supported by an adequately resourced GF to provide the critical foundation for operational requirements.

Both the Generating and Operating Forces depend on funds provided by Congress to the Army for fulfillment of the Army's Title X responsibilities to provide the nation's land–warfare capability.

The panel found that GF funding levels largely are a byproduct of the OF budget generation process. Unlike the OF budget–force development process, which is supported by extensive modeling and applied analytical tools, the GF budget and manpower allocation process is not based on a functional analysis of requirements across the force. Supplemental funding for the GWOT has muted the need for a more detailed analysis of balanced resource requirements between the OF and the GF. Over the last few years, manpower resource "holes" have been filled with GWOT dollars that have allowed GF commanders to meet sustaining requirements through extensive hiring of contractor personnel. Future budgeting processes are not expected to have this same luxury.

Total Army Analysis (TAA)



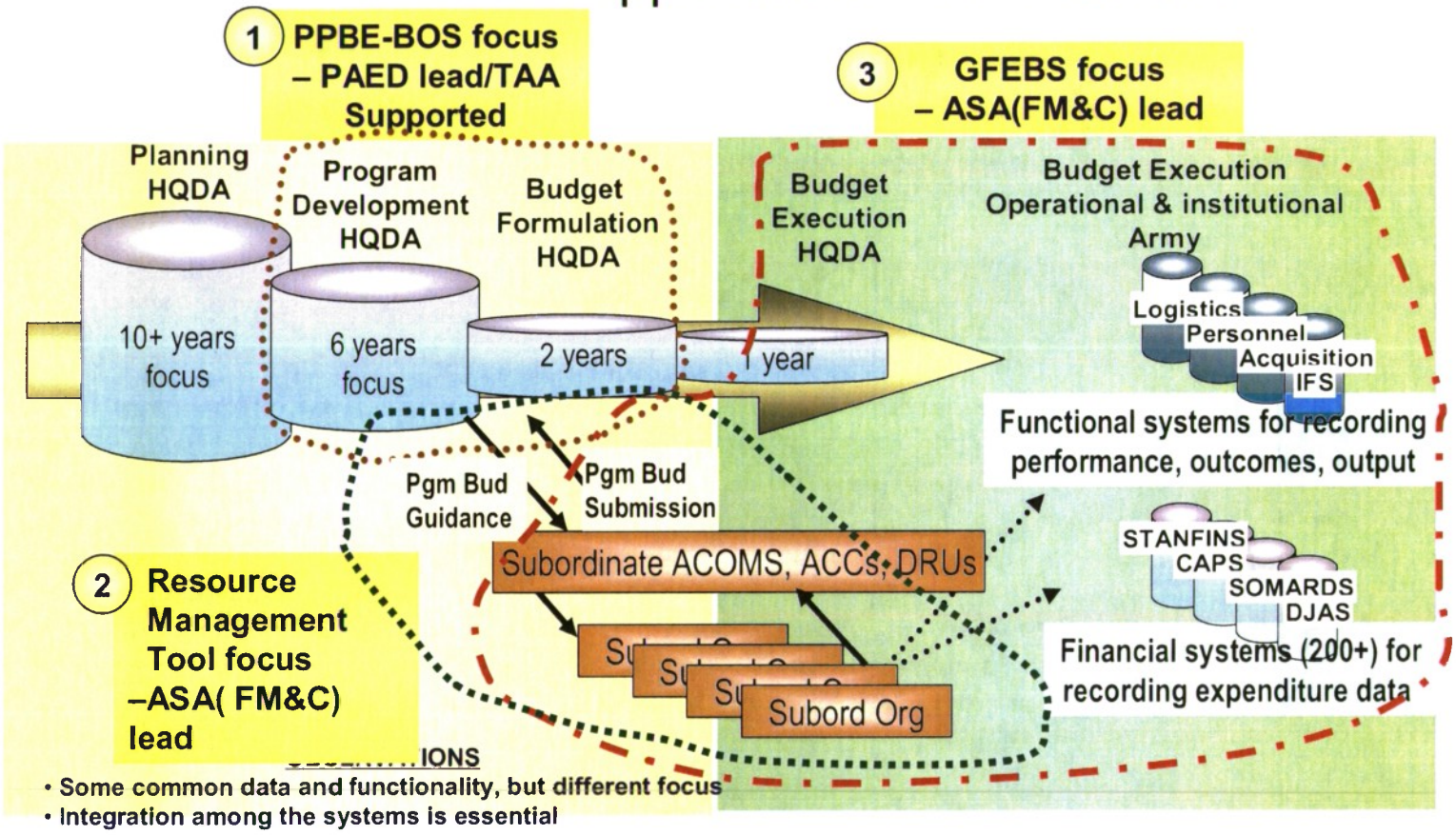
The Total Army Analysis process is critical in the determination of manpower and, subsequently, budget requirements for the Army. The TAA resource determination process is outlined in the Army War College handbook on "How the Army Runs." Since TAA supports the POM, it is conducted about every 2 years, although can be initiated on a directed basis when there is a major change in force structure or other circumstances affecting the size of the force.

The two phases in the TAA process are a requirements phase I and a resourcing phase II. The requirements phase (red above) focuses on an initial qualitative review of the CAA-developed Operating Force (based on quantitative wargaming of specified capabilities), identification of issues, and development of options to address each issue. The needs of the GF are considered but not rigorously as those of the OF.

The resourcing phase (blue) assigns available resources to the OF and GF, with OF usually receiving first priority.

From past experience, it appears that GF funding is largely an allocation of available resources after TOE/OF requirements are determined, based on prior-year funding levels and not on what is required to properly support the OF.

PPBES Applications and Process



More complete GF input is necessary earlier on in the process to support budget build

Results of budget deliberations and TAA resourcing determinations are applied to programs by HQDA PEGs, developed into a budget, sent to Congress for appropriation, and then apportioned by the Army Budget Office for distribution to the subordinate commands.

Funding distributed to the field for the GF is intensively managed by each of the many unique subordinate commands with limited HQDA oversight. This intensive management is supported by and through each command's Resource Management (RM) office. Every RM office visited had a set of budget and civilian manpower management tools tailored to their unique needs. These tools appear to be dynamic and are being continually adjusted, with new ones developed based on active management needs and mission changes.

The panel noted that the commands readily exchange ideas concerning state-of-the-art estimating and modeling techniques. However, most commands' tools remain unique and are useful only to the specific command. None of the command systems are used at HQDA level, although this is changing somewhat with the introduction of the Resource Management Tool (RMT) that is being used for budget execution in most of the Army. RMT also has a civilian manpower application that integrates dollars for civilians and manpower—vitally needed in the Army but still being studied as to how best to use.

Force Development Processes for Generating and Operating Forces

Generating Forces

- Focus on functional mission
- Respond to mission change or new functional methods or material
- Organization prepares concept plan and draft new organization structure (TDA)
- Apply current-year experience as applicable to organizational change
- Apply command's idea for success since standard designs are generally unavailable because of unique functional mission

Operating Forces

- Focus on combat or combat support mission
- Identify essential military capabilities
- Combat developer designs and develops standard TOE unit structures
- Test and evaluate unit prototype
- Design, develop, test and evaluate related organizations
- Conduct field test and simulations
- Evaluate risk
- Finalize TOE design

KEY OBSERVATION

Generating Force organizations prepare recommendations for organizational change without the rigor of OF combat force analysis

continued

The panel examined the interrelationship between the Generating and Operating Force on their force development, force approval, and budget approval and budget execution processes.

The Operating Force is the best understood and evaluated component of the two. As the Army's principal function is to fight and win the nation's wars, it is not surprising that this component receives the most attention. Operating Forces focus on combat and combat support missions that are resourced through well-established TOE organization structures. Numerous models and simulations are used by Army planners to evaluate risk and distribute resources—the underlying budget development process is well understood.

The Generating Force focus is functionally oriented, and the structure of the GF is based on command plans and TDA organizational structures. The GF resourcing process is very different. For the GF, subordinate Army commands use prior-year TDAs as a basis for developing subsequent-year baselines to be injected into the annual resourcing process. HQDA reviews and approves GF organizational structures, but the panel found that this review is done without HQDA-approved metrics or with metrics developed by the subordinate organization(s). Once TDA structures are approved, organizations use the TDA to prepare budget dollar and manpower schedules. As the budget process unfolds, HQDA adjusts dollars (and de facto adjusts GF civilian manpower authorizations) to reflect funding levels available after consideration of OF requirements. At this point, dollars (and FTE manpower) are distributed by HQDA through the PEG process to GF organizations that have to apply what they are given to meet mission requirements. ACOM civilian manpower requirements are rarely fully funded, and there is a very weak link between requirements, authorizations, and allocated funding levels.

Program–Budget Formulation Processes for Generating and Operating Forces

Generating Forces

- ASA(FM&C)/PAED provide Program Budget Guidance (PBG) that includes civilian end strength (ES) & work years (WY), & dollar guidance by Army program element
- Commands spread ES, WY and dollar guidance for coordination by staff and subordinate orgs
- Civilian manpower decisions are often independent of dollar implications to programmatic portion of shared APE
- Commands prepare separate Schedule 8s for manpower & dollar changes
- HQDA distributes Sch 8s among PEGs which focus on dollars but decision may effect dollars for civ manpower

Operating Forces

- G3 provides force structure list which includes EDATE for unit changes
- Program–budget guidance includes OPTEMPO & funding guidance for TOE forces
- Operating commands use DA or local versions of Training Resource Methodology (TRM), flying hour and other tools to estimate budget
- HQDA uses TRM & related tools to review and evaluate command budget proposals
- Mil Pay not co-mingled with operational dollars & therefore decisions below HQDA do not involve tradeoffs

continued

Despite the fact that OF capabilities are directly linked to a viable GF, the program–budget formulation process for each component is significantly different. For the OF, G3 provides a force structure list that includes an EDATE for unit changes. HQDA's program–budget guidance is then issued providing OPTEMPO and funding guidance for TOE forces. Operating commands use versions of the Training Resource Methodology (TRM) to estimate budget requirements. Operating command budget estimates are reviewed by HQDA using TRM to evaluate command budget proposals. In this process, military pay is not co-mingled with operational dollars; as a result, requirements for subordinate commands do not involve an analysis of tradeoffs.

For the GF, the ASA(FM&C)/PAED provides program budget guidance (PBG) that includes civilian end strength and dollar guidance by Army program element (APE). GF commands forward this guidance to staff and subordinate organizations for coordination. Civilian manpower decisions are often independent of dollar implications to the programmatic portion of shared APEs. Commands then prepare separate Schedule 8s to reflect manpower and dollar changes. After receiving command Schedule 8s, HQDA distributes these documents among PEGs, which focus on allocating dollars (read "shortages"). The shortfall here is that this allocation does not consider the impact that decisions may have on civilian manpower.

Program–Budget Formulation Processes for Generating and Operating Forces

KEY OBSERVATION

- *Operating Forces budget for operations and pay in different appropriations*
- *Generating Forces budget for operations and pay in the same appropriation*
- *Common tools and methods applied across the Army for estimating Operating Force budgets, i.e., TRM, flying hours and OSMIS*
- *No common tools available for estimating Generating Forces operating budgets with required synchronization*
- *HQDA PEGs and higher level approval groups determine budgets for Generating Forces operations and civilian personnel*
- *No tool exists to synchronize and maintain running totals between civilian pay & non-pay changes within the appropriations*

Decisions about the availability of funds for either GF operations or GF personnel will effect the other (zero sum game)…OF funding is not similarly linked

continued

There are several key observations in the program–budget formulation process for GF and OF. First, the two components budget for operations and pay differently. OF decisions are supported by extensive analysis for each piece, and resourcing requirements are not linked. For the GF, budgeting for operations and pay are identified within the same appropriation, without extensive analysis, and a focused decision on one (either operations or pay) will directly affect the other.

As mentioned earlier, the Army employs common tools and methods to develop and estimate OF budgets. The Army lacks similar tools to budget for GF requirements.

HQDA PEGs determine the budgets separately for GF operations and civilian personnel absent any tool to synchronize and maintain running totals between civilian pay and non-pay changes with an appropriation.

Current-Year Execution Processes for Generating and Operating Forces

Generating Forces

After appropriation of funds --

- HQDA appropriation sponsors develop Annual Funding Program (AFP) & Fund Authorization Doc. (FAD)
- Operational funds – including civilian pay & non-pay -- are allocated to commands in PBAS
- Civilian end strength (ES) & work year (WY) controls are distributed to commands in PBG
- Commands use combination of TAADS authorization doc., WY controls & funding to manage civilian personnel actions
- Civilian pers and operational actions draw money from same funds, i.e., APE

Operating Forces

After appropriation of funds --

- HQDA appropriation sponsors develop Annual Funding Program (AFP) & Fund Authorization Doc. (FAD)
- Military pay appropriations are centrally managed by appropriation sponsor
- Operational funds are allocated to commands
- Commands requisition mil pers based on authorizations in TAADS doc. and personnel action, e.g., reassignment
- Soldier's pay is independent of funds for operations

8
continued

The Army program element provides the common DA structure for programming and budgeting resources to individual groups or organizational entities, major combat forces, and support programs. APEs are designed and quantified in such a way as to be both comprehensive and mutually exclusive, and they are continually scrutinized to maintain proper visibility of Army programs.

For most appropriations and manpower determination, the APE code consists of six numeric or alphanumeric characters, which relate to the Army Management Structure Code (AMSCO) and, to a lesser extent, the OSDPE.

Current-Year Execution Processes for Generating and Operating Forces

KEY OBSERVATION

- *Military pay, recruiting costs and benefits are centrally managed and Soldiers are essentially issued free to commands & do not compete for local funds*
- *Civilian pay and almost all civilian personnel actions are funded locally and compete with local operational demands for the same funds*
- *The larger, more diverse and dispersed the organization, the more difficult it is to manage labor and non-labor funds from the same APE*
- *FADs generally only provide funds for the quarter, statutes require maintaining funds for payroll; therefore, commands have little flexibility*
- *All civilian personnel actions require integrated data from TAADS (authorizations by job series and grade), end strength, work years (from PBG), and funds from FAD*

An integrated management tool is essential for use across commands and all Army operating agencies to support the budgeting process--

- *to reduce burden of pulling & synchronizing data among those sources*
- *to estimate costs & identifying implication to quarterly APE allotment*
- *to maintain current information on changes that **will effect the next update of TAADS or next program–budget formulation event***

Military pay, recruiting costs, and soldier benefits are centrally managed and funded and are essentially issued free to commands. Resources for these functions do not compete with local funding requirements. This contrasts with civilian pay and most civilian personnel actions that are funded locally— resources for these functions compete with requirements for local operational demands. There is a clear and compelling need for integrated TAADS data to support all civilian personnel actions.

In short, an integrated resource management tool is essential for use across commands and all Army operating agencies to support the budgeting process. This tool would reduce the burden placed on subordinate commands that must pull and synchronize data among many sources. A tool would facilitate cost estimation and identify the implication of alternatives to the quarterly APE allotment. Finally, a tool could be used to maintain a database of current information on changes that would affect the next TAADS update or the next program–budget formulation event.

Other Policy Considerations

- DoD Guiding Principles (DoDD 1100.4):
  - 'National military objectives shall be accomplished with a minimum of manpower that is organized and employed to provide maximum effectiveness and combat power'
  - 'Manpower management shall be flexible, adaptive to program changes, and responsive to crisis situations and new management strategies....existing policies, procedures and structures shall be periodically evaluated to ensure efficient and effective use of resources'
  - 'Long-range strategies and workforce forecasts shall be developed to implement major changes to policy, doctrine, materiel, force structure and training, while maintaining ready forces and assuring greatest possible productivity and effectiveness'
  - 'Manpower in support functions...shall be maintained at the lowest level practicable to optimize combat capability within the operating forces'
- Public law:
  - '...civilian personnel of the DoD many not be managed on the basis of any end-strength...or limitation on the number of such personnel who may be employed on the last day of an FY'

Other significant legal, regulatory, and policy references served as foundation for this study and the panel assessment of opportunities to focus census data on broader requirements for manpower budgeting and management.

Two key references the panel reviewed were DoD Guiding Principles (DoDD 1100.4), which outlines a number of fundamental DoD tenants for manpower management within the Department (several of which are highlighted here), and public law that addressed management of civilian end strength.

These underlying principles and law were critical in reviewing and understanding how the GFC might be further developed and applied to facilitate informed decision-making on resourcing and manning a Generating Force that is directly linked to the Operating Force.

Enterprise Resource Determination Process

Issue: GF funding is what remains after funding the OF and is not based on set of functional, OF support relations.
Findings:

- Total Army Analysis (TAA):
  - Requirements Determination Phase:
    - GF input is based primarily on existing TDA unit structure, NOT business or allocation rules
    - Determination of warfighting requirements and "required MTOE/TDA force file" NOT rigorous consideration of balance of "supply/demand" GF/OF
  - Resource Determination (Conference) Phase:
    - GF funding allocation criteria lacking – functional requirements not well defined
- Force Feasibility and Leadership (GOSC) review seeks to resolve contentious issues
  - Decisions on resourcing GF appear to be qualitative judgments based on perceived GF unit needs and those expressed by GF subordinate commanders

Risk taken in the GF manifests itself over time in the OF

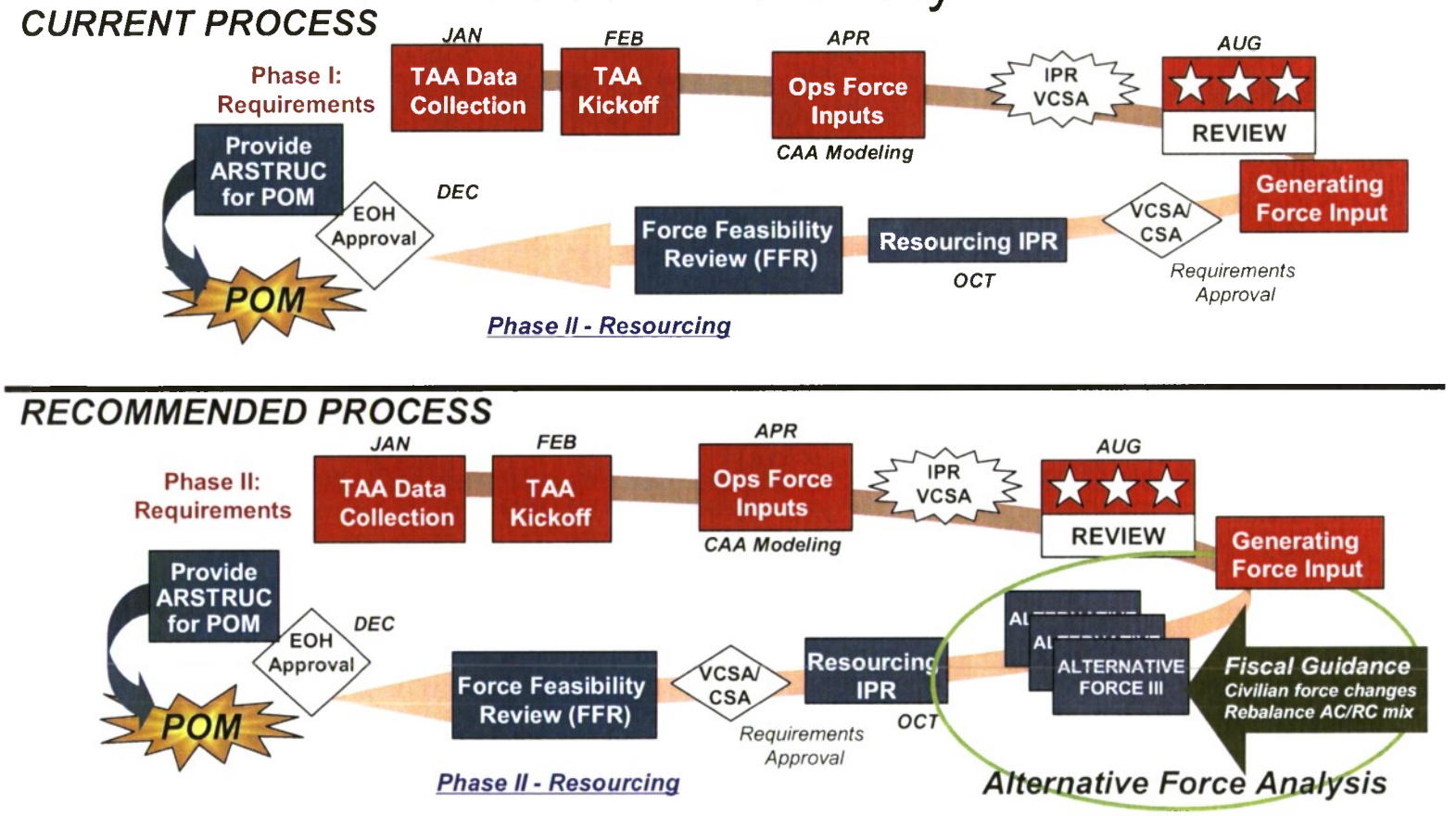
Considering the current ways the TAA and PPBES processes are conducted in resourcing the OF and GF, issues exists in the manner in which resources are allocated to the two force elements. The most critical is the lack of detailed analysis of the functional and resource needs of the GF in order to properly support the OF.

In the current TAA, G3 FM has started a more detailed consideration of GF requirements in conjunction with subordinate commands, However, HQDA must take additional steps to more closely link resourcing decisions for both the OF and the GF. Without sufficient tools under the current resourcing process, the Army may take unnecessary risks as future planning and budgeting processes take place. Although supplemental funding has tended to blur the immediate need for more analytical rigor into this critical link, the following recommendations should provide for better management in the future:

- Examine the TAA process to allow better procedures for analyzing GF versus. OF requirements using a model as discussed in Appendix D.
- Examine GF functional designations and processes that have measurable outputs tied to OF support and used to balance resource allocations to the GF and OF.
- Develop an appropriate risk assessment tool (red/yellow/green) to be used for comparative analysis in TAA and budget processes.

Total Army Analysis (TAA)

2005 ASB Study



The ASB 2005 Summer Study recommended that the TAA process be modified (2005 slide shown) to accommodate a fuller analysis of alternatives with full consideration of fiscal guidance. This modification would allow full consideration of the OF/GF balance needed in the process. This would allow:

- In TAA process after GF inputs are determined, conduct a computer-modeled analysis of alternative force structures using fiscal guidance input to determine feasible force structures for review by Resourcing IPR, to include (1) link of military force structure changes to civilian force changes and all other resource changes, and (2) rebalance the active/reserve mix.

- Conduct Resourcing IPR using a strategic planning "total cost" perspective, which then includes cost of military and civilian strength and all other Army resource requirements using fiscal guidance.

- Brief CSA/VCSA after Resourcing IPR, obtain approval of Army force structure, and make adjustments resulting from the briefing.

- Determine force structure feasibility to assure executable POM force.

- Deliver executable POM file for Army at beginning of POM cycle.

This year, theG3 Force Modernization Office began to include a more deliberate analysis for inclusion of GF requirements and resources earlier in the process.

Today: Generating Force Programs & Workload Factors

- FM 1-01 "…the Generating Force's primary mission is to "build" the Operational Army and sustain it…"
- Brinkerhoff AFMC program groups and workload factors:
  - Expeditionary Army Support
  - Logistics
  - Materiel Development & Acquisition
  - Individual Training & Educations
  - Military Health Care
  - Military Personnel
  - Army Administrative

# of Units in Expeditionary Army
Items managed in each program
Size of RDA program
Trainee/student load for programs
Eligible patients
Military personnel strength
Overall strength of Army

Support the Operating Force and be ready to "Surge"

An important element in force analysis is the functional measures used to represent the value of a command. In analyzing the OF, these measures are usually some measures of effectiveness of friendly against enemy forces. For the GF, the functions should relate to the effectiveness of support to the OF.

A 2002 IDA study (IDA Document D–2695) by John Brinkerhoff examined the fundamentals of the institutional Army support of the expeditionary Army. Brinkerhoff attempted to identify support functions or groupings for which work measures could be identified.

The final product of the study was a new way to look at the Army, called Army Force Management Categories (AFMCs). AFMCs were designed to provide well-bounded areas of effort that could be matched well to work-loading factors resulting in ways to make informed judgments on the amount of overhead the Army needs to support both OF and non-Army programs of a particular size and shape. During the process of dividing the institutional Army into coherent and well-defined subcategories, many classification problems were uncovered. Many of these were resolved by working at the program element level of detail. Even at that level, however, it became apparent that constructing a completely satisfactory system for understanding the institutional Army is extremely difficult. After much trial and error, it was possible to establish programs and subprograms for the institutional Army that make sense overall, even though some of the contents are still puzzling.

IMCOM Management Approach

CLS Update and Manpower Rebalance Initiative

INSTALLATION SUPPORT SERVICES (95)
58 Services in CLS v4.0 = 417 SSPs

SERVICES - (60 services)		
BASOPS (40 Services)		
1	Civilian Personnel Services	(G-1)
7	Military Personnel Manning	
8	Military Personnel Services	
9	Substance Abuse	
12	Sports, Recreation, and Libraries	
13	Business Operations	
14	Continuing Education Services	(G-1)
17	Administrative Services	
18	Information Assurance	
19	Automation	
21	Installation Security Program Mg't Support	(G-2)
23	Ammunition Supply Services	
24	Retail Supply	
25	Central Issue Facility	
26	Asset Management	
27	Materiel Support Maintenance	
28	Transportation Services	
29	Food Services	
30	Laundry and Dry Cleaning Services	
51	Army Lodging Management	
68	DPTMS/DOIM/CIO Management	
69	Program Budget	
70	Support Agreement/MOU/MOA Mg't	
71	Management Accounting	(Mission)
72	Installation TDA Management	
73	Management Analysis	
74	Contracting	(AcA)
79	Administrative & Civil Law	
80	Criminal Law & Discipline	
81	Client Services	
82	Claims	
83	Religious Support	
84	Public Affairs	
89	Inspector General Services	(IG)
90	Protocol Services	(Mission)
91	Installation Management	
92	EEO (Equal Employment Opportunity)	
93	EO (Equal Opportunity)	(EO)
94	Internal Review	
95	Installation Safety and Occupational Health	
Family Programs (2 Services)		
10	Army Community Services	
11	Child and Youth	
Base Communications (1 Service)		
15	Communication Systems and Systems Support	
Audio Visual (1 Service)		
16	Multimedia/Visual Information Processes	
Real Property Services (16 Services)		
40	Maintenance - Improved Grounds	
41	Maintenance - Unimproved Grounds	
44	Heating/Cooling Services	
45	Water Services	
46	Waste Water Services	
47	Electrical Services	
48	Other Utility Services	
53	Facilities Engineering Services Management	
54	Master Planning	
55	Real Estate/Real Property Administration	
57	Custodial Services	
58	Indoor Pest Management	
59	Outdoor Pest Management	
60	Refuse Removal	
61	Snow, Ice and Sand Removal	
75	Fire and Emergency Response Services	
ARMY FAMILY HOUSING (1 Service)		
50	Family Housing Management	

FACILITIES (15 Services)		
SRM (14 Services)		
31-39	Facilities Maintenance (9 Services)	
42	Facilities Maintenance - Other	
43	Maintenance - Surfaced and Unsurfaced Areas	
49	Maintenance - Railroad	
62	Minor Construction	
65	Restoration Programs	
Facility Demolition/Disposals (1 Service)		
63	Real Property Disposal	(BRAC)
ENVIRONMENT (3 Services)		
54	Conservation Programs	
66	Compliance Programs	
67	Pollution Prevention Programs	
ANTITERRORISM/FORCE PROTECTION (4 Services)		
74	Anti-Terrorism Services	
76	Correctional Services	(OPMG)
77	Law Enforcement Services	
78	Physical Security	

OSD funds thru Facilities Sustainment Model (FSM)

G-3 (7 Services)		
300	Command and Control	
301	Mobilization and Deployment Support	
302	Airfield Operations	
304	Training Land Sustainment	
305	Range Management	
306	Range Operations	
307	Range Modernization	
MEDCOM (5 Services)		
500	Patient Care	
501	Health Support for Readiness and Mobilization	
502	Dental Support for Readiness and Mobility	
503	Preventive Medicine Services	
504	Veterinary Medicine Services	

G-3 deferred

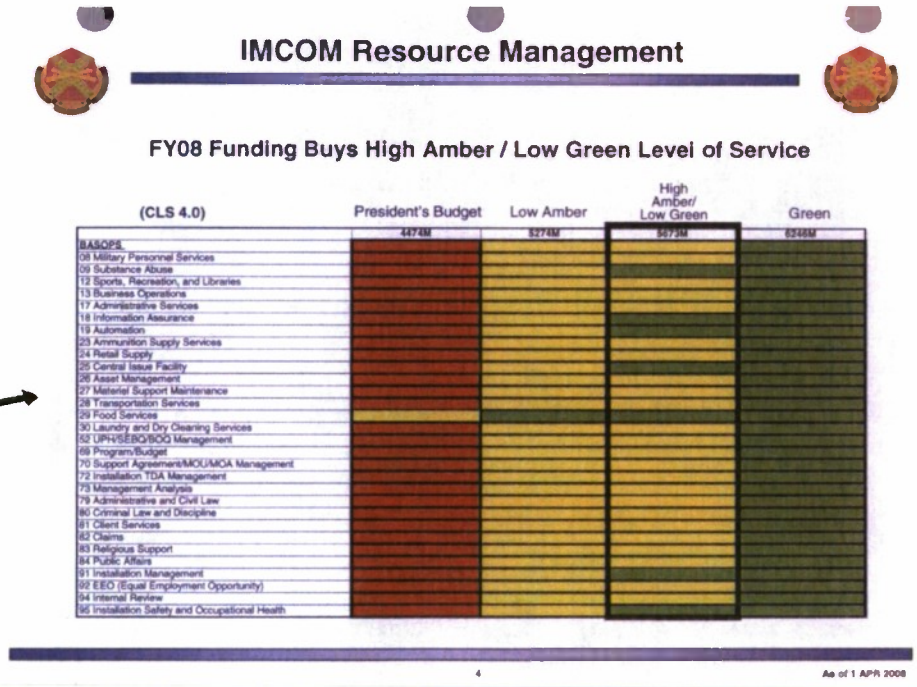
SATs conducted April 07

Services included in CLS v4.0
Services outside of CLS v4.0

The functional descriptions of the output of the Generating Force that were evident in the Brinkerhoff study exist today for many of the commands in the GF. Ideally, the Army should seek to find measures of the worth of functions in GF commands that relate to the effectiveness of support of the OF. In this way, the functional measures would contribute in the TAA to more objective analysis and judgments when allocating resources.

A very good example of an integrated set of functional requirements is used at the Installation Management Command. To manage the multitude of services it provided, IMCOM developed a matrix of installation support services required to do its Army mission. These in turn were analyzed for resources required to perform the services, and a matrix was developed that shows level of resources per quality of service (see next chart).

IMCOM has a fully developed "Common Levels of Support" service delivery tool that links 490 services delivered to dollars, service quality and "risk"



Requires much more finely defined functions than AR 10-87

Similar tools necessary to support TAA POM resourcing decisions

The culmination of the resources versus quality of service is a display that links various funding levels to a stoplight-type assessment of quality of services provided. To date, the results of using this tool have been effectively used in resource requests to HQDA.

Our analysis suggests that a similar tool at the appropriate level of aggregation would be extremely informative within the TAA process when deliberating GF and OF resource allocations.

The panel concluded that the Army should develop robust models that can provide focused resourcing decision tools for Army leaders. Implicit in this conclusion is the need for a properly defined set of functions and subfunctions that relate to "demand" and "supply" of services. Such definition should be supportable by measurable and quantifiable deliverables from a mature GFC.

The panel anticipates that delivering this functional structure will be an iterative one. Once refined, it should clearly enhance understanding of the second- and third-order effects of resourcing alternatives.

Conclusions

- Budget proposals should be consistent with organization authorizations for civilian manpower and contractors
- Civilian manpower requirements should drive the budget for civilian manpower (payroll)
- Current-year execution data should inform force development and budget formulation about types and quantities TDA personnel, as well as related civilian personnel funding
- Quantitative methods, which relate to outcomes or outputs, should be developed to support Generating Force decisions on organizations and manpower requirements
- Budget execution across the Army requires a tool for integrating and synchronizing data from:
  - Authorization documents (approved space, grade and job series)
  - Authorized end strength and work year, plus FTE for contractor space (from PBG)
  - Authorized dollars (Annual Funding Program (AFP) & Fund Authorization Documents (FAD) from PBAS or GFEBS in the future

Conclusions (Continued)

- The Army resourcing (authorization) process is not structured on the premise that there are direct links between minimum levels of GF resourcing and fielding and maintaining a viable OF
- Developing a more differentiated GF function list aligned to OF requirements is required
- An inventory of heads (mil, civ, contractor) that are linked to a more appropriate GF function list is necessary to effectively resource the GF
- Tools must be developed to link GF manning and budget to planned and time-phased policy, doctrine, materiel, force structure and training requirements for the OF
- Manpower data systems are not aligned to provide consistent reference points for budget–resource formulation processes

CONCLUSIONS

The panel concluded that the Army resourcing process is not structured on the premise that there is a direct link between minimum levels of GF funding and the ability of the OF to fight and win the nation's wars.

The census currently underway utilizes an inadequate GF function list as outlined in AR 10–87. A more refined list of GF functions, closely linking output to the OF, is necessary to improve the overall resourcing process within the Army as a whole.

An inventory of heads (military, civilian, and contractor manpower equivalents) is a necessary first step in understanding the nature and complexity of the Generating Force.

The Army lacks the necessary tools to link GF manning and budget to planned and time-phased policy, doctrine, materiel, force structure, and training requirements necessary to support the OF.

Manpower data systems are currently not aligned to provide a consistent reference point for the budget–resource formulation process.

Recommendations

- Charter study to develop/refine GF functional designations and processes with measurable outputs relatable to OF sustainment, usable to establish resource allocation levels within the Army
  - The ASB made a similar recommendation in 2006
- Based on "refined function/services" list above, develop risk (red/yellow/green) assessment tool for GF
- Develop activity-based analytical tools that link GF manning and budget to planned and time-phased policy, doctrine, materiel, force structure and training requirements.
  - Use "evolved" census data to develop tools to identify and evaluate manning options by function and define risk associated with each option
  - Determine manpower mix criteria for GF functions
- Continue to develop better integration of GF and resource analysis into TAA process