Report of the

Defense Science Board
1996 Summer Study

on

Achieving an Innovative Support Structure for 21st Century Military Superiority

Higher Performance at Lower Costs

November 1996

Office of the Undersecretary of Defense
For Acquisition and Technology
Washington, D.C. 20301-3140

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DEFENSE SCIENCE
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Dr. Paul Kaminski
Under Secretary of Defense Acquisition and Technology
The Pentagon
Washington, DC

Dr. Kaminski:

I am forwarding the final report of the 1996 Defense Science Board Summer Study Task Force on Achieving an Innovative Support Structure for 21 Century Military Superiority. This report identifies significant risks regarding the viability of DoD weapons system investment plans for the coming six years. The Task Force is greatly concerned that resources will not be available for needed investments in modernization, due to the high costs of support, and the associated infrastructure, at a time when budgets are, at best, not increasing. Historical trends show proportionately increasing support costs coupled with poor support responsiveness.

This Task Force's vision is similar to that presented in the support and business sections of the FY95 DSB Summer Study, the report of the Commission on Roles and Missions, and the FY96 DSB Task Force on Privatization and Outsourcing. The vision calls for DoD personnel to prepare for and conduct combat and crisis management operations while relying on a robust, competitive private sector to provide commercial-style support. This approach ensures that each community leverages its core competencies.

The Task Force recommends two fundamental changes for the DoD:

- ¥ Dramatically restructure DoD support, utilizing modern information technology and management principles, and maximizing the use of the competitive private sector -- thus generating significantly more dollars for modernization and combat capability through shifting dollars generated by cost reductions in specific high-cost areas of support, while providing higher quality, more responsive support services to the warfighter, and

- ¥ Create a new planning and budgeting process that will institutionalize incentives to more effectively align overall resources with DoD's mission requirements — a process change that is required in order to achieve the necessary incentives for resource reallocations.

I strongly endorse the recommendations of this Task Force and suggest you consider recommending to the Secretary that he immediately begin a process to implement these recommendations. The Board stands ready to support you in this vitally important process of implementation over the coming years.

Dr. Craig I. Fields
Chairman

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Dr. Craig I Fields
Chairman
Defense Science Board
The Pentagon
Washington, DC

Attached is the final report of the 1996 Defense Science Board Summer Study Task Force on Achieving an Innovative Support Structure for 21 Century Military Superiority. This Task Force was tasked to assess the current DoD support structure and to formulate recommended approaches for both enhancing performance and reducing costs. We focused our energy on identifying 1) specific areas and approaches for lowering support costs and enhancing performance, and 2) mechanisms for implementation of needed changes -- in order to shift dollars from support to modernization and combat capability.

As presented to us, many of DoD's support activities are neither modern, efficient nor low cost. In addition, they often do not provide the required responsiveness nor are they matched to the new rapid and flexible styles of warfare that the Services are evolving. Today, such activities consume an increasing share of the DoD budget - more than 55%. Because of this situation, this Task Force sees the need for a very different approach to providing support. The Department's objective must be to enhance support performance significantly, while freeing up sufficient resources to assure the availability of funds for modernization and combat capability -- within the likely future total DoD budgets. Our analysis of both the Department's and private sector approaches concluded that there is a very real opportunity to enhance military support while significantly reducing its costs.

The Task Force presents a new vision for 21st Century support. Our vision is one where DoD does only those functions that are "inherently governmental" -- warfighting (and other military operations), direct (battlefield) support, policy and decision making, and oversight. All other functions would be provided by the competitive, private sector -- utilizing "best practices" and achieving better, faster, lower-cost results. Examples of changes that might result from this new vision include:

- CONUS logistics and maintenance to be done in the competitive private sector
- DoD would not be in the housing business
- All special skills training (i.e., "classroom" -- excluding core military) to be done with modern methods and by the competitive private sector
- All remaining bases to receive all of their support from the private sector
- Government would not be in the "mega data processing center" business

Within the attached report, we provide specific recommendations. We believe that, if implemented, these recommendations could yield shifts of ~$30B per year from support to forces by the year 2002. Outsourcing of the majority of support functions to the competitive private sector and a corresponding reduction in DoD civilian and military personnel are key elements of implementation of our recommendations. Specifically, the Task Force calls for an approximate 5% per year reduction in the civilian work force and an approximate 2% per year reduction in military personnel over the next five years. Through exploitation of modern, competitive, private-sector support (often built on advanced information technology), DoD can achieve better support for lower costs.

Although challenging to achieve, we strongly believe that such a support approach can be implemented. However, implementation of this $30B per year shift of resources will require dramatically different incentives. DoD should continue the individual incentive of allowing those who achieve the savings to keep the dollars for modernization reinvestment.

In addition, this Task Force believes there is a need to focus resource allocation on output -- on mission purpose. Such a change in focus (from a supplier-based prioritization to a user-based one) demands that the CINCs be brought into the mainstream of the resource allocation process. Although the CINCs are responsible for planning and executing the mission, today, their inputs do not materially impact the resource allocation process. We believe that the CINCs, through the JCS, should make the trade-offs between combat capability, modernization and support.

This Task Force proposes process changes to bring the CINCs into the mainstream of DoD's planning and budgeting process. In response to SecDef guidance, the CINCs, Joint Chiefs and Chairman should be required to produce coordinated, resource-constrained mission plans, fully burdened with necessary support. These plans would then become the basis for the Services and Defense Agencies to organize, train and equip combat forces and to perform necessary support functions. To both providers and warfighters, this approach would provide clear visibility of the linkage between mission forces and resource allocation.

To initiate this process change, the Department should use vehicles for change that are available today. For example, the Quadrennial Defense Review process is about to begin and could employ this approach. In addition, DoD could direct that coordinated, resource-constrained, CINC mission plans be used as the basis for development of POM '00. As an early step in the transition to this process change, DoD could initiate a repackaging of the recently completed FY '98 plans to show "fully burdened" planned investments vs. mission. This repackaging effort would motivate needed changes in the DoD financial system, as well as provide the CINCs with insights as to actual costs for support infrastructure.

An added benefit of the mission-oriented planning and budgeting process would be the heightened visibility into the high readiness and warfighting penalties currently being paid for the large inefficiencies in the present support system -- often driven by legislative mandate or simply by tradition. It is hoped that this visibility will help in overcoming the political and institutional resistance that can be expected in implementing the proposed shifts in resources from support to modernization and combat capability.

In summary, we believe that the Department should begin implementation by:

- Stating a new support vision and specific goals for cost reduction and performance enhancement;
- Creating a new defense planning and budgeting process, with overall resource allocation and priority setting driven by the CINCs; and
- Assigning responsibilities and beginning the detailed implementations process this calendar year.

We would like to thank the members and government advisors of this Task Force for their hard work on this Summer Study and for their dedication to strengthening the Department.

Dr. Jacques S. Gansler
Co-Chairman

Mr. Gordon England
Co-Chairman

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Foreword

This report summarizes the work of the Defense Science Board Summer Study Task Force on Achieving an Innovative Support Structure for 21 Century Military Superiority — Higher Performance at Lower Costs. The report contains a brief Executive Summary followed by two sections and several appendices. Section I includes the Task Force briefing with facing page text. Section II contains supporting analyses of this Task Force on selected cost-reductions areas. The Task Force analyzed four equipment-related areas, three central support areas, five people-related areas and two other cost-reduction opportunities. Appendix A contains the Summer Study Terms of Reference. Appendix B contains a glossary of acronyms. Appendix C lists briefings presented to this Task Force during various meetings.

Executive Summary

As seen in Figure ES-1, with a declining defense budget, the DoD has found it increasingly difficult to provide adequate funds to satisfy 21st Century equipment modernization requirements (procurement has declined over 70% since 1985). Support and infrastructure costs have been taking an increasing share of DoD resources (absorbing over 55% of the budget, as shown by the white areas in figure ES-2), with fewer dollars available for combat and modernization (as shown by the shaded areas in Figure ES-2).

DoD TOTAL OBLIGATIONAL AUTHORITY (TOA), 1983-1997

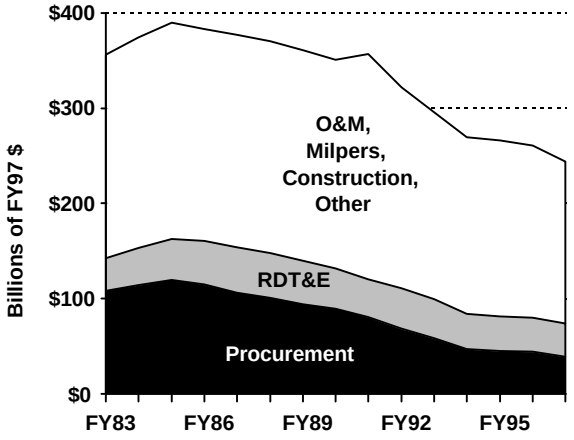

Figure ES-1

TOTAL EXPENDITURES 1996

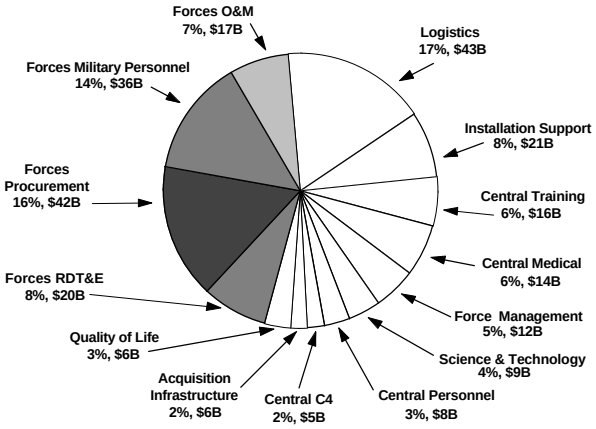

Figure ES-2

The 1996 Defense Science Board Summer Study on Innovative Support Structures for the 21st Century was charged to assess current DoD support and to recommend approaches for both enhancing performance and reducing costs. This Task Force focused its energy on identifying 1) specific approaches for lowering support costs and enhancing performance, and 2) mechanisms for implementation of needed changes (to shift dollars from support to modernization and combat capability).

The DoD currently has plans to significantly increase its expenditures on modernization. However, this Task Force found that these investment plans have a very high risk. It is likely that resources will not be available for needed investments in modernization, due to the escalating costs of support and the associated infrastructure at a time when budgets are not correspondingly increasing. Historical trends show increasing support costs coupled with poor support responsiveness.

The Task Force concluded that a very different approach to providing support is required in order to ensure the availability of funds for modernization and combat capability within the likely total DoD resources. Based on analysis of both the Department's and private sector approaches, this Task Force sees the opportunity to enhance military support while significantly shifting funds from support to combat effectiveness and modernization. The challenge facing the Department is to achieve such a dramatic transformation over the next five years.

The Task Force recommends two fundamental changes for DoD:

- Generating significantly more dollars for combat capability and modernization through cost reductions in specific high cost areas of support, while providing higher quality, more responsive support services to the warfighter and;
- Creating a planning and budgeting process that will have incentives to more effectively align overall DoD resources with DoD's mission requirements.

Each of the support areas shown in Figure ES-3 have been analyzed in detail for their costs, personnel and potential for change. Specific recommendations are made by this Task Force (see Section II) that, if implemented, could yield shifts of over $30B per year from support to forces by the year 2002. Essential to achieving these changes is a dramatic increase in outsourcing of the majority of support functions to the competitive private sector and a corresponding reduction in DoD civilian and military personnel. Specifically, over the next five years, the Task Force calls for a ~5% per year reduction in the civilian workforce and a ~2% per year reduction in military personnel.

Figure ES-3 illustrates both the relative payoff and the relative difficulty of achieving the specific cost reduction recommendations of this Task Force. Although challenging to achieve, this Task Force strongly believes that an integrated, DoD-wide approach to shifting support costs to modernization and combat, combined with exploitation of modern approaches (often based on advanced information technology) that yield better performance for lower costs, can be implemented within a 5 year period. But, DoD's civilian and military leadership must create a vision for such an integrated approach and aggressively pursue various cost reduction approaches (e.g., widespread use of the private sector for competitive outsourcing) in spite of the difficulty of achieving the required change.

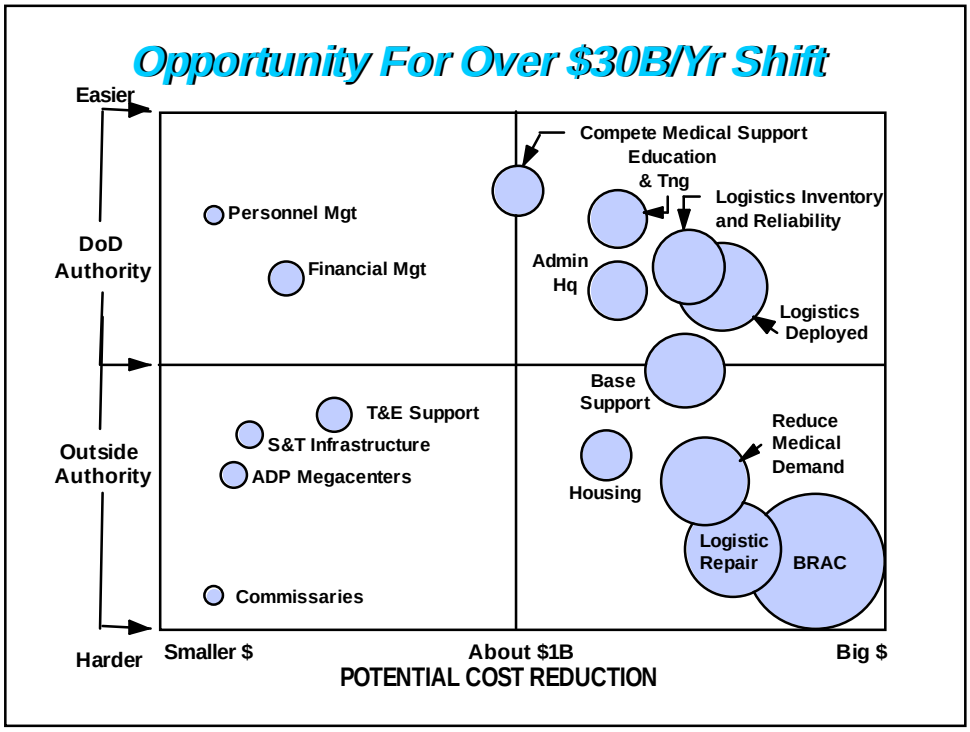

Figure ES-3

Further, the Task Force sees the "mission pull" process depicted in Figure ES-4 as the other essential part of such an integrated approach. The essential step is getting the "users" (the warfighting CINCs) directly involved in setting priorities within the resource planning process (through the CJCS/VCJCS). While the Services, as the

"suppliers," would still have full responsibility for the resources, the trades between "support" vs. "modernization and combat capability" (within a constrained total budget) would now be driven by mission needs (vs. supplier desires).

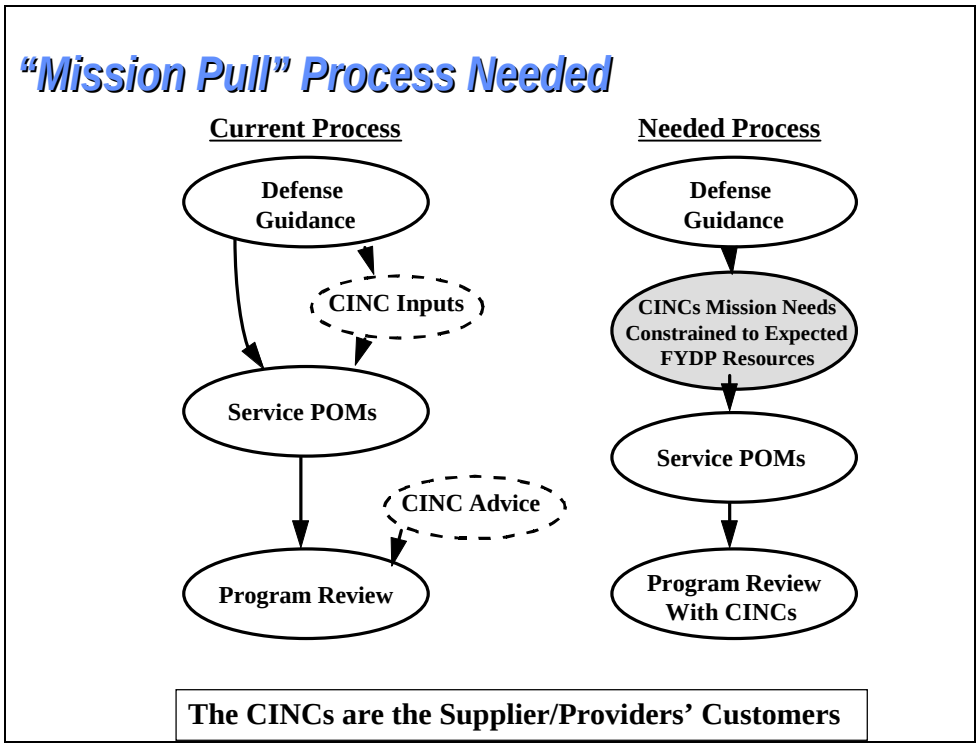

Figure ES-4

To achieve the required transformation in DoD resource allocations, there are a variety of barriers to change which must be overcome. To begin with, today there is no explicit vision, goals or metrics for embarking down a path of shifting resources from support to modernization. This Task Force proposes a vision that unambiguously places public sector employees only in "inherently governmental" functions, (their core competencies: warfighting, direct battlefield support, decision policy making, and oversight), while the competitive private sector will perform all other functions (its core competencies). The Secretary should adopt this vision and establish quantitative dollar objectives and performance metrics for measuring progress in implementation.

In terms of the recommendation for a specific policy shift by the Department toward the DoD only performing "inherently governmental" functions, it would be beneficial to support Senate Bill 1724 and the House equivalent, House Bill HR 28. While these bills are not expected to pass during the present session, there would be a much better chance of their being approved with DoD support. They are in line with what this Task Force is recommending and indicate some Congressional support for the Task Force recommendation.

Secondly, the Department must change the perverse incentive system currently in place that encourages managers at all levels to maintain the status quo and even to make changes in less cost effective directions. The Department's resource allocation processes, authorities and responsibilities must become aligned with missions and not with "Cold War" functionalities. The Department must shift from "supplier" budgets to "user" budgets, with the CINCs playing a key role in budget priorities, within the overall guidance provided by the Secretary and with integration of the CINCs inputs by the CJCS/VCJCS. Additionally, to create individual incentives, when commanders make cost savings, their organizations should be rewarded by keeping a share of the money for future investments.

To complement these steps, the Department must make sufficient up-front investment resources available to "kick start" the dramatic shifts from support to combat effectiveness and modernization. The cost associated with each of the early rounds of BRAC were significant. Resources must be made available for future BRACs as well as for other needed investments. This Task Force strongly encourages the Department to set up an investment pool for use in encouraging high rate-of-return investments that will lead to dramatic shifts of resources from support to modernization and combat effectiveness.

The DoD financial system must also be strengthened. Managers within DoD must be able to gain better visibility on costs vs. outputs in the support functional areas. The current financial system encourages mislabeling, evasion of responsibility, looking good vs. being good and distrust of senior DoD executives. The Task Force feels that widespread use of activity-based-costing is appropriate; however, the recommendation is to make the needed financial system changes in parallel with the overall support area transformation not to hold up the latter until the former is complete.

Finally, DoD must convince Congressional leadership that the dramatic shift of resources outlined within this report is crucial to the long term military superiority of the US, and that such a shift can be accomplished within likely budgets, even under balanced budget and lower tax environments. The plan to convince Congressional leaders of the need for this shift should be of high quality, inclusive and provide a high (>90%) probability of success - in other words, as good as operations plans in the military are supposed to be. Currently, there is no integrated plan of any quality that is comprehensive and provides any assurance of success. This is normally thought of as a serious failure on the part of executive management.

The Secretary must employ both military and civilian leaders of the Department in this process and gain the support of industry leaders (who will benefit from the increased outsourcing). There is a need for a commonality of vision across the DoD.

In summary, the Secretary should seize the opportunity <u>now</u> to start this process. The leadership team in place today is ideally suited to the task. DoD should:

- State a new support vision and goals for cost reduction and performance enhancement;
- Create a new defense planning and budgeting process, with overall resource allocation and priority setting strongly influenced by the CINCs; and
- Assign responsibilities and begin the detailed implementations process this year.

It is important to emphasize the critical nature of the timing associated with taking these actions. The implementation of the Task Force recommendations is a multi-year effort. It is highly desirable that the current Secretary initiate this process over the next few months, so that the implementation gains an initial momentum.

SECTION I

Annotated Briefing

DSB SUMMER STUDY TASK FORCE ON

ACHIEVING AN INNOVATIVE SUPPORT STRUCTURE

FOR 21ST CENTURY MILITARY SUPERIORITY

Overview

The 1996 Defense Science Board Summer Study on Innovative Support Structures for the 21st Century was charged to assess current DoD support and to recommend approaches for both enhancing performance and reducing costs. Under likely future budget constraints in the coming decade, DoD will find it difficult to provide the required investments in modernization and combat to ensure military superiority of US military forces, at the same time as it continues the high level of expenditures on support and infrastructure. Thus, this Task Force focused its energy on identifying approaches for lower support costs while enhancing performance, as well as on mechanisms for implementation of the needed changes.

Based on its assessment, the Task Force found the Department's investment plans for the coming years to be high risk. It is likely that resources will not be available for needed investments in modernization, due to the escalating costs of support and of the associated infrastructure. Historical trends show higher support costs and poor support responsiveness. Such trends are the basis for this assessment.

The Task Force concludes that a very different approach is required in order to ensure the availability of funds for modernization and combat capability. Based on analysis of both the Department's and private sector approaches, this Task Force sees the opportunity to enhance military capability while significantly shifting funds from support areas into the combat and modernization areas. The challenge faced by the Department and by the nation, in general, is to achieve such a dramatic transformation over the next five years. The Task Force makes recommendations aimed at facilitating the implementation of such a shift.

Overview

The Need

- To generate funds for 21st Century Military Superiority ("force modernization") -- within constrained defense budget

The Problem

- Current DoD investment strategy (to satisfy "need") has very high risk (historic trends are against it) -- different approach is required

The Opportunity

- **Enhancing military capability by shifting significant funds from support areas to combat and modernization**

The Challenge

- To achieve dramatic transformation of DoD support structure over next few years (resulting in higher performance at much lower cost)

DSB Summer Study Task Force

The Summer Study Task Force was asked to define the steps that are necessary to transform the support structure so that it will provide high quality, responsive support at a reduced cost. The Task Force believes there is a general understanding of what needs to be done, in this regard: to take advantage of advanced information technology, modern management techniques, and world-class commercial capabilities. There is not now a common vision on how to implement such a shift. Creation of the proper incentives is also a key element of making this transformation. The Task Force conclusion is that for success in implementing a dramatic shift, DoD must do two things. First, DoD must identify a set of specific support opportunities that yield higher performance and lower cost. Secondly, DoD must create a "mission pull" in order to cause the resource shift from support to modernization and combat capability to actually be required by the institution itself. This report focuses on both of these elements.

DSB Summer Study Task Force

- Objective:
  - **Define steps necessary to achieve transformation**
    - General understanding that something needs to be done, but answer elusive!
    - Need to take advantage of advanced information technology, modern management techniques, world-class industrial capabilities, and proper incentives
- Conclusion:
  - **For success, there must be:**
    - Specific “opportunities” for higher-performance support at lower costs
    - “Mission pull” to provide the incentives for change

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DSB Summer Study Task Force

The Task Force first analyzed the current investment strategy and support plans of the Defense Department. Second, the Task Force identified those specific support areas where the major share of the dollars are spent and then assessed approaches with the potential for cost reductions while maintaining and even enhancing military performance. In this regard, the Task Force placed a great deal of emphasis in its analysis of personnel reductions — both military and civilian, since people are the primary cost drivers in the support area. The next element was to define the process for achieving change and the associated incentives needed to bring about change. Finally, the Task Force identified a set of initial goals and action plans for the Department — both in each individual support area and across the DoD.

DSB Summer Study Task Force

- Tasks
  1. Analyze current investment strategy and support plans
  2. Identify specific, high-cost areas for dollar and personnel reductions -- while maintaining or enhancing military performance
  3. Develop innovative approaches to achieve higher performance at lower costs
  4. Define process and enables / incentives for change
  5. Specify initial set of goals and action plans

DSB O&S Task Force Membership

The assembled Task Force was a select group with representatives of industry, academia, and former military. Many of the Task Force members have participated in the sort of culture change envisioned for DoD in the context of their own organizations.

DSB O&S Task Force Membership

Co-Chairs

Dr. Jacques Gansler*, Tasc, Inc.
Mr. Gordon England*, GRE Consultants, Inc.

Members

ADM Stanley R. Arthur, USN (Ret) , Lockheed-Martin
Mr. David J. Berteau, SAIC
Mr. Edwin L. Biggers
Dr. Kevin F. Brennan, Georgia Institute of Technology
Gen Michael P.C. Carns, USAF (Ret)
LTG Paul Cerjan, USA (Ret), Lockheed-Martin
Mr. Dean Clubb*, Texas Instruments, Inc.
Mr. Edsel D. Dunford
LTG Harry A. Griffith, USA (Ret)
Dr. Robert Hermann* , United Technologies Corp.
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Dr. Sam Kleinman, CNA
VADM Stephen F. Loftus, USN (Ret)
Mr. Peter Marino*, E-Systems
Dr. Ruth Novak
Mr. Phillip Odeen*, BDM International, Inc.
Mr. Robert Parker*
Mr. Gene Porter, CNA
Gen Bernard Randolph*, USAF (Ret), TRW
Mr. Michael Rich, RAND
Mr. John Stewart*, McKinsey & Co., Inc.
GEN William G.T. Tuttle, USA (Ret), LMI
GEN John Vessey*, Jr. USA (Ret), Consultant
Mr. Charles D. Vollmer , Booz, Allen & Hamilton
Gen Larry Welch*, USAF (Ret), IDA
Dr. R. Stanley Williams, Hewlett Packard Laboratories

* DSB member

DSB O&S Task Force Government Advisors

Strong support was also provided by the Task Force government advisors. Many of these people will lead in achieving the changes that result from the deliberations of this Task Force.

DSB O&S Task Force Government Advisors

- Executive Secretariat
  - Mr. Jay Dutcher, Executive Secretary
  - Maj Wynne Waldron, DSB Executive Secretariat
- OSD
  - Mr. Lou Chaker, ADUSD
  - Mr. Bill Gorham, CALS Office
  - Mr. Steve Grundman, PA&E
- JCS
  - LTG John Cusick, J-4
  - MG Howard Mooney, J-4
  - COL Daniel Mongeon, J-4
  - Lt Col Carol King, J-4
  - Dr. Rita Wells, National Defense University
- Army
  - MG Charles Mahan, DCSLOG
  - COL Samuel Chappell, DCSLOG
  - Mr. Tom Sweeney, USAWC
- Navy
  - RADM John Scudi, OPNAV N46
  - CAPT Rich McAfee, OPNAV 804
  - CDR Allen Thompson, OPNAV N412
  - Mr. Dave Wennergren, OPNAV N46
  - Dr. David Moran, ONR
- Air Force
  - BGen Leon Wilson, HQ USAF/LGS
  - Col David Zorich, HQ USAF/LGMM
- USMC
  - BGen P.M. Lee, USMC I&LLP
  - Col Larry Wells, USMC LPP
  - Col Dale Town, USMC
- Support
  - Mr. Brad Smith, Strategic Analysis, Inc.

Outline

This report includes four elements: characterization of the current enterprise and of the proposed new enterprise, approaches to implementation plans associated with the transition to such a new enterprise, and overall findings and recommendations.

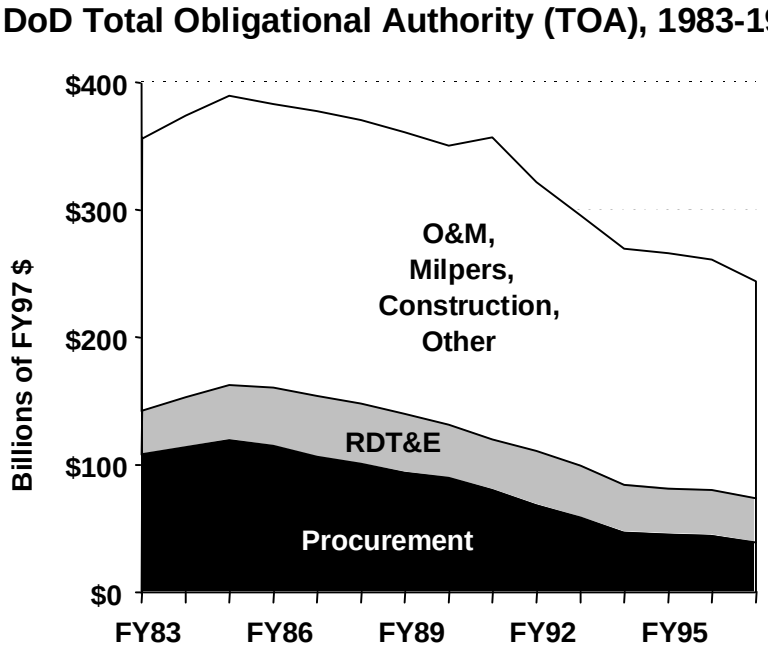
Outline

- The Current Enterprise
- The New Enterprise
- Implementation Plan
- Findings and Recommendations

The Problem: Declining Resources for Modernization

The discussion of the current enterprise includes: recent trends, where we are today, current plans for the near-term future, and the risks associated with the current DoD plans. The decline in DoD's investment in modernization of the forces is shown very clearly in the figure below which covers the 1980s and 1990s. There has been a continuing decline in the procurement account during this period; with the increasing share of the budget being used to operate and maintain the current forces. Procurement funding has declined over 70% since 1985. Where it used to be a third of the budget, it is now down to 17%.

The Problem: Declining Resources for Modernization



- *Procurement down over 70% since 1985*
- *31% of budget authority in 1985 -- now 17%*

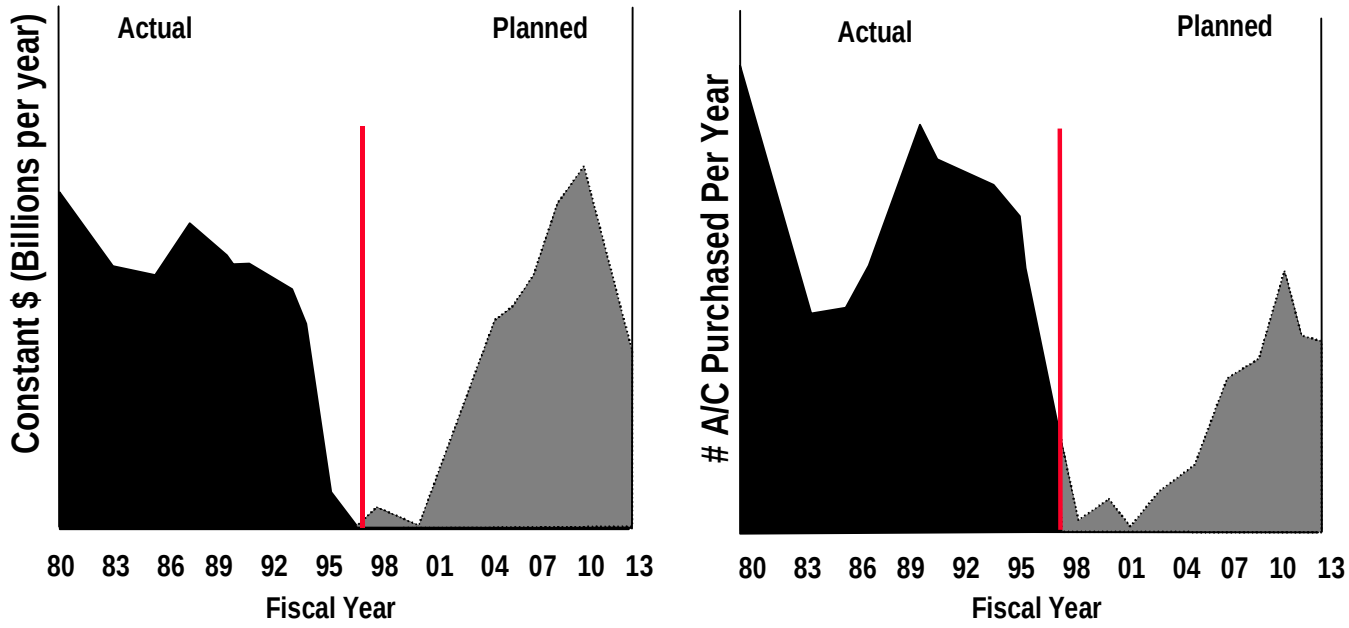
Will Funds Be Available for Planned Procurements?

Given this historic trend, the Task Force asks whether funds will really become available for planned future procurements. The figure below is an example of the sort of investment that will be required — and are currently planned — for modernization. This example addresses Air Force combat aircraft. By the year 2000, over 50% of the aircraft will be more than 20 years old. The figure shows the actual DoD plans today in terms of dollars to be available for combat aircraft in the Air Force. One can see the plan for a significant increase in the investment level, while right now it is nearly zero. The right hand figures show the same thing in the terms of the number of aircraft that will be procured.

One obvious observation to draw from these figures is that there is a strong need for acquisition reform. If one looks at the number of aircraft per unit dollar in the past and the number per unit dollar in the future, one can see that in the past, the DoD got twice as many aircraft for the same number of dollars.

Will Funds Be Available for Planned Procurements?

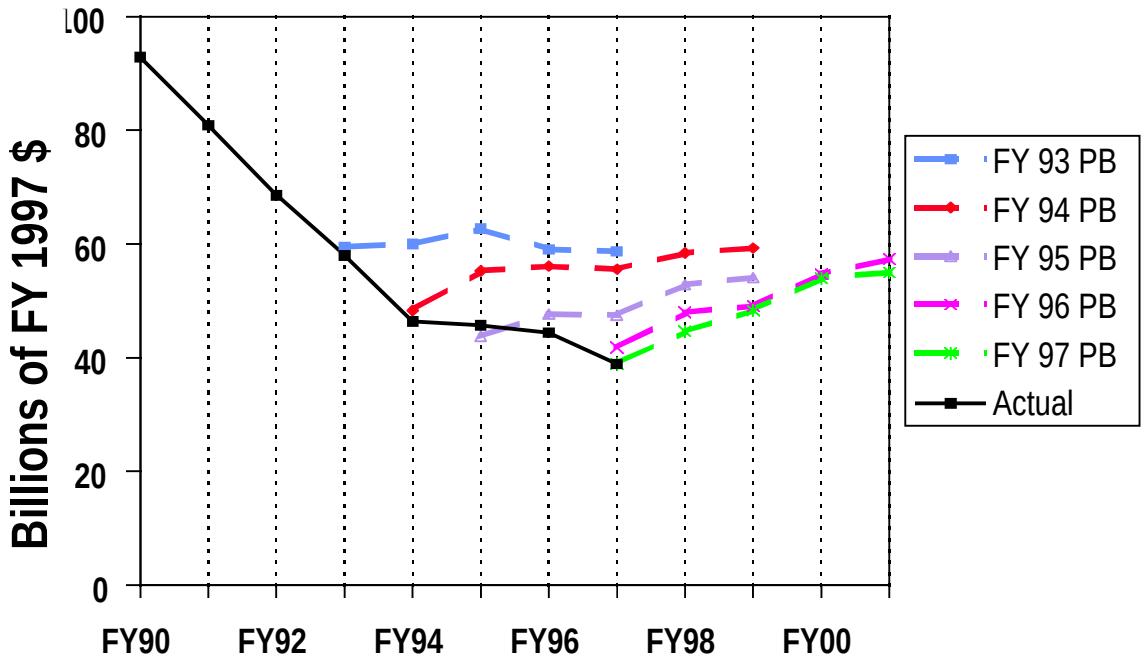
Example: A.F. Combat Aircraft Procurement



Historic Procurement Trends Not Encouraging

Given recent history, the Task Force assessed the likelihood of this planned increase in the procurement account as very low. Over the last five years of plans (the dotted lines show plans; the solid line is the actual expenditures for procurement), the DoD has put off the increase every year and one might expect that same thing to happen in the future (for reasons covered later).

Historic Procurement Trends Not Encouraging



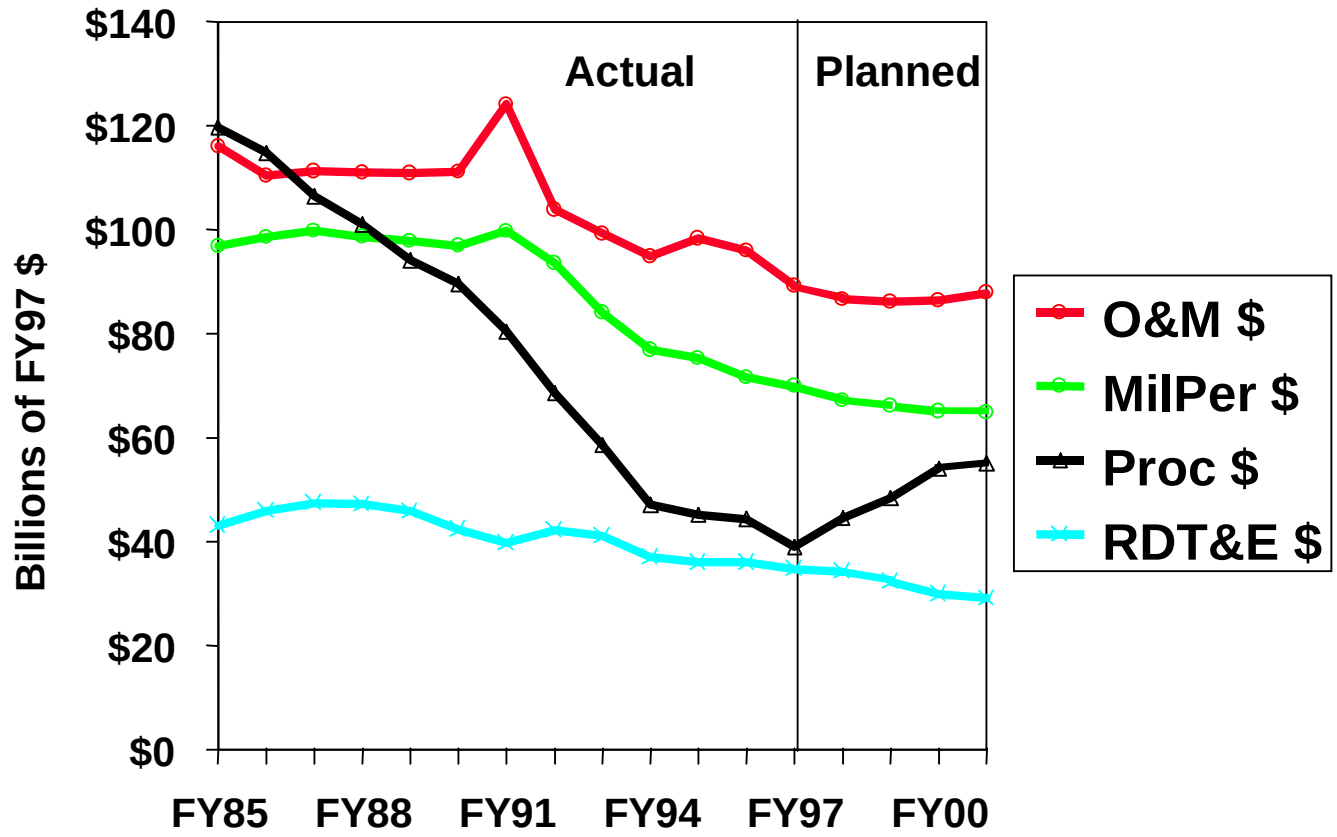
It also matters what the dollars are spent on (added dollars for unrequested items e.g. B-2, submarines, NMD, do not necessarily address defined modernization needs)

Procurement Increase Planned

This figure shows DoD historic budget breakdowns since 1985 and plans for the five year periods beginning with the FY97 FYDP. The figure shows that procurement has continued to decline even though the intent was to increase such investments in each of the President's budgets. The current DoD plan is again to increase procurement "next year." Such an investment would come at the expense of military personnel and R&D, while operating and maintenance costs remain the same or in fact increase slightly.

The Task Force also notes that it is not simply the magnitude of the procurement dollars that matters. It also matters where those dollars are invested. In many cases, Congress has added dollars for the things they feel are "necessary" that the DoD hasn't requested and/or doesn't believe is required for 21st Century modernization.

Procurement Increase Planned



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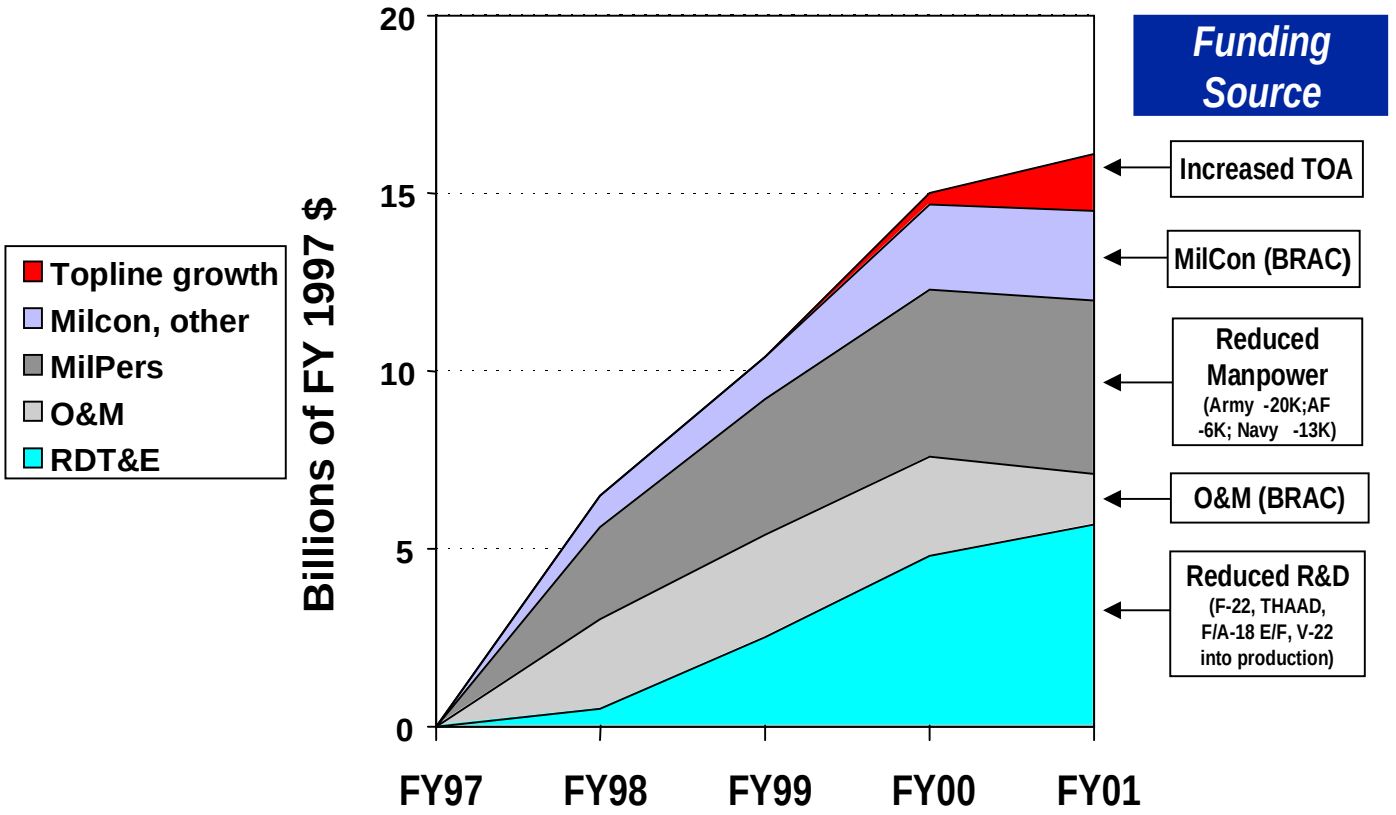
“Planned” Sources of Future Procurement Growth

This figure shows how the DoD plans to provide the resources needed for modernization. Over the coming five year period, the plan targets five areas: increased budget authority (TOA), military construction reductions associated with recent BRAC, reduced manpower, O&M savings associated with BRAC, and reduced levels of R&D. DoD plans for taking advantage of base closures include sizable manpower reductions on the military side, a decrease of 40,000 people. A significant number of dollars planned to become available are from the RDT&E accounts. This is the historical going-out-of-business approach to R&D. The assumption is that, once DoD has developed new systems, it can put them into production and then not have to do as much R&D in the future.

"Planned" Sources of Future Procurement Growth



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Risks to Planned Procurement Growth

The Task Force foresees a number of risks associated with achieving the current DoD 5-year investment plan in this figure. Full advantage was taken of the risk assessment that the OSD Office of Program Analysis and Evaluation (PA&E) recently completed for the Secretary. The asterisks show the PA&E assessments of risk. The highest risk may be in the topline of the DoD budget—whether or not it will increase as planned or even be reduced. Given the balanced budget and tax reduction pressures and the current Congressional budget resolution, the Task Force sees a risk of about $10B/yr. in the coming five year time period. This is considered a relatively conservative estimate (there may in fact be a significantly lower Defense budget). Additionally, there are the Congressional add-ons that may total well over $6B per year, that provide material not required by DoD and could replace essential DoD equipment modernization.

The Task Force found that in many cases the base closure savings were not being realized in either the MILCON or the O&M accounts. A prime example of this risk is the 5,000 Army civilians who have been RIFed through the BRAC process, but are still on the payroll due to Congressional restrictions.

There is a considerable resistance to trading off end strength reductions in military personnel for modernization. Here, the question is whether the savings in military personnel should be converted into warfighting slots rather than modernization.

Funding for operational contingencies will continue to consume significant levels of resources, frequently at the expense of modernization, and many continue to be underfunded by the Congress.

The DoD plan assumes that O&M will stay level. This Task Force suggests that history shows that, without a significant cultural change, it is likely to rise. Deferred depot and real property maintenance is a resource problem in the DoD and the Task Force sees no solution for that—it is believed to be a high risk.

The DoD plans calls for reducing the RDT&E funding for new capabilities. In fact, DoD will likely need a continuing set of new technologies and concepts to maintain 21st Century military superiority. This element of the plan is also seen as high risk, estimated to be at least $4B per year, to fund an adequate continuing R&D program to develop the equipment required for the implementation of the “revolution in military affairs.”

In total, the Task Force estimates there is roughly $38B per year (or 15% of the budget) in risk against $17B in planned resources indicating that this is a high risk plan for future modernization needs.

Risks to Planned Procurement Growth

Based on "Likely" Trends

Source	Plan 2001	Risk	Potential In 2001
Topline growth	+$2B	Risk to topline from Congressional Budget Resolution	-$10B
	--	Congressional "add-ons" that replace required modernization	-$6B
MILCON	+$3B	BRAC cost growth	-$1B*
MILPERS	+$5B	Resistance to Army end-strength reduction	-$1B
O&M	--	Funding for operational contingencies	-$3B*
	+$1.5B	O&M likely to rise	-$2B*
	--	Depot/real property maintenance growth	-$2B*
RDT&E	+$5.5B	RDT&E required at higher level	-$4B
	--	Acquisition program cost growth	-$4B*
	--	Growth in C4ISR (vs planned reductions)	-$5B
Total	**+$17B**	Total	**-$38B**

$38B/yr of risk in the $17B/yr of planned increases for modernization

* Included in Defense Program Projection (DPP) assessment of programmatic risk

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Other Concerns About The Plans

The Task Force then noted several other concerns about the current plan. First, the Task Force found that the plan already has incorporated many "expected" savings from Service initiatives. If such savings are not realized, then the risk is even higher. Secondly, many of the expenditures to be addressed (even if successfully changed) are "on the margin." The planned shift from 55% total obligational authority for support to 53% after a five year period is hardly noteworthy. Thirdly, although the plan assumes that total O&M will stay relatively level (because of decreasing manpower), the O&M funding per soldier has in fact been going up throughout the past five year period and is likely to continue into the coming years. In fact, as modernization is put off and the equipment in the field continues to age, it is likely that maintenance costs will rise. Finally, the Task Force sees a very serious conflict within the DoD regarding the priority of modernization in comparison with maintaining military end-strength. As resources are freed, if modernization is not seen as a high priority, the historical trend (of putting it off until next year) is likely to continue.

Other Concerns About The Plans

- Many important Service "initiatives" -- savings largely incorporated into FYDP
- Planned "infrastructure" expenditures go from 55% to only 53% in 2001
- O&M/ "soldier" ratio has historically increased
- Conflict between modernization and military end-strength
  - Many in Services believe that uniformed billets saved from support must be retained and converted to combat positions -- this would increase costs!

High risk of achieving current plan

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Thus, for the 21st Century military superiority ("modernization") plans to have credibility, a dramatically new approach to support is required to mitigate the risks in the historic approach. To achieve this modernization, the Task Force is convinced that the DoD must have a credible plan that shifts approximately $30B per year from support to modernization and combat by the end of the 5 year plan.

For the 21st Century Military Superiority ("modernization") plans have credibility, dramatically new approach to support required to mitigate the risks in the historic approach

Current DoD Support Activities

The support activities that currently exist are neither modern and efficient nor low cost. Most consumers of such support do not have a very positive picture of DoD support, characterizing it as a Cold War relic. Not only does support consume a large share (more than 55%) of the DoD budget, it doesn't provide the required responsiveness and it is not matched to the new rapid and flexible styles of warfare that the Services are evolving. In addition, what convinced this Task Force to think that there is a great opportunity here, is that world class commercial operations in very similar activities in many cases are actually achieving dramatically higher performance and lower costs (e.g. as shown on the next chart, in the logistics area).

Current DoD Support Activities

- Cold-War relic
- Consume over 55% of DoD expenditures
- Do not provide desired responsiveness
- Not matched to new rapid and flexible operations
- Do not achieve performance of world-class commercial operations

Example: DoD Logistics

This figure shows commercial performance in comparison with DoD performance in the logistics area. As shown, there are similar functions, distribution, repair and procurement being performed. The DoD has simply not kept up with the commercial revolution in logistics. The table lists the DoD average times and those of typical commercial firms doing business in areas such as electronics, aircraft, and vehicles. The issue is not whether these are the right benchmarks for DoD or are even achievable. Rather, it is that the DoD should be able to achieve far better performance in its "commercial" type activities. Moreover, commercial firms are able to get high performance at significantly lower cost. There is the enormous opportunity for the DoD to move aggressively in this direction. But, it means doing things very differently.

Example: DoD Logistics

Large Opportunity for Improved Performance at Lower Cost

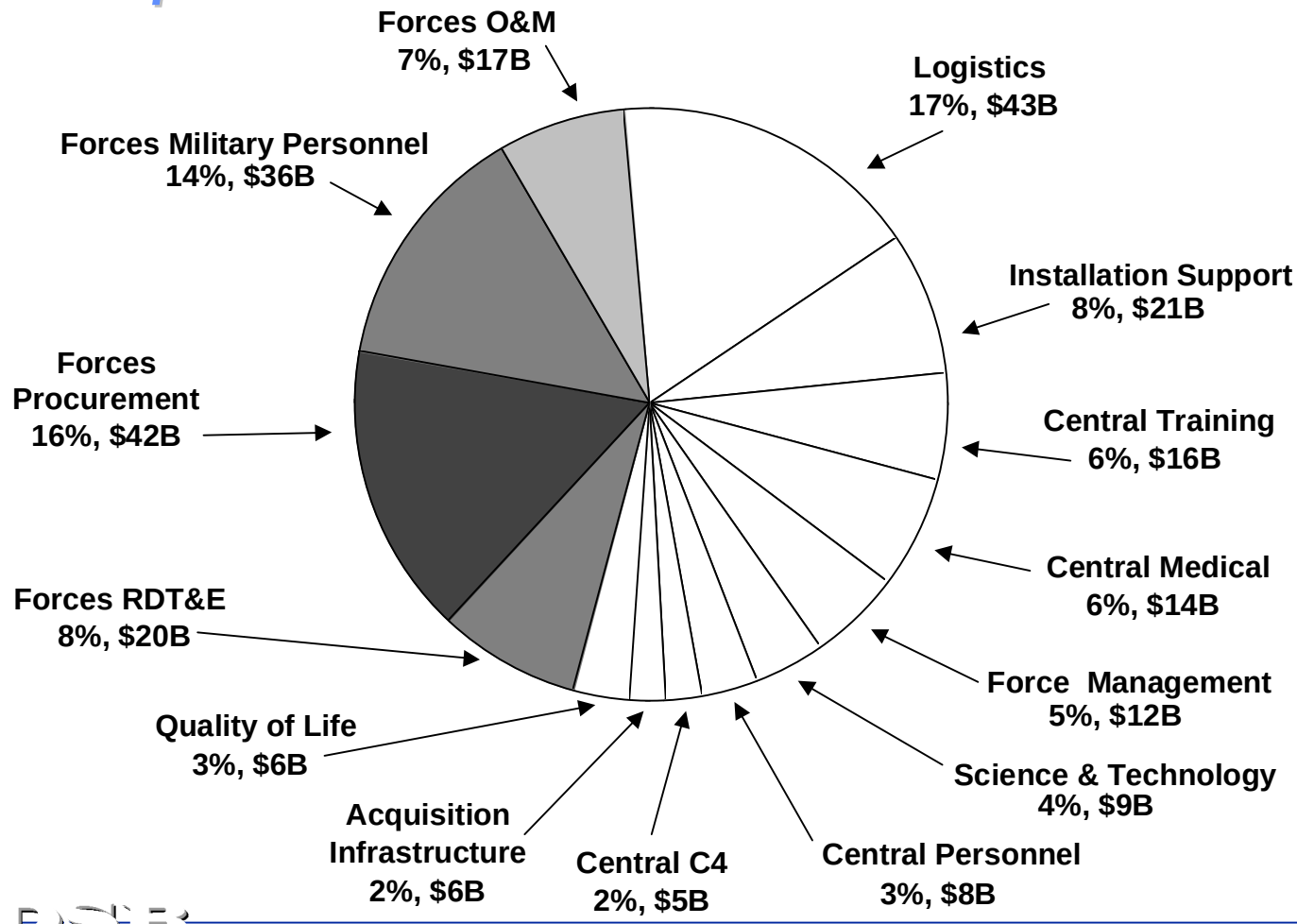
Process	DoD	Commercial Companies		
Distribution (for in-stock items)	26 days (DoD average)	1 day (Motorola)	3 days (Boeing)	2 days (Caterpillar)
Repair (cycle time)	4-144 days (DoD average)	3 days (Compaq)	14 days (Boeing electronics)	14 days (Detroit Diesel)
Repair (shop time)	8-35 days (Army tank/truck)	1 day (Compaq)	10 days (Boeing electronics)	5 days (Detroit Diesel)
Procurement (administrative lead time)	88 days (DLA)	4 days (Texas Inst.)	0.5 days (Portland General)	Minutes (Boeing, Caterpillar)

Source: RAND, Others

Total Expenditures 1996

And how is DoD spending it's resources today? This figure summarizes DoD's estimated expenditures for 1996. The Task Force had great difficulty in getting such visibility into actual defense expenditures because the DoD budget structure is not tied to functional or mission activity. The white areas shown on this chart are expenditures for support (excluding the direct O&M to the forces); while the black and shaded areas are the expenditures for forces and modernization. There are opportunities for cost reductions in the white areas as well as in the black areas while achieving significant improvement in performance (as will be discussed later). Importantly, (as shown in the chart) only about 14% of the total DoD resources are actually going for military warfighting personnel.

Total Expenditures 1996



What the People Are "Doing" (thousands)

Because of the importance of people in understanding how to make significant support cost reductions (this being a labor-intense "business"), the Task Force collected data on where the people are now and what they are currently doing, in terms of the job series. This data is summarized below. Note that combat personnel represents only about 14%, which matches the dollar level on the prior chart. This 14% includes some civilians who are in functions that are categorized by DoD's Occupational Conversion Index* under the Task Force's combat heading, but is primarily military personnel.

What is also interesting about this data is that the military personnel in combat represent a very small percentage of the total military force. A very large share of the military personnel are in fact involved in support functions. The Task Force was surprised to learn that far more than 600,000 military personnel are in the support infrastructure. Based on this data, the Task Force looked hard at reducing both the number of civilian and military personnel involved in support.

- Source: Occupational Conversion Index, September 1993, DoDI 1312.1-I

What the People Are "Doing"*
(Thousands)

Occupation	# Civ	# Mil	Total	%
Maintenance/Repair	186	433	619	25.00%
Administration	262	119	382	16.00%
Combat	12	324	336	**14.00%**
Logistics	132	152	283	12.00%
Technical	114	91	205	8.00%
Health/Medical	28	131	159	6.00%
Comm/Intelligence	6	137	143	6.00%
Engineering	47	12	59	2.00%
Data Processing	37	20	57	2.00%
Other	50	180	229	9.00%
Total	874	1,599	2,472	100.00%

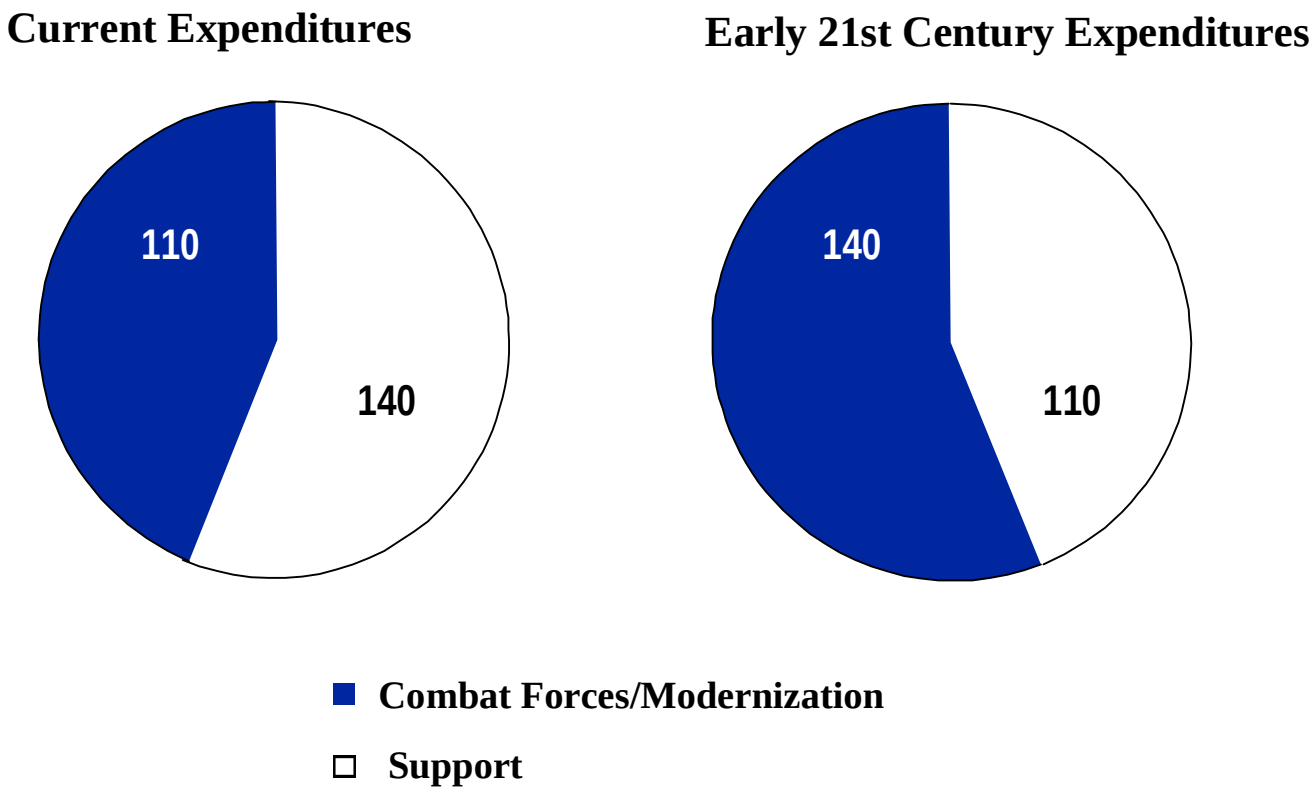
- ***40% of active duty military are in "infrastructure"***
- ***72% of "centralized training" done by military***
- ***Many others in "force structure" are doing commercial type jobs***

**** Based on job series***

Shifting Resources ($Billions)

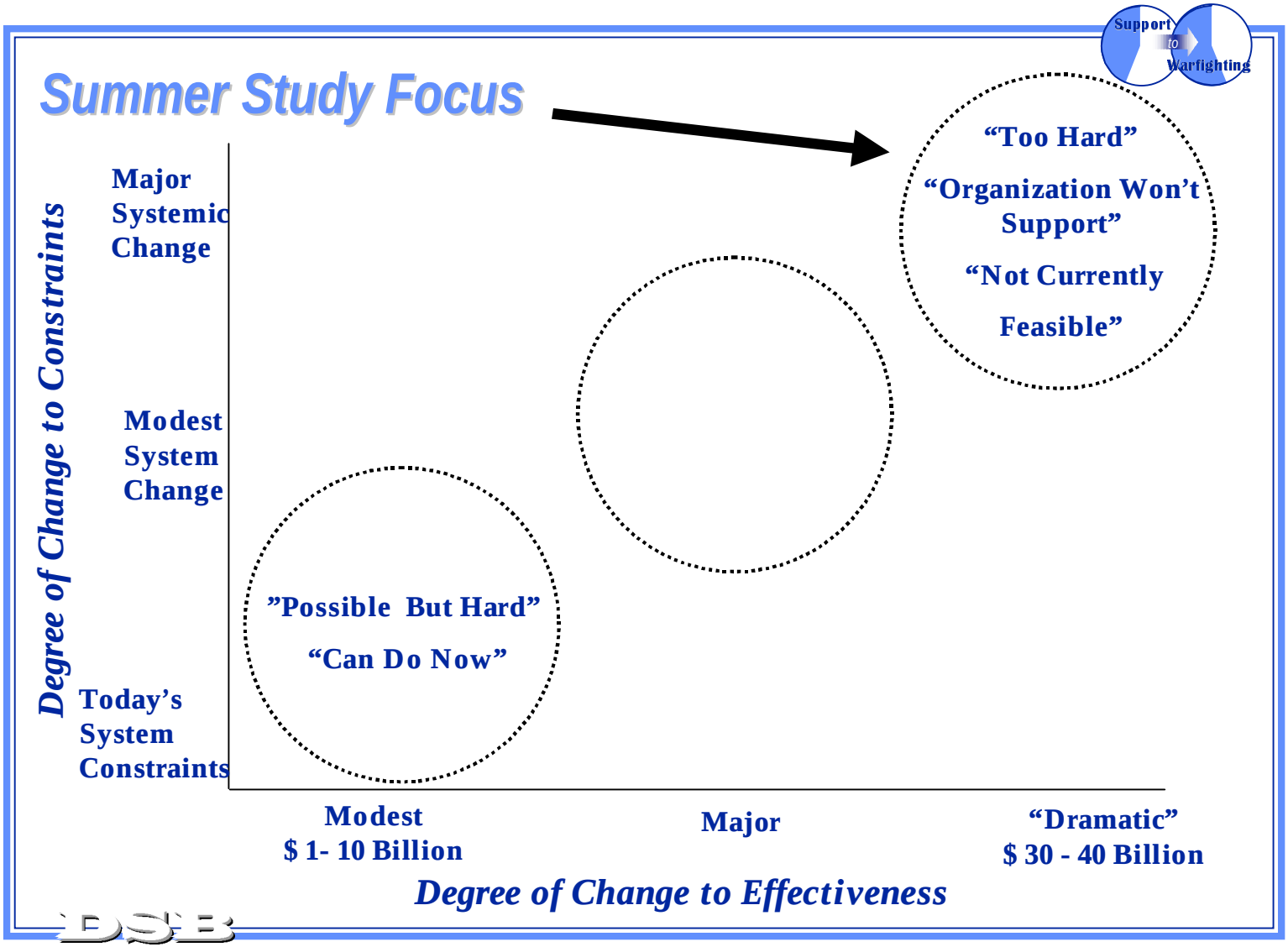
The Task Force sees great potential for a very significant reallocation of resources within DoD. The Task Force recommends that a concrete program be developed to reverse current budget allocation that has approximately $110B for combat and modernization and $140B for the support by the early 21st Century. DoD should be able to shift $30B annually from the white area of the expenditures chart (support) into the black area to support combat forces and modernization. The next section provides specific recommendations for reducing support costs that provide confidence that DoD can make such a shift.

Shifting Resources ($Billions)



Summer Study Focus

The Task Force recognizes that this will not be an easy job. In fact, this will require fundamental changes in the way the DoD conducts its support operations. If significant improvement in effectiveness is desired, one cannot be satisfied with very modest changes of a few billion dollars out of the total of $250B. For example, the DoD now has many initiatives in the privatization and outsourcing areas which are expected to yield savings at the end of the coming five year period of $1.5B to $2B per year. But, DoD is operating in the lower left corner of the figure, within today's institutional constraints. What this Task Force recommends is that DoD focus on the upper right hand part of this figure. The responses received to such a recommendation likely include: "it is impossible," "no one will do it," "you cannot count on just-in-time inventory," "you cannot make dramatic reductions in manpower," and "it certainly is not possible to convince Congress of the need for such a change." The Task Force believes that the change is both necessary and possible. It is the current way of doing business that, in the long run, will be impossible to maintain. The Task Force recognizes that it will require a major systemic change and that is what is recommended.


Support to Warfighting
Summer Study Focus
Degree of Change to Constraints
Major Systemic Change
Modest System Change
Today's System Constraints
"Too Hard"
"Organization Won't Support"
"Not Currently Feasible"
"Possible But Hard"
"Can Do Now"
Modest
$ 1- 10 Billion
Major
"Dramatic"
$ 30 - 40 Billion
Degree of Change to Effectiveness
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DoD's 21st Century Operations and Support Structure

This section provides a description of the Task Force vision for a new support structure for the 21st Century. The section also discusses the need for a more relevant financial information structure since having the right financial information is critical to implementing an efficient support structure.

Since the shifting resources from the support infrastructure is crucial to building the needed 21st Century force, the next step after defining the vision is to identify specific opportunities to shift significant resources. This section includes a summary of such opportunities (from the support infrastructure part of the DoD budget), along with some detail on a few selected support areas. Section II of this report contains more complete analyses of all of the support areas addressed by this Task Force. In addition, there is a summary of other opportunities to free up resources identified by the FY95 DSB Summer Study within the forces and modernization part of the budget.

DoD's 21st Century Operations and Support Structure

- Vision of 21st Century O&S Structure
- Financial Information Shortfalls
- O&S Performance and Cost-Reduction Opportunities
- Specific Examples of Proposed Actions
- Other Opportunities

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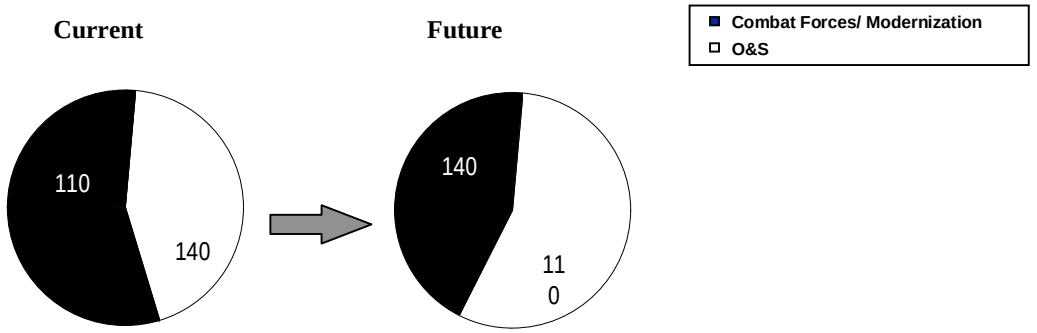
Vision

This Task Force's vision is similar to that presented in the support and business sections of the FY95 DSB Summer Study, the report of the Commission on Roles and Missions, and the FY96 DSB Task Force on Privatization and Outsourcing. The vision calls for DoD personnel to prepare for and conduct combat and crisis management operations while relying on a robust, competitive private sector to provide the commercial-style support. This approach ensures that each community leverages its core competencies.

With this vision as the basis for change, there is the clear potential to shift resources so that the ratio of spending for support infrastructure to modernization and combat capability changes as depicted. It is important to note, at the same time, the quality of support can be enhanced to meet the needs of 21st warfare through faster, more responsive support operations and a flatter, smaller more agile headquarters structure.

Vision

- 21st Century O&S is transformed fundamentally -- higher performance, lower cost
  - DoD personnel focus on preparing for and conducting combat operations and managing crises -- their core competence
  - Support activities not deployed for combat are performed by a robust, competitive private sector -- their core competence



- Achieve higher performance throughout O&S
  - Streamlined base and installation structure (reductions of at least 20%)
  - Logistic support is faster, more responsive, and effective
  - The command/headquarters/overhead structure is smaller, flatter, more agile

Competitive Outsourcing Improves Performance and Reduces Cost

Since the potential to reduce support cost depends so heavily on outsourcing, it is useful to point to evidence that outsourcing of commercial-type functions does, indeed, reduce costs and improve performance. Within the private sector, outsourcing is increasingly common for these reasons as well as to permit companies to focus on their core competencies. The public sector also has significant positive experience in outsourcing with very positive results.

Private sector outsourcing has been motivated by the search for higher quality services at least as much as by cost reduction potential. Even so, the experience has been an average 15% cost reduction can be achieved. Cost reductions have been significantly greater when the public sector outsources to the private sector. The greatest overall cost reduction comes when tasks performed by military personnel can be outsourced since associated indirect cost such as training and rotation base are also eliminated. (The empirical data on which this analysis is based is contained within the DSB Task Force Report on Privatization and Outsourcing.)

The key to successful outsourcing is a robust, competitive source base. The Task Force believes that private forms already exist or will quickly enter the market to meet virtually all of DoD's support requirements.

Competitive Outsourcing Improves Performance and Reduces Cost

Public and Private Sector Experience:

- Improved performance -- better technology and training
- Greater flexibility and responsiveness
- Significant cost reduction based on extensive experience
  - 15% in private sector outsourcing
  - 20% in public sector competitive wins
  - 40% when shift from public to private (competitive)
  - 50% when outsourcing military billets
- Sufficient private sector capability exists or will be created to provide robust competition

Convert Fixed Costs to Variable Costs

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Defense Financial Information — A Critical Need

There is a need for significant improvements in the DoD financial information systems to facilitate the move to a more efficient support structure. DoD cannot control costs if it doesn't know what those costs are. Fixing current deficiencies should not, however, delay progress on reducing the costs of specific areas of the O&S structure.

Recent experience has highlighted the deficiencies in the system's ability to provide basic financial information, i.e., knowing where the money goes. The financial community is working to correct basic deficiencies. However, the ongoing efforts will not provide the access to financial data bases needed for effective visibility into the uses of resources. The challenge in doing this is not primarily technical in nature. Instead, the challenge is to generate an atmosphere of trust such that the Services and Defense Agencies are more willing to provide full visibility into their financial systems. A better financial system is not a technical matter. The current financial system encourages distrust, unassertive cost management, "turf" wars, and economic failure:

- "If I save anything, they (DoD) will take it away."
- "No matter what they say this year, they won't give me my savings next year."
- "They play sleight-of-hand games with the money."
- "How can I reduce costs? I don't even know what anything costs me?"
- "Lie, cheat and steal is what you have to do to protect yourself."

The second need is knowing how the funds are used and whether that matches the intended use. The current system is focused on the legal and control functions needed to ensure that the money is in the right bins and is properly accounted for, rather than to provide current and accurate information to help manage defense programs. The system can, with considerable effort, provide some information on the uses of money using ad hoc systems. For example, the Visibility and Management of O&S Costs (VAMOSC) system collects information after-the-fact on some uses of money, but with a significant time lag (one to two years).

Even more difficult, with the current system, is insight into the relationship between the allocation of money and military mission outputs. Such insights are essential to timely allocation and reallocation decisions. Following the work of the DSB Task Force on Readiness, a major effort is underway to relate inputs to outputs in the area of readiness. This effort includes work to refine the metrics to provide a clearer understanding of what the Department is getting for the investment. However the Department needs such information in each major support activities area as well.

Defense Financial Information-A Critical Need

- Where does the money go?
  - Financial Community understands need and is engaged
  - Striving for department-wide access as input to decisions
- How is the money used?
  - Accounting data focuses on legal and control functions -- fails to meet management needs
  - Need activity-based systems for industrial activities -- currently ad hoc
  - Visibility and Management of O&S Costs (VAMOSC) system collects historical data (but with 1 - 2 year lag)
- What does the money do?
  - Little capability to relate allocation decisions to mission capability outputs
  - Effort underway to relate readiness inputs to outputs -- some metrics
  - Need meaningful metrics and benchmarks relevant to each major activity

Defense Financial Information — Recommendations

The Task Force recommends accelerated efforts to provide modern financial management systems, including activity-based cost (ABC) accounting systems, for commercial and industrial activities to help relate outputs to inputs. This ABC effort can proceed quickly on an activity-by-activity basis, to support planned outsourcing decisions. Advanced financial systems are available from many proven vendors (COTS) so little development effort is needed.

The need for shared information must overcome the trust and authority issue that impedes connected, shared systems. It is not that difficult to devise meaningful output metrics. It is significantly more difficult to ensure that the output metrics serve the needs of the decision maker. As a first step in reforming the system, the Department should quickly outsource a number of routine accounting and finance functions, since there is a competitive, commercial community that does these tasks well and far more economically than can the Department.

Defense Financial Information - Recommendations

- Accelerate plans to adopt modern accounting systems
  - Install “ABC” accounting systems
  - Use proven COTS software
- Require compatible financial systems department-wide
- Insist on output metrics relevant to real management needs
- Required Action: DepSecDef task USD(Comptroller) to develop implementation plans by July 97; target initial capability by 1999

O&S Cost Reduction and Cost-Reduction Opportunities

This figure summarizes the results of the O&S cost reduction panels of this Task Force. It illustrates the potential for substantial reductions in support programs, freeing funds for needed investments. The current cost estimates are based on the best available data, given the deficiencies in the DoD financial information system. Details on the rationale, methodology, and front end investment needs for each of these potential reductions are provided in Section II of this report. In many cases these reductions are not without some upfront costs. Where it was possible to estimate it, the detailed assessments include this cost.

In most instances, it will be possible to achieve improved performance while reducing costs. This enhanced performance comes from leveraging the demonstrated performance of the private sector, which in most cases far exceeds that in government support activities.

While the cost reduction estimate for C4I shown here is for central support only, the broader C4I area has high potential for more efficient use of resources. Several DSB Task Forces have identified the need for joint operational concepts, joint operational architectures and joint technical architectures for C4I systems. Without such an underlying framework, it is impossible to make valid judgments about the value of individual systems. However, it is certain that there is significant redundancy in some areas and significant gaps in others, thus the savings may be reinvested.

O&S Cost Reduction Opportunities Summary ($Billions/yr.)

(Annual After Implementation)

Equipment Related	Current	Reduction
■ Deployed logistics	17.0	3.3
■ CONUS logistics	14.1	6.0
■ Test and evaluations	1.9	.5
■ Science and technology	7.3	.6
		10.4

People Related	Current	Reduction
■ Education and training	16.0	1.8
■ Base support	20.0	2.4
■ Base Closure (BRAC)		6.0
■ Housing	11.6	1.3
■ Medical	15.0	4.0
■ Commissaries	1.0	.2
		15.7

Central Support		
■ ADP	.9	.2
■ C⁴I Central	5.5	----
■ Finance and admin		
– Headquarters	5.0	1.5
– Personnel	8.1	1.5
– Finance	1.8	.4
■ Acquisition Management	6.0	1.0
		4.6

Other Opportunities

- New Operational Concepts and Efficiencies
- Reducing Redundant Forces
- Acquisition Reform
- DBOF Competition
- Simulation/optempo
- C⁴ISR architecture

OPPORTUNITY: $30B+ ANNUALLY BY 2002

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1996 Summer

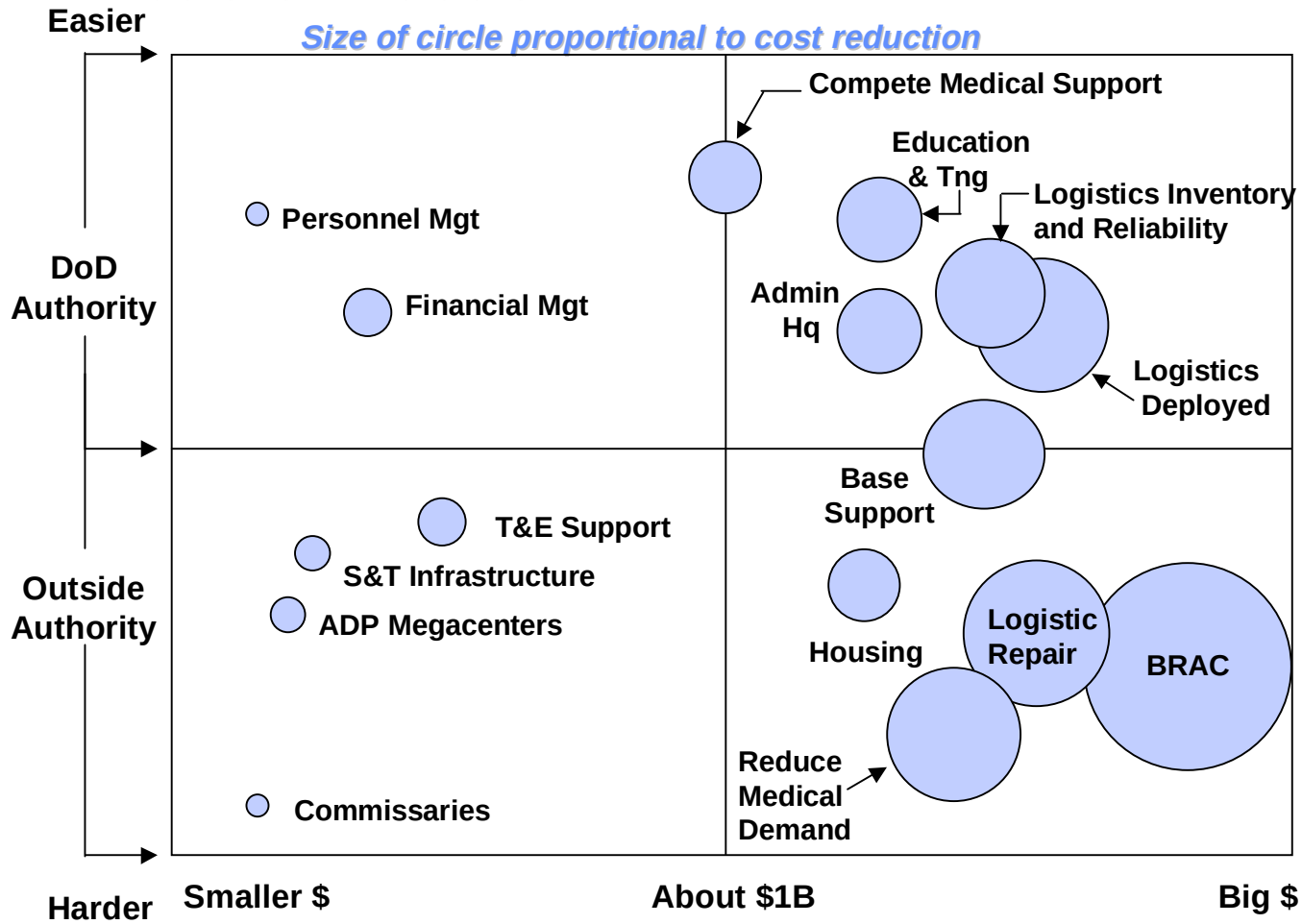
Areas of Focus

The Task Force's cost reduction panels clearly recognize the impediments and difficulty involved in realizing such shifts in use of resources. Section II of this report describes, in more detail, useful approaches for implementation. This figure illustrates the relative difficulty and benefits of potential reductions. The size of the circles represents the size of the potential cost reduction, with the center line being at about the $1 billion level. The vertical categories on the figure are the sources of the authority required to make the shifts. The circles across the top show areas within the Department's authority. This does not mean that any are easy and the vertical placement provides an estimate of the relative difficulty.

The bottom half of the figure indicates areas where Congressional or Administration action outside the Department is required. In some cases, such as logistics and medical, the area has been subdivided. Medical laboratory, pharmaceutical, equipment maintenance, and various other kinds of medical support for military personnel and their dependents could be outsourced within the SecDef's authority. However, various actions to shift the demand from fully DoD funded treatment to cost shared or private employer funded treatment would require Congressional approval and would face strong opposition from active duty and retired personnel.

In the base support area, it was difficult to identify such a useful single division but there is considerable legislation that has some effect on the Departments' authority to outsource. Again, the report of the Commission on Roles and Missions contains a fairly detailed appendix of legislative impediments to base support outsourcing.

Areas of Focus



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O&S People Reduction Opportunities Summary

This figure summarizes the potential for reduction in the DoD workforce, both military and civilian. This Task Force sees approaches for eliminating the need for approximately 18% of the work force by 2002. The Task Force believes that these estimates are quite conservative. For example, in the area of acquisition management, the Task Force estimate would reduce one person out of six. With acquisition streamlining and an enhanced push to outsource certain functions, the reductions could be much greater. The Task Force also notes that the DoD has an extraordinarily low employee to supervisor ratio, when compared to that of commercial industry. The Task Force could see an additional reduction in civilian employees of ~13,600 of the ~38,300 supervisors, shifting the ration from 1 to 9 to 1 to 14, closer to commercial averages. This ratio is still lower than commercial industry averages; however, further increases in the ratio may not be practical since more civilian supervisory personnel may be needed to provide effective oversight of increased levels of outsourcing.

It is important to note that an ~5% per year drawdown in civilian employment along with a ~2% drawdown in military personnel would meet this need. As will be shown later, such levels of drawdown in civilian and military personnel are not in the FYDP; yet, they are levels below those already achieved in FY 1994 and FY 1995.

O&S People Reduction Opportunities Summary

(000 of People Annual After Implementation)

Equipment Related	Current		Reduction	
	Military	Civilian	Military	Civilian
■ Deployed logistics	547	9	60	1
n CONUS logistics	2	164	1	134
n Test and evaluation	6	8	4	5
n Science and technology	3	15	2	10
Total	***558***	***196***	***67***	***150***

People Related	Current		Reduction	
	Military	Civilian	Military	Civilian
■ Special skill training	90	25	52	14
n Base support (including BRAC)	117	131	24	26
n Housing	*Data Not Available*	*Data Not Available*	*Data Not Available*	*Data Not Available*
n Medical	103	86	25	46
n Commissaries	*Data Not Available*	*Data Not Available*	*Data Not Available*	*Data Not Available*
Total	***310***	***242***	***101***	***86***

Central Support	Current		Reduction	
	Military	Civilian	Military	Civilian
■ ADP (does not include central C4I)	*Data Not Available*	4	*Data Not Available*	1
n HQ, Finance and Admin	57	63	17	24
n Personnel	71	12	*Data Not Available*	3
n Acquisition Management	20+	66+	3+	11+
Total	***148***	***145***	***20***	***39***

✓ ***Total Reduction: 463,000***

- Military 188,000
- Civilian 275,000

OPPORTUNITY: Reduce Total Workforce

Military — ~ 2 % per year through 2002

Civilian — ~ 5 % per year through 2002

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Attack the Personnel Problem

Most of the opportunities to shift resources from support to modernization and combat capability will require workforce reductions. People issues drive politics and, unless the impact of the actions on people and jobs is recognized and dealt with, the political and cultural impediments to success will be impossible to overcome. This viewgraph summarizes general recommendations of this Task Force regarding how to attack this personnel problem. As suggested, most of the changes affect people either by shifting the workload to the private sector or by finding ways to do it with fewer people. The table below summarizes DoD's recent performance in reducing the civilian work force as well as the current plans through FY01. In the early 1990s, DoD has been hiring replacements for attrition on roughly a 1 for 3 basis. The figure also shows planned civilian direct hire levels as reflected within the FYDP. As shown within this table, the Department will reduce its work force by an average of 2.9% per year during the period of FY 1996 through 2001. Given an attrition rate of 5% per year, this would indicate that DoD intends to hire replacements on roughly a 1 for 2 basis in the coming years. As shown on the facing slide, this Task Force would recommend much more selectivity in hiring replacements. The DoD should focus on hiring those with the information technology skills required for the future.

Civilian Direct Hires
(Full Time Equivalents)
(000 of People)

	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000*	FY 2001*
National Performance Review (NPR) Targets (dated October 1994)	931.4	869.7	833.3	798.5	764.7	742.6	723.2	Not Projected	Not Projected
Percent Decrease		6.6	4.2	4.2	4.2	2.9	2.6	--	--
Actuals and Projected (FYDP for FY 1997 and Beyond)	931.4	868.3	821.7	800.3	767.4	744.6	718.3	700.1	689.7
Percent Decrease		6.8	5.4	2.6	4.1	3.0	3.5	2.5	1.5

In order to achieve the $30B per year shift in resources (by the year 2002) recommended by this Task Force, the DoD should set civilian downsizing targets at 5% per year through FY 2001. As shown in the table above, the DoD achieved civilian workforce reduction levels even greater than 5% in FY 1994 and FY 1995. Continuation of civilian personnel reductions at the rate that was achieved in FY 1994 and FY 1995 is not planned for FY 1997 and beyond. The civilian work force could be reduced by taking advantage of the fact that 21% of the civilian work force (175,000 people) are eligible for some kind of retirement buy-out. Since, if this Task Force's recommendations are implemented, deeper reductions would be needed, this Task Force recommends that the DoD continue to invest in a range of measures to cushion the impact, including outplacement assistance and a broader reeducation program (e.g., the Civilian Assistance and Re-Employment program). It will be important to work closely with the government employee unions, to assist civilian workers in out-placement. Generous buy-outs over 6 to 12 months could be very attractive to workers and be a worthwhile investment by DoD to pare the workforce.

* The estimates of planned civilian direct hire levels for FY 1998 through FY 2001 are based on DoD's FY 1998 PDM I. Most of the data in the above table use "full time equivalents" as the measure of the number of civilian direct hires. This measures the actual level of effort delivered, not the number of "billets." This measure was used for setting personnel reduction targets in the National Performance Review. The NPR only set reduction targets through FY 1999. For the two years following FY99, the only data available is that within the FYDP which is measured in "end strength" or billets. End strength data would not address gaps between attrition and hiring. FY00 and FY01 data (numbers and percentage decrease) in the above table are based on end strength numbers.

Attack the Personnel Problem

- Every choice will affect people -- generally shift to promote core competence (outsourcing) or reduction-in-force
- Encourage civilian retirement
  - 7% fully eligible
  - 14% partial

  } 175K civilian employees
- Selectively limit replacement -- hire for the information age
  - In early 1990s, DoD hired almost 1 person for every 3 persons that left
  - Given an attrition rate of 5%, FYDP projections are based on a hiring rate of 1 person for every 2 that leave
- Continue and strengthen the DoD transition program for civilian employees (Civilian Assistance and Re-Employment Program)
  - Civilian downsizing targets at 5% per year through 2001
    - Note: DoD achieved higher levels in FY 1994 and FY 1995
  - Reeduction for new private sector skills, outplacement assistance and buyouts
- Team with government unions (Partnering Program)

Areas to Consider

To provide some confidence that the cost reductions shown on the earlier charts are real, though difficult, the following charts show some detail for the four areas checked here. More complete detail for all of these areas shown below is in Section II.

Areas to Consider

Equipment Related

- Logistics (supply, maintenance, transport) of deployable forces
- Logistics in CONUS
- Inventories (system, parts, etc.)
- Labs and T&E facilities

People Related

- Medical
- Education and Training
- Housing
- Base Support (other than logistics)
- Commissaries
- Base Closures

Central Support

- ADP
- C4I
- Finance
- Administration
- Personnel Management
- Headquarters
- Acquisition Management

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CONUS Logistics Infrastructure

The role of the CONUS logistics infrastructure is to sustain the weapons systems and people back home who are, or will be, deployed. The CONUS logistics infrastructure operates as a "middleman" between manufacturers of items and the customers; determining what it should stock, buying the stock, filling customer orders, and operating facilities to perform about 70% of the customers' repair work. The warfighting organizations already have their own logistics support activities that make repairs on weapons and support systems and hold buffer stocks of needed supplies. Thus, the CONUS logistics infrastructure acts as a second "middleman" between weapons systems operators — ships, squadrons, battalions — and commercial suppliers.

The Task Force proposes the conversion of the current logistics system to a 21st Century system. It would exploit the technology and processes used by recognized world-class companies, and which rely on the competitive private sector to meet their logistics requirements.

The Task Force believes that this goal is achievable and the end result will be a logistics support structure which is more responsive to Services needs, while realizing significant reductions in expenditures and people.

CONUS Logistics Infrastructure

- Role: Sustains readiness of weapons and people
  - Fills customer orders and repairs equipment
  - Supports deployable logistics organizations
- Our Goal: Convert to 21st Century logistics system
  - Exploit the technology and methods used by world-class companies
  - Rely on private sector competition for all CONUS support
- Result: Responsive, agile support with significantly less cost and fewer people

CONUS Logistics Infrastructure

The CONUS logistics infrastructure exists for sustainment of readiness, primarily in terms of filling customer orders and supporting the deployable logistics organizations in peacetime as well as wartime. Using 1995 as a baseline, the profile of the CONUS-based infrastructure includes supply, maintenance, and materiel distribution management of a $60B inventory consisting of almost 5M items – of which 80% are active. These active items generated $16B in sales — excluding petroleum sales — and utilized almost 62,000 people throughout the inventory control points, distribution depots, and installation organizations. The operating costs for these activities were $4.9B for that year. Additionally, over 100,000 people in maintenance depots and installation activities were involved in repair and maintenance-related activities supporting deployable forces. These organizations had operating costs of over $9B. Thus, in total there are at least 166,000 people directly involved, and over $14B spent annually to provide needed support. There are many opportunities, when compared to world-class commercial companies, for improvements in these DoD processes. The DoD recognizes that there are economies to be gained and are actively pursing them. But, the Task Force concluded that a more aggressive program would further decrease costs and improve support.

To gain economies and achieve significant savings that can be diverted to improve DoD's force structure and modernization accounts, DoD must change the paradigm and get out of the materiel management/distribution and repair businesses. While it is recognized that Contractor Logistics Support (CLS) has been used to a limited extent in DoD, and whereas the new DODD 5000.2 requires the use of CLS where appropriate, the Task Force believes that this should become mandatory for all weapons and support systems. Additionally, the Task Force has seen the success of the "prime vendor" concept for medical items, putting DoD in a world-class environment, and this Task Force is convinced that this is another avenue to achieve savings by expanding its application to all other commodities.

Up-front investments are critical for this new paradigm to be successful. DoD must invest in the enablers and demonstrations that confirm applicability and help build the confidence of the force that its support will be there when and where needed. If DoD shifted and adopted the philosophy to get out of the materiel management/distribution and repair businesses at the CONUS level, and to lesser extents overseas, the Task Force sees further gains in efficiency and military effectiveness. The Task Force believes that DoD will realize improved readiness and reduced systems operating costs through direct CLS. It also sees faster response times for the requesting units, as well as leaner retail inventory needs by the fighting forces. For the Commander, this also translates into a smaller logistics footprint in the theater.

Another added, and critical, benefit of this shift is the enhancement of DoD's wartime surge capabilities. The number of robust contractor/commercial enterprises that will be needed for the surge are providing the services and support. Industry has demonstrated this capability in past crises. For example, Caterpillar was able to meet, with great success, the huge increased demand for equipment and parts after the Mount St. Helen eruption. Finally, this concept would allow the military leadership to focus on its core obligation, to defend the United States and, if necessary, win its battles.

The Task Force estimates that DoD could reduce annual costs by $6B in annual cost reductions (beyond FYDP reductions) by 2002 if it were to get out of materiel management/distribution and repair businesses. Using conservative estimates, the Task Force sees these savings coming from the three major sources noted on this chart. Larger savings are quite possible through inventory reductions, but $1B seemed to be a very safe estimate. These funds can go directly to improve force structure and modernization accounts.

CONUS Logistics Infrastructure

Current Activity

- Materiel management/distribution
- Maintenance and repair
- $60B inventory (sales of $16B/yr)

Current Effort	
Personnel	$/Annual
62,000	4.9B
104,000	9.2B
166,000	14.1B

Approach

- Get DoD out of repair and inventory management businesses
  - Expand contractor logistics support to fielded systems
  - Expand "prime vendor" concept to all commodities
- Invest in reliability improvements $300-500M/yr
- Accelerate total asset visibility/commercial integration

Result

- Improved readiness
- Reduced cost of ownership (reliability improvements)
- Less inventory
- Quicker response

Cost reduction - $6B annually

- *Reduced cost of supplying and repairing* *$3.5B*
- *Inventory reduction savings* *$1.0B*
- *Reliability payoff* *$1.5B*

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Logistics Infrastructures Required Actions

To accomplish this paradigm shift, there are some actions that are in the purview of the Secretary of Defense and others which will require legislative relief. To be successful, all changes must be transparent to the force (warfighters). The warfighter's confidence must not be diminished in his support systems; in fact, DoD needs to show that the new approach will be more responsive and flexible.

In addition to a clean policy mandate that the private sector will provide this support, a detailed implementation plan is needed. It must set out detailed milestones with clear responsibility for meeting the schedule. Executing this shift will require DoD to work closely with the communities and people where these logistics facilities are located. DoD will need to assist these communities in handling the economic impact, something it has done successfully when bases have been closed. Up-front investments will be needed to ease the impact on the people. In addition, DoD should invest in demonstrations to build the confidence of the force that support will be there when and where needed.

Logistics Infrastructures Required Actions

- Set policy on future logistics structure
  - Sec Def - by Dec 1996
- Establish implementation plan with milestones and clear responsibility
  - DUSD (Logistics) by July 1997
- Completion date - personnel actions, base closings, outsourcing actions - by 2002

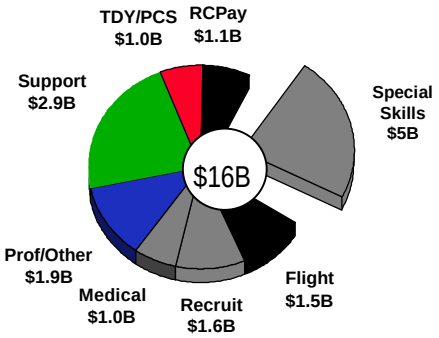
Education and Training — Specialized Skill Training

The Department of Defense spends over $16B per year on training and education. Some training involves unique military skills, such as advanced schooling for officers (e.g. war colleges). Other aspects involve entry level military indoctrination, including the basic training of recruits and officers. However, a significant fraction - about $5B/yr., with support costs included - is spent on formal classroom schooling of enlisted personnel in specialized technical and administrative skills.

The Task Force notes that the Department's outyear training and education plans reflect a continued "business as usual" approach to providing the specialized skill training needed by many military personnel. This approach is reflected in both stable planned spending, and the programming of large numbers of personnel to spend lengthy periods of time in formal schoolroom training away from their "home" units. The Task Force believes that the increasing availability of wide area computer networks and advanced learning methods, together with the demonstrated availability of such training from the commercial sector, provides a major opportunity to streamline this element of DoD's training activities.

Modern commercial computer-aided teaching techniques, aggressively adopted by the Department of Defense, combined with the competitive outsourcing of residual classroom training, has the potential for significantly reducing the overall cost of obtaining the needed specialized skills, while simultaneously improving the result of the training.

Education and Training
Specialized Skill Training



- Role: Classroom training for military personnel in range of technical and administrative skills (excludes "core" military training)
- Our Goal: Employ more advanced learning methods and approaches to meet skill-based training need
- Result: More responsive and effective training at far less cost

Specialized Skill Training

Military personnel are trained in specialized skills mostly by other military personnel, even though many of the particular skills do not require extensive military experience. On an annualized basis, throughout each year about 80,000 military students are being taught specialized skills in a formal classroom setting by about 40,000 military instructors, and supported by an additional 5000 base personnel. The resulting $5B annual cost is comprised primarily of the wages and benefits of the personnel that are so assigned. The Task Force approach to reducing the costs of such training is as follows:

Reduce requirement for classroom training : "Distance learning" is being increasingly utilized in the private sector to provide highly specialized training to designated personnel precisely when it is needed ("just in time"). This approach significantly reduces training costs by permitting the student to learn at his or her assigned job location, frequently on a schedule that allows continued performance of his or her primary tasks. This approach also permits the training to be tailored for the specific job at hand. Such techniques are being studied by the military services (particularly the Army), but have not resulted in any visible reduction in the number of personnel that are planned to be diverted to formal schooling either on temporary or "permanent" duty basis; nor to the number of instructors and support personnel planned.

Improve retention, utilization, and recruiting. In addition to the efficiencies available for increased use of modern training techniques and technologies, increased utilization and retention of personnel with needed skills would reduce the requirement for new trainees. Greater job satisfaction and less attrition generally results from continued use of key skills, and longer assignments also directly reduce the need for newly trained personnel. Finally, some of the specialized skills needed in the military services are routinely available in the civil sector. Community colleges and vocational-technical schools graduate significant numbers of laboratory technicians and computer operators, for example.

Competitive outsourcing of remaining classroom training. It is likely that, even after maximum advantage is taken of modern learning technology and techniques, there will still be some need for formal classroom training. But there is a growing private sector capability to provide such training across a broad range of specialized skills.

Improve total ownership cost visibility: In contrast to most of the other infrastructure areas, current specialized skill training almost exclusively involves military personnel - not only as students, but also as instructors. Because military personnel are funded through pay and end strength appropriations and authorizations that are generally separate from the mission, the cost of military personnel has been considered indirectly, if at all, in the design of most military forces, equipment, and support structures. As a result, there is a strong legacy of treating military personnel as "free assets" when plans are made.

Shift funding responsibility: Large military training bureaucracies in each Service are not highly motivated to reduce the formal training that is provided to military personnel in their facilities. For this initiative to be fully effective, it will be necessary to not only provide full visibility to the total costs but to give the "planners" and "users" of such support much greater authority to decide on the numbers and skills of such personnel that will be needed. Program managers that are responsible for the design of future weapons systems must be incentivized to also embed adequate training and maintenance aids in their equipment as well as to design an operating and support structure that meets realistic life cycle cost goals - much as the Navy is attempting to do by limiting the manning of the prospective Arsenal Ship. There will also need to be strong leadership and support for this initiative at the operational level. Finding time for OJT will have to be a command responsibility, not just that of the student.

Based on the studies conducted to date, a 30% reduction in formal school room training for specialized skills should result from the increased use of distance learning and embedded training. This equates to about $1.4B per year after the conversion costs are paid. The competitive outsourcing of the formal schoolroom training that is still found to be needed, after distance learning and embedded training is fully implemented, should reduce costs another $0.4B per year.

Specialized Skill Training

Function

- Special technical schools

Current Effort	
Personnel*	$/Annual
125,000	$5B

* 72% military

Approach

- Reduce classroom training
  - Use more distance learning/embedded training/interactive courseware
- Improve recruitment, utilization and retention of skilled persons
- Outsource residual classroom training
- Shift funding responsibility from training commands to user commands
- Improve total ownership cost visibility, particularly for military personnel

Result

- Training better suited to need (timelines; focus)
- Training time away from home unit reduced 30%
- Greater workforce stability (less TDY/PCS)

- Cost Reductions - $1.8B annually
  - New Approaches $1.4B
  - Outsourcing .4B

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Specialized Skill Training — Actions Required

The Undersecretary of Defense (Personnel and Readiness) should establish, as a clear policy, that the military services are to institute the types of changes recommended in this DSB report in order to sharply reduce the number of personnel that receive formal classroom specialized skills training away from their home unit; and assure a corresponding reduction in faculty and support personnel.

To this end, the USD (P&R) should prepare an implementation plan, including appropriate milestones, for: 1) the shift of budgeting responsibility to "users", 2) funding the course conversions and local training facilities other than those embedded in weapons systems, 3) conducting outsourcing competitions for provision of the residual classroom training, 4) establishing goals for the increased recruiting, utilization, and retention of skilled personnel and 5) establishing an appropriate tracking system.

Similarly, the Undersecretary of Defense (Acquisition and Technology) should support the new initiatives in the planning of new acquisition programs. In particular, the USD (A&T) should ensure that full advantage is taken of the opportunity to embed cost-effective training and diagnostic functionality in all new weapons systems that contain digital processors and user interface devices and ensure the provision of adequate memory, programmability, connectivity, and courseware development.

These implementation plans should be established by July 1997, with the intent of completing the streamlining of current course requirements by 1999, recognizing that some distance learning opportunities will be paced by installation of the Defense Information Infrastructure and the pace of establishing needed local learning centers.

Specialized Skill Training
Required Actions

- Policy: Outsource specialized skills training and employ new technologies to reduce schoolroom time
- Implementation plan with milestones by USD (Personnel and Readiness) and by USD (Acquisition and Technology) complete by July 1997
- Completion date - by 1999

Military Housing — Introduction

The Task Force examined the housing benefit for DoD's personnel. The Department has a long standing commitment to guarantee shelter for its forces. Military personnel live in private sector housing, military family housing, or barracks. There is a general sense, shared by this study group, that DoD provides housing of mixed quality, spends more money than the private sector for comparable housing, and uses the wrong data to compute its variable housing allowances. The Task Force believes that the benefit can be improved and personnel and their families given better housing. At the same time, the Task Force believes costs can be reduced and the money used for modernization and improved quality of life. It also believes that recent initiatives do not address some of the basic problems.

Because the money to house forces are in many accounts, it was not easy to arrive at the total cost to house military personnel. In FY96, DoD spent $11.6 billion to house its personnel and their dependents[1]. Of that, $1.6B was to construct new units or renovate existing units. The maintenance and operation cost was $4.3B, of which $3.5B was for married family housing and the remainder for barracks. Allowances for personnel living in the private sector totaled $5.7B. There is little visibility into the number of personnel maintaining and operating housing and the Task Force was unable to provide an estimate of that number. About two-thirds of married personnel live in the private sector. For bachelors, approximately 40% live off the base. In the Navy, approximately 50,000 junior enlisted bachelors are required to live on ships.

The Task Force believes the DoD should get out of the housing business (wherever this is possible), relying on adequate housing allowances and market forces to provide the required housing. The result will be a better housing for military personnel at lower costs.

[1] The numbers are derived from data provided by ODASD(I)Housing.

Military Housing - Introduction

- Role: Construction of new military housing; operation, maintenance and upgrading of existing housing; and housing allowances for personnel living "on the economy"

- Our Goal: Get DoD out of housing business, rely on adequate housing allowances and market forces to provide housing for military families in CONUS.

- Result: Better housing for military personnel at less cost

Military Housing

There are many problems with the current delivery system. First, DoD spends more money to house its military families than does the private sector. This cost disparity has been identified in a 1993 Congressional Budget Office study and confirmed by DoD analysis, a Center for Naval Analyses report and a soon to be published GAO report. And none of these studies corrected for the fact that private landlords have to include the price of the land in their rent, while government housing costs do not. Yet, with all this additional expenditure, military housing is of mixed quality. There are many modern, quality units for our personnel, but there are even more houses that need to be replaced or undergo major renovation. DoD reports, and this was noted by the Marsh panel, that the cost to raise the quality of military family housing to acceptable standards is $20 billion. There are additional billions that must be invested in our barracks. This is an unfunded liability that reflects the Department's historically poor performance in this area.

FY96 legislative authority and the proposed housing authority do not address the fundamental problem that inadequate allowances encourage personnel to want to live in military housing. They focus on building more units by tapping into private capital markets, but at the cost of upfront payments, asset transfers, and guaranteed occupancy. They ignore the role of allowances in fulfilling our housing obligation. DoD has stated that its goal is to cover 85% of rent, but it covers only 78%. And in high-cost areas, military personnel are not fully compensated for the higher rents. The Department justifies building houses and participating in housing markets based on this self-generated demand for military housing obligation. Indeed, the VHA levels are calculated based on what military people pay for housing, not on appropriate housing costs. The shortcoming in the allowances encourages people to want to live in military housing. This demand in turn justifies the Department building houses and participating in housing markets.

Military Housing

Support to Warfighting

Current Effort	
Activity	$/Annual
Construction/improvements	$1.6B
Maintenance/operators	$4.3B
Housing allowance	$5.7B
Total	$11.6B

Function

- Provide adequate housing for military personnel

Approach

- Use private sector where housing market exists; raise housing allowances; and use contractors to build and manage housing where no markets exist
- Sell current housing and use proceeds for allowances
- Correct housing allowance inequities

Results

- Personnel have resources to choose where they live
- Greater equity among personnel
- DoD costs 50% more than private sector to provide housing (CBO, CNA, GAO, DOD studies)

Net Cost Reduction $1.3B

- Avoid $20B investment to reach adequate housing quality

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Military Housing — Required Actions

The Task Force proposes that, within the United States, DoD use the private sector almost exclusively. This is DoD's stated position, but it continues to build in markets with adequate affordable housing. The only exception should be where housing markets don't exist. For these few cases, contractors should both build and maintain housing for the Services. It is in these cases that the new legislation should be used. The actions shown below would facilitate implementation of such an approach.

The Task Force agrees with the Marsh Panel review that the bachelor housing has too long been treated separately from family housing, to the detriment of the bachelors. It recommends a common policy. However, it believes that junior bachelor enlisted personnel, those with less than two years of service, should remain on base for military socialization.

DoD should start selling or razing houses that must undergo major renovations. DoD can't afford to maintain them and can't continue to invest the money needed to renovate and replace. This will immediately release money, as much as $1.6 billion, for additional allowances.

The Task Force proposes that allowances be raised, particularly in high cost areas. DoD needs to correct the way it computes the variable housing allowance. Research by CNA and RAND report that these allowances are incorrectly based on housing expenditures and not housing prices. That is, housing allowances are based on what the average military person pays and since these personnel are buying smaller and more distant units in high-cost areas, the variable housing allowance underestimates the cost of comparable housing across regions. This has resulted in personnel being significantly less satisfied with their housing in high-cost areas.

The group believes that all military personnel should receive allowances. The only exception would be the junior personnel mentioned earlier. The remaining military housing should be rented to willing members at rates to cover the cost of operating and maintaining units. DoD should seek authority to set up a trust fund with money received from selling houses. This fund should be used to further increase the housing allowances. DoD should also seek the saved school impact aid, which comes from non-DoD accounts.

Net costs can be reduced by an estimated $1.3 billion. This allows for an 9% increase in the allowance to 85% of the average rent paid. This does not include any return from selling military housing. Converting that to allowances could add another 5%.

Personnel will have more resources to choose where they live. Also, applying the policy to both married and single members reduces that inequity. And with the correction of the variable housing allowance, DoD would correct the inequity across regions. Finally, DoD would avoid investing $20 billion in family housing and additional billions on barracks to bring them up to standards.

Military Housing
Required Actions

- Sec Def:
  - Policy to shift to housing industry market
  - Increase housing allowances an average of 7%
  - Correct computation of variable housing allowance (VHA)
- Implementation:
  - In FY 98 budget, move construction funding to allowances
  - Correct VHA for FY 97 execution
- Completion Date:
  - Change FY 98 budget submit by Dec 96
  - Correct VHA by Dec 96

Base Support — Introduction

A large portion of the support resources are used to maintain and operate DoD's bases and installations. The Task Force examined only those installation costs for bases whose primary mission is to support operational units (which excludes the logistics and training bases). DoD's goal should be to take excess facilities off the books and avoid the operations and maintenance costs. Since base support functions are almost exclusively commercial-like activities, DoD should be conducting competitions and draw more on the capabilities of the private sector for remaining facilities. The result should be an efficient, responsive, and flexible infrastructure.

The Task Force sees considerable opportunities for savings from operating base support. Of the 2,000 A-76 competitions conducted by DoD between 1978 and 1994, over half were for installation support activities. According to a Center for Naval Analyses study, the average savings were 30%, despite the fact that most of the A-76 actions were small — averaging about 35 people. All of this demonstrates that base installation costs can be brought down. The result of outsourcing should be an efficient, responsive, and flexible base infrastructure.

Base Support - Introduction

- Role: Provide personnel and equipment needed to operate and maintain DoD bases and installations world-wide

- Our Goal: Eliminate unneeded bases/installations and shift support activities to competitive private sector

- Result: Efficient, flexible and responsive support function and modern network of bases and installations

Base Support

The annual cost of base support is $20 billion. Almost 250,000 people — nearly half of which are military will work in this area in FY97. The Task Force recommends three approaches to reducing base support costs: to improve internal business practices, to consolidate to reduce excess capacity, and to competitively outsource. As in many other areas, the lack of cost visibility limits effective management. Costs can't be controlled if they are not known. Activity-based costing is a simple solution, and should be instituted. If a private firm doesn't conform to cost accounting standards, it is not allowed to bid on DoD work; however, DoD allows its own internal organizations to operate this way routinely.

Competition and outsourcing should be aggressively pursued. Base support activities should be bundled for competition. The Services have traditionally competed small activities. This produces the least savings and merely transfers stovepipes to contractors. Contracting for support of entire bases or specific functions across regions would produce greater savings. More importantly, to produce greater long run savings, the Services should use their authority to set up best-value competitions. This should limit contractor defaults and performance problems. DoD should continue to work to eliminate the laws that restrict outsourcing. The Department can work within the current legislation, but it would be far easier if, for example, the restrictions (e.g. on competing security guards and firefighters) were lifted. In addition, outsourcing of base support could allow the DoD to eliminate 50,000 positions and reduce costs by $2.4 billion per year. The one-time cost to compete these functions would be about $600M. Improved business practices and consolidations will allow the Department to make better use of its resources, and shifting functions to private firms that specialize in those areas should improve the quality of service at reduced costs.

This Task Force believes that there is still considerable excess base capacity in the DoD as the number of bases has declined far less than the reductions in force structure and personnel levels. Another series of base closures is clearly required. Previous base closings saved $6 billion a year. Another series of equal magnitude should be planned. The result should be a modern and efficient infrastructure.

Base Support

Function

- Provide base support activities (excluding logistics and training)

Current Effort		
Personnel		$/Annual
Civilian	131,000	
Military	117,000	$20B

Approach

- Improve internal business practices - visibility of ownership costs
- Conduct best value competitions for supporting entire installation or regions
- Reduce excess capacity with further rounds of base closures (BRAC 1997, 1999, 2001)
- Eliminate legal barriers to competitive outsourcing (guards, firefighters, etc.)

Results

- Major support services shifted to private sector
- Improved performance and responsiveness
- Avoid cost burden of excess facilities

Annual cost reduction

- Personnel - $2.4B
- Future base closings (BRAC) - $6.0B

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Base Support — Required Actions

The Task Force recommends that the DepSecDef raise the issue of substantially revising, maybe even withdrawing, OMB circular A-76. DoD can outsource with it; but it could totally change the way it does business without it. It is antithetical to significant reform.

DoD should also seek authority for additional BRAC rounds. This is a bold move, but the Task Force does not see how else DoD can discard unnecessary facilities and bases without such a move. The process has been politically accepted. Three more rounds of base closure are recommended.

A quick-paced schedule is essential. Legislative action should be to Congress by January 1997 the DoD needs to be into the first new base closure round by the middle of 1997. Given experience from the last three rounds, DoD should now be in a good position to set up the process and decide on the base closures far faster.

Base Support
Required Actions

- Dep Sec Def seek legislative/regulatory relief needed to execute this strategy
  - Major change/elimination of A-76
  - Repeal of legislative impediments
  - New BRAC authority (3 rounds)
- Implementation: DUSD (Industrial Affairs and Installations) develop implementation plan, by July 1997. Legislative initiatives to Congress this year
- Completion Date: Outsourcing actions complete by 1999. BRAC actions spread over 1997, 1999, 2001

Other Opportunities to Shift Resources for Building 21st Century Military Superiority

There are many other opportunities to reduce costs. The preceding discussion has been about shifting resources from support and infrastructure to modernization and combat categories that would achieve more military capability within the same resources. There are also opportunities to shift resources within forces accounts and modernization funding to allow a greater focus more intensely on 21st Century needs. The Task Force lists several on this slide

Other Opportunities to Shift Resources for Building 21st Century Military Superiority

- New Operational Concepts and Efficiencies
- Reducing Redundant Forces
- Acquisition Reform
- DBOF Competition/Restructuring
- Coherent C4ISR Architecture
- Use of simulation to reduce OPTEMPO

Emerging Ground Forces Concepts That Should Impact Support in Combat

The ground forces have been particularly active in rethinking organization and doctrine that relate new technologies and new concepts to the likely demands of the 21st Century environment. This thinking is reflected in a number of ongoing Service efforts. Some are listed on this chart. While each of these efforts is unique, they encompass a very wide range of new thinking and they have a number of common themes: more agile forces that can respond quickly from the CONUS and control larger areas and populations in crisis situations with smaller, lighter forces; and forces structured to be quickly deployed and immediately effective while larger, heavier forces are being assembled and deployed as required. These operational concepts also have obvious implications for smaller, more agile support structures.

Emerging Ground Forces Concepts That Should Impact Support in Combat

- Multiple efforts: Army After Next, Marine Corps Operational Maneuver From the Sea (OMFTS), Sea Dragon, DARPA Small Unit Operations work, DSB 1996 Summer Study on "Tactics & Technology"
- Common themes
  - Rapid, flexible, modular force tailoring
  - Fewer echelons of administrative headquarters - virtual combat unit organization
  - Dispersed forces - lighter, higher tempo forces controlling larger battle space with fewer forces
  - Minimum combat support and combat service support ashore in the theater
  - More reliance on indirect fires

Growth of the Deploying Forces 1989-1994

However, as shown here, during the five year period following the end of the Cold War, the force has continued to evolve in response to the Cold War imperative of building overmatching power to deal with massive, armor-heavy forces. Such a force served very well against the massive, armor-heavy Iraqi forces in Desert Storm, given there was time to deploy and organize such a force in the theater. However, the overall result is a heavier force that requires massive lift and high capacity port facilities to bring it to bear (note especially the 67% increase in airborne forces).[2] Moreover, it is likely that the support structure needed in-theater to support these forces has also grown in recent years. An impressive increase in capability was achieved with this growth in weight, but it may not be as relevant as it should be to 21st Century needs.

[2] For the details of this chart (and the references) see the FY96 DSB Report on Strategic Mobility.

Growth of the Deploying Force 1989 - 1994

Support to Warfighting

Combat Forces -- Army

Division	Growth in Unit TO&E Weight
Armored	46%
Mechanized	49%
Infantry	31%
Air Assault	42%
Airborne	67%
Light Infantry	35%

Cold War Plans coming to fruition with heavier forces and massive support needs

DSB 1996 Summer

Reducing Redundant Force Capabilities
1995 DSB Revisited

The 1995 DSB Summer Study was uniquely charged with finding trade-offs to pay for their recommendations. This chart repeats some of those areas of potential tradeoff suggested by this Summer Study. The Deep Attack and Weapons Mix study being directed by J-8 will at least partially address the strike attack issue. However, it will inevitably be hampered by shortfalls in valid force and support cost information and by the difficulty in achieving Services buy-in to a useful range of assumptions. Instead there is an intense effort to find a set of assumptions unlikely to do violence to the support for any favorite Service programs.

The VCJCS has asked the DSB to provide some more definitive advice on the plethora of systems that are designed to help address Dominant Battlefield Awareness needs. But again, such an effort is severely hampered by lack of a joint operational concept and operational architecture. Since each of these systems provides some value added, it is easier to justify each individually than to make judgments based on its cost and marginal contribution to an overall architecture.

In spite of a number of efforts, the theater missile defense and cruise missile efforts continue to expand without benefit of an overarching operational concept, operational architecture or technical architecture. This makes it exceedingly difficult to make judgments about the incremental contributions of the various systems.

There continues to be very heavy emphasis on armored systems combat as the dominant form of modern ground warfare, as reflected in the increasingly heavier forces discussed earlier and the continuing investment in a series of new anti-armor capabilities. Yet the most likely threats, including larger potential contingencies, do not involve a significant armor threat.

Four Army reserve forces divisions previously identified as “not tasked” for the two-MRC scenarios are now scheduled to be converted to combat services support. The remaining four divisions, equipped as combat forces, are not required for any of the identified warfighting contingencies. Should they be focused in some manner or should four divisions be eliminated from the total force structure?

These and other areas provide continuing opportunities to shift resources to more relevant force needs.

Reducing Redundant Force Capabilities

1995 DSB Revisited

- Strike Attack Platforms ($12B) vs. Smart Weapons ($2 to $3B)
- Dominant Battlefield Awareness (27+ systems - $4B)
- TMD/Cruise Missile Defense ($3B+ per year)
  Expanding Numbers of programs - without architecture
- Anti-Armor Systems (8 systems $3B)
- 4 Untasked Reserve Forces Divisions ($5B+ per year)

Smart Ship — A Manning Example

Technology and vision can also have a significant impact on manning demands in the combat forces. DoD has, for a number of years, implemented fairly modest changes in some systems – from a six-man B-52 crew to a two-man B-2 crew, etc. But there are far larger combat crew reductions possible, such as on combat ships – and in many cases with the prospect of increases in combat effectiveness. The Navy's Smart Ship project has the goal of reducing the ships crew on an existing destroyer/frigate class vessel by 40%. These potential savings are particularly significant for sea-going systems because of the associated shore rotation and training tails. The needed technologies are available, but it will require significant rethinking of practices and beliefs to maintain the needed attention to operational and support imperatives while reducing crew size.

Smart Ship -- A Manning Example

- Technology and vision enabling innovative manning concepts
- Goal -- Drastically reduce ships crew
  - 40% reduction on current combatants
  - Larger reduction on future combatants
  - Big impact on shore rotation and training
- Enabling Technologies
  - Combat system developments
  - Communications
  - Automated support
  - Corrosion control innovations
- The challenge -- Rethink practices and beliefs
  - Warfighting and Survivability
  - Logistics, maintenance, and training

Payoff is big - Involves thousands of active duty personnel

DSB
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Keep Heat on Acquisition Reform

There is little need to persuade the current DoD leadership of the importance of acquisition reform. It is included here just as a reminder that there are large potential savings still to be realized from this area.

Keep Heat on Acquisition Reform

Added potential of at least $10B per year

- Current acquisition system drives up costs in two ways
  - Non-value added activity
  - Over capacity acquisition work force (cost exceeds $3B annually)
- Coopers & Lybrand/TASC studies demonstrates that DoD acquisition system adds 20% or more to equipment costs
  - At current procurement levels, adds $8B of purchasing power to annual procurement budget
  - Also generates significant reductions in service contract costs
- Streamlined system would also reduce people costs and installation support

- *The needs and opportunities are defined and understood*

- *Now the challenge is implementation*

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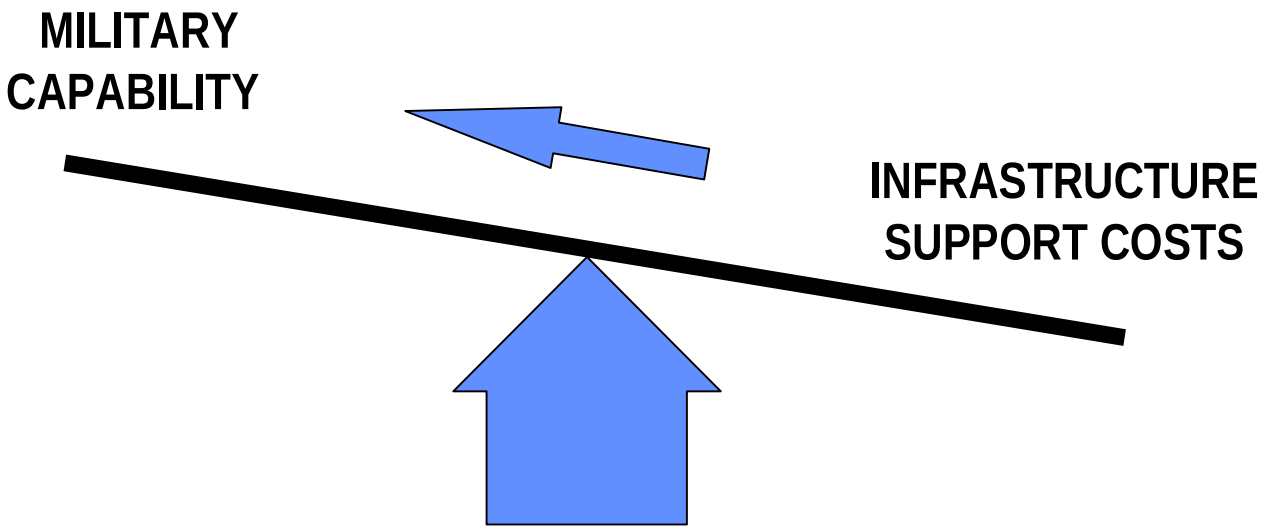
Implementation Approach

Previous sections of this report discussed both the imperative and the opportunity to move resources from support infrastructure to operational capabilities. Implementation will require a powerful forcing function. This Task Force proposes expanding the planning and budgeting approach to help provide that forcing function; however, it is not suggesting change to Title 10 relationships or responsibilities.

The Task Force sees a powerful bureaucracy and constituency within the Department whose daily focus and interests are committed to support infrastructure. The fact that, with defense budget reductions, resources for operational force capabilities have been reduced much faster than support infrastructure is adequate testimony to vested interests in support infrastructure that, with the current budget process, overrides the needs of the operational mission. The Task Force suggests the needed forcing function must come from the Joint Chiefs and the CINCs responsible for carrying out the Department's operational mission.

IMPLEMENTATION APPROACH



Observations

Looking to the operational community for the mechanism to shift the focus from support infrastructure to operational forces is not a new idea. It has been the successful approach used by modern business enterprises to cause a dramatic shift in resource priorities in response to changes in the business climate and customer demand. Many such enterprises have found such a focus to be essential to survival. In most such cases, increased influence to those responsible for the basic mission of the enterprise -- the operators -- has been a key to transforming priorities. This focus in the commercial world is greatly facilitated by the fact that consumer demand must drive supplier/provider priorities. Those enterprises that fail to accord sufficient priority to consumer demand soon become extinct.

By law and by the nature of the enterprise, the DoD organization needs to embody a sharp distinction between supplier/provider and operational responsibilities. It seems clear that in the current resource allocation process, the Services exert the dominant influence. Still, the Task Force proposal does not suggest a change to the Services organize, train, and equip responsibilities. This Task Force is not suggesting that the Services do less. It is that the joint world needs to do more to fulfill their inherent responsibilities. Specifically, the proposal is that the Services' Title 10 responsibilities be executed more clearly in response to the demands of the operational consumer.

Observations

- Modern business practices have yielded substantial efficiencies
- Successful management techniques place primary responsibility for resource allocation in the hands of those responsible for the “mission”
- Mission of DoD comprised in two sets of overlapping responsibilities
  - Organize, train, equip and support military forces -- Services
  - Execute the mission -- CINCs
- Influence over resource allocation now is overwhelmingly with Armed Services and not with using operational commands

Strong Reasons for Expanding the Planning Process

The Task Force does not underestimate the difficulties and resistance involved in any change to the planning and budgeting process. Still, there are compelling reasons to expand the process to provide more relevance of the resource allocation process to operational needs. It will become increasingly difficult to make the crucial trades to provide the most relevant capabilities as resource constraints tighten while missions remain.

The key to ensured relevancy is relating resource allocations to mission outputs. Lacking this orientation, the system will continue to be input oriented and the current undesirable resource allocation trends are likely to continue. Reinforcing the importance of an output-oriented approach is the need to more adequately address those important factors that are traditionally considered beyond the Services' organize, train, and equip responsibilities -- that is dealing with the need for joint operational concepts, architectures for multi-Service missions and all the joint connectivity so essential to effective joint operations. This focus does not detract from the importance of the Service's responsibilities. Instead, it is to ensure that the Services organize, train, and equip in response to user needs as defined by the joint world that includes the Service Chiefs in their Joint Chiefs' role.

Strong Reasons for a New Planning Process

- Crucial trades need to be made within framework of the missions and resource constraints
  - Corporate experience shows value of putting responsibility and authority into the hands of operating unit leadership
  - Focus of planning process needs to be mission outputs
- Modern military force created as much by information systems, integrating procedures and connections as by force elements themselves
  - Architecture of the force, its configuration and application need to be the collective province of force commanders (the CINCs), rather than solely the province of the providers

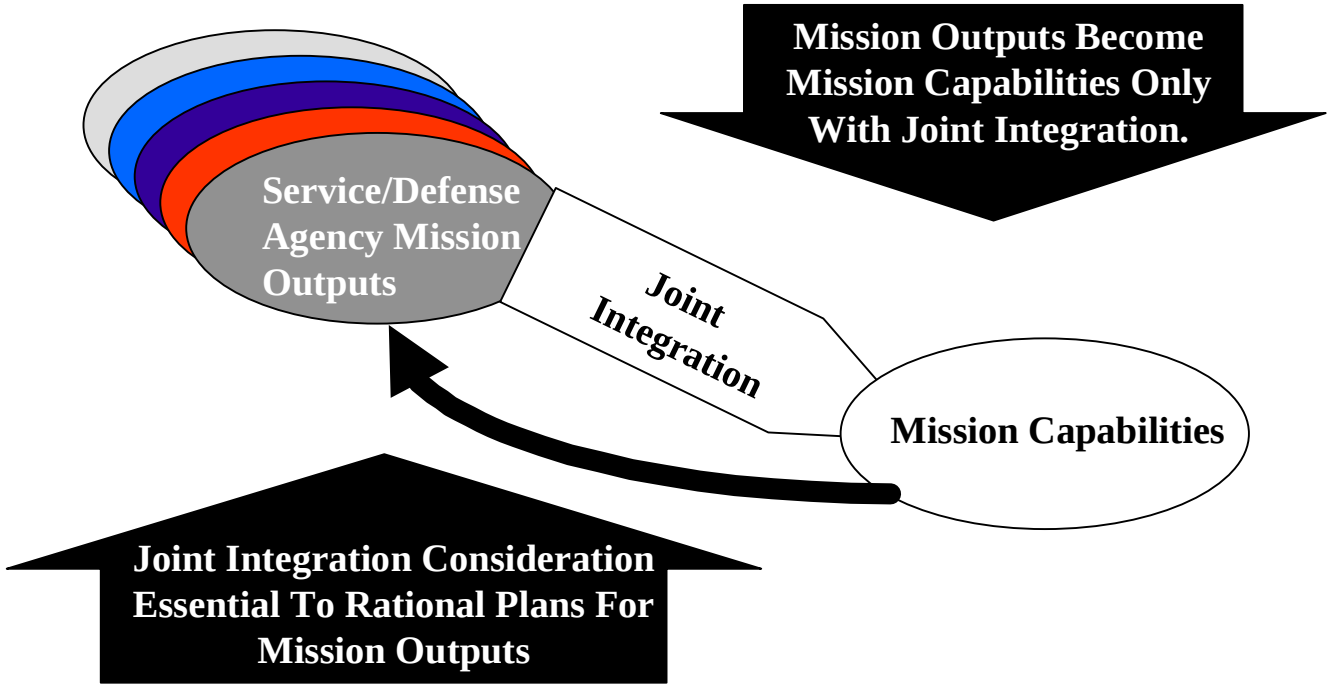
Integrating Force Capabilities

This chart reinforces the focus on joint integration as an essential step. There can be no assurance that the providers' solutions to individual capability needs will fit joint needs unless the demands of joint integration become upfront considerations. At the same time, the system has not delivered meaningful mission capabilities until the joint integration step has been completed.

In the past, joint integration has taken place partially. and imperfectly, during the contingency. This was the case in Vietnam, Desert Shield/Desert Storm, and Somalia. In each case, important provider outputs could not be integrated in time and to the extent needed to properly exploit their potential. Hence, for that part of the force, the planning and budgeting system failed to achieve its only legitimate purpose -- to produce useful mission capabilities.

Integrating Force Capabilities

Essential to Mission Output



Why Now?

Given the long-standing nature of the need for an expanded focus, it is fair to ask why now? It is not that it will be easier now but instead that the need is more compelling now and the combination of circumstances and personalities makes it possible now. As already noted, the current hopes for generating the needed additional funds for modernizing force capabilities are high risk. The Task Force sees the Department pushing its plans to increase needed modernization investments into the future. High on the list of risk factors is the likelihood of more, not less, pressure for further reductions in the defense budget. Further, attention to joint needs and the increased priority accorded those needs has been steadily increasing for more than a decade with the Goldwater-Nichols legislation strongly representative of the pressures to increase joint influence. Further, the proof that operational influence can have a greatly beneficial impact is available in the experience of business enterprises.

The Task Force acknowledges that it is unlikely that it has identified, with any precision, the exact sources of resources that can and should be shifted from support infrastructure to operational capability. But, the Task Force has provided solid evidence that $30B per year by the year 2002 is a goal that can and should be pursued with determination and full expectation of success, given the needed powerful impetus from joint customers. Such an impetus is key to making the needed changes in the culture and the goals.

Why Now?

- Current plan to increase funding of force capabilities -- a high risk plan
- Goldwater-Nichols foundation for more relevant joint involvement
- Lessons learned from modern business experience
- Opportunities clearly identified for substantial resource shifts within the Department ($30B/yr by 2002)

Powerful Forcing Function Needed -- Joint "Mission Pull"

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Implementation -- Two Interrelated Steps

Implementation requires two interrelated steps. The first is a clearly articulated, strongly expressed vision. While individual proposals for resource shifts can be staffed to whatever extent needed, vision is not a staff function. It is a leadership function that is likely to be diluted and delayed if subjected to the normal staffing routine. This first step needs the attributes listed on this viewgraph and can be taken now. As always, it takes money to make money and many of the high payoff proposals require a front end investment. There are a number of specific and difficult steps required to fulfill the vision, some of which are listed here.

The second step is to enable the joint forcing function by expanding the resource allocation process as described earlier.

Implementation -- Two Interrelated Steps

1. Clear DoD leadership ***vision*** committed to shift $30B/yr., by 2002, from support to modernizing operational capabilities
   - Establish a working capital fund for big payoff opportunities
   - Continue to downsize base structure -- BRAC 97, 99, 01
   - Rely on the competitive private sector for non-governmental work now done by military and government civilian personnel
   - Aggressively pursue removing regulatory and legislative barriers
   - Continue to drive out redundancy in force capabilities

2. Expand planning and resource allocation process -- focus on and measure in terms of ***mission output***

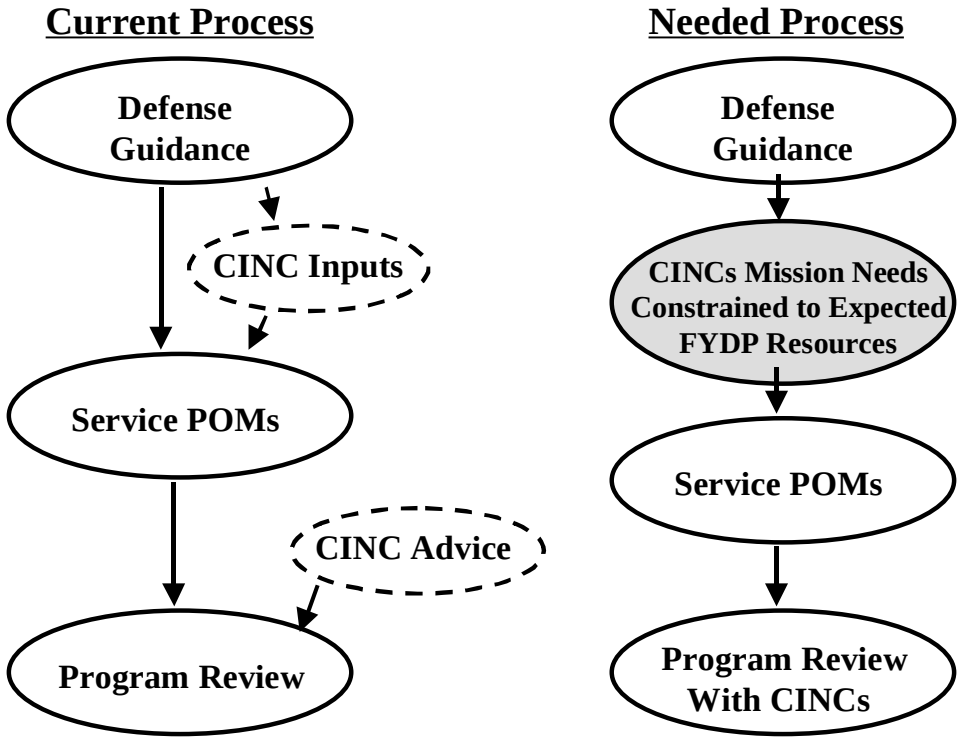
Expanding the Joint Role -- a Process Change

More specifically, this chart depicts the expansion of the process to ensure that the joint element of the Department fulfills its responsibilities to make joint operational needs the paramount driver for resource allocation. There has already been a significant move in the Chairman's assessment and the JROC process to focus more on ensuring attention to the CINCs' needs to carry out their assigned operational missions. Still, this emphasis needs to be as firmly institutionalized in the process as the Services' roles are in building POMs.

The CINCs' current role as shown on the left is still not an integral, required part of the process and, even taken collectively, addresses only a fraction of the resources allocated. There are any number of possible approaches to the mechanics of making the CINCs' role an integral part of the process, as shown on the right. The cultural change is far more important than the mechanics. The cultural change is to treat the CINCs as the customers of the supplier/providers. As such CINCs should not be expected to define the solutions needed from the suppliers--that is a Service, OSD, and JCS role. The CINCs must be the principal source for identifying gaps in capability to carry out their assigned operational missions. However, the CINCs must also place such gaps in capability within the context of the available resources. Further, the CINCs' role should include direct involvement in evaluating how well DoD's resource plans satisfy its needs.

In summary, this Task Force believes that there is inadequate focus on DoD's enterprise purpose -- mission capability, often allowing supplier interests to overshadow customer needs.

Expanding the Joint Role -- a Process Change



The CINCs are the Supplier/Providers' Customers

Focus on Mission Output

The key is to focus the defense planning process on output and to focus resources on mission purposes, constrained to realistic budget expectations. There has already been a significant move towards resource-constrained CINC plans over the past decade. Still, the change in the PPBS process proposed by this Task Force will be a powerful antidote to the lingering perception (with some continuing basis in fact) that CINCs' inputs are unconstrained and of limited relevance to the resource allocation process.

Casting and reviewing resource allocation in mission output terms are essential prerequisites to linking mission needs with resource allocation. The Department and some of the best of private business lack the accounting tools for accurate activity-based costing, on a mission-by-mission basis. Still, providing the best available view of resource allocation in a mission output perspective can significantly alter the culture and focus. This mission output focus, however imperfect, concentrates supplier attention on the operational customer, makes the customer aware of the total price of what might otherwise be considered "free" services, and moves all the participants to more realistic expectations and understanding of limitations.

The mechanics of depicting the budget in this fashion and the precision with which it can be done is far less important than the cultural change it enables and encourages. It must involve both users and supplier/providers. The CINCs will need to devote some part of their staff to this new focus, but there are clearly more than enough people involved in the planning and budgeting process within the Department to fill this role.

Focus on Mission Output

Resource Visibility: "What We Get for Our Money"

Depict the entire defense budget spread over the CINCs missions -- enough detail for joint and provider worlds to understand what forces and services cost.

Year 3, etc.

Year 2

Year 1

Provider Budget Allocations	CINC 1	CINC 2	CINC 3	CINC 4	CINC 5	CINC 6, etc.
Forces Providers						
Defense Agencies						
Other Support Providers						

Subtotal

TOTAL: $250B

Subtotal

Focus resources on mission versus support infrastructure -- increase CINCs' and providers understanding of realistic expectations and limitations.

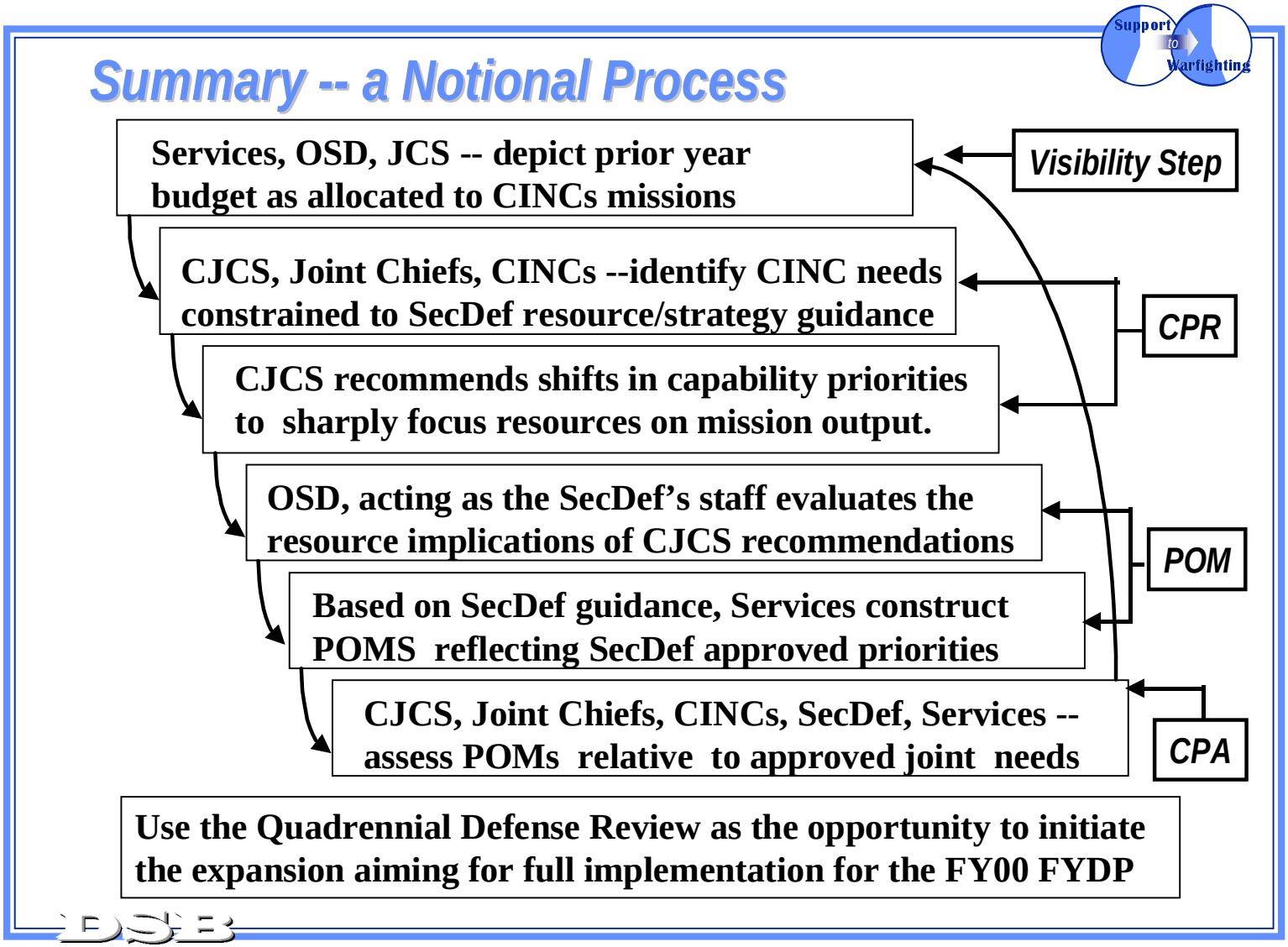
Summary -- a Notional Process

This chart summarizes a suggested process for conducting the resource constrained, mission output, customer focused expansion of the planning and budgeting process. The process would begin with a user and provider examination of the past year's budget. To do this, the entire budget, with small exceptions, should be allocated to the CINCs' operational missions. DoD's accounting systems are currently poorly suited to this purpose. Still, even a gross estimate will serve the useful purpose of focusing the process on mission outputs. This initial examination forms the basis for casting the CINCs future operational needs in a framework constrained to expected resources.

Based on this examination, the joint world can identify specific mission oriented needs for priority changes. This, with OSD staffing and SecDef approval then becomes the authoritative basis for the Services execution of their Title 10 responsibilities in the Program Objective Memorandum (POM) process. The POM review process would then focus on the relationship of Service POMs to joint mission needs rather than the current focus on marginal input issues. This expanded process does not usurp any of the players responsibilities. It does, however, compel the joint world to play their proper and intended role.

The Quadrennial Defense Review provides the opportunity to work out and test this new process for full implementation in the FY2000 Future Years Defense Plan.

Summary -- a Notional Process



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Output Oriented Planning and Budgeting

None of this constitutes entirely new thinking. There have been a number of attempts to promote a more mission-output-oriented process, with more influential customer involvement. The reasons those efforts were less than fully successful is far less important than the cumulative positive impact they can have on the possibility of doing it now.

This DSB Task Force's recommendation is simple. It will be hard. The first attempts will be less than satisfying but it is time to stop waiting for an easy, guaranteed solution. It is time to just do it.

Output Oriented Planning and Budgeting

An Approach with a Solid Foundation

1984	Concept accepted by Secretary Weinberger
1986	Recommended by Packard Commission
1986	Incorporated by Goldwater-Nichols
1994	Recommended by Commission on Roles and Missions

Findings and Recommendations

Findings

In summary, this Defense Science Board Task Force has found that there is high risk in the current modernization plans of the Department. The Task Force identifies a variety of risks in the current DoD plan to achieving the modernization investment levels required for the next six years and has concluded that, without a dramatic shift of resources, the US military will not be able to achieve the military superiority it currently has in the early part of the 21st Century.

To address these risks, the Task Force has found that it is possible to:

- Generating significantly more dollars for combat and modernization through cost reductions in high cost areas of support, all the while looking to potential enhancements in the delivery of support services to the warfighter, and
- Creating a planning and budgeting process that will more effectively align resources with today's missions — a process change that is required in order to achieve the necessary incentives for resource reallocations.

Findings

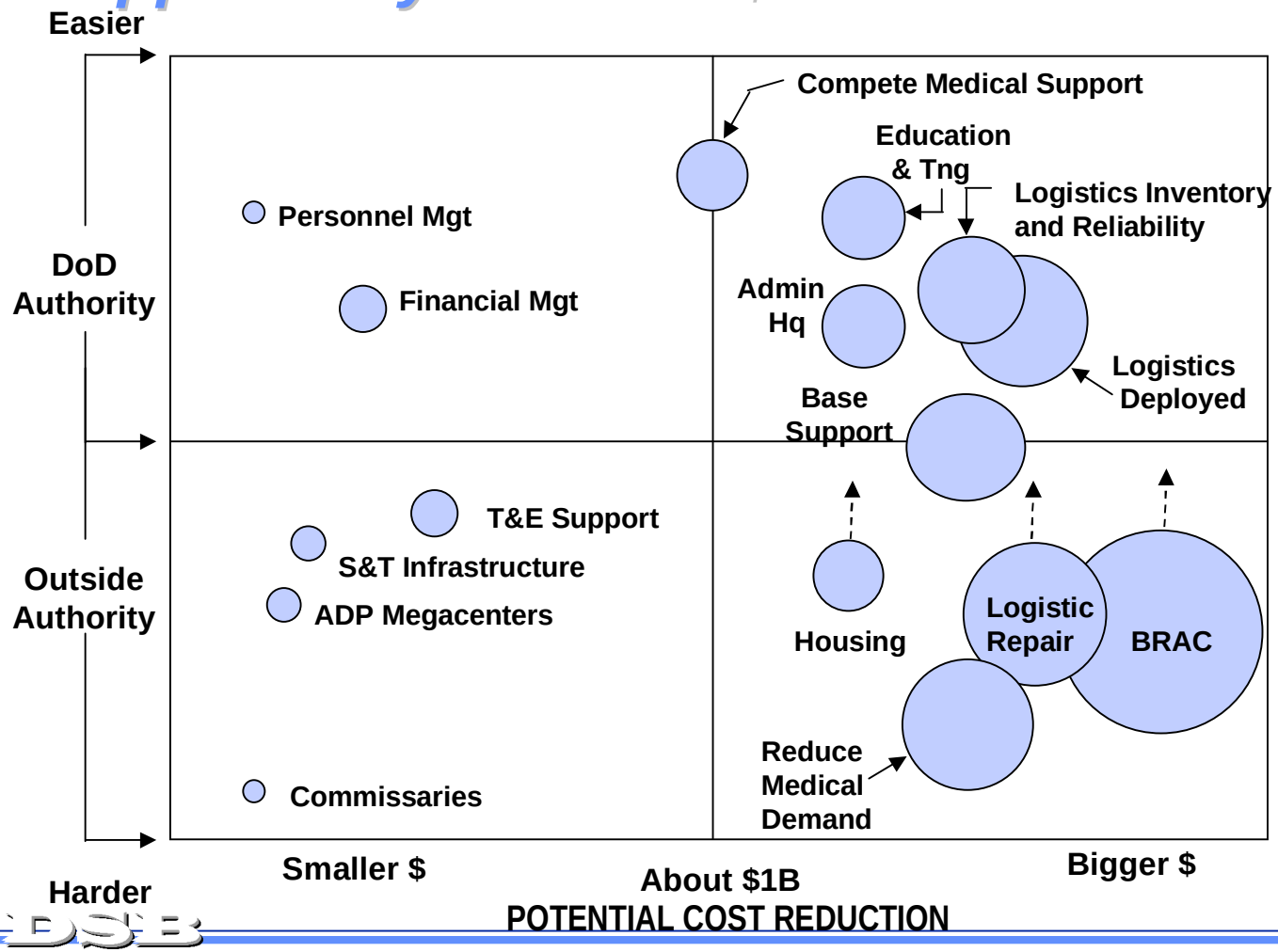
- There is very high risk in current modernization plan
- Within current budget, it is possible to mitigate risk by:
  - Generating significantly more dollars from support for combat and modernization
  - Creating a process that will more effectively align resources to missions

Opportunity for Over $30B/Yr Shift

This figure again displays the potential payoffs and the difficulty of achieving the payoffs of the specific cost reduction recommendations outlined within this report — with the circle sizes proportional to the potential annual cost reductions. Although difficult to achieve, this Task Force strongly believes that an integrated, DoD-wide approach to shifting support costs to modernization and combat, combined with modern approaches that yield better performance for lower costs, can be implemented. But, DoD's civilian and military leadership must create a vision for such an integrated approach and aggressively pursue various cost reduction approaches in spite of the difficulty of achieving success.

In addition to those areas under administration control, they must also encourage the Congress to remove the legislative constraints that currently exist (for example, removal of the "60/40 law" governing depot activities, and the creation of another round of BRAC actions).

Opportunity For Over $30B/Yr Shift



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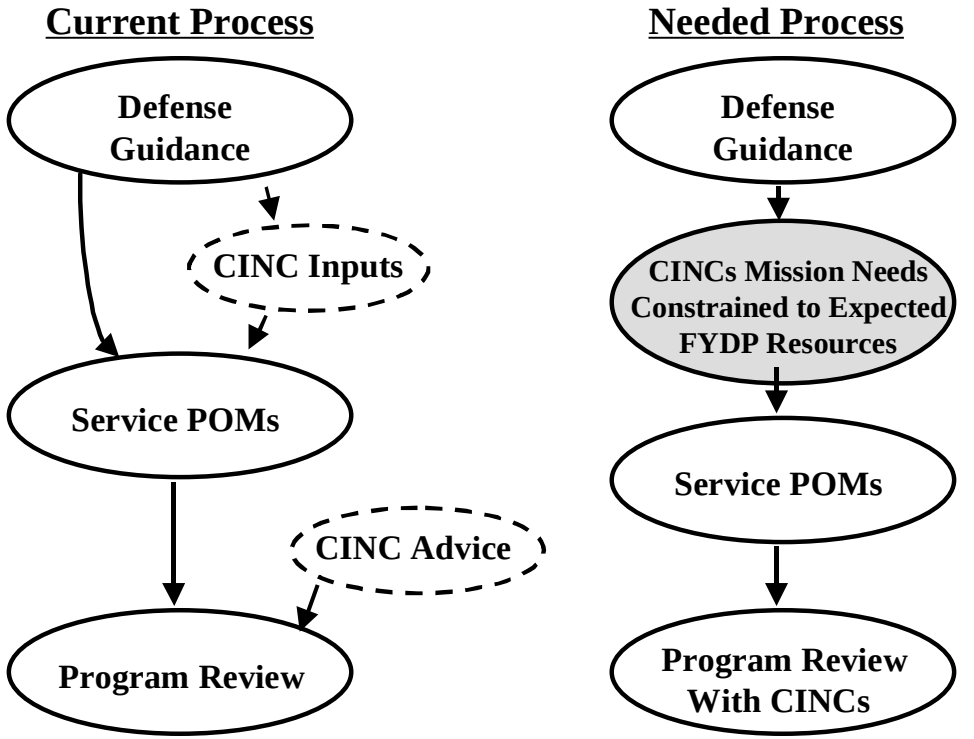
"Mission Pull" Process Needed

The Task Force sees the "mission pull" process depicted in this figure as an essential part of such an integrated approach. This process change would create the incentive and encourage the paradigm shift required to achieve the needed resource shift of $30B/yr. To achieve this, the DoD must enlist the support of its CINCs in setting resource priorities. With regard to the revisions of the planning and budgeting process, perhaps there would need to be some reform in the UCP in order to avoid any skew in mission resource allocation; however, this is not a precondition of this recommendation. Such changes would fall out of the implementation of the process.

"Mission Pull" Process Needed



The CINCs are the Supplier/Providers' Customers

"Barriers" to Change are Recognized and Need to be Explicitly Addressed

As noted in the table below, there are a variety of barriers to change. First, today there is a lack of an explicit policy, goals or metrics for embarking down a path of dramatically reducing support costs. This Task Force has proposed a vision that unambiguously places public sector employees in functions that are "inherently governmental" (warfighting, direct support in the field, decision and policy making, and overnight) and the private sector in its core competencies — performing all other support functions (via competitive outsourcing). The Secretary should adopt this policy and establish quantitative dollar objectives, personnel reductions, and performance metrics for measuring progress.

In terms of the recommendation for a specific policy shift by the Department toward the DoD only performing "inherently governmental" functions, it would be beneficial to support Senate Bill 1724 and House Bill HR 28. While these bills are not expected to pass during the coming year, there would be a much better chance of their being approved with DoD support. They are exactly what this Task Force is recommending and indicate some Congressional support for the Task Force recommendations.

Second, the Department must change the perverse incentive system currently in place that encourages managers at all levels to maintain the status quo and even to make changes in less cost effective directions. The Department's resource allocation processes, authorities and responsibilities must become aligned with missions and not with "Cold War" functionalities. The Department must shift from "supplier" budgets to "user" budgets, with the CINCs clearly in control of setting the budget priorities, within the overall guidelines of the Secretary. In addition, individual incentives must be created by allowing commanders to keep a share of the savings for their organization (e.g., 100% the first year and 50% the second year).

Next, the Department should make sufficient resources available to initiate the dramatic shifts from support to combat and modernization. The costs associated with one round of BRAC closures were very significant. Future BRAC costs should be somewhat lower (due to learning) but nonetheless significant, and there are other investments needed. This Task Force strongly encourages the Department to set up an investment pool for use in encouraging high rate-of-return investments that, in the not too distant future, will lead to dramatic shifts of resources from support to modernization and combat. An initial level of at least $1B per year seems reasonable for such a pool.

The DoD financial system must also be strengthened. This Task Force makes recommendations on how to go after this area in a better way. In essence, the managers within DoD must be able to gain better visibility on costs vs. outputs in the support functional areas.

Finally, DoD must begin a process of convincing the Congressional leadership that the dramatic shift of resources outlined within this report is crucial to the long term military superiority of the US, and that such a shift can be accomplished within likely budgets, even under balanced budget and lower tax environments. The Secretary must employ both military and civilian leaders of the Department in this process, as well as union and industry leaders, and thus, must achieve a commonality of vision across the DoD that does not exist now.

"Barriers" to Change are Recognized and Need to be Explicitly Addressed

Barrier	Solution
■ Lack of explicit policy, goals, and metrics	■ Declare unambiguous policy with quantitative dollar objectives and performance metrics
■ Perverse Incentives (mission and resources responsibilities not aligned)	■ Shift from "supplier" budgets to "user" budgets ■ Provide means for those who provide cost reductions to keep them (100% 1st year; 50% 2nd year)
■ Lack of Investment	■ Set up initial $1B+ investment pool
■ Lack of financial visibility	■ Implement management accounting system (output oriented)
■ Congressional mandates	■ Civilian and military leadership to work aggressively together and with government unions and industry

SecDef, Seize the Opportunity!

The Secretary should seize the opportunity to start this process now. DoD should:

- State a new support policy and goals for cost reduction and performance enhancement;
- State a new defense planning and budgeting process, with resource allocation and priority setting clearly in the hands of the CINCs; and
- Assign responsibilities and begin the detailed implementations process this year.

It is important to emphasize the critical nature of the timing associated with taking these actions. It is highly desirable that the current Secretary initiate this process prior to the end of this year, so that the implementation gets a "kick start."

SecDef, Seize the Opportunity!!

- State new support policy and goals
- State new planning/budgeting process
- Assign responsibilities and begin detailed implementation process this year

SECTION II

SUPPORTING ANALYSIS OF COST-REDUCTION AREAS

1.0 INTRODUCTION

This section provides the detailed Task Force analyses of cost reduction in individual support areas. These analyses are divided into four sections: equipment-related areas, central support areas, people-related areas and other opportunities for cost reductions. The section begins with a very brief description of the Task Force vision of a new support structure for the 21st Century and a summary of the overall cost reduction potential of the Task Force recommendations in terms of both dollars and people.

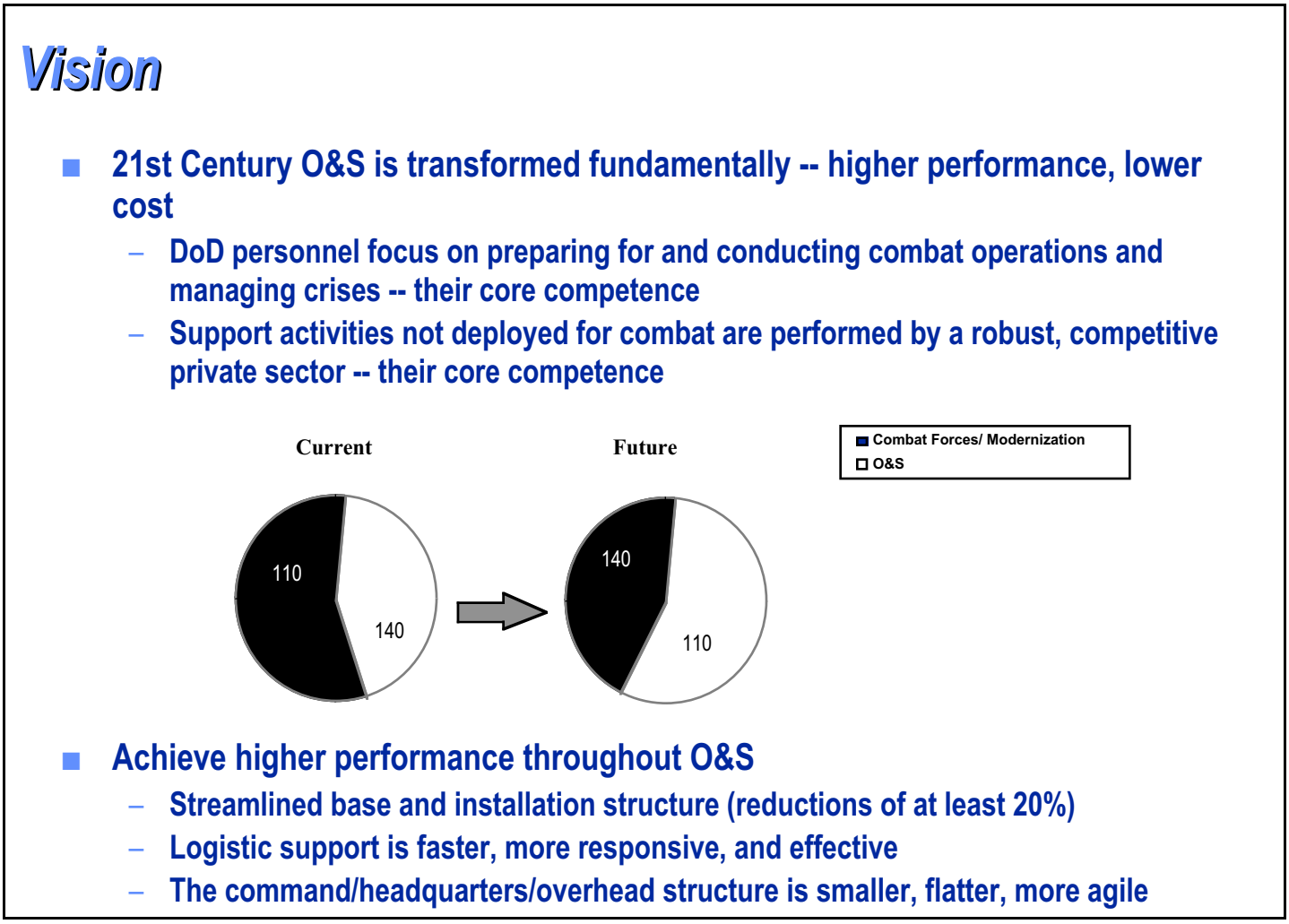


Figure 1-1

As discussed in Section I, this Task Force's vision is similar to that presented in the support and business sections of the FY95 DSB Summer Study, the report of the Commission on Roles and Missions and the FY96 DSB Task Force on Privatization and Outsourcing. The vision calls for DoD personnel to prepare for and conduct combat and crisis operations while relying on a robust, competitive private sector to provide the commercial-style support. This approach ensures that each community leverages its core competencies.

Figure 1-2

Given this vision, it is important to provide evidence that outsourcing of commercial-type activity does, indeed, reduce cost and improve performance.

The 1996 Defense Science Board Task Force on Privatization and Outsourcing studied this area in considerable detail. They found that within the private sector, outsourcing to leverage greater core competency is increasingly common. The public sector also has significant experience in this area. Private sector outsourcing has generally been motivated by the search for higher quality services at least as much as by cost reduction potential. Even so, the experience has been an average of 15% cost reduction. Cost reductions have, on average, been significantly greater when the public sector outsources to the private sector. The greatest cost reductions come when tasks performed by military personnel can be outsourced since the associated indirect cost can also be eliminated. The key to successful outsourcing is the existence of robust, competitive sources. Today, the Task Force believes that there is little doubt that procurement opportunities will produce such sources quickly for commercial-style services.

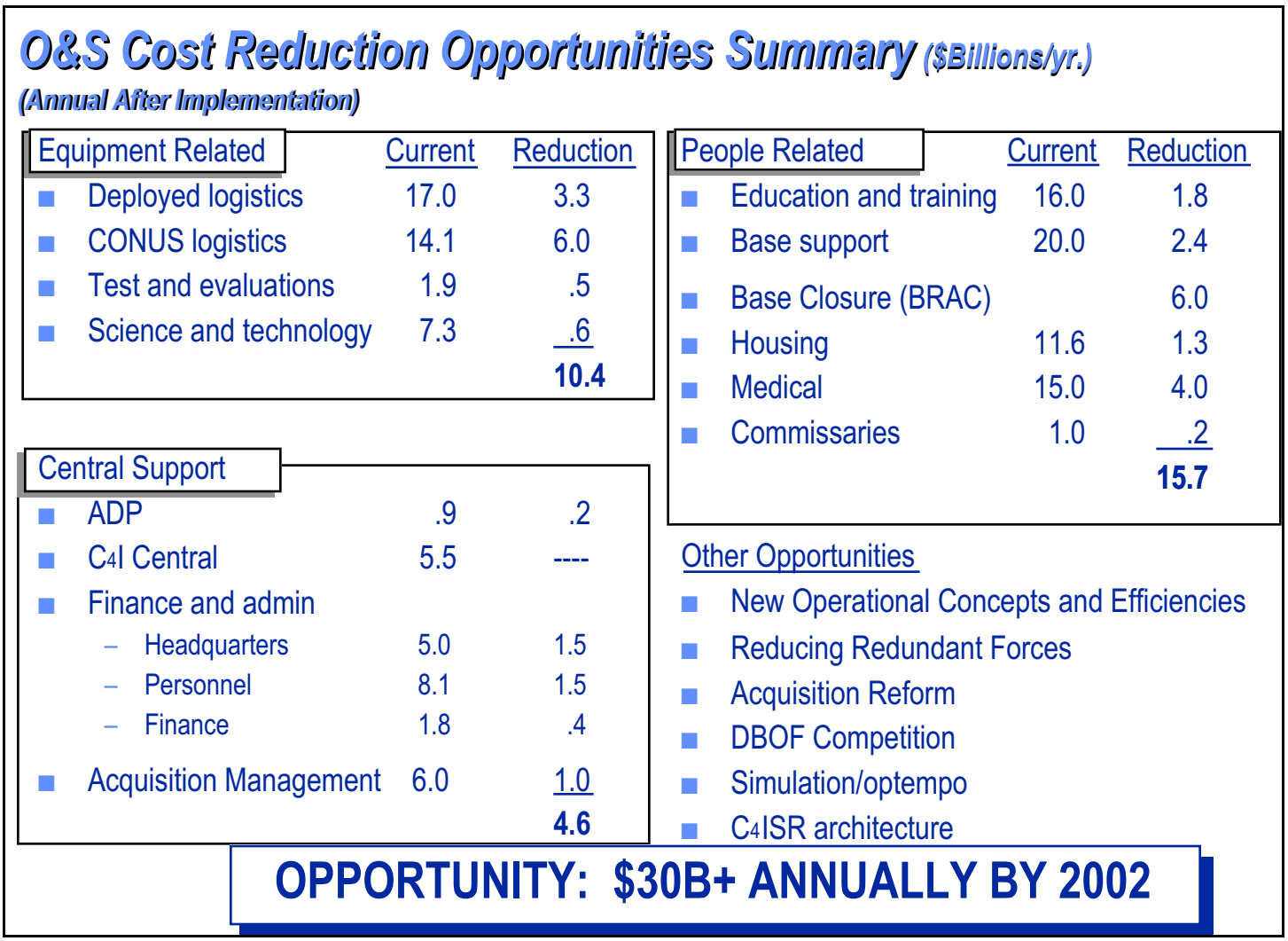


Figure 1-3

Figure 1-3 lists the support areas investigated by this Task Force and summarizes the potential for O&S cost reduction. For each of the areas listed, separate "cost reduction panels" of the overall Task Force were set up — with area experts taking part along with relevant government advisors. The estimates of the total current costs are based on the best available data, given the deficiencies in the DoD financial information system. Details on the reduction mechanisms, methodology, and needed front end investments used to arrive at these potential reductions are provided in this section of the report.

Figures 1-4 through 1-6 summarize the military and civilian personnel associated with DoD's "infrastructure." This data was provided to the Task Force by the OSD Office of Program Analysis and Evaluation (PA&E). The infrastructure categories used by OSD (PA&E) are slightly different than those used by this Task Force in its analysis of cost reduction areas; however, this data was a baseline used by the Task Force in beginning their evaluations. Note, the Task Force was uncertain of what functions were encompassed by the PA&E category "Force." The Task Force believes that breakdown of personnel using job series found in Section I comes closer to a characterization of jobs that really represent "combat." The Task Force believes that many support functions are included in the PA&E category "force." Similarly, with regard to Figure 1-6, the Task Force is comfortable with the allocation of personnel for the ~1.2 million people covered by this table. It does, however, believe that many of the other ~1 million are really performing infrastructure functions. The difficulty in

obtaining good estimates on people and dollars by function is a reflection of the poor state of visibility between input and output.

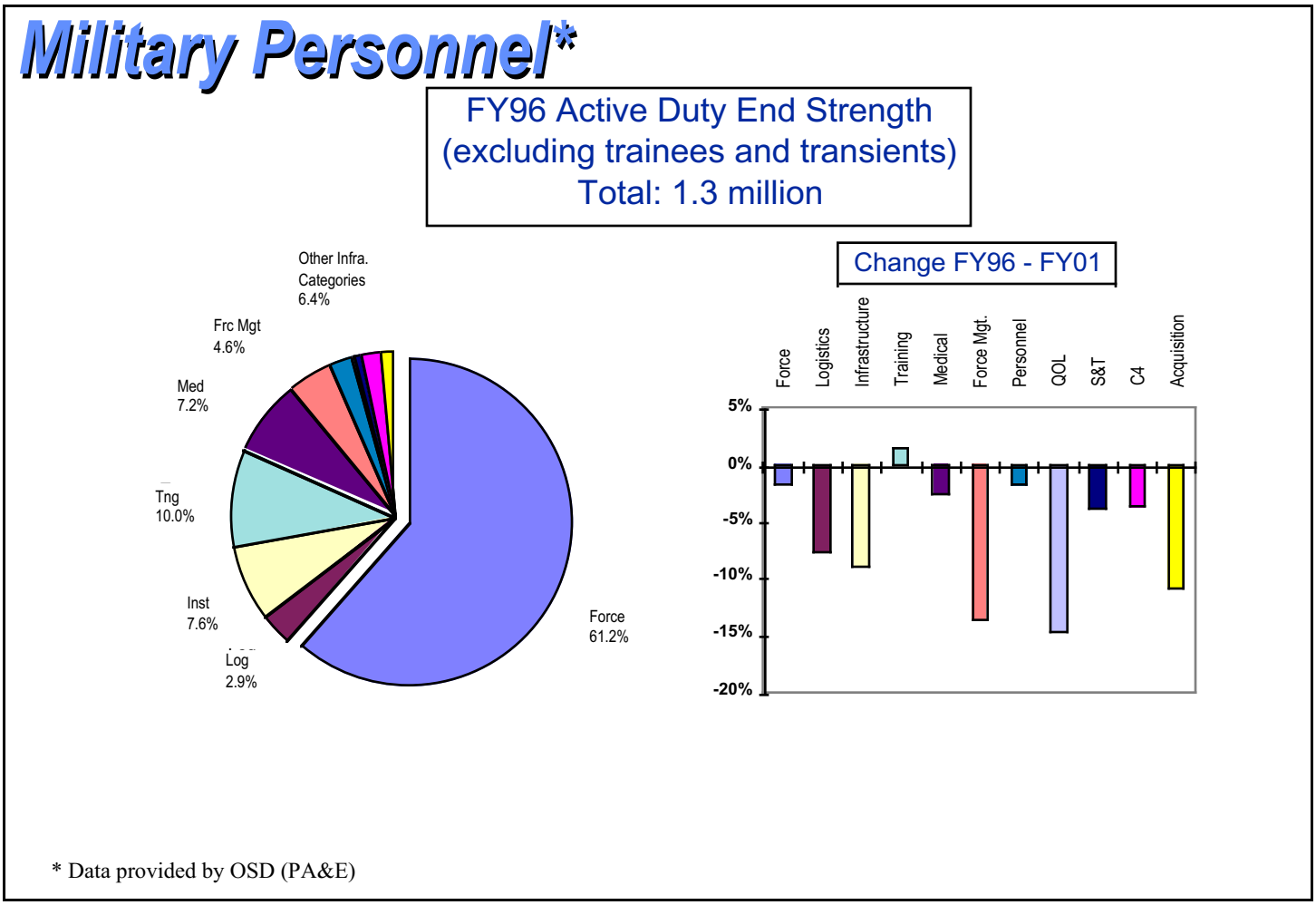
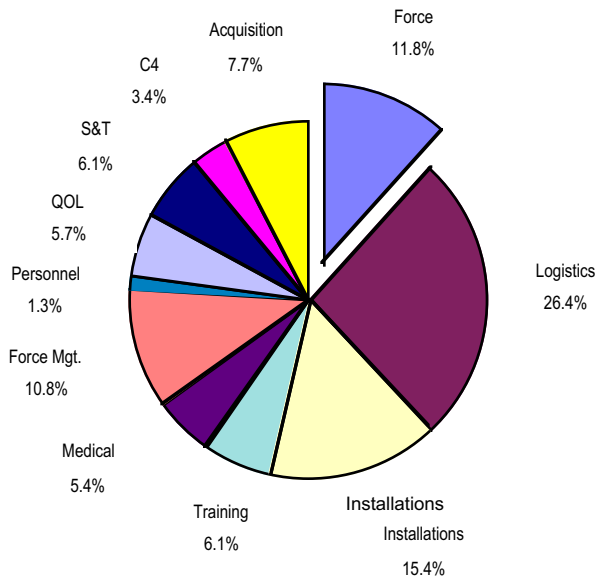
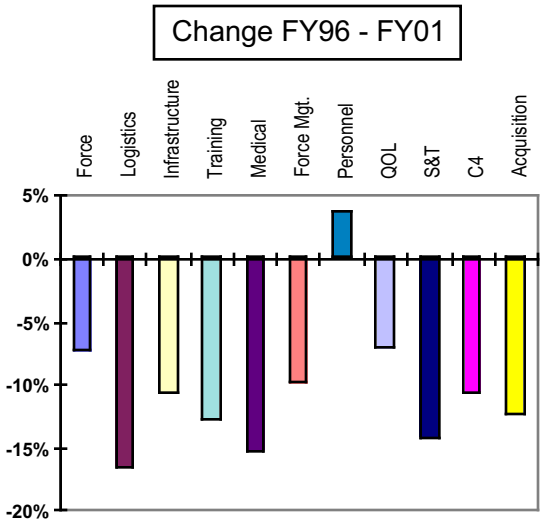


Figure 1-4

DoD Civilian Personnel*

FY96 Civilian Work Years
Total: 830,000 +





* Data provided by OSD (PA&E)

Figure 1-5

Resources and People Involved in DoD "Infrastructure*"

* Data provided by OSD (PA&E)

** Exludes trainees and transients

Category	% of TOA ($250B)	% of DoD Workforce** (2,130,000)	% Civilian*
Logistics	17% ($42.5B)	12% (255,600)	85% (217,260)
Installation Support	10% ($25B)	11% (234,300)	57% (133,551)
Central Training	8% ($20B)	8% (170,400)	28% (47,712)
Central Medical	6% ($15B)	8% (170,400)	32% (54,528)
Force Management	5% ($12.5B)	7% (149,100)	61% (90,951)
Central Personnel	3% ($7.5B)	2% (42,600)	27% (11,502)
Quality of Life	3% ($7.5B)	2% (42,600)	92% (39,192)
Science & Technology	3% ($7.5B)	3% (63,900)	90% (57,510)
Central C4	2% ($5.0B)	2% (42,600)	54% (23,004)
Acquisition Information	1% ($2.5B)	4% (85,200)	77% (65,604)
	TOTAL $: ***$145B***	**TOTAL:** ***1,256,700***	**TOTAL:** ***740,814***

Figure 1-6

Figure 1-7 then summarizes the Task Force's evaluation of those potential reductions in military and civilian personnel that are associated with the cost reduction recommendations shown in Figure 1-3. As noted on Figure 1-7, a civilian drawdown of ~ 5 % per year along with an ~ 2 % drawdown in military personnel can accomplish the needed reductions in the work force. As was shown in Section I, such levels of drawdown in civilian and military personnel are not in the FYDP; yet, they are levels below those already achieved in FY 1994 and FY 1995.

This Task Force sees approaches for eliminating the need for approximately 18% of the work force by 2002. The Task Force also notes that the DoD has an extraordinarily low employee to supervisor ratio, when compared to that of commercial industry. The Task Force could see an additional reduction in civilian employees of ~13,600 of the ~38,300 remaining supervisors (after the above drawdown in personal), shifting the ration from 1 to 9 to 1 to 14, closer to commercial averages. This ratio is still lower than commercial industry averages; however, further increases in the ratio may not be practical since more civilian supervisory personnel may be needed to provide effective oversight of increased levels of outsourcing.

O&S People Reduction Opportunities Summary

(000 of People Annual After Implementation)

Equipment Related	Current		Reduction	
	Military	Civilian	Military	Civilian
■ Deployed logistics	547	9	60	1
■ CONUS logistics	2	164	1	134
■ Test and evaluation	6	8	4	5
■ Science and technology	3	15	2	10
Total	**558**	**196**	**67**	**150**

People Related	Current		Reduction	
	Military	Civilian	Military	Civilian
■ Special skill training	90	25	52	14
■ Base support (including BRAC)	117	131	24	26
■ Housing	*Data Not Available*	*Data Not Available*	*Data Not Available*	*Data Not Available*
■ Medical	103	86	25	46
■ Commissaries	*Data Not Available*	*Data Not Available*	*Data Not Available*	*Data Not Available*
Total	**310**	**242**	**101**	**86**

Central Support	Current		Reduction	
	Military	Civilian	Military	Civilian
■ ADP (does not include central C4I)	*Data Not Available*	4	*Data Not Available*	1
■ HQ, Finance and Admin	57	63	17	24
■ Personnel	71	12	*Data Not Available*	3
■ Acquisition Management	20+	66+	3+	11+
Total	**148**	**145**	**20**	**39**

✓ ***Total Reduction: 463,000***

- Military 188,000
- Civilian 275,000

OPPORTUNITY: Reduce Total Workforce

Military — ~ 2 % per year through 2002

Civilian — ~ 5 % per year through 2002

Figure 1-7

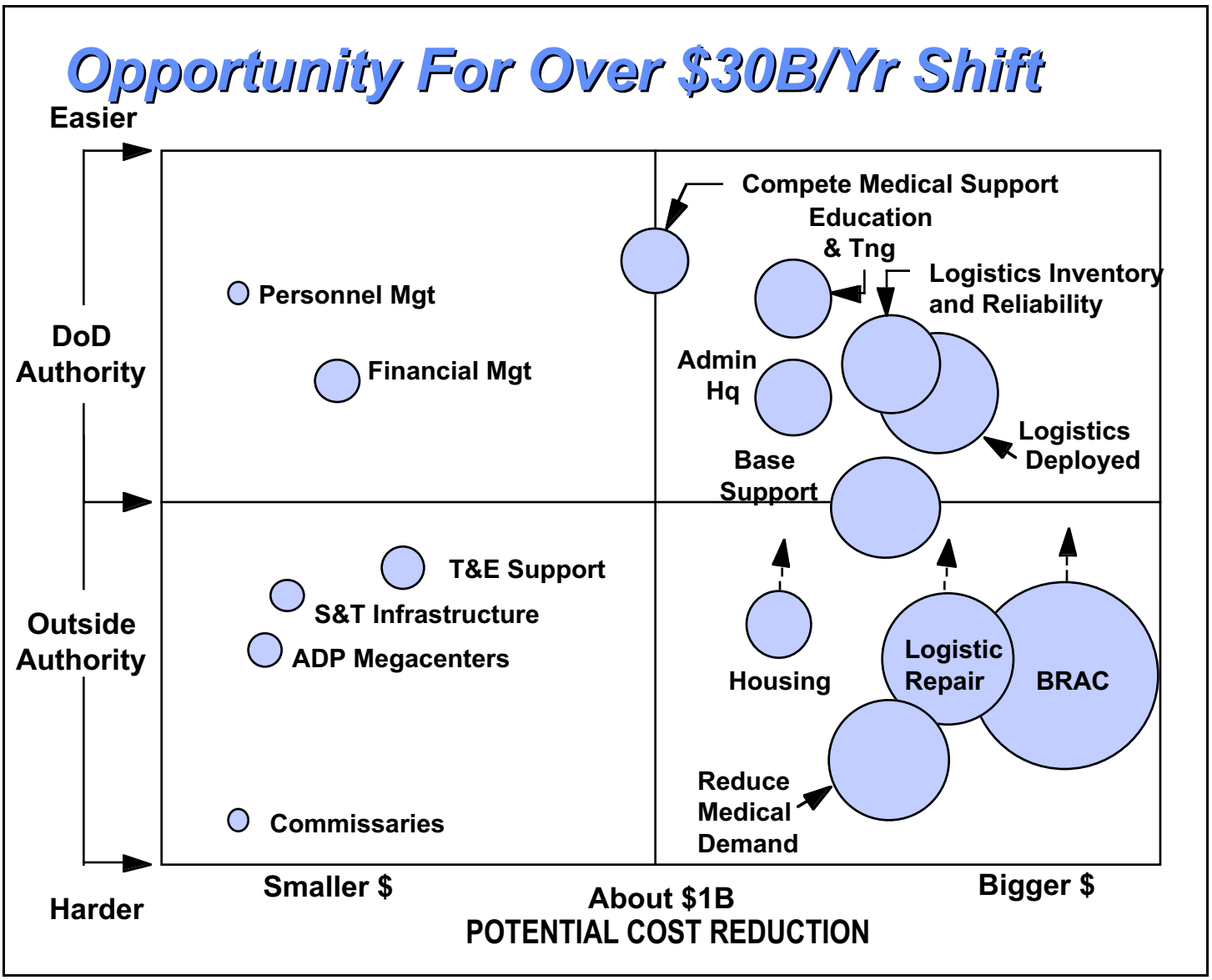


Figure 1-8

The cost reduction panels clearly recognize the complexity and difficulty involved in realizing a $30B annual shift in resources from support to modernization. This figure shows both the relative difficulty and the benefits of cost potential reductions in the support areas analyzed. The vertical axis of the figure shows the sources of the authority required to make the shifts. The top half shows areas where the potential change is within the SecDef's authority. This does not mean they are easy and within the top blocks the vertical placement of the circles provides an estimate of the relative difficulty. The size of the circles represents the size of the potential cost reduction, with the center line being at about the $1 billion level.

The blocks across the bottom half of the figure shows areas where Congressional or Administration action outside the Department is required. In some cases, removal of a current Congressional constraint is all that is required (e.g. the law requiring 60/40 shift of depot work) or, in other cases, a new law is required (e.g. for a new round of BRAC). Such actions are indicated by the dotted arrows in the figures. Also, in some cases, such as logistics and medical, the area has been subdivided. Medical laboratory, pharmaceutical, and various other kinds of medical support could be outsourced within the SecDef's authority. However, various actions to shift the

demand from fully-DoD-funded treatment to cost-shared or private-employer funded treatment would require Congressional approval.

In the base support area, it was difficult to identify such a useful single division but there is considerable legislation that has some effect on the Department's authority to outsource. Again, the report of the Commission on Roles and Missions contains a fairly detailed listing of legislative impediments to base support outsourcing.

Many of the opportunities to shift resources from support to forces must include reductions in the DoD workforce — "right-sizing" the military and civilian support personnel levels. The civilian work force could be reduced by taking advantage of the fact that some 21% of the civilian work force (175,000 people) are eligible for some kind of retirement buy-out. In recent years, the Department has had a personnel reduction goal of 4% per year. Such a goal is not explicitly planned beyond FY 1999. Recently, DoD has been hiring to replace normal attrition on very nearly a 1 for 3 basis. Changing this hiring policy clearly provides an opportunity to address some of the needed reductions. DoD recommends that the Department continue the policy of reducing the civilian workforce that has been in place as a result of the National Performance Review. Additionally, while the military personnel have already been significantly cut, the Task Force recommends a further ~ 2% per year reduction between now and 2002 — with all of the cuts coming in support positions, thus not impacting combat personnel (in fact, allowing for increases in combat personnel, as the shifts in resources become fully implemented).

2.0 COST REDUCTION ANALYSES OF EQUIPMENT-RELATED AREAS

2.1 CONUS LOGISTICS INFRASTRUCTURE

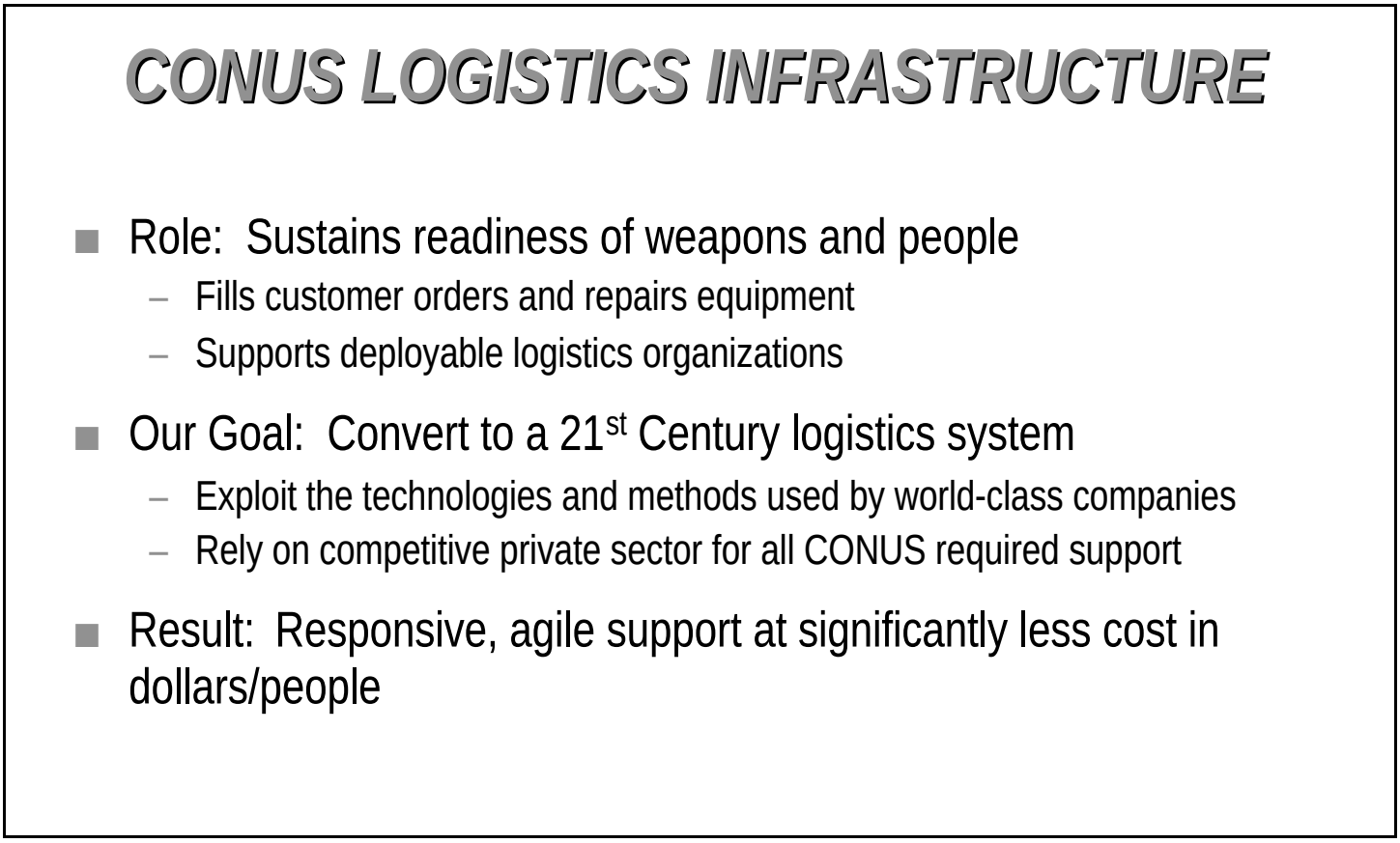


Figure 2-1.1

The role of the CONUS logistics infrastructure can be best summed up as the sustainment of weapons systems and people who are, or will be, deployed. The CONUS logistics infrastructure operates as a "middleman" between manufacturers of items and the customers, determining what it should stock, buying the stock, filling customer orders, and operating facilities to perform about 70% of the customers' repair work. The warfighting organizations already have their own logistics support activities that make repairs on weapons and support systems and hold buffer stocks of needed supplies. Thus, the CONUS logistics infrastructure acts as a second "middleman" between weapons systems operators — ships, squadrons, battalions — and commercial suppliers.

The Task Force recommends a goal of converting current logistics system to a 21st Century system, one that exploits the technology and processes used by recognized world-class companies, and which relies on the competitive private sector for essentially all of the CONUS elements of the logistics system.

The Task Force believes that this goal is achievable and the end result will be a support structure which is more responsive to Service needs, while realizing significant DoD resource savings in budget expenditures and people that are currently associated with the CONUS logistics infrastructure.

CONUS Logistics Infrastructure

- Current Resources

	Personnel[1]	Operating Cost $/yr
– Inventory control points, distribution depots, installation supply	62K	4.9B
– Maintenance depots, installation repair	104K	9.2B[2]
Total	**166K**	**14.1B**

- Benchmarking Opportunities:

	DoD	Industry
Distribution	24 days	1-3 days
Rpr Cycle Time	18-25 days	3-14 days
Sales/Person	$0.4M	$22M

1/ 1-2% military
2/Does not include $4.2B in repair contracts

Figure 2-1.2

The CONUS logistics infrastructure exists for sustainment of readiness, primarily in terms of filling customer orders and supporting the deployable logistics organizations in peacetime as well as wartime. Using 1995 as a baseline, the profile of the CONUS-based infrastructure includes supply, maintenance, and materiel distribution management of a $60B inventory consisting of almost 5M items – of which 80% are active. These active items generated $16B in sales – excluding petroleum sales – and used almost 62,000 people throughout the inventory control points, distribution depots, and installation organizations. The operating costs for these activities were $4.9B for that year. Additionally, over 100,000 people in maintenance depots and installation activities were involved in repair and maintenance-related activities supporting deployable forces. These organizations had operating costs of over $9B. As one can see, at least 166,000 people are directly involved with deployable forces, and over $14B are spent annually to provide needed support. There are many opportunities, when compared to world-class commercial companies, for improvements in DoD processes. DoD recognizes that there are economies to be gained and are actively pursing them. But, much more can and should be done. Thus, it is necessary to look at the support structure from a business sense to decrease costs and enhance support.

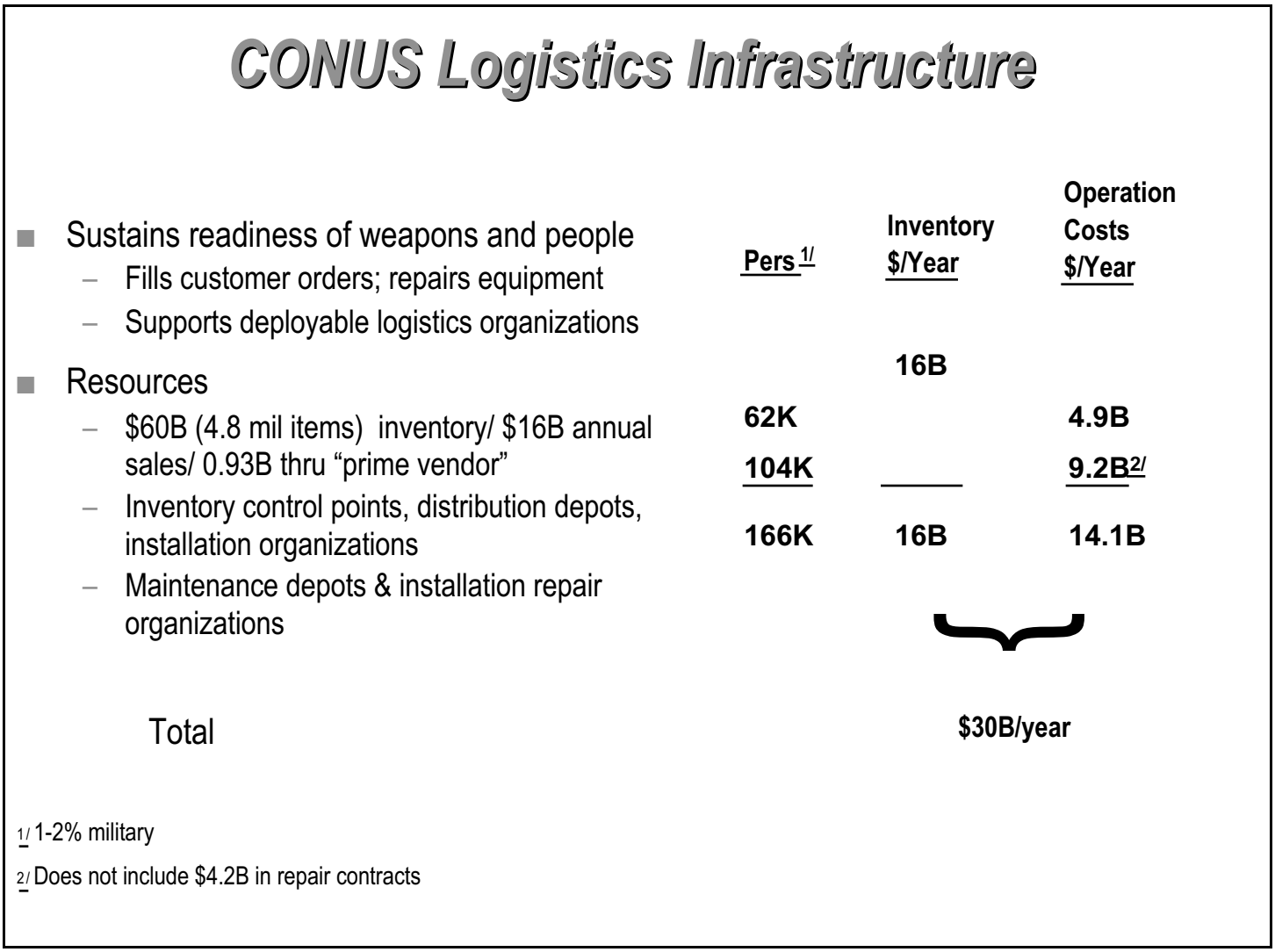


Figure 2-1.3

It is important to note that about $900M of the $16B in inventory sales is now done by "prime vendors." This is a steadily increasing trend, particularly in DLA, but also growing in the Services. Here the inventory control point (ICP) manager becomes a "broker" who arranges through a contract for the vendor to provide a catalog of items, e.g., pharmaceuticals, tires, batteries, and the vendor does the inventory management and distribution. Inventory is sold to the vendor as in DLA's Bell Helicopter contract. The ICP manager oversees the performance of the vendor, e.g., meeting delivery time standards.

On-going initiatives are gradually reducing the infrastructure costs as well as the costs of ownership of DoD's weapons systems. It is this Task Force's judgment that the pace is too slow to have much effect over the next 5 years.

As shown in Figure 2-1.2, comparing the performance of the DoD "enterprise" with the best commercial firms indicates the potential for improvement:

- Distribution for the best commercial firms is 1-3 days while DoD's average, which, although steadily decreasing, is currently 24 days with some pockets of excellence as velocity management principles are tested — Fort Bragg has averaged less than 8 days.

- Repair cycle time in the best companies average 3-14 days while depot maintenance times have decreased recently to an average of 18-25 days.

- If we look at the dollar value of "sales" per person, we see industry averaging $22M for each employee. However, DoD is 500 times less efficient, averaging only $.4M per person.

DoD Plans In Area (LOG Infrastructure)

- DoD initiatives to improve logistics infrastructure are commendable
  - Inventory reduction through prime vendor and logistic "pipeline" reductions
  - Logistics response time reduction
  - Total asset visibility
  - Improvements in mobility and prepositioning
  - Reducing weapon system cost of ownership -- investing in reliability improvement
  - Increasing outsourcing / implementation of DoD 5000.2 (e.g., Army "Paladin")
- DoD Logistics Strategic Plan and FYDP recognize need to make the Infrastructure more effective and efficient

But barriers must be removed and efforts accelerated

Figure 2-1.4

It must be noted that world-class commercial firms have the capability to meet surge requirements using a significant commercial base of their businesses to satisfy DoD requirements. For example, Caterpillar was able to meet with great speed the huge increased demand for equipment and parts after the Mt. Saint Helen eruption. Figure 2-1.5 lists some current processes and services which have been successfully outsourced by the Services and DoD.

Current Logistics Outsourcing

- Enhanced Vendor Delivery
- Prime Vendor
  - Medical
  - Facilities Maintenance Supplies
  - Wood Products
  - Subsistence
- Electronic Catalogs
  - Electronic Mail
  - E-CAT
  - PARTNET
  - ASCOT
  - FAST
  - GSA Advantage
  - UNICOR
- Logistics Civilian Augmentation Programs
  - USA - LOGCAP
  - USAF - AFCAP
  - USN - CONCAP
- Contractor Logistics Support
  - USAF

    KC-10 C-9 Airevac
    C-20 E-3
    T-43 C-27
    E-4JSTARS
    C-21 B-1
    B-2B-2
    F-117 C-12
  - USA

    Palladin C-12
    C-20 GPS
    UH-60 Flt Training System
    Mobile Subscriber Equipment (MSE)
  - USN

    C-9 C-20
    T-45 EA-6B
    T-34 FFG
    Minesweeps
    Gas Turbine Power Plants
- Depot

  Distribution
  Maintenance

Figure 2-1.5

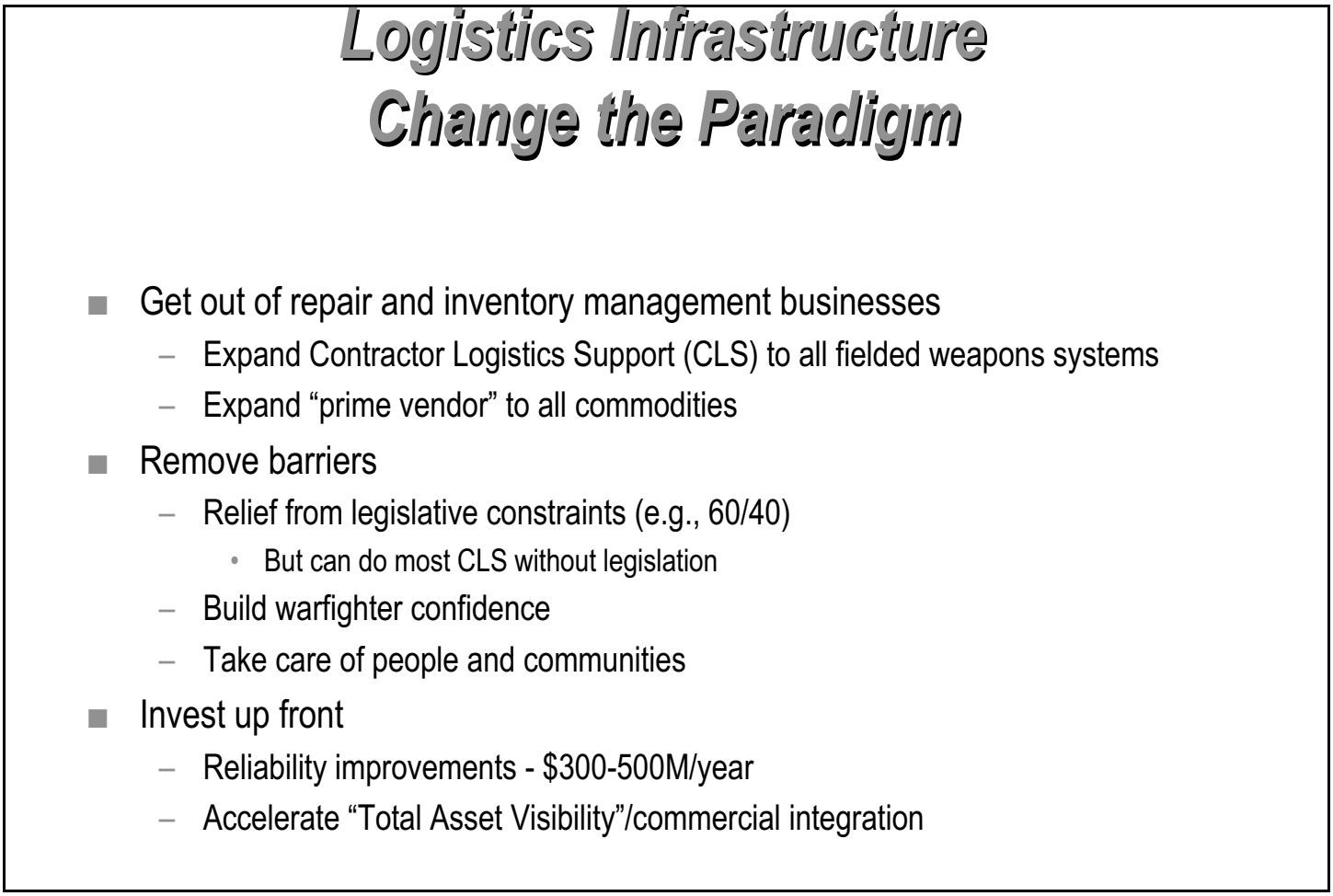


Figure 2-1.6

To gain economies and achieve significant savings that can be diverted to improve DoD's force structure and modernization accounts, DoD needs to look at dramatic changes in the way it does business. DoD must change the paradigm, and it must get out of the materiel management/distribution and repair businesses. While it is recognized that Contractor Logistics Support (CLS) has been used to a very limited extent in DoD, and whereas the new DODD 5000.2 requires the use of CLS where appropriate, the Task Force believes that this should become mandatory for all weapons and support systems. Additionally, the Task Force has seen the success of the "prime vendor" concept for medical items putting DoD in a world-class environment, and the Task Force is convinced that this is another avenue to achieve savings by expanding its application to all other commodities.

Up-front investments are critical for this paradigm to be successful. DoD must invest in the enablers and demonstrations that confirm applicability and help build the confidence of the force that its support will be there when and where needed. If DoD shifted and adopted the philosophy to get out of the materiel management/distribution and repair businesses at the CONUS level, and to lesser extents overseas, the Task Force sees more efficiencies and military effectiveness to be gained. The Task Force believes that DoD will realize improved readiness and reduced systems operating costs through direct CLS. It also sees faster response times for the requesting units, as well as leaner retail inventories needed by the fighting forces. For the Commander, this also translates into a smaller logistics footprint in the theater.

Another added, and critical, benefit of this shift is the enhancement of DoD's wartime surge capabilities. The contractor/commercial enterprises that will be needed for the surge are providing the services and support. Industry has demonstrated this capability in past crises. For example, Caterpillar was able to meet with great success, the huge increased demand for equipment and parts after the Mount St. Helen eruption. Finally, this concept now allows the military leadership to focus on their core obligation, defend the United States and, if necessary, win its battles.

To help accomplish this paradigm shift, there are actions that are in the purview of the Secretary of Defense and others that will require legislative relief. But DoD could accomplish 70 to 80% without changing any laws, only management procedures. To be successful, all changes must be transparent to the force (warfighters). The warfighter's confidence must not be diminished in his support systems; in fact, DoD needs to show that they will be more responsive and flexible.

To be able to embrace this shift will also require DoD to work closely with the communities and people where these organizations are located. Up-front investments are critical for this paradigm to be successful. DoD must invest in the enablers and reliability improvements that help build the confidence of the force that its support will be there when and where needed. DoD should emphasize that all of the recommended changes are in practice somewhere in DoD now.

While keeping in mind that supporting the operational concepts of the 21st Century must be the basic tenet of any new logistics support structure, it is nonetheless imperative to look for ways to decrease costs as well as enhance support. To gain economies and achieve significant savings that can be diverted to improve DoD's force structure and modernization accounts, DoD needs to look at dramatic changes in the way it does business. DoD must change the paradigm and it must get out of the supply and repair "middle man" businesses.

Figures 2.1.7 through 2.1.11 show how the Task Force suggests that DoD proceed with implementation.

CONUS LOGISTICS INFRASTRUCTURE SUGGESTED APPROACH

- Process change
  - Get out of repair business -- expand Contractor-Logistics Support (CLS) to fielded systems
    - Expand on base of Weapons System Management teams to create and oversee contractor support, e.g., Army Mobile Subscriber Equipment (MSE), Air Force KC-10
    - Develop contracts that would provide the spares "catalog," end item overhaul, and sustainment engineering, system training and field tech support
    - Require and provide incentives for reliability improvements (see results of DSB Task Force on Logistics Modernization)
  - Get out of business of inventory management
    - Enlarge the "prime vendor" concept to include all commodities - bypass A-76
    - Convert weapons/support systems to CLS, contractor becomes Prime Vendor for system spares
- Roadmap to Implementation
  - Barriers
    - Legislative e.g. (60-40 depot rule)
    - Cultural resistance to revolutionary change within DoD
  - Costs
    - Personnel outplacement: 135K of 166K people = $3.4B @ $25K / person
    - Investment in reliability improvements $0.3 - 0.5B/year
    - MIS for management of CLS and prime vendors metrics - $0.1B (est)
  - Enablers
    - Building on partially known base for CLS, prime vendor experience of DLA (Pharmaceuticals, etc.)
    - Defense Total Asset Visibility program under way
    - Growing acceptance of outsourcing in Congress (S1724, HR28)

Figure 2-1.7

While it is recognized that Contractor Logistics Support (CLS) has been used to a limited extent in DoD, and whereas the new DoD regulation 5000.2 requires the use of CLS for new and modified systems (unless waived), the Task Force believes that this should become mandatory for all weapons and support systems. The Task Force on Logistics Modernization report of June 1996 amplifies this point.

Additionally, the Task Force has seen the success of the "prime vendor" concept for medical items and others, putting DoD in a world-class environment. The Task Force is convinced that this is another avenue to achieve savings by accelerating its application to all other commodities, thus removing the Services and DLA from their present "middleman' role, converting them to "brokers." To help accomplish this paradigm shift, there are some actions that are in the purview of the Secretary of Defense and others that will require legislative relief, as noted earlier.

The legislative barriers noted can restrict the full implementation of CLS; the present 60% floor for organic depot maintenance might require overhauls to be done by depots. However, the Services can go forward with

CLS contracts for supplying parts, technical assistance, training, sustainment engineering and system modifications. Once legislative relief is obtained, the CLS contracts can be modified to include overhaul.

Costs of outplacement assume the gradual conversion over a five-year period of 22 to 23 thousand people DoD-wide each year with the current $25,000 "buyout." Loosening of current civil services retirement rules, as in the military, e.g., 15 years at reduced annuity, could facilitate out placement. This reduction could be the major portion of the on-going 5% annual reduction in the DoD civilian work force.

The Services and OSD should augment Joint Total Asset Visibility efforts to illuminate the distribution performance metrics, and develop the program recommended in the DSB report on Logistic Modernization for measuring achievement of systems operating and support cost goals.

Enablers listed above indicate this is not virgin territory and that even the attitude in the Congress toward outsourcing may be changing with the two bills, with 30 and 40 sponsors, respectively.

To reemphasize, all changes must be transparent to the warfighters. The warfighter's confidence must not be diminished in his support systems; in fact, there is a need to show that the system will become more responsive and flexible. To be able to embrace this shift will also require DoD to work closely with the communities and people where these organizations are located. DoD will need to assist these communities in developing a graduated approach to self-sufficiency. A balance must be achieved between the people, the community, private business, and DoD's interests.

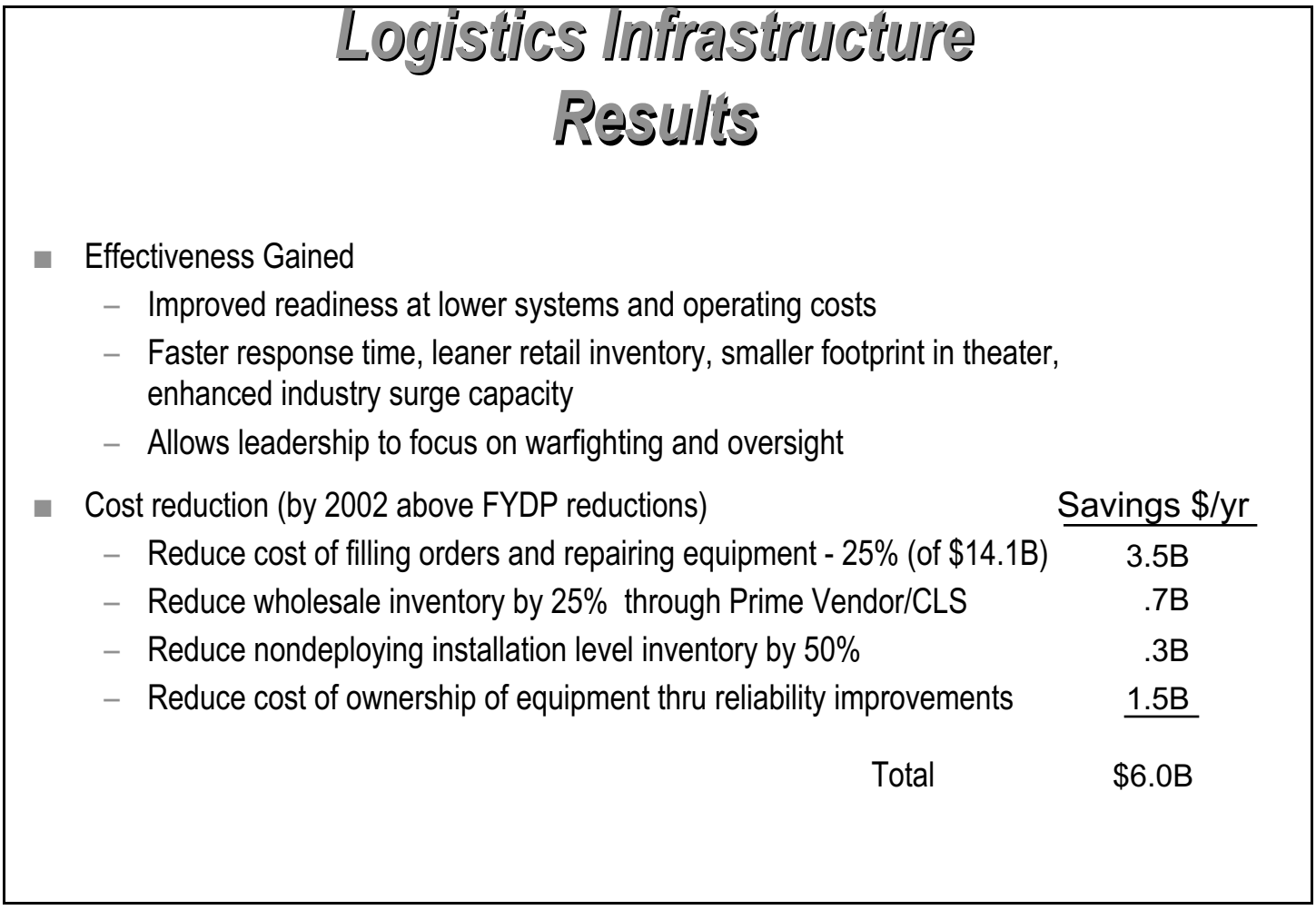


Figure 2-1.8

If DoD got out of the supply and repair business in CONUS, and to lesser extents overseas, the Task Force sees efficiencies, improved readiness and reduced systems operating costs through direct CLS. DoD can also see faster response times for the requesting units, as well as leaner retail inventories needed by the fighting forces. In fact, for the Commander, this translates into a smaller logistics footprint in the theater. Another added, and critical, benefit of this shift is the enhancement of DoD's wartime surge capabilities. The contractor/commercial enterprises that will be needed for the surge are providing the services and support. Finally, this concept now allows the military leadership to focus on their core obligation, defending the United States and winning its wars.

It is estimated that DoD can achieve almost $6B in annual cost reductions (above FYDP reductions) by 2002 if it were to get out of the repair and supply business. Using conservatives estimates, the Task Force sees these savings coming from four major sources (rationale follows Figure 2-1.10):

- $3.5B can be saved by reducing the cost of filling orders and repairing equipment.

- $.7B can be saved by employing more "prime vendor" and CLS opportunities; reducing wholesale inventories 25%.

- $.3B can be saved as a residual effort by reducing the installation inventories.

- $1.5B can be saved through Services' investment of $300-500M/year and by encouraging industry, through incentives (because they now provide life cycle support for their product) to make reliability improvements which will decrease operating and support costs.

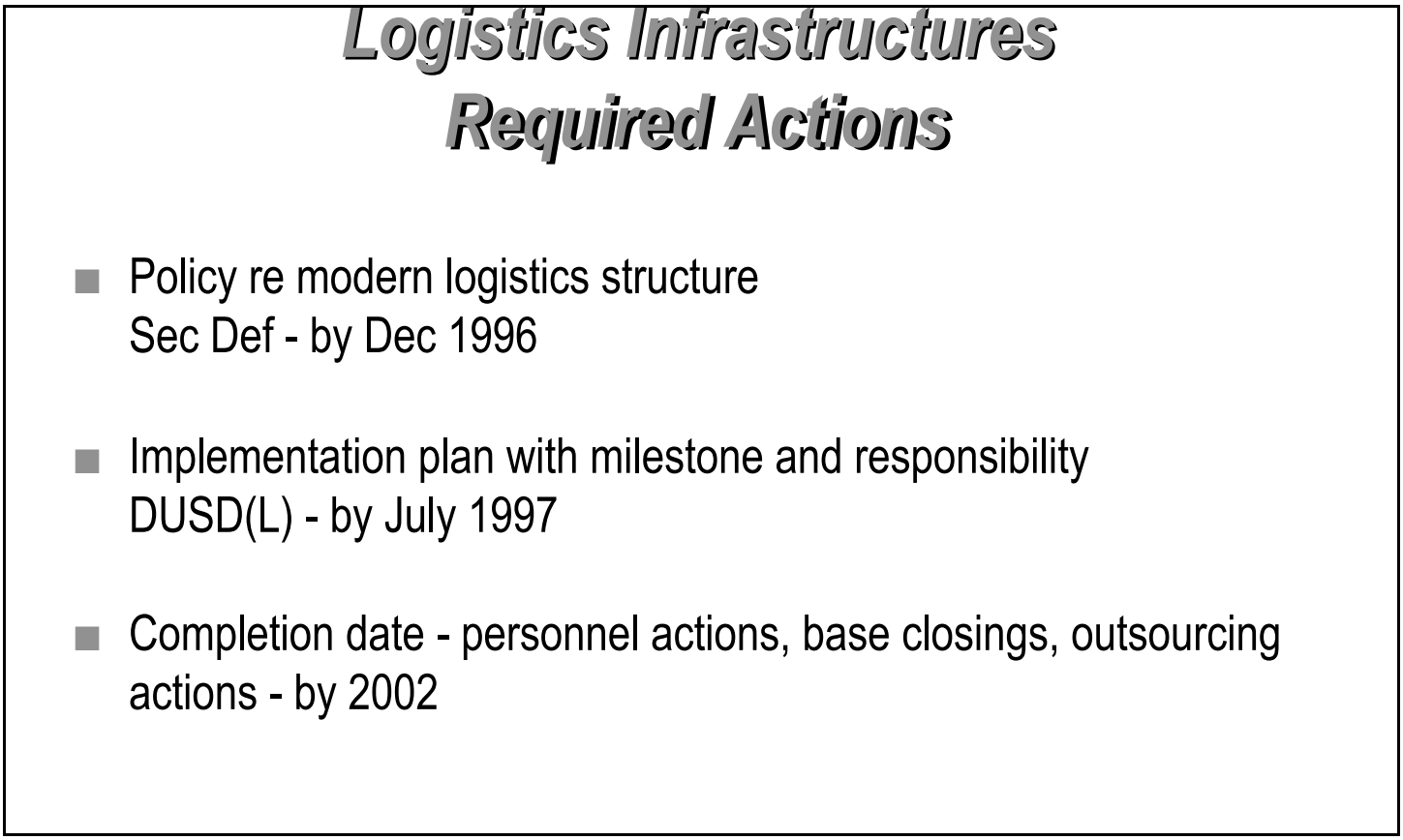


Figure 2-1.9

To achieve this support structure, three primary objectives must be met, with detailed timelines and milestone to support each through to implementation:

- The SecDef must embrace these concepts and publish a policy that reflects the goal of moving to a modern logistics structure to support the military of the 21st Century. This should be published by December 1996.

- The DUSD (Logistics) should be identified with responsibility for overseeing and developing the detailed plan to support the SecDef proclamation and vision. This plan should be worked by the Services and completed by July 1997.

- Finally, a realistic completion date (end of 2002) must be established that all can work toward. This date must allow for all the necessary actions, (legislative relief where needed, personnel actions, competitive contracts, etc.) to be complete or in place.

Logistics Infrastructure Advantage of Change

- Cost savings (by end FYDP)

	Savings $/yr
– Reduce cost of filling orders and repairing equipment - 25% (of 14.1B)	3.5B
– Reduce wholesale inventory by 25% (8B) through Prime Vendor/CLS	.7B
– Reduce installation level inventory by 50%	.3B
– Reduce cost of ownership of equipment thru reliability improvements	1.5B
Total	$6.0B

- Quality of Life
  - Fast response time for supplies improves work life
- People Impact
  - 135K of 166K pers moved to more productive private sector activity over 5 yrs
  - Remaining personnel have constructive management tasks to oversee CLS and prime vendor performance
- Effectiveness Gained
  - Improved readiness (e.g. MSE kept 97-98% availability in Desert Shield/Storm)
  - Faster response time, leaner retail inventory, smaller footprint in theater, improved wartime surge capability
  - Ability of military leaders to focus on Warfighting tasks vice industrial operations.

Figure 2-1.10

The Task Force believes that DoD will realize improved readiness and reduced system operating costs through direct CLS. A recent example is the MSE during Desert Shield/Storm — it was maintained at a 97-98% availability rate while reducing operating and support costs. Faster response times for the requesting units can be achieved, as well as, leaner retail inventories needed by the fighting forces which translates into a small logistics footprint in the theater.

NOTE: There is a wide perception that reducing the $60B DoD inventory can produce large savings. Experience suggests modesty in making the estimates.

One time savings in inventory acquisition dollars. Reducing the total requirements for on-hand inventory allows the inventory manager to sell the amount of inventory reduced without re-buying it. If the wholesale system has excess inventory, the savings will be delayed until the excess inventory has been sold. This will vary by item. For some items, the savings will be immediate. For other items, it may take several years. In general, the savings for reparable items will take longer. This is because the number of reparable items in the system is only reduced when a unit fails to be returned for repair, or an unserviceable item is returned and cannot be

repaired or is withheld from repair. For this reason, it takes much longer to bring reparable on-hand balances down. Normally only about 10% of the items need to be completely replaced each year — the "attrition" buy.

In analysis of all of the reparable inventory managed at two Service inventory control points, the Task Force found that it took six years to recover 13% of the total inventory reduction. Because of the low attrition rate for some reparable items and the large amount of excess stock on hand (generated, in part, by force reductions) some of the potential inventory reduction savings would never be recovered by avoiding new buys.

One time savings in repair dollars. For reparable items, reducing the total requirement for on-hand inventory also allows the inventory manager to use on-hand inventory to meet demand and delay the repair of some items. When repair savings will occur also varies by item, depending upon the level of excess serviceable assets on the shelf. Although the inventory level of reduction is normally expressed in the acquisition cost of materiel, the savings that result from delaying a repair action are at the repair price of the item, which is substantially less than the acquisition cost.

In the analysis done on the two Service inventory control points, the total savings from avoiding buys and avoiding repairs in the first six years was 20% of the total inventory level reduction.

Thus, wholesale inventory savings were estimated based on assuming a reduction of 25% by 2002 in the level of *active* inventory ($32B of the $60B total) is feasible. If the recommended shift to CLS and Prime Vendor takes place, presumably the Services would transfer the inventories to the contractors as DLA has done with the Bell Helicopter contract. The achievable savings is computed as follows:

25% ($32B) = $8B total reduction over 6 years	=	$1.33B/year
consumables = 25% of reduction	=	$.3B/year procurement avoidance
reparables = 75% of reduction $1.0B		
10% attrition buy avoidance	=	$.1B
estimated 30% repair savings	=	$.3B
Total	=	$.7B/year cost avoidance

Inventory savings from the reported retail inventory were estimated at $0.3B/year assuming half of the $14B retail inventory supports deployable forces and the remainder support these operations functions. Assuming that $2B of the "forces" inventory could be eliminated by 2002 would yield approximately $700 million per year of which $300 million (conservatively) could result in avoided procurement costs.

Another added, and critical, benefit of this shift is the enhancement of DoD's wartime surge capabilities. The contractor/commercial enterprises which will be needed for the surge would be providing the services and support. Industry has demonstrated this capability in past crises.

Finally, this concept now allows the military leadership to focus on their core obligations, defend the United States and, if necessary, win its battles.

CONUS Logistics Infrastructure
What To Do When

- Near Term
  - New Systems & Modifications of Systems: Implement 5000.2 Policy on CLS
  - Fielded Systems: Services' Materiel Commands (SMCs) develop model contracts, appoint "Tiger Teams", designate system managers -- get warfighter's support
    - Begin conversion to CLS, schedule largest O&S cost systems first
    - May exclude depot overhaul until 60-40 limit lifts
  - Items Outside CLS: DLA and SMCs
    - Expand use of commodity Prime Vendor Contracts
    - Shrink ICPs, Distribution Depots, Use FTE reductions
  - Increase Technology Insertion Program for reliability improvement (SMCs)
  - Designate DUSD(L) as the focus for implementation monitoring and establish Integrated Product Teams (USDA&T)
  - Establish process to measure and track system O&S costs - with goals (USDA&T)
- Intermediate
  - Continue efforts to remove legislative constraints -- support Congressional efforts to remove outsourcing barriers
  - Take Care of People - Buyouts/Retraining, Benefits
  - Use defense economic impact grants if necessary to get support

Figure 2-1.11

Figure 2-1.11 lays out a suggested strategy to implement the new paradigm of CONUS logistics support — brokering and performance oversight replacing enterprise operation. Its important feature is that it is not new. There is a base of success! But there is a need to show leadership support for a new way, especially to warfighters.

The key to success is in smart contracting, making use of the new climate of acquisition reform to develop productive relationships with weapons systems support contractors and prime vendors.

Teams ("Tiger Team") of contracting specialists, engineers, and inventory control point (ICP) managers having experience in prime vendor and CLS contracting should develop model contracts and lead the newly designated weapon/support management teams through the acquisition process with maximum dialogue with potential contractors. Contracting techniques should include incentives for exceeding performance standards (e.g., award fees) and gain sharing from reliability and process improvements. Likewise, there should be penalties for poor performance. CLS contracts should be potentially long term, (e.g., base year plus four option years) to facilitate the inevitable modifications that come from experience with these new relationships. DoD's share of cost savings from contractor action might be plowed back at some rate into further modifications as a motivation for the contractor.

2.2 DEPLOYED/DEPLOYABLE LOGISTICS

Deployed/Deployable Logistics

- Logistics Structure for Operations In-Theater/Afloat: Support for Systems & People - A critical function, essentially military
  - Sustainment/fill orders, currently manage approximately $20B inventory
  - Intra-theater lift (air, ground, water)
  - Repair & maintenance
  - Services (Base Ops/ Field Services)

Personnel Used Today:	DoD Military Personnel	Civ
Supply & Services	157K	4K
Transportation	90K	3K
Maintenance	300K[1/]	2K
TOTALS	547	9K

[1/] The Services have 435K personnel categorized as maintainers.

Figure 2-2.1

The Task Force examined the deployed logistics area to assess whether the availability of prime vendor and contractor logistics support, coupled with the new national military strategy, might offer opportunities to both improve the timeliness and effectiveness of logistics support, as well as reduce the requirement for the over 600,000 military that are involved in supporting warfighters. This population constitutes nearly 40% of the active military end strength.

Inventory data include $9.9B reported and approximately $10B unreported, the bulk of which is Navy and Marine aviation inventory and ship parts afloat. Logistics organizations that deploy in immediate support of the warfighter have been set aside from consideration because, due to the hazards of a hostile environment, some deployed logistics will have to remain the province of the military. Clearly, where operational constraints allow, there is money to be saved in this area while improving actual support.

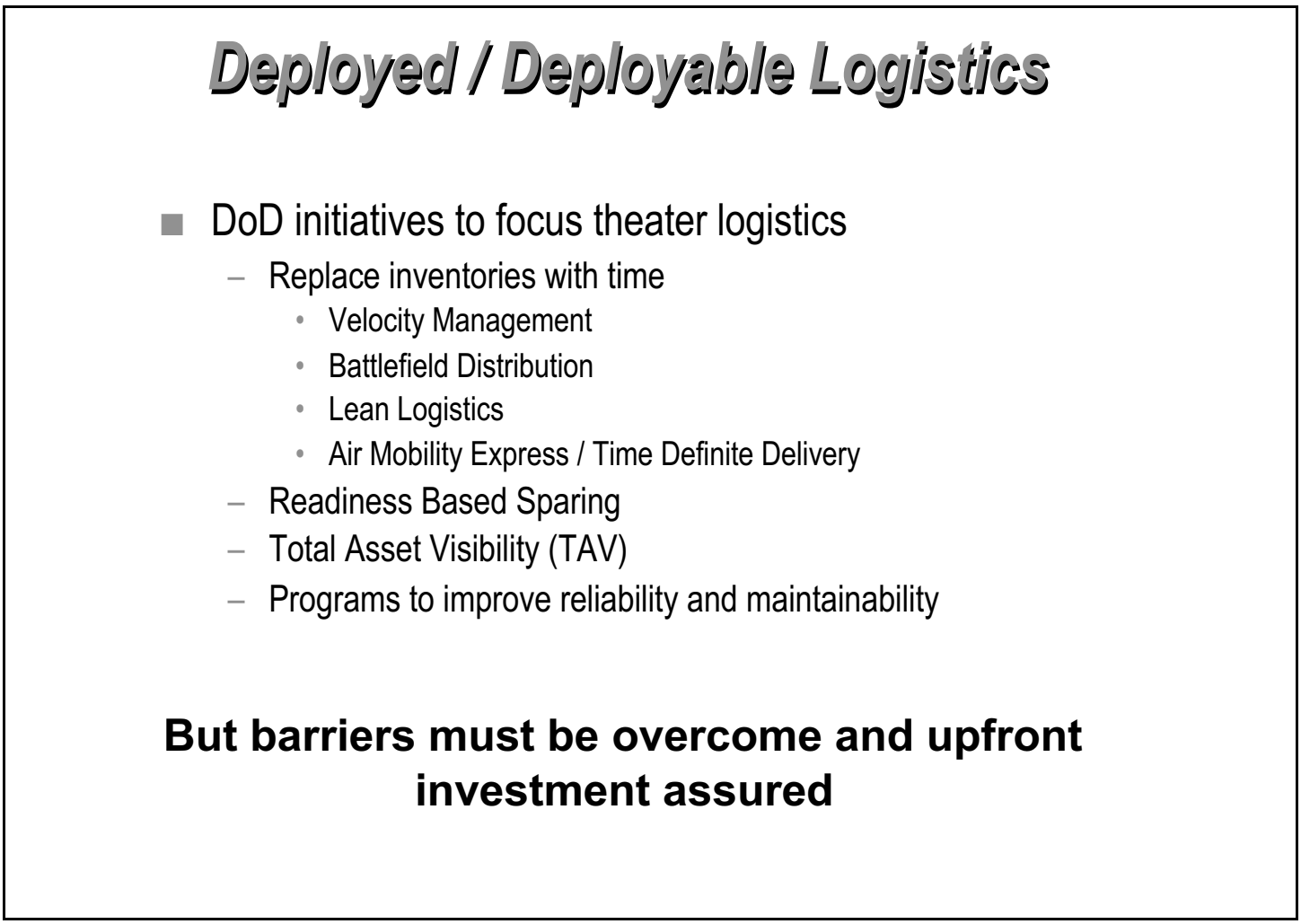


Figure 2-2.2

The Services have already taken some significant steps to improve theater logistics support. Most of these have to do with trading inventories for time – by moving things faster, the forces do not need as much – and by refiguring how to manage the movement of long distance high priority items as well as the overall joint distribution of "stuff" in-theater. Some of the Service programs are listed on the above chart. They are all moving in the right direction; but very slowly.

Another area that has high DoD interest is the concept of "total asset visibility." Inventories often contain needed parts but such parts are not identified and moved where they are needed. Each Service has an asset visibility project with Joint Total Asset Visibility (JTAV) program to integrate the separate efforts. These programs are fragmentary at present.

Further, the Task Force sees great potential benefits from technological improvements that decrease equipment failure rates and increase the effectiveness of necessary maintenance. However, these programs are piecemeal across the Services and DoD needs each Service's commitment to increase investment in the necessary modifications.

Deployed / Deployable Logistics Benchmarking

Process	DoD	Commercial Companies		
Distribution	24 days (DoD Average)	1 day (Caterpillar))	3 days (Motorola)	2 days (Boeing)
Repair Cycle Time	18-25 (Air Force)	14 days (Detroit Diesel)	14 days (Boeing)	3 days (Compac)
Meeting Surge Requirements	Large Inventory	Redeploy assets	Visible/Pooled Inventory	Draw from suppliers stocks

The Warfighter in theater / afloat is the ultimate customer. Thus, all wholesale/retail benchmarks apply. 21st Century concepts of integrated support will frame actual logistics benchmarks.

Figure 2-2.3

Benchmarks for forward deployed logistics are much like those for the CONUS logistics infrastructure. The experiences of Caterpillar in supporting remote mining sites and Boeing in supplying global airlines are certainly helpful examples of the customer-focus of world-class logistics organizations.

These examples offer parallels for the range of integrated logistics, including reaching out to troops under threat of hostile fire. Caterpillar's surge support of equipment operators dealing with the Mount St. Helen disaster illustrates commercial support activities in very hostile environments. The Service theater logistics organizations can learn much from the absence of layering, of processes for ordering and distribution in world-class firms and from the networked visibility of assets employed by these companies that includes customers. Commercial firms are delivering parts in days today, not weeks as is the current DoD performance.

Deployed/Deployable Logistics Suggested Approach

- Process Change
  - Organizing Principle: Focus theater logistics to reduce footprint and improve responsiveness to the warfighter
  - Realize reduction in theater/afloat support personnel and inventories
    - Must have asset visibility
  - Keep pushing to achieve world-class response time for supplies
  - Reduce echelonment of stocks
    - Adopt networked (distributed) asset visibility for all inventories
    - Institute integrated (joint) theater distribution
  - Shrink maintenance personnel & inventories
    - Limit repairs to remove and replace; contractor logistics support does the rest
    - Use smart diagnostics, assured communications and joint total asset visibility (JTAV)
    - Empower mechanics to order direct from vendor
- Widen contingency contracting for any support not exposed to hostile encounter

Figure 2-2.4(a)

The organizing principle for modern theater logistics support has already been adopted by the Services in such concepts as Lean Logistics and Velocity Management. DoD should set demanding, time-based targets and aggressively push these initiatives. This means getting the asset visibility without which none of this will work, removing unnecessary nodes in the distribution and inventory networks, and moving away from inventories sized to "just-in-case."

In the maintenance arena, 300,000 of the 435,000 total maintainer personnel are forward deployed. DoD can achieve significant savings by disciplining itself to remove-and-replace failed components. Contractor logistics support (CLS) firms supply serviceable components and perform platform overhauls. Repairers should have the best technical tools and connectivities, hooking the mechanic directly to the parts suppliers and CLS technical support. The Services also need to examine the value of the 135K maintainers not considered deployable. If CLS firms perform skill training for their systems, many of the repairer jobs in the training base can be eliminated. Rotation policies that justify another large number of repairers also deserve examination. Finally, the Joint Total

Asset Visibility Program provides the glue to realize both better response time and oversight of contractor logistics support and prime vendors. One scheme for JTAV use is discussed below.

Deployed/Deployable Logistics Suggested Approach (Continued)

- Roadmap to Implementation
  - Barriers
    - Slow introduction of JTAV, MIS, "smart" diagnostics
    - Lack of adequate investment in reliability improvement
    - Lack of joint planning for "battlefield distribution" - strategic mobility integration
    - Inconsistent/inadequate consideration of allied/coalition interfaces
  - Costs
    - JTAV efforts and reliability investments
    - "Smart" diagnostics: $50-100M per year
  - Enablers
    - Warfighting concepts allow shrinking logistics footprint
    - MIS, diagnostics, communications available technology must be adopted
    - Changes in Services' attitudes toward "free" military personnel, e.g., "Smart Ship", Force XXI

Figure 2-2.4(b)

Setting difficult goals and tracking reductions in O&S costs, facilitated by a better financial management system, and an activity-based costing approach, will assure that the leadership's interest is retained.

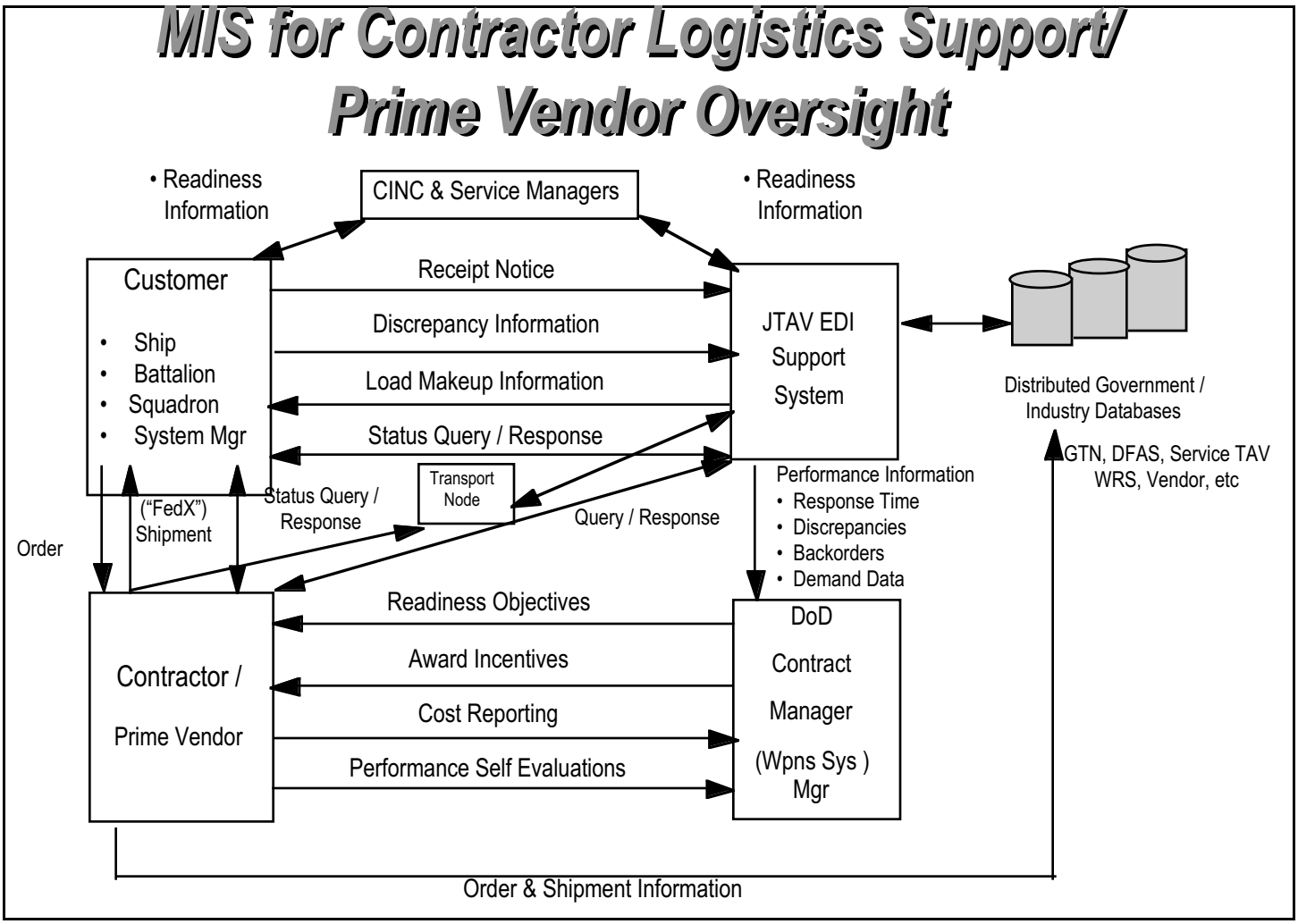


Figure 2-2.5

A potential approach to a management information system (MIS) for providing oversight of CLS and prime vendor contracts is depicted above. Under this approach, DoD and its contractors form partnerships aimed at sharing information required to ensure high readiness of defense systems and equipment. DoD contract managers, with inputs from CINC and Service managers, set contractually binding readiness objectives and award fee incentives. Contractors and prime vendors interface directly with customers, including ships, battalions, and squadron in-service system managers. Customers submit orders for materiel items electronically using commercial buying capabilities such as those emerging on the Internet. Customers obtain the status of their orders via query/response electronic data interchange (EDI).

A key component of the MIS is the automated Joint Total Asset Visibility (JTAV) EDI support system. JTAV provides CINC and Service managers with access to a variety of Government and industry distributed databases. When a customer places an order for an item with a CLS contractor or prime vendor, an image of the order is given visibility to JTAV. When the order is shipped by the CLS contractor or prime vendor, the shipping information is also given visibility to JTAV. Upon receipt of the materiel item by the customer or designated supply support component, a receipt notice is forwarded to JTAV. If the materiel item required by the customer for some reason is inadequate to satisfy the requirement, a discrepancy notice is submitted to the JTAV system. Customers and the CLS contractor or prime vendor have the ability to query JTAV and to

receive a variety of information, including in transit movement data and the makeup of larger loads of materiel items.

An important element of the MIS is JTAV's ability to provide the DoD CLS/prime vendor contract manager with performance and cost metrics. Information such as the response time from date of order to date of receipt, item discrepancies, backorders, and demand information for failure mode analysis, is readily available to contract managers providing oversight of CLS/prime vendor contracts. The JTAV EDI support system serves as a tool to provide readiness information to CINCs and Service managers, as well as to DoD contract managers responsible for ensuring that readiness objectives are being achieved by the participating contractors. It is also important to provide the means for trading off cost vs. performance.

Design objectives for the CLS/prime vendor oversight MIS should include maximum use of commercial off-the-shelf software, data exchange standards, and networking capabilities. Moreover, the integrity of the transactions should be preserved via emerging data protection methodologies agreed to by Government and industry.

The Task Force conservatively estimates that costs can be reduced by 10%. But there is more, potentially a lot more, to be gained by outsourcing everything that is possible. A recent letter by a British Member of Parliament to his Minster of Defense (MOD) expresses frustration at the "sheer waste of having soldiers on full overseas pay undertake tasks that can easily be done by civilian staff at a fraction of the cost." It went on to comment (regarding the contractor support in Bosnia) that the quality far exceeded that by the government.

The barriers are substantial, at this point. DoD must have the technical tools, systems reliability, plus joint and combined planning and doctrine. Costs to remove these impediments must be borne up-front, particularly in the technical areas. But the cost and performance advantages will shortly be evident, for the deployed as well as at-home logistics.

"Smart" diagnostics requires investment in better integrated electronic technical manuals and orders, integrating them with system built-in test and external test equipment for more accurate fault isolation. The payoff is a much lower no-evidence-of-failure rate, fewer parts required, and less maintenance time, thus fewer mechanics needed.

The "enablers" listed in Figure 2-2.4 will facilitate more aggressive moves by the Services to reduce the requirement for military personnel. Both initiatives shown in the chart contemplate reducing support personnel by smart process changes likely to yield better performance.

Deployed/Deployable Logistics
Advantages of Change

- Cost Savings
  - Reduce deployable support personnel by 10%[1/]: → 55K
    - Associated overhead personnel (training, base ops) → 5K
    - 60K personnel @ $50K/year → $3B
  - Reduce deployable inventory ($19.6B) by 10% = $2B → .3B/year
- Quality of Life
  - Lessens military TDY load
  - Allows better management of rotation base requirements and optempo
  - Quality of work life for military personnel:
    - Advanced tools and systems
    - CLS training and technical support
- Effectiveness Gained
  - Smaller logistics footprint; more agile logistic support organizations
  - Improved readiness of systems, quicker repair
  - Closer integration of deployed/CONUS support, retail/wholesale systems, strategic/ theater movement

[1/]Could be much higher with full outsourcing of support on ships, main operating bases, theater support hubs.

Figure 2-2.6

The Task Force estimates of cost savings are very conservative. Ten percent reductions in personnel and inventory would seem to be well within the reach of streamlined deployed logistics as described in the good ideas now being introduced by the Services; and no where close to results achieved in comparable, world-class commercial logistics operations. Some savings are already programmed under such programs as Lean Logistics and Velocity Management; but much more is possible. The extent of possible savings go well beyond present ideas. If DoD considers replacing uniformed logistics with commercial alternatives, at cheaper rates with greater responsiveness, wherever hostile fire potential does not preclude, then there are savings of significance well worth exploring. Subsequent charts define a more "aggressive" approach then that outlined above — with the potential for significantly improved performance and considerably lower costs.

The impact on "quality of life" will be immediate, as the support force structure is reduced, the temporary duty load on the remaining force will be less. The rotation base and optempo for the remaining military forces will be easier to manage — fewer is easier. Additionally, work environment improvements such as automated tools, systems and contractor training will certainly make life better for the military front-line support that remains.

So what about overall effectiveness after starting on the road to outsourcing and privatizing deployed logistics, as well as streamlining? There are two kinds of gains, those from doing it smarter militarily and those from using commercial networks to break through to new methods and tap existing international commercial networks. In either case, military commanders can achieve a smaller logistics footprint and more agile support to whatever military operations are undertaken. Systems should be more available, with quicker repair. Most significantly, the resultant system achieve the integration of systems that are presently disjointed — deployed; CONUS, retail and wholesale, strategic and theater movement.

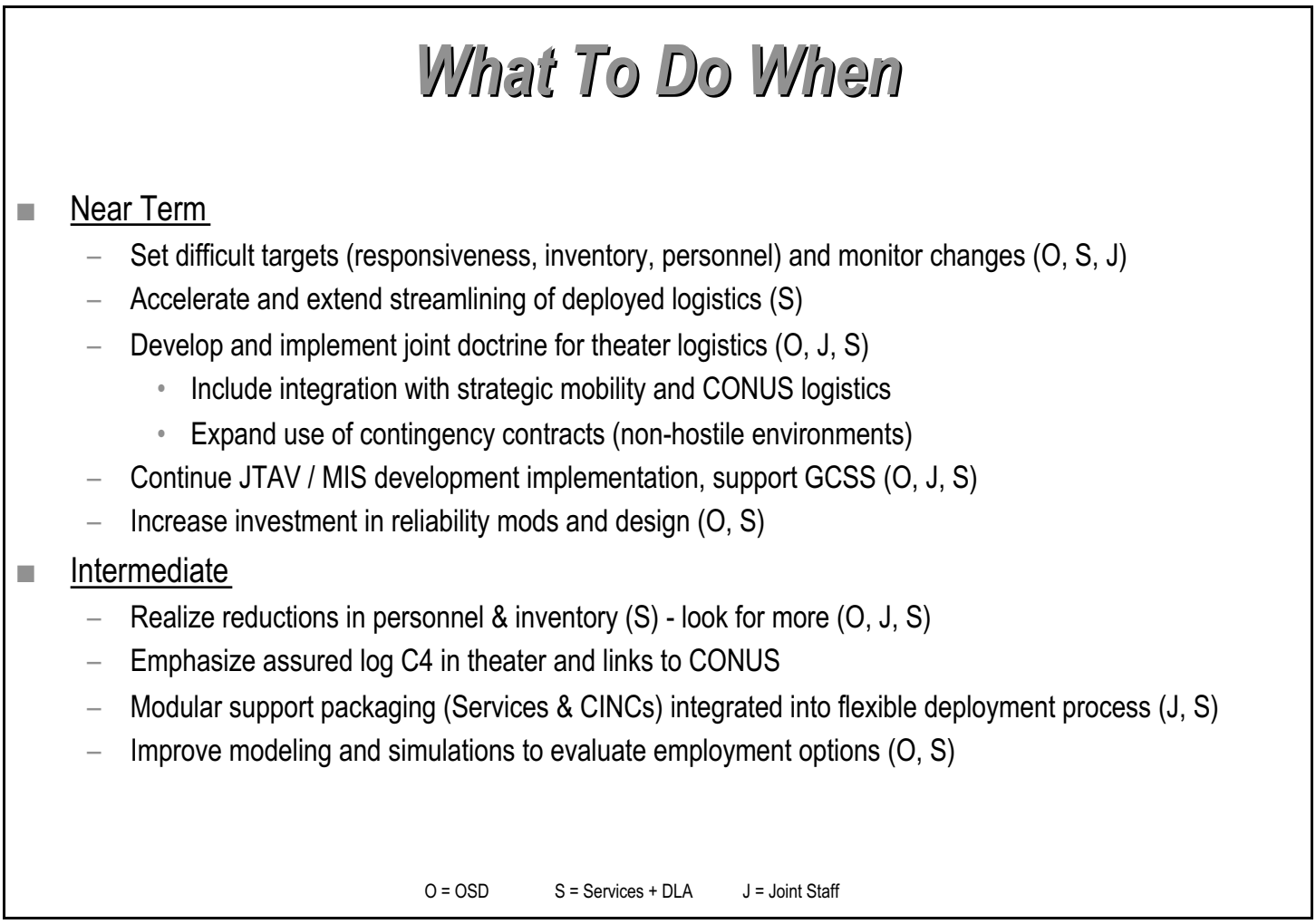


Figure 2-2.7

The first thing to do is to set difficult targets and accelerate current Service initiatives. DoD must develop the joint logistics doctrine to support all these new ideas - there is already a lot of joint logistics doctrine, but not much which addresses joint future logistics. A key point must be close integration of logistics initiatives with strategic mobility and asset visibility projects, all funded at entry levels, but all needing strong-minded prosecution to ensure necessary results. This includes opening up the communications and computer networks, including the nascent Global Combat Support System. Finally, reliability improvements are a clear savings now and in the future, as described in the CONUS logistics infrastructure section.

For the intermediate future, DoD must not just plan on reductions but must also realize them. The necessary C4 improvements must also come about, or none of this will work. At the same time, the Services will need to

continue their various efforts toward flexible support packaging as a component of better deployment processing. And, DoD needs to harness modeling and simulation technologies to provide a logistics "what-if" capability to evaluate support options.

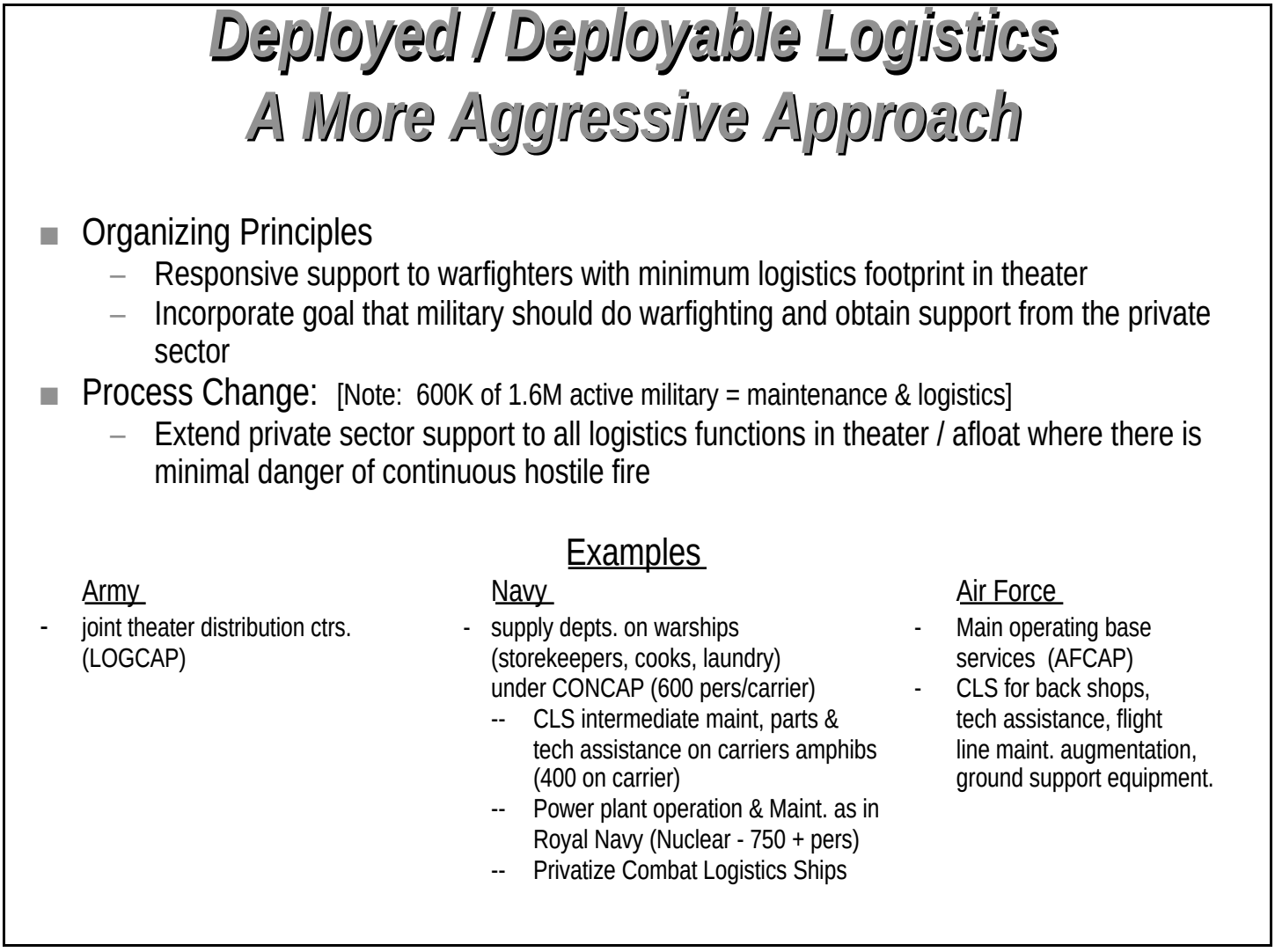


Figure 2-2.8(a)

A more aggressive approach to outsourcing deployable logistics support would produce significant additional savings. In this approach, military personnel, afloat and ashore, would be focused exclusively on warfighting or direct support of combat units in a potentially hostile environment while all other logistical support, including much in-theater support, would be outsourced. AFCAP, CONCAP, and LOGCAP are the contracting vehicles used by the Air Force, Navy, and Army, respectively, to obtain support services in a theater of operations.

Immediate opportunities to prototype this approach exist for all Services, as nearly 40 percent of all military personnel currently perform logistics or maintenance functions. The Army joint theater distribution centers could be outsourced providing in-theater material management and fuel support. Similarly, in-theater Air Force squadrons and ground support equipment could be supported through contractor logistics support, as main operating base supply and personnel services are outsourced. At the same time, the Navy could prototype

outsourcing afloat supply services (e.g., food service, laundry, etc.), aircraft intermediate maintenance, and ship propulsion plant operations and maintenance.

Deployed / Deployable Logistics
A More Aggressive Approach -- (Continued)

- Roadmap to Implementation
  - Barriers
    - Cultural, e.g., civilians on warships perception about reliability of contractor force in crisis (hostile fire)
    - New, mostly untried ideas although various precedents exist, Korea, Vietnam, Desert Storm, Bosnia

Note: More Merchant Marines were lost in W.W.II (U boats, etc.) than Sailors. They sailed in spite of the threat.

- Startup Costs:
  - Modified Living Accommodations
  - Test results should illuminate others
    - Costs of LOGCAP, CONCAP, AFCAP to prepare/exercise assuming that no DoD personnel are eliminated
- Enablers
  - Performance of civilian contractors in Desert Shield/Storm, Bosnia
  - Availability of large pool of people with prior service
  - Readiness of contracted services firms to participate
  - Continuous pressure to find more effective and efficient manning strategies

Figure 2-2.8(b)

The most significant barrier to implementing expanded contractor support would be in overcoming cultural resistance to change. There will be concerns that contractors will not provide the needed flexibility and ability to "surge" to meet unforeseen requirements. There will also be fears of diminished unit cohesiveness and morale, as significant numbers of civilian contractor personnel are blended into units that were previously all military, especially on Navy ships. Although recent history shows that civilian contractors have performed very well under demanding conditions, strong initial resistance should be anticipated.

In addition, there will be costs to initially convert to contractor support. For example, berthing modifications may be required on Navy ships. Expanded contractor support will likely increase peacetime costs of LOGCAP, CONCAP, and AFCAP, unless DoD personnel levels are reduced.

Several enablers will facilitate more aggressive outsourcing. Civilian contractors performed well in Desert Shield/Storm and, more recently, in support of operations in Bosnia. As the military drawdown continues, significant numbers of former military members will become an experienced "pool" of candidates for these new contractor positions. Companies with experience in supporting military requirements have indicated that they would be very interested in taking on this new work. This approach directly supports DoD's ongoing effort to develop more effective and efficient manning strategies.

Advantages of Deployed / Deployable Logistics -- A More Aggressive Approach

- Cost Savings
  - Potentially dramatic in a military maintenance & logistics population of 600K
  - Net savings from outsourcing 25K military billets @ 50% cost saving = $1.25B
- Quality of Life
  - Reduced discipline problems by outsourcing low skill, higher undisciplined rate pers, e.g., cooks, laundry, supply persons
  - Achieve higher quality services for deployed/afloat personnel
- Effectiveness Gained
  - Reduced turnover in higher skill areas -- maintenance, power plants
  - Improved readiness of systems (fewer but higher skilled people)

Figure 2-2.8(c)

Potentially dramatic savings can be achieved by taking a much more aggressive approach to contractor support. Nearly 600,000 military personnel currently perform maintenance and logistics functions, and many of these positions are suitable for outsourcing. Outsourcing has a "multiplier" effect as elimination of the primary billet also eliminates the requirement for an associated billet base for training and recruiting. In fact, eliminating a single operational billet saves nearly two billets service-wide or an average of $100,000 annually. Net savings from outsourcing 25,000 military billets is estimated to be $1B, assuming a 50% savings rate.

- Requirement for rotation based for each Navy / AF deployed / afloat billet = 0.6-.8 person
- Added per billet requirement for transient student, recruiting / training, etc. = .15 person
- Eliminating one such billet yields approximately two people @ 50K/yr = $100K

For a number of relatively low-skill jobs, such as Navy food service and laundry operations, the quality of service provided by contractors is expected to equal or exceed that currently provided by military personnel. In

addition, a frequent source of military disciplinary problems would be eliminated. The quality of life of remaining military personnel would be enhanced.

Contractors can provide a more experienced work force for higher skill areas, such as maintenance and ship propulsion operations, which will lead to improved system readiness. Troubleshooting will be more accurate, reducing material support costs. Turnover will be much lower as the contractor provides better service with fewer but more highly skilled people.

Figure 2-2.8(d)

Implementation of this more aggressive approach is best done in two phases. In the near term, in-theater and afloat systems could be brought under CLS and personnel services could be selectively outsourced. The Army should modify the current Log Cap contract to add the Joint Theater Distribution System including this change in joint doctrine. The Navy should prototype contracting out elements of afloat supply departments, particularly in personnel services such as food service, laundry operations, barbershops, and retail store operations. In addition, ship propulsion operation and maintenance and aircraft intermediate maintenance on aircraft carriers and large amphibious ships are excellent near-term outsourcing opportunities. Like the Army,

the Air Force should prototype outsourcing supply and services and employ CLS for units on extended deployments.

Working closely with contractors, feasible models and performance metrics need to be developed. In addition, aggressive plans need to be developed for evaluating potential future candidates for outsourcing. Building on these prototype efforts, expanded contractor support should be incorporated into new system design and manning strategies.

2.3 TEST AND EVALUATION (T&E) INFRASTRUCTURE

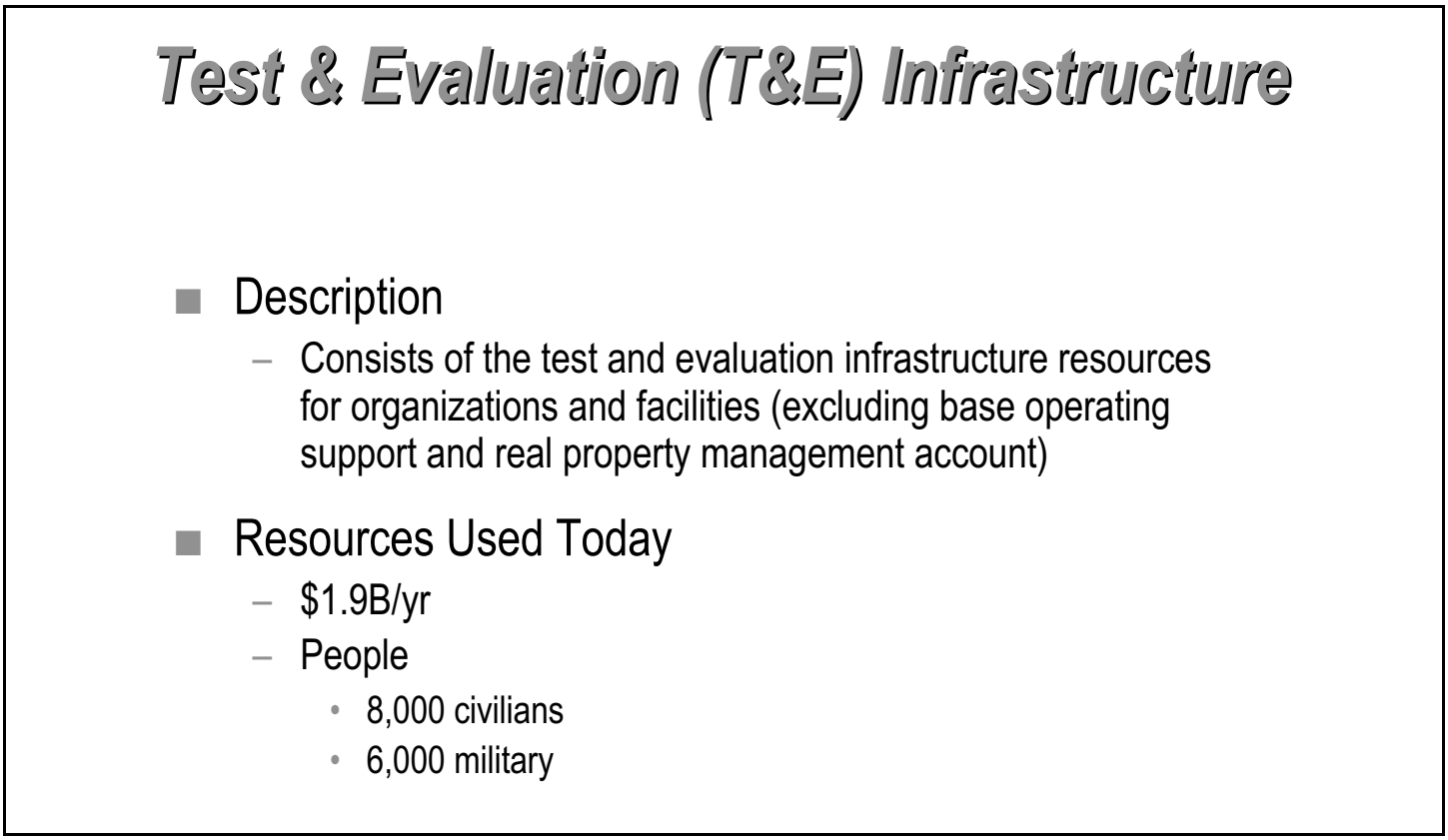


Figure 2-3.1

The DoD test and evaluation (T&E) infrastructure consists of all facilities or capabilities that will be used for T&E data collection. Such facilities and capabilities are either DoD-owned or located on DoD-controlled property (air/land/sea or space), platforms or equipment used to provide deliverable T&E products. At present DoD has some 21 principal T&E centers, including ranges. Many of these sites are unique. Many of such facilities will be needed for T&E future generations of aircraft and missile systems. Once disposed of, it would be nearly impossible to re-acquire them — even from public usage.

Investments by DoD in facility improvement have been less than one-third of the rate of investment by private industry. As a result, DoD continues to use inefficient, labor intensive T&E capabilities. However, the Services

have recognized the problems and are gradually taking steps to correct deficiencies. In addition, the Office of the President has issued a directive to DoD (and other Government agencies) to develop approaches both to improve T&E efficiencies and to cut infrastructure.

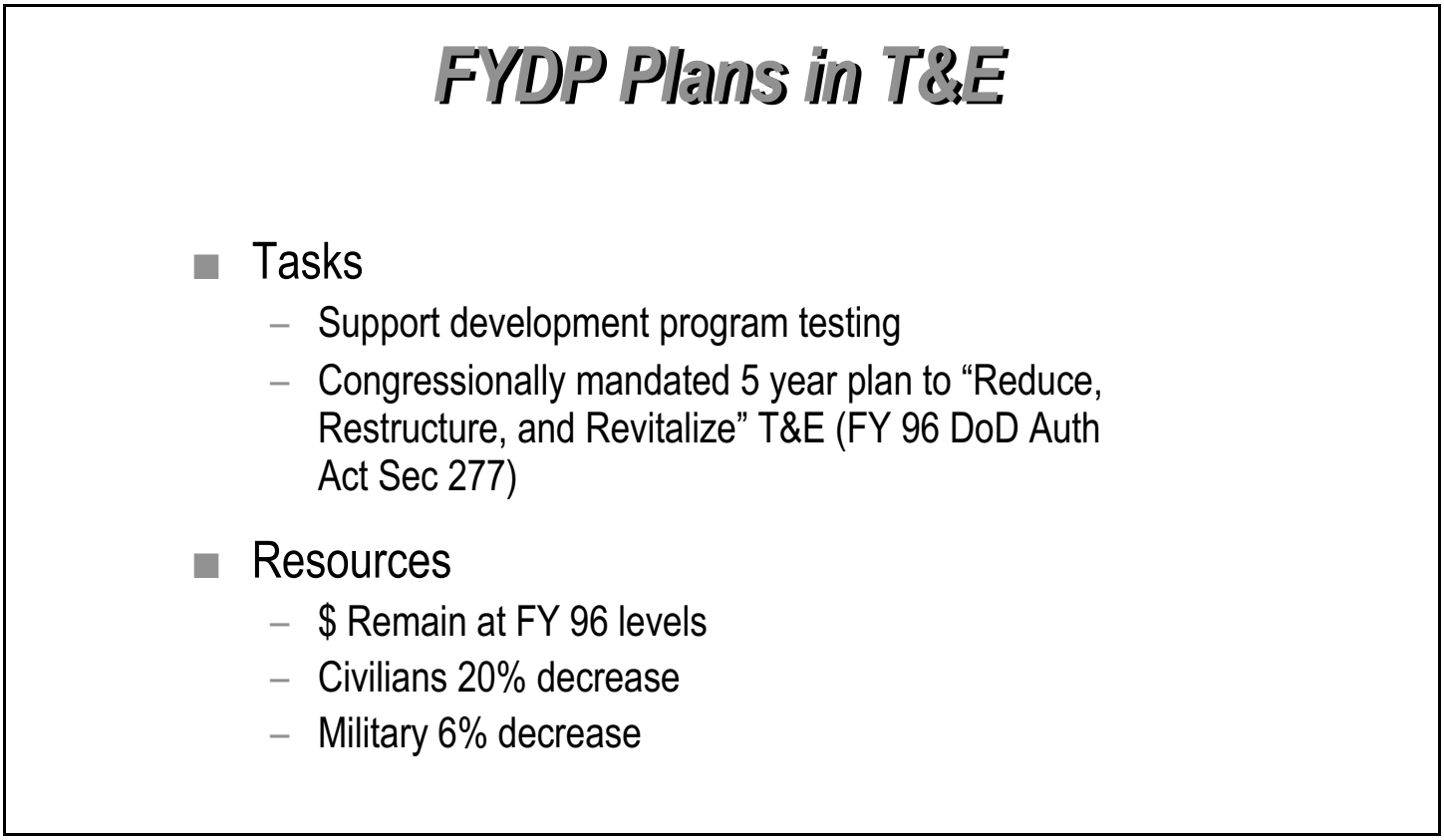


Figure 2-3.2

In addition to Presidential direction, the National Defense Authorization Act for Fiscal Year 1996 also instructed that DoD examine ways to reduce the costs of its T&E infrastructure. DoD has responded to these directions with a program to significantly cut infrastructure. In fact, from 1990 to the year 2000, the T&E infrastructure workforce is projected to decrease by about 39%. The issue, then, is what more can this Task Force recommend to help reduce T&E infrastructure costs still further?

Benchmarking (T&E)

- World-class Example
  - Boeing 777 test support
    - Accomplished with minimal infrastructure
      - 50 person team
- Gov Performance
  - F-22 test support
    - 300 person test team
      - AFFTC Infrastructure
- Comparison
  - Gov approach takes longer (3 yrs vice 1 yr)
  - Gov approach costs more

Figure 2-3.3

The answer to this question becomes obvious when one compares Boeing's world-class T&E program for the 777 with that for the current F-22 test efforts. The bottom line is "process." Figure 2-3.4 outlines this Task Force's recommended approach to making the DoD T&E process efficient, effective and lower cost.

Suggested Approach (T&E)

- Competitively privatize appropriate T&E facilities in place
  - Incentivize contractor to remain competitive (SPO's empowered to use best value facilities - in-house or commercial)
  - Contractors could also compete for commercial business
- Increase use of modeling and simulation
  - Modernize existing facilities
- Roadmap to Implementation
  - Barriers
    - Political constituencies to those phased out or downsized
  - Costs
    - $50M phase-out
  - Enablers
    - Profit motive drives industry to provide efficient service at least cost
    - Local government ready to team with industry to prevent faulty closure
    - Workforce wants employment opportunities

Figure 2-3.4

Although DoD T&E facilities need modernization, it is important to recognize that substantial equipment is already in place. Early decisions should be made on what, if any, facilities and/or sites will no longer be needed. Most will be required, although there may be some redundancy within the T&E infrastructure, particularly across services. It would be very attractive to industry to use the extant DoD facilities and equipment base to compete for T&E business - not just for government work, but also for commercial T&E. Further, DoD must establish a policy that a prime item Program Office be allowed to select the best value facility to conduct testing rather than be directed to use a certain facility. In order to be competitive, the facility contractor would not only have to use modern test techniques such as modeling and simulation, but would also need to embark on a long term equipment modernization program.

Implementation of such a competitive privatization in place approach would have some significant hurdles to overcome. The potential for loss of jobs could result in significant political opposition. Also DoD would need to accept the unplanned costs of early retirements for civilian employees, as well as some relocation expenses. However, when faced with the alternatives of facility closure, it can be expected that both the local community and DoD employees would work with any DoD implementation team. Moreover, the expected savings would be achieved because the contractor is in business and must realize a profit.

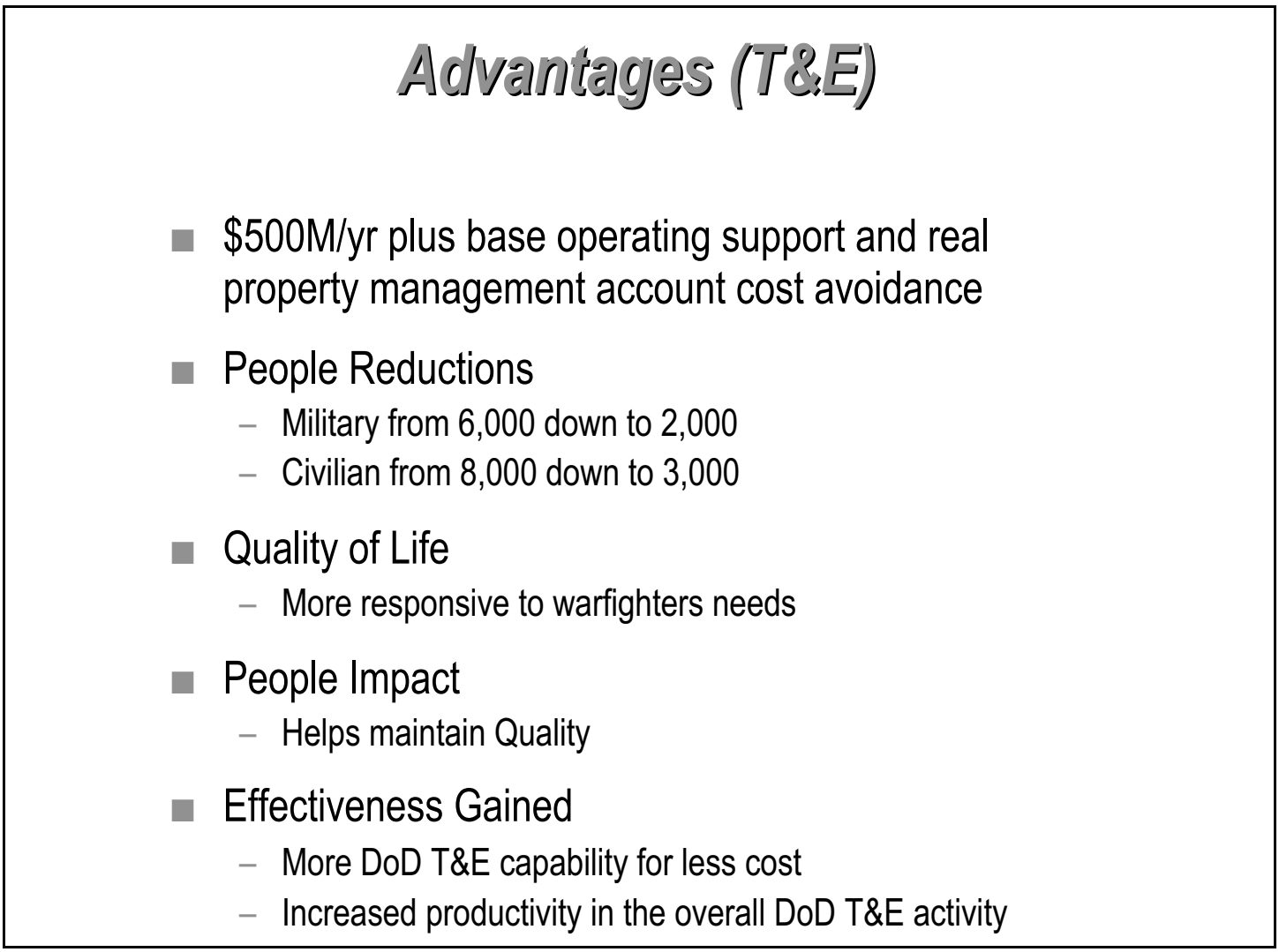


Figure 2-3.5

As noted above, the Task Force assesses the result of such a move to privatize T&E facilities to be significant cost avoidance for DoD. The number of DoD people would be reduced: military from 6,000 today to 2,000 by the 21st Century and the civilian workforce from 8,000 to 3,000 over the same period. Further, such private operations should yield more effective testing, thus allowing delivery of effective upgraded and new weapon systems to the CINCs in less time than DoD currently experiences. As the ultimate "customer," the CINCs could have a stronger voice in the types of test conducted. Test planning could also tie operational testing closer to developmental tests to shorten the total test cycle and provide a richer data source. In the final analysis, however, the facility contractors would need to maintain a high quality workforce and facility in order to be competitive. The result would be both dollar savings to DoD and improved T&E.

What To Do When (T&E)

- Near Term
  - Evaluate need for test sites' future use
  - Develop a plan to competitively privatize (USD - A&T action)
    - Complete by Jan 97
- Intermediate
  - Briefings (USD - A&T action)
    - Services, OSD, SecDef, Congress
    - Monitor progress (complete by 2002)
  - Organizational Considerations
    - Must maintain viable organization during transition

Figure 2-3.6

The move to privatize the T&E infrastructure will work only if DoD can get all of the principals in the area to work together. This requires development of comprehensive plans in the near term that include the assessment of future use. These plans would need to be briefed to all concerned and adjustments would be made to accommodate concerns. The key theme throughout the planning and implementation process, would be that competitive privatization is beneficial to all concerned.

2.4 SCIENCE & TECHNOLOGY (S&T) INFRASTRUCTURE

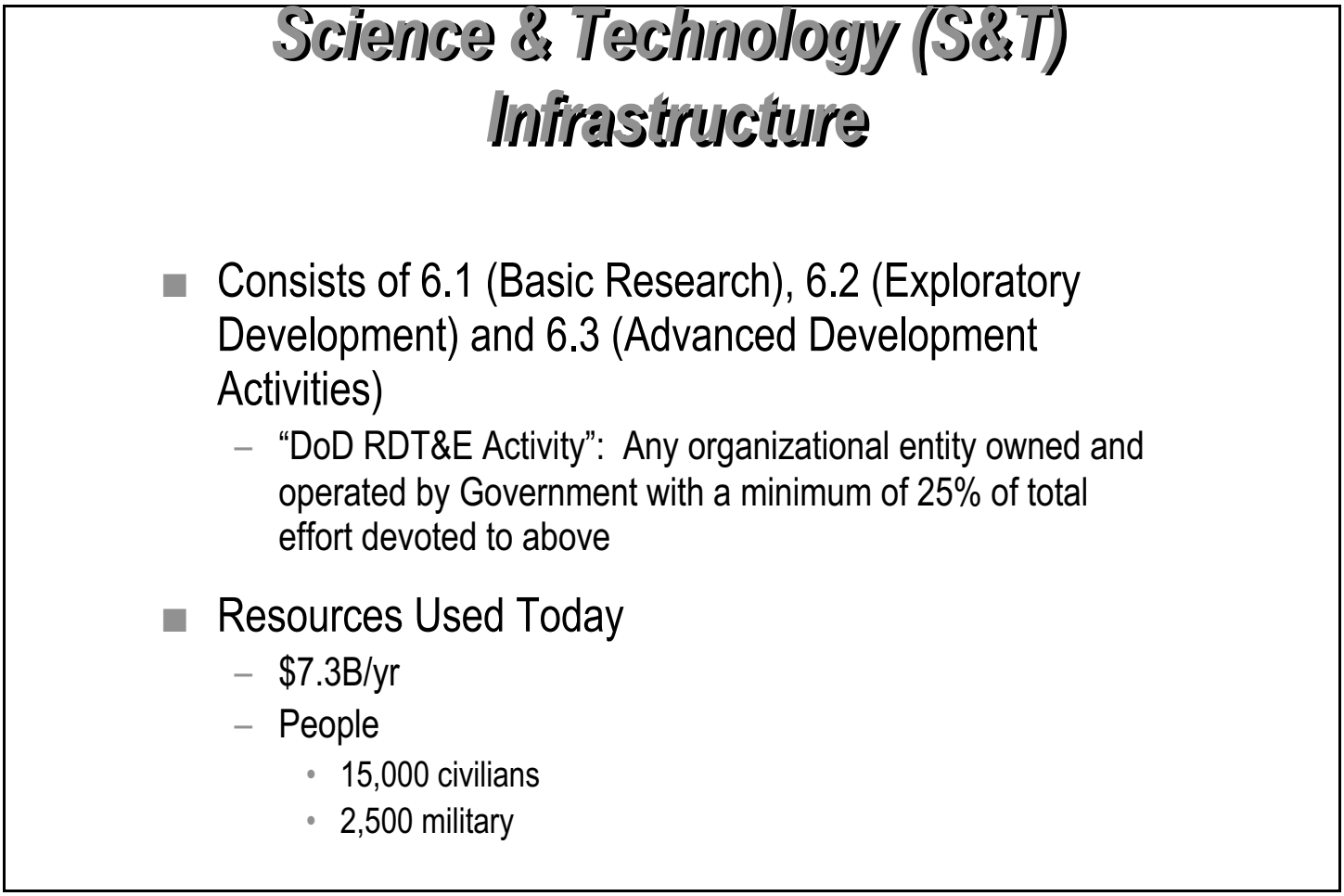


Figure 2-4.1

The DoD Science and Technology (S&T) infrastructure consists of facilities and capabilities that are used to perform science, technology and engineering development. For the purposes of this study, the term applies to any Government entity with a minimum of 25% of its total effort devoted to S&T. S&T includes scientific and engineering work classified as:

- 6.1 - Research
- 6.2 - Exploratory Development
- 6.3 - Advanced Development

The DoD S&T infrastructure is operated at dozens of facilities across the country. Coordination of S&T efforts is accomplished at the service and agency levels as well as via an OSD-led teams. A number of initiatives to improve the S&T infrastructure have taken place over the past few years. Currently, the total budget for FY97 Science and Technology is $7.3 billion. There are over 15,000 civilians employed in the DoD laboratories along with about 2,500 military personnel.

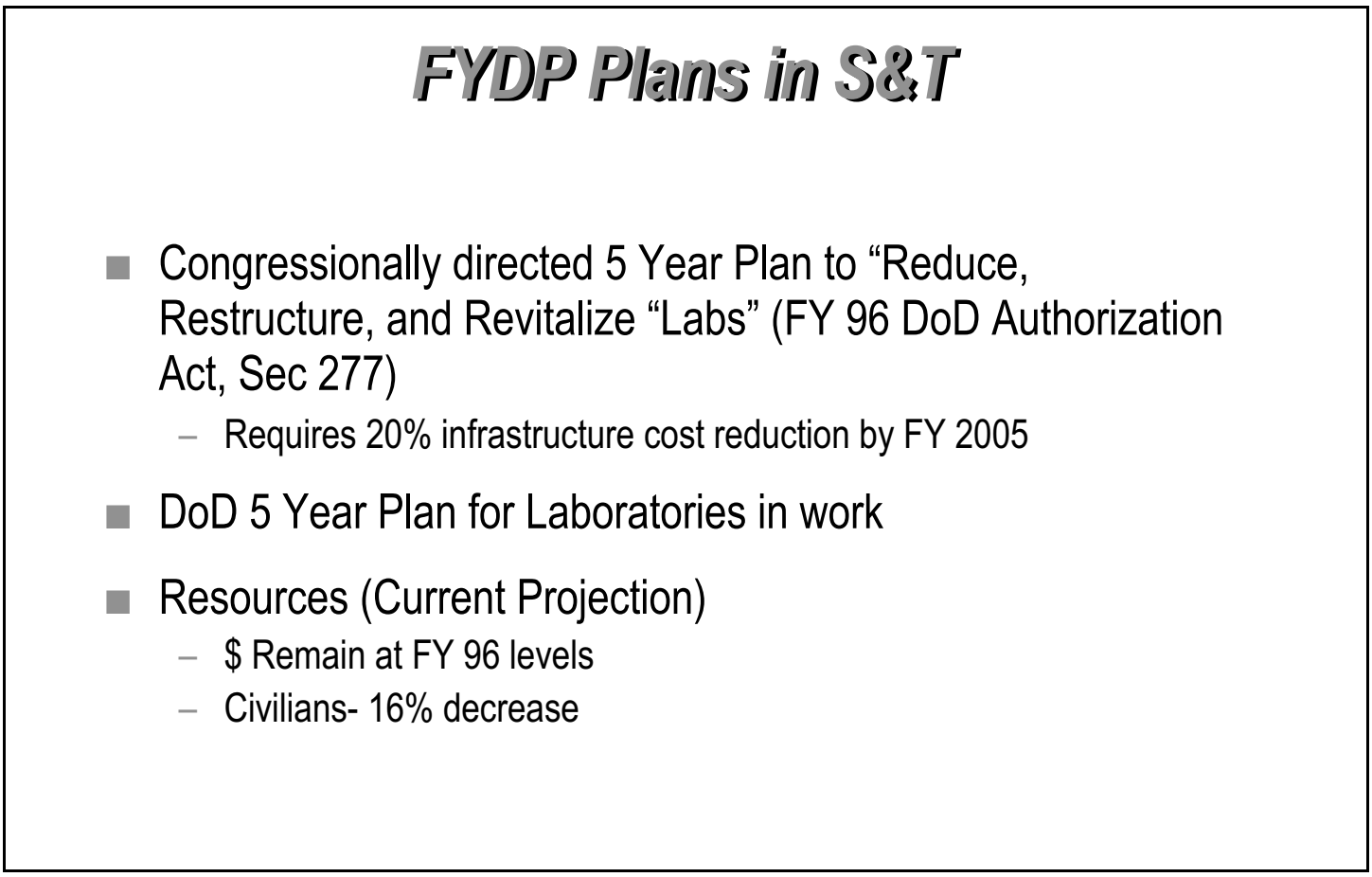


Figure 2-4.2

As part of the FY 96 National Defense Authorization Act, Congress directed additional DoD effort to improve its S&T activity. Section 277 of the Act requires the development of a five-year plan for the consolidation and restructuring of defense laboratories and test and evaluation centers. The principal requirement of this authorization is that costs of the laboratory infrastructure be reduced by at least 20% by FY05. The plan is to achieve cost reduction through reduction, restructuring and revitalization. Actual reduction of current infrastructure will be performed to eliminate old, high-maintenance, and inefficient facilities while retaining critical capabilities for the future. Planned actions will reduce laboratory infrastructure by 2005 by at least 20% beyond the Base Realignment and Closure Act of 1995. Restructuring of the laboratories will be examined focusing on both consolidation of laboratories, cross-Service reliance, privatizing and outsourcing to universities and industry. Finally, revitalization of existing facilities is envisioned. Revitalization will emphasize cross-Service sharing, improving efficiencies, reducing costs of operation and maintenance and re-focusing efforts towards the salient science and technologies for twenty first century military needs. The current plans for S&T envision a 16% decrease in civilian employment. Funding allocations are projected to remain constant at FY96 levels leading to more resources available for research (vs. infrastructure costs).

Benchmarking (S&T)

- World-Class Example
  - Personal Computer Industry
    - Focused research/rapid transition
      - One year from technology demonstration to development
  - Gov performance
    - Space and Missile Tracking System
      - Technology demonstration requires six years before development can proceed
- Comparison
  - Industry
    - Goals clear
    - Small team
    - Funding/people resources stable
  - Government
    - Changing requirements
    - Large number of people at several levels
    - Funding/people resources fluctuate

Figure 2-4.3

Although S&T infrastructure improvements are proceeding as directed, process changes must be implemented if additional savings are to be realized. The personal computer industry provides an excellent example of technology development with minimum use of infrastructure resources. In this case, the goals are clear and small stable teams accomplished the work. On the other hand, the Government laboratories often see changing requirements and priorities. Moreover, the approval process for projects involves multiple levels of review and decision-making. And finally, the actual S&T performers change frequently as the people are moved from project to project. Military performers are frequently transferred in the middle of project execution.

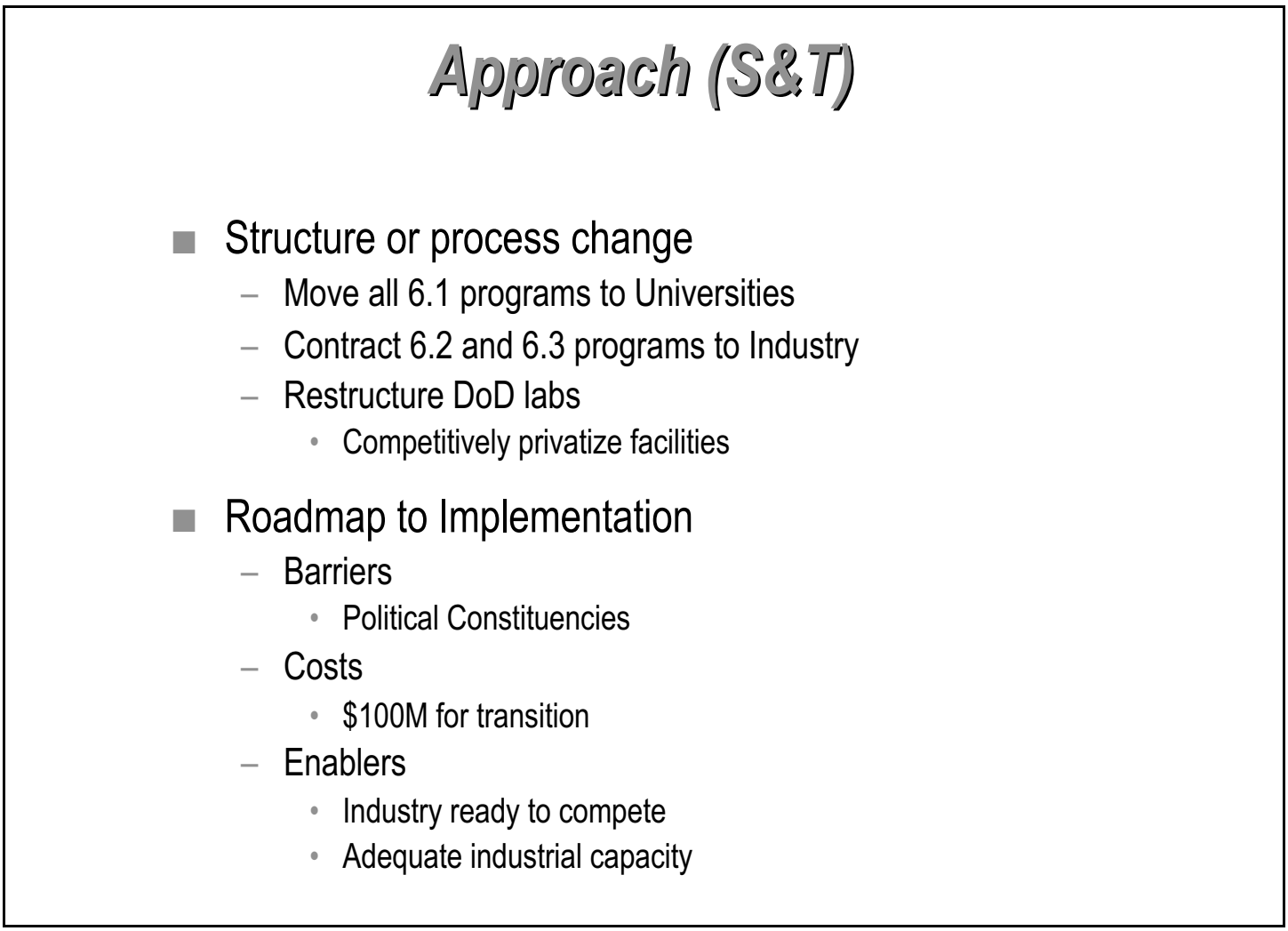


Figure 2-4.4

A combination of structural and process changes are necessary to effect greater efficiencies in the DoD S&T program. The Task Force recommends that DoD outsource much more of the S&T work to universities and industry. Basic research programs (6.1) should be moved from the DoD laboratories to universities. DoD scientists could be assigned to work with the universities in their laboratories on selected programs. This team approach would be beneficial to all concerned. The universities would receive funding to accomplish programs and the research faculty would have meaningful programs to expand the breadth of their research efforts. DoD would have the further benefit of the interaction between DoD and a broader set of world-class university scientists.

The exploratory development (6.2) and the advanced development (6.3) activities should be handled differently. In the case of the 6.2 programs, a few would be moved to universities. However, the majority of those programs and all of the 6.3 programs would be accomplished by industry. It is envisioned that industry would compete for the work. Concurrently, those DoD laboratory facilities which are still required after their programs move to university/industry locations, could be privatized, as discussed earlier for T&E facilities.

It is likely that, through the implementation of free market forces, more efficient and effective use of resources can be obtained. It is expected that through competitive bidding on DoD science and technology projects, cost reductions will be gained as well as elevated performance.
Another alternative is to competitively privatize all DoD S&T laboratories. Following the approach and success of the Naval Air Warfare Center in Indianapolis, it is possible to privatize existing DoD laboratories, reduce costs to the military, and retain a world-class capability.

Realization of these proposed changes will encounter strong resistance politically. Political constituencies will probably fight to maintain these facilities since they provide significant economic benefits and employment to local communities. Additionally, phaseout of DoD laboratories will require some investment costs, immediately increasing the budget demands rather than reducing them. However, some form of competitive privatizing, combined with an emphasis on outsourcing, may prove to be the most politically palatable and cost effective means of reducing S&T. Some DoD S&T performers should be retained within a newly privatized laboratory structure to ensure an oversight capability.

It is quite likely that private industry would compete heavily to obtain the DoD laboratories, particularly if they come fully equipped. As in the Indianapolis example, these facilities will have a short interim period (roughly 5 years) during which they will receive a guaranteed percentage of military research contracts and spending. After this interim period, the facilities would have to behave as any privately owned S&T enterprise and compete for all grants and contracts. It is likely that many of the privatized facilities would not only perform government related work, but will aid in the research and development activities of their parent companies.

Advantages (S&T)

- $600M/yr plus BOS/RPMA cost savings
  - 8% of current level
- People Reductions
  - Military from 2,500 down to 1,000
  - Civilian from 15,000 down to 5,000
- Quality of Life
  - More responsiveness to warfighter needs
    - Current efforts provide excellent foundation
- People Impact
  - Can maintain consistent high quality
- Effectiveness Gained
  - Increased productivity in the S&T program
  - Larger S&T program at lower cost

Figure 2-4.5

The above chart lists the payoff of this privatization and outsourcing approach. The Task Force estimates an annual cost savings of $600 million plus the savings in the Base Operating Support/Real Property Management Accounts (BOS/RPMA). This cost savings estimate is based on the personnel reductions plus efficiency improvements. The initial investment costs of privatizing must be taken from these gross savings to yield the net value of $600M/yr. Through the insertion of free market competitive forces, it will be easier for DoD to maintain a consistent level of high quality S&T workforce. Additionally, competitive bidding can be conducted on all S&T projects in a way that ensures more responsiveness to warfighter needs. It is projected that an overall improvement in effectiveness will be obtained. The DoD laboratory S&T performer base will undergo significant reduction; military personnel reduced to about 1,000 from 2,500 currently and civilian workers reduced to 5,000 from 15,000.

Specifically, this Task Force envisions that, by outsourcing, DoD laboratory staff reductions, and competitive privatizing, increased productivity and a richer S&T program can be obtained at lower cost.

What To Do When (S&T)

- Near Term
  - Develop a plan to begin move to Industry/universities in 1998 (USD-A&T Action): complete by Jan 97
  - Identify the potential benefits and problems
- Intermediate
  - Briefings (USD-A&T Action)
    - Services, OSD staff, SecDef, Congress
  - Monitor implementation (complete by 2002)
  - Organizational Considerations
    - Must maintain viable organization during transition
  - Budget Issues
    - Congress must appropriate funds in different accounts over transition

Figure 2-4.6

As a possible means of implementing such a DoD laboratory restructuring, the Task Force recommends the above course of action. In the near term, DoD should develop a plan to begin transitioning 6.1 research to universities and 6.2 and 6.3 research to private industry in 1998. The plan should be completed by January, 1997. DoD should identify the potential problems and benefits of this action and also examine the effects of privatizing the DoD laboratories, while transferring 6.1 research to universities. The intermediate and longer term goals should be to build support for greater levels of outsourcing and for privatization through a series if briefings to the Services and Agencies, OSD, leadership and Congress. It is important to build support for the likely protracted transition period. A viable organization must be maintained until the transition period is complete in 2002. It is critical that Congress become supportive since there is a need for funds in many different accounts over the transitional period.

3.0 COST REDUCTION ANALYSES OF CENTRAL SUPPORT AREAS

3.1 AUTOMATED DATA PROCESSING

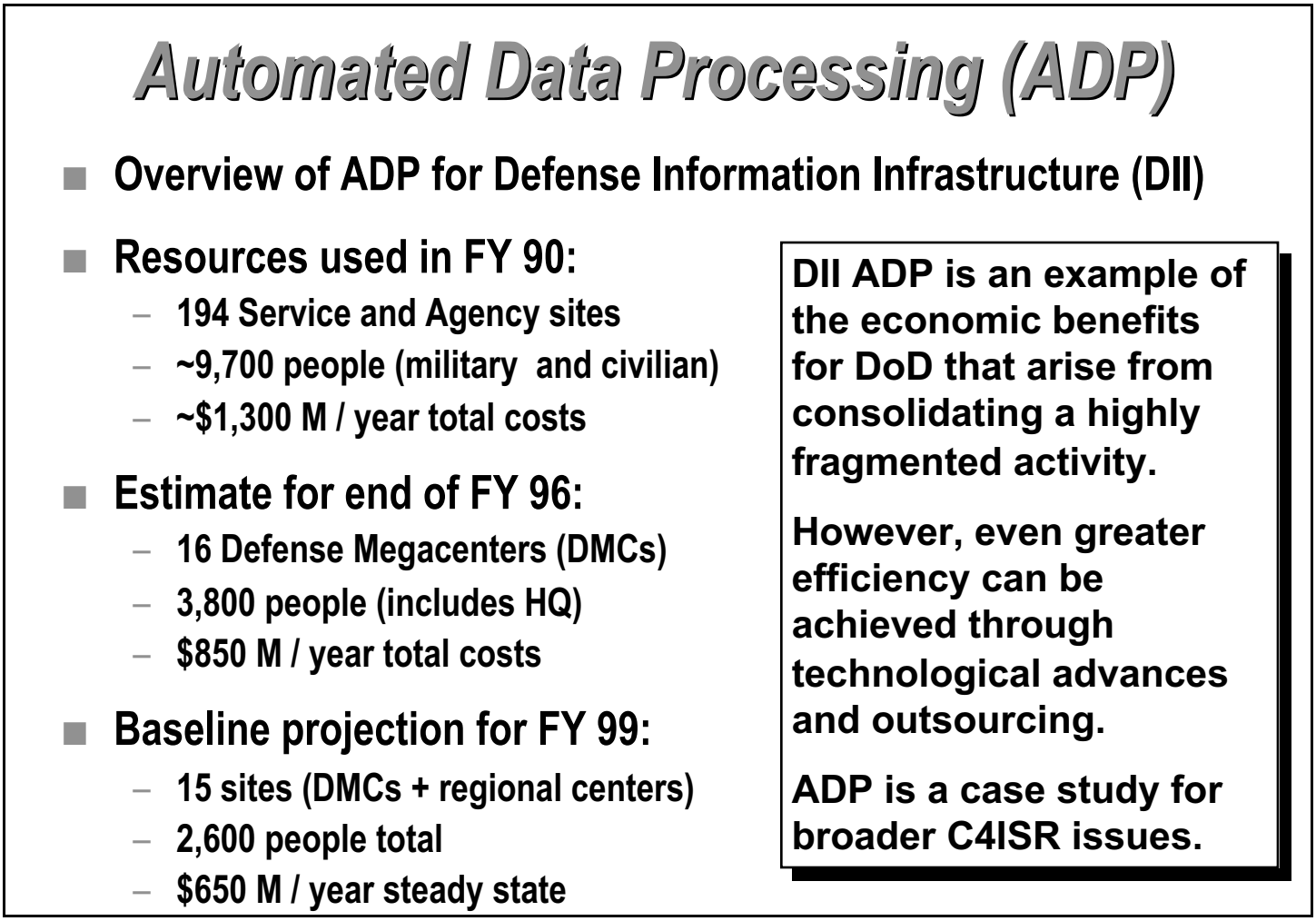


Figure 3-1.1

The DoD has been consolidating its Automated Data Processing (ADP) centers during the past six years. First, DMRD 924 ordered the consolidation of 194 Service and Agency business-oriented Information Technology (IT) facilities and Central Design Activities (CDAs) into 34 ADP centers. Legislative restrictions limited the effort and left 59 active sites. A second consolidation initiative, DMRD 918, transferred these and other Defense Information Infrastructure (DII) assets to the Defense Information Systems Agency (DISA), but the CDAs were later transferred back out. DISA developed and submitted to the BRAC 1993 Commission a plan to consolidate the remaining ADP facilities they managed into a smaller set of Defense Megacenters (DMCs). Since then, 30 BRAC sites and 11 non-BRAC sites have been migrated into 16 DMCs, with 13 BRAC and 1 non-BRAC sites scheduled to be moved by May 1997. DISA did not submit a specific proposal for BRAC 1995, but one host base was recommended for closure, which by itself will bring the number of DMCs down to 15 by FY '99. DISA's stated intention is to further reduce the DMCs "to the lowest number which satisfies the total DoD information processing requirements." Because of the complexity of the process as it has played out, it is

difficult to asses what the total financial impact of the consolidation process has been. This has undoubtedly been exacerbated by the fact that DoD has removed estimated savings of $0.5B/year for operating the mainframe computers from the budgets of the Service and Agency customers, which discourages the customers and DISA from finding and/or reporting dollar savings. The estimated *net* savings from ADP consolidation to DoD through FY "99 is $1.3B.

As significant as the ADP consolidations have been, there is still room for very significant cost savings and performance enhancements for the DII. These gains will come from more efficient use of computer technology, that are best obtained by outsourcing essentially all ADP functions to Contractor-Owned Contractor-Operated (COCO) facilities. This will get DISA out of the business of data processing, and allow it to concentrate on the more important issues of information management, which is where the true military value is added. Of course, there are significant political hurdles to be overcome to pursue this option.

The consolidation of ADP resources achieved by DoD provides an example of what is possible in the broader context of C4ISR, which is highly fragmented and dependent upon a rapidly advancing technology base. Thus, it is an important case history.

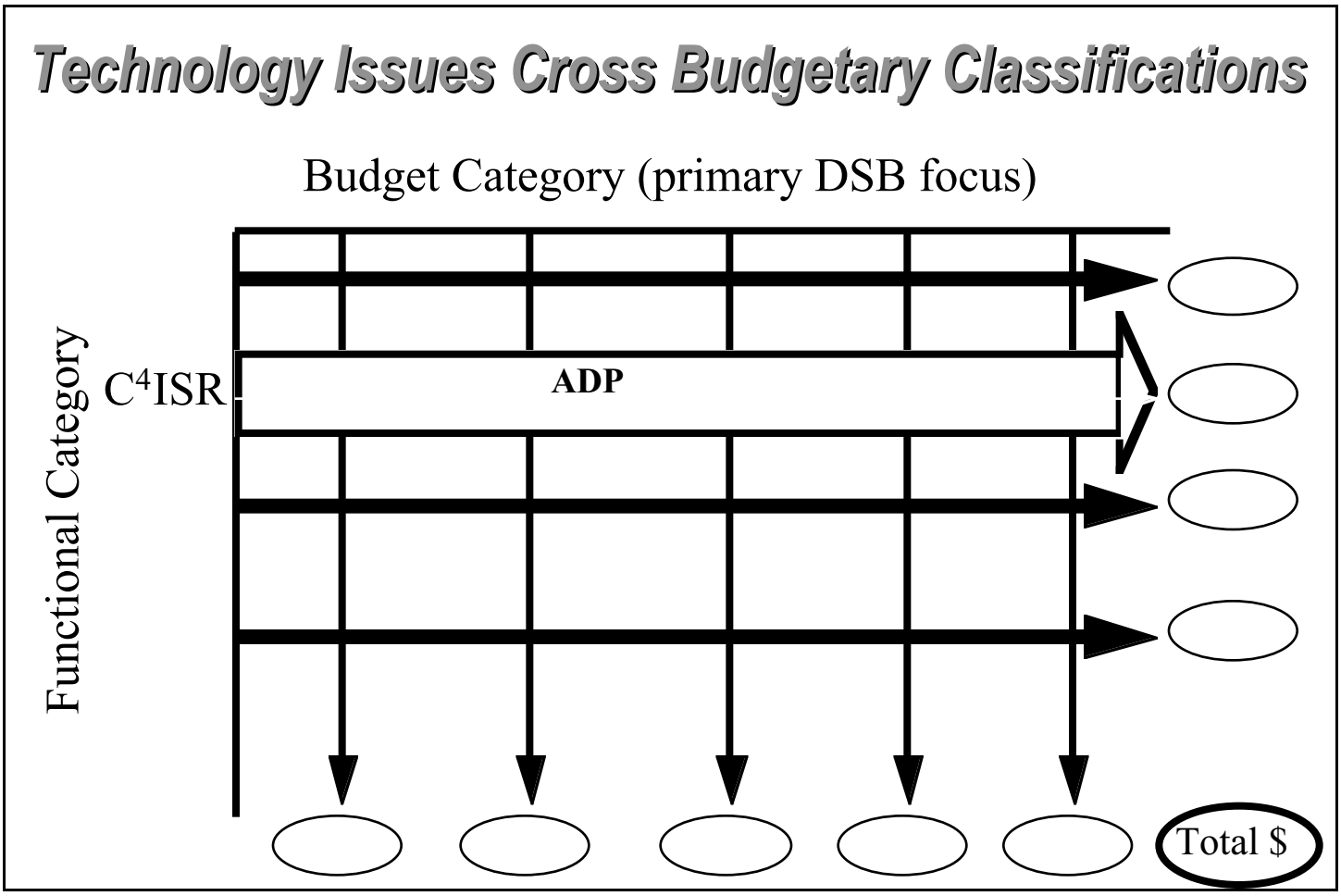


Figure 3-1.2

The focus of this Task Force has been to find economies in the operations of the DoD infrastructure. Most of these studies have followed budget categories, since this is often the easiest way to find out where the money is.

However, the issues of ADP, and more generally C4ISR, cut across the budget categories, and thus it is only possible to identify significant opportunities when examining them as functional categories. There is some risk of double counting the economies available through the budget and functional categories, but given the way this study has been structured any double counting in ADP or C4ISR is small compared to the total economies recommended.

ADP Benchmarking

- **Industry Best Practice for personnel required for ADP services**
  - **~160 FTE / 1000 Million instructions per second (MIPS) capacity***
  - **this benchmark is decreasing rapidly as computers gain capability**
- **DMC performance in FY '96 (projected)**
  - **~300 FTE / 1000 MIPS installed capacity***
- **Industry experience is that ADP inefficiency is mainly due to use of obsolete hardware and legacy software**
  - **DoD requires support of multiple platforms and operating systems**
- **The gap between industry standards and DoD is widening**
  - **DoD acquisition time is longer than the generation cycle of computers**
  - **acquisition procedures delay large hardware purchases**

*According to Coopers & Lybrand report of 9 Feb 96 "Strategy Options for Defense Information Services"

Figure 3-1.3

The data presented above on the best industry practice comes from the February 1996 study by Coopers and Lybrand and have been validated through discussions with the managers of large data processing centers. Because of the rapid increase in computer capability, the number presented as industry best practice should be considered an upper limit and could be as much as a factor of two lower. The fact that the DMCs are so high above this benchmark is probably the result of the fact that they are required to support legacy software and staff of extra personnel to handle the multiple hardware platforms and operating systems.

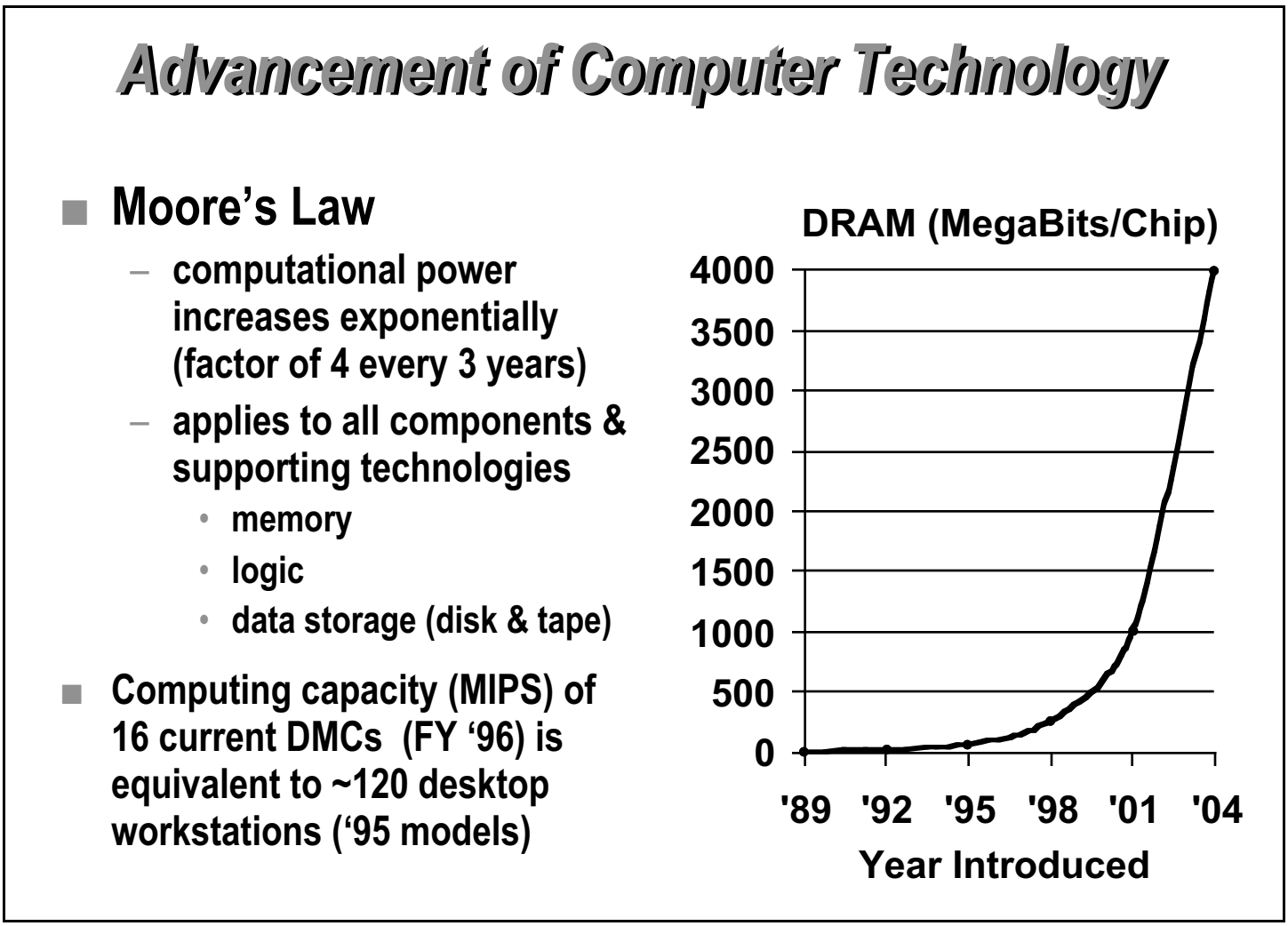


Figure 3-1.4

In order to plan any multi-year activity involving computer technology, one must anticipate the rapid advancements that are still being made in the field. The capabilities of computers and their associated peripherals have been advancing exponentially for the past 25 years. The number of components that can be fabricated on a silicon chip has increased by a factor of four every three years, which is the time required to produce the next generation of chips. This exponential growth rate is now known as Moore's law, after Gordon Moore, one of the founders of Intel. Since silicon manufacturing provides the basis for all the related data processing technologies, such as magnetic disk or tape storage, those areas are improving at the same or even faster rates.

Exponential growth is now a part of the culture of the semiconductor industry, and it has been formalized into a set of goals by the Semiconductor Industry Association (SIA) as a part of the Technology Roadmap. Every chip manufacturer in the world is committed to the Roadmap, since to lag behind its mileposts means bankruptcy. Thus, at least up to the year 2004, anyone planning computer related issues can predict with reasonable confidence the performance capability and even the cost of the hardware that will be required in the future. Especially given the absolute computing capacities that are currently available, any forward looking analysis that does not take Moore's Law into consideration will face total obsolescence within two chip generations. To make this point clear, consider that the computers released in the year 2004 will be about 64 times as powerful as last year's models. Since today's DMC workload in MIPS is the equivalent of about 120 workstation CPUs (1995

model), the entire current computational workload of the DMCs could potentially be performed by a literal handful of CPUs in the year 2004 (although by then the demand for services will be significantly higher and more sophisticated as new applications become available).

Previous Recommendation and DISA Plan

- **Strategy Options for Defense Information Services Coopers & Lybrand report of 9 February 1996**
  - **recommended further consolidation of DMCs to 6 GOCO sites**
  - **found little difference between cost of GOCO and GOGO options**
    - **COCO option was excluded from consideration**
    - **customer satisfaction given high priority over technology flexibility**
- **Defense Computing Services Consolidation, Optimization, and Contracting Plan of 6 June 1996**
  - **keep all 15 facilities remaining after BRAC 95 as GOGO assets**
    - **motivated largely by political constraints and loyalty to DMC staff**
  - **increase workload of DMCs by broadening customer base**
    - **move aggressively to become a large ADP supplier business**
  - **transition DMCs to regional support centers as technology matures**
    - **broaden business base to include consultation and repair services**

Figure 3-1.5

Coopers & Lybrand performed an analysis of the DMCs for DISA, and came to the conclusion that the most cost effective means for further consolidation was to condense the existing DMCs into 6 Government Owned Contractor Operated (GOCO) facilities. However, this analysis explicitly excluded the Contractor Owned Contractor Operated (COCO) option as politically undesirable. The analysis also weighted customer satisfaction very highly and technological flexibility very low. Thus, their study was highly constrained and not able to determine the absolute lowest cost or highest efficiency structures for the DMCs.

The Defense Computing Services Plan demonstrates that DISA has an aggressive and ambitious management staff, since they propose that they compete for the IT and communications services of the entire Federal Government. After retreating and consolidating, DISA now plans to attack and grow. Instead of cutting back the number of DMCs to 6 GOCO facilities, as recommended by Coopers & Lybrand, they propose to keep and operate all their facilities. They would seek further efficiencies and economies by attracting new customers for their ADP services and by gradually converting DMCs to Regional Computing Combat Support Activities

(RCCSAs) as technology advancement decreases the need for mainframe services and increases the need for client-server systems. In short, DISA has submitted a business plan that projects rapid growth and diversification of their information technology (IT) services by replacing ADP activities supported within the Services, Agencies and other branches of the Federal Government and by forming regional client-server support facilities. Given that DISA has successfully managed a significant consolidation of ADP facilities, this may at first seem to be an attractive option. However, it also contains significant risks.

The DISA plan is primarily driven by political motives and the absolute requirement to support the legacy software systems of their customers. Given the starting point of 16 DMCs, the plan to move to a Government Owned Government Operated (GOGO) structure with 9 DMCs and 6 RCCSAs by FY 99 is one of the least attractive options, even though a considerable fraction of the components of this system will be contracted out. When viewed from the standpoints of global cost minimization and efficiency maximization (i.e. in an environment with no political constraints), there are too many DMCs and the RCCSAs would be spread too thinly to effectively provide infrastructure support services to all the sites that will require it.

The plan characterizes COCO or GOCO solutions as "radical outsourcing", and argues that proceeding along these lines would "disrupt current consolidation and optimization efforts, present DoD with a significant and unnecessary political problem with local communities, produce operational risks because of the lack of redundancy and backup, and would cause further hardship to a workforce that has downsized by about 34% over the past two years." However, many of the same arguments can be applied to the DISA plan, since other existing government ADP centers would have to be shut down if their business was moved to the DMCs. The concern for and loyalty to the DISA ADP personnel demonstrated by the carefully crafted Human Resources Strategy in the DISA Plan should be applied to all technical personnel in DoD who face redundancy as a result of downsizing. The costs of these programs should be built into the downsizing effort.

The major technical risk of the DISA plan is driven by the first DMC service requirement, "Customer support for mainframe and legacy applications *as long as it is required*" (emphasis added). Thus, the DMCs will be built upon a foundation based on obsolete computer architectures and customers who demand that their legacy systems be run and have little incentive for replacing those obsolete systems. In fact, there are many IT experts who argue that there is no need for mainframe computers at all for the types of business-related ADP functions performed by the DMCs. Several major data processing enterprises are based entirely on client-server technology. If the requirement to support legacy systems were eliminated and the entire ADP infrastructure were replaced with modern equipment, DoD would recover on the order of $100M per year over five years in ADP costs with an initial investment of less than $100M and continuous system upgrades.

The rationale for creating the RCCSAs is primarily to maintain facilities and staffing. The existing DMC staff would be poorly suited to the consulting, maintenance and repair roles envisioned for the RCCSAs, and thus would require a significant amount of retraining, as discussed in the DISA plan. In addition, there would be too few sites and too few people to provide the services required. This is a case of centralizing an essentially non-governmental function, as recognized by the plan, that should be distributed.

Suggested Approach for ADP Consolidation

- **Outsource ADP to 4-6 Contractor-Owned Facilities (COCO)**
  - at least 2 vendors obtain contracts to guarantee competition
  - negotiate contracts to ensure that state of the art facilities are maintained and prices reflect contractor efficiency improvements
  - after transition, savings of additional $250M / year are possible
- **Roadmap to COCO implementation**
  - barriers
    - political acceptance - the major obstacle
    - legacy software & operating systems
  - costs
    - replacement of legacy software and new hardware purchases
    - provide support and relocation services to redundant personnel
  - enablers
    - charge actual costs for legacy systems and phase out obsolete hardware
    - retain some savings for efficiency investments and customer incentives

Figure 3-1.6

One alternative option, considered in the absence of political constraints, is to fully outsource the DISA ADP activities to 4-6 COCO facilities managed by at least two different vendors, and for DISA to retain only those functions that are militarily essential, such as proper collection of data, distribution and analysis of results, and supervision of the vendors and their contracts. The Task Force proposes that DISA retain only the core of the military value added to the process, which is information management, and contract out the business of data processing.

DISA needs to have a carrot and stick approach for eliminating legacy systems: offer financial assistance (customer incentives) to help acquire whenever possible or develop only when necessary new and highly optimized applications, charge penalties for running applications that require obsolete hardware or operating systems, and impose a deadline for the elimination of obsolete systems. The latter two incentives are probably more easily imposed by COCO facilities than by DISA GOGO centers. In general, the COCO option provides the maximum flexibility with the smallest technical risk, since it is up to the contractors to provide the optimum mix of computing platforms to provide the services required. Thus, DISA concentrates its efforts on managing information and contracts, rather than on becoming a huge IT corporation.

In terms of regional support centers, DISAs role should be to choose the common operating environment and communications protocols, that are nearly universally standardized now anyway, and allow each location to contract locally with the best commercial support available, as is the present practice in industry (even among computer companies).

In the analysis of information technology outsourcing recently published by the Harvard Business School, "Corporate Information Systems Management, The Issues Facing Senior Executives, Fourth Edition," the activities supported by the DMCs, i.e. standard and repetitive services, are deemed to be best supported by outsourcing, which will provide access to higher IT professionalism and current technology while reducing the risks of adopting inappropriate IT architecture and maintaining idle capacity. Thus, the COCO option appears to be the best overall when considering only economy and efficiency of operation.

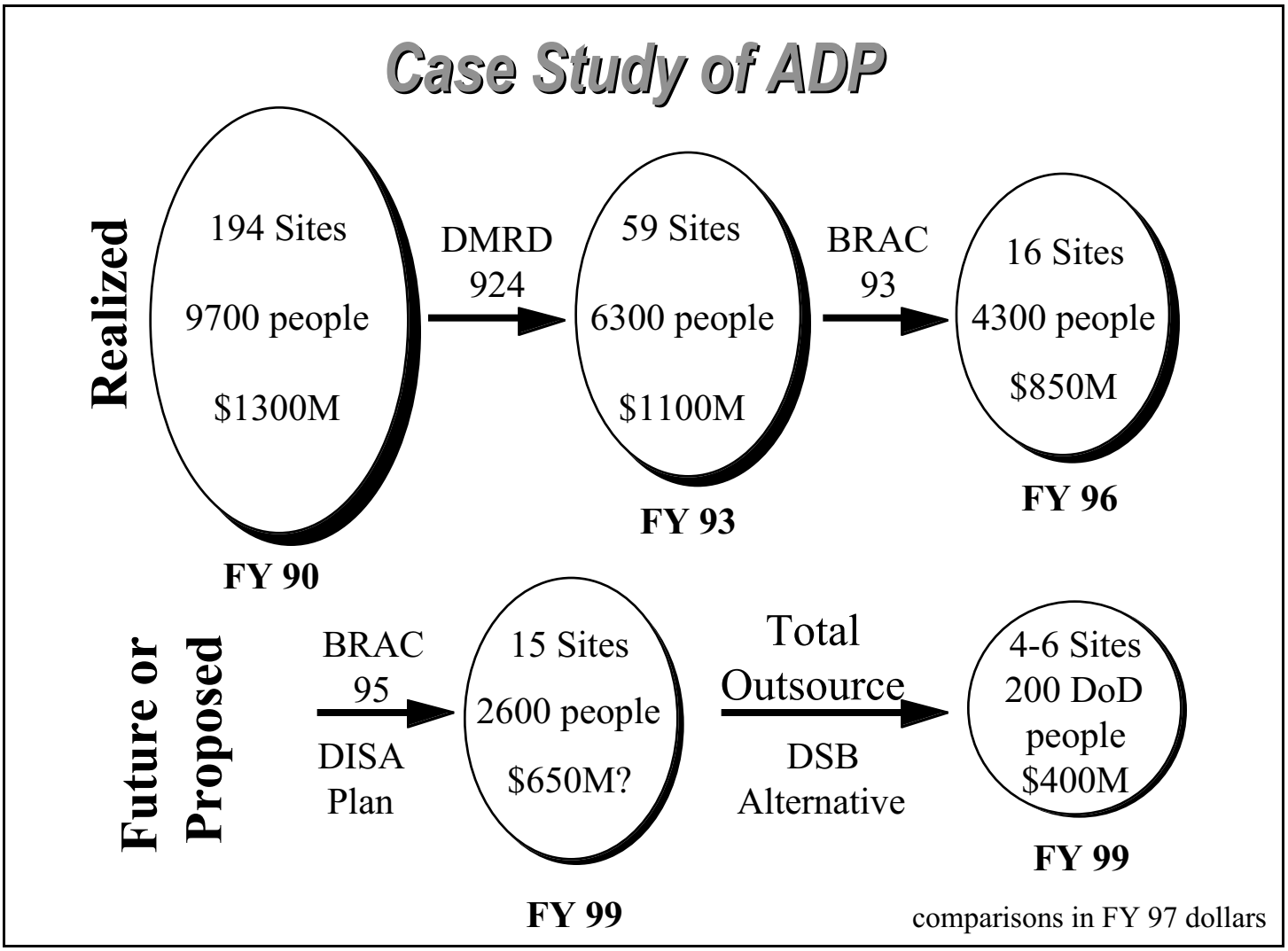


Figure 3-1.7

This is a visual representation of the economies that have been realized to date in ADP for DII and the potential savings that are still available in the future. The numbers presented are estimates based on data provided by several different sources, and there is a significant uncertainty in their values given the fact that the ADP enterprise has undergone such rapid change. They should only be used to indicate trends and the general size of

the economies involved. In cases where numbers from different sources were significantly different, the more conservative estimate was used. In particular, the figure of $850M used for FY 1996 is not just the cost of operating and maintaining the mainframe computers but also includes the cost of the supervising headquarters operation, the costs for moving the equipment and personnel to the DMC sites, and costs associated with downsizing the workforce, as presented in the 9 February 1996 report by Coopers & Lybrand, "Strategy Options for Defense Information Services." The baseline projection for 1999 also uses the numbers from the Coopers & Lybrand report. The DISA plan for further consolidation would redirect the functions of some of the DMCs to regional support centers, but even with additional work that will be accomplished, the costs of redirection will be significant and thus the number of $650 M for the total enterprise is still reasonable. The cost of the outsourcing initiative proposed includes $100M for downsizing costs and $50M for customer incentives. Thus, after the transition period for this plan, the steady state costs are estimated to be $300 M per year for the COCO plan compared to the baseline cost of $650 M per year to support 15 centers of one sort or another. Of course, the workload of the two proposals may be significantly different.

3.2 COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (C⁴ISR)

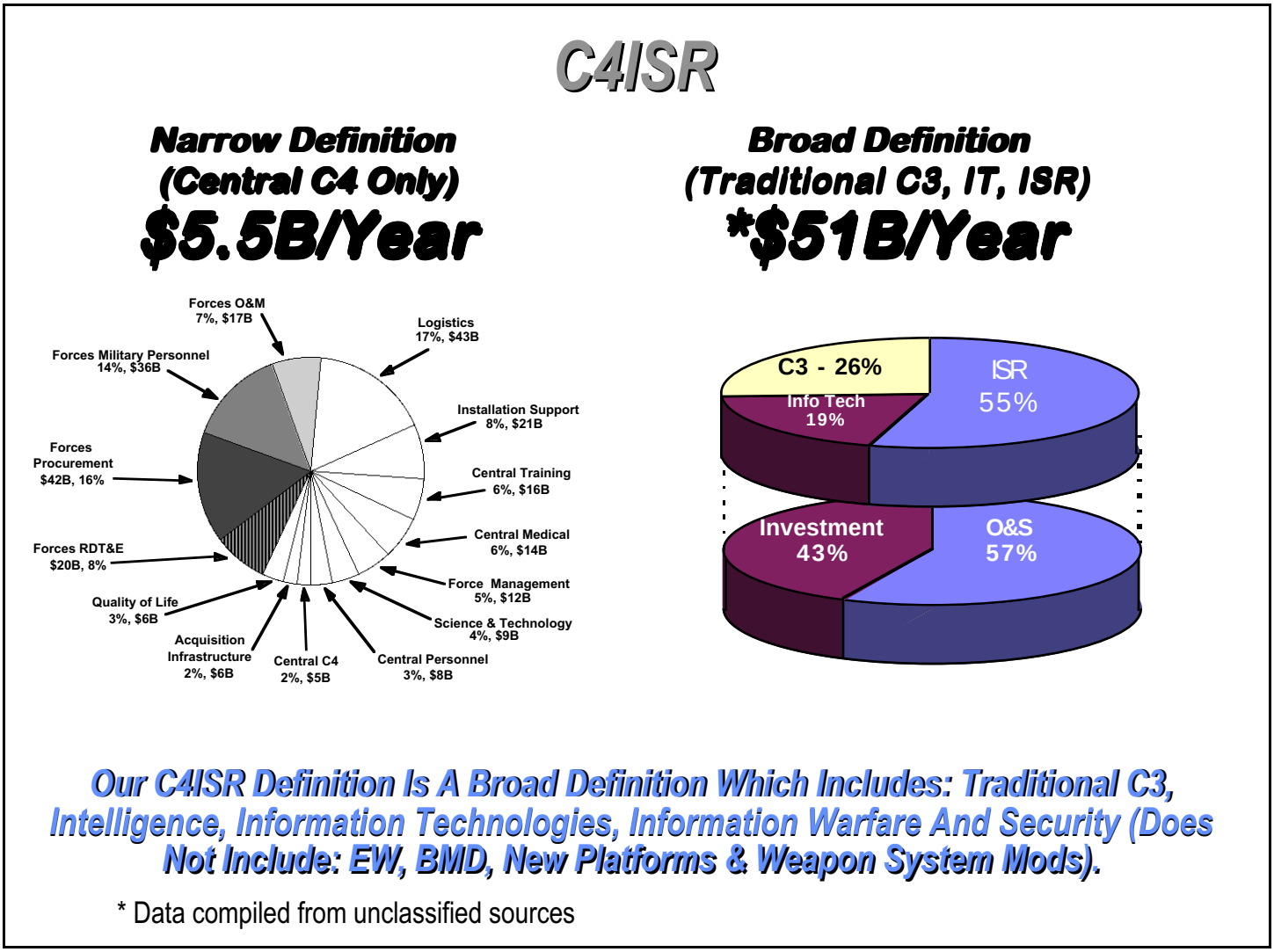


Figure 3-2.1

C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance) is one of the largest and fastest growing areas of the DoD budget. It is an area that is constantly evolving from C2 through a long stream of iterations (C3/C3I/BMC3/C4/BMC4I) to its present form of C4ISR which is prominently featured in most of the new and emerging doctrines and concepts. These doctrines and concepts include: CJCS' Joint Vision 2010, USAF's Global Reach Global Power Doctrine, USA's Force XXI Doctrine and Digitization Of The Battlefield Initiative, USN's Forward From The Sea Doctrine, USMC's Sea Dragon, and this year's DSB Summer Study on Tactics and Technology For 21st Century Military Superiority. All of these documents incorporate a rather broad definition of C4I. For the purposes of this report, this Task Force has accepted a broad definition which includes: traditional C3 (Central C3, Tactical C3, Strategic C3 and Surveillance), information technologies (Computers, Information Systems and Information Technology), and traditional intelligence Programs (Joint Military Intelligence Programs, Tactical Intelligence And Related Activities,

National Foreign Intelligence Programs, and Security). As shown by the chart, PA&E shows the Central C4 budget as $5.5B/year but acknowledges that the bulk of the C4ISR programs are "buried" in other line items. Upon further analysis by OSD/C3I, the actual number is closer to $51B/year [*]. 43% of C4ISR budget is in the investment account and 57% is in O&S accounts.

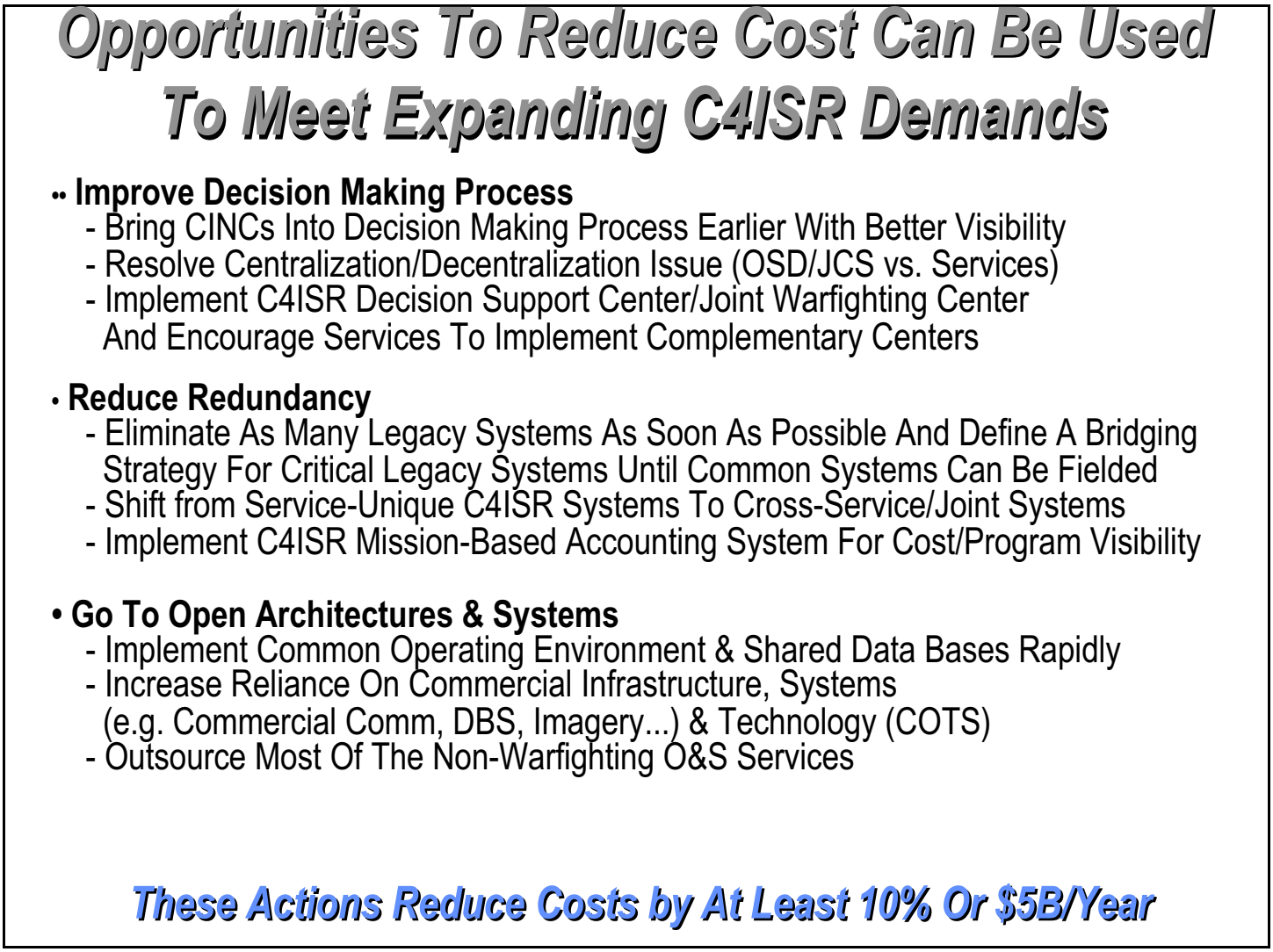


Figure 3-2.2

It is recognized throughout the C4ISR community that future planning does not match visionary rhetoric. As currently planned, C4ISR is projected to decrease 5% over the FYDP while most experts believe that this area should increase by over 5% per year. Consequently, the shortfall could be as much as $80B over the FYDP. The

Task Force believes that C4ISR community needs to invest more but may not need more money. By improving decision making processes, reducing redundancy, and going to open and common architectures, DoD can save a minimum of 10% or $5B which can be reinvested to cover any potential shortfalls or invested in the transition from legacy to open systems.

[*] Data compiled from unclassified sources

In the decision making area, this Task Force believes that the SecDef should focus on: matching requirements to planning (the C4ISR community feels that these are badly out of sync), bringing CINCs into decision making process earlier with better visibility (the CINCs are the ultimate user and have ultimate accountability), resolving centralization/decentralization issues (providing clearer responsibilities for OSD, JCS, CINCs, new CIOs, C4I executive agents, and Services), implementing C4ISR Decision Support Center/Joint Warfighting Center ($150M is planned) and encouraging Services to implement their C4I centers to OSD/JCS Centers.

Regarding open and common architectures and systems, the Task Force believes that DoD would be best served by increased reliance on commercial architectures, systems, technology and services. In the computers (information technologies) and communications areas, the commercial world is progressing at a rate that far exceeds DoD and is often an order of magnitude less expensive.

3.3 ADMINISTRATION/FINANCE/HEADQUARTERS FUNCTIONS

Administration/Finance/Headquarters

- Description
  - Activities that furnish funding, equipment, and personnel for the management of the defense forces
    - Finance
    - Personnel
    - Headquarters
  - Supervisor Ratio (Dept wide)
- Resources Used Today
  - Infrastructure (# people x 000)

Function	# Mil	# Civ	# TTL	($)	% Total	
Finance/Hq	57	63	120	(13.9B)	11%	(12%)
Personnel	71	12	83	(8.1B)	7%	(7%)
...	. .	. .				
...	. .	. .				
Total	640	499	1,139	(113.8B)	100%	(100%)

  - Supervisory Ratio - Civilian - 1/8

Figure 3-3.1

This Task Force studied:

- •. Department-wide administration infrastructure which includes program elements that resource departmental headquarters, management of international programs, NATO infrastructure, support to other defense organizations and federal government agencies, security investigative services, support of service acquisition executives (includes DFAC), industrial services, security and audit programs, public affairs activities, and criminal and judicial activities.

- •. Management/operational headquarters infrastructure which includes program elements that resource the management and operational headquarters for both force elements and joint planning activities. For example, the management headquarters for the DoD CINCs are included in this category. Furthermore, Service Commands directly related to force operations and planning, such as Navy's Anti-Submarine Warfare Command, are included in this category.

- Geophysical Aids infrastructure which includes program elements that resource weather and meteorological activities. This category includes resources associated with the Weather Service for the Navy and Air Force, the Defense Meteorological Satellite Program, oceanographic services and other related elements.

- Central personnel infrastructure which consists of programs that provide funding, equipment, and personnel to support military personnel. These programs provide for acquisition of new personnel, dependent support activities, PCS costs, personnel in transit, general personnel management, and the management and base support of personnel activities.

DoD is the largest federal agency employer with a workforce of more than 3.3 million active and reserve military and civilian personnel in FY95. DoD's civilian component represents approximately ~36% of the Department's total active force, up from ~34% in FY86. The Task Force is concerned that the active military force was reduced by ~30% between FY 1986 and FY 1995 while the civilian force was reduced by only ~22%. Presumably, active military personnel are far more likely to be in the "combat capability" portion of the DoD resource allocation equation than civilian personnel.

OSD/PA&E has reported infrastructure military and civilian personnel levels effective FY97 through FY01. The number of personnel working in the areas of Central Administration (personnel), Finance, and Headquarters represents 18% of the total infrastructure sector, and thus merits an in-depth look for changes that could be implemented with a shift in DoD's approach to management consistent with that currently in use by world class private sector organizations.

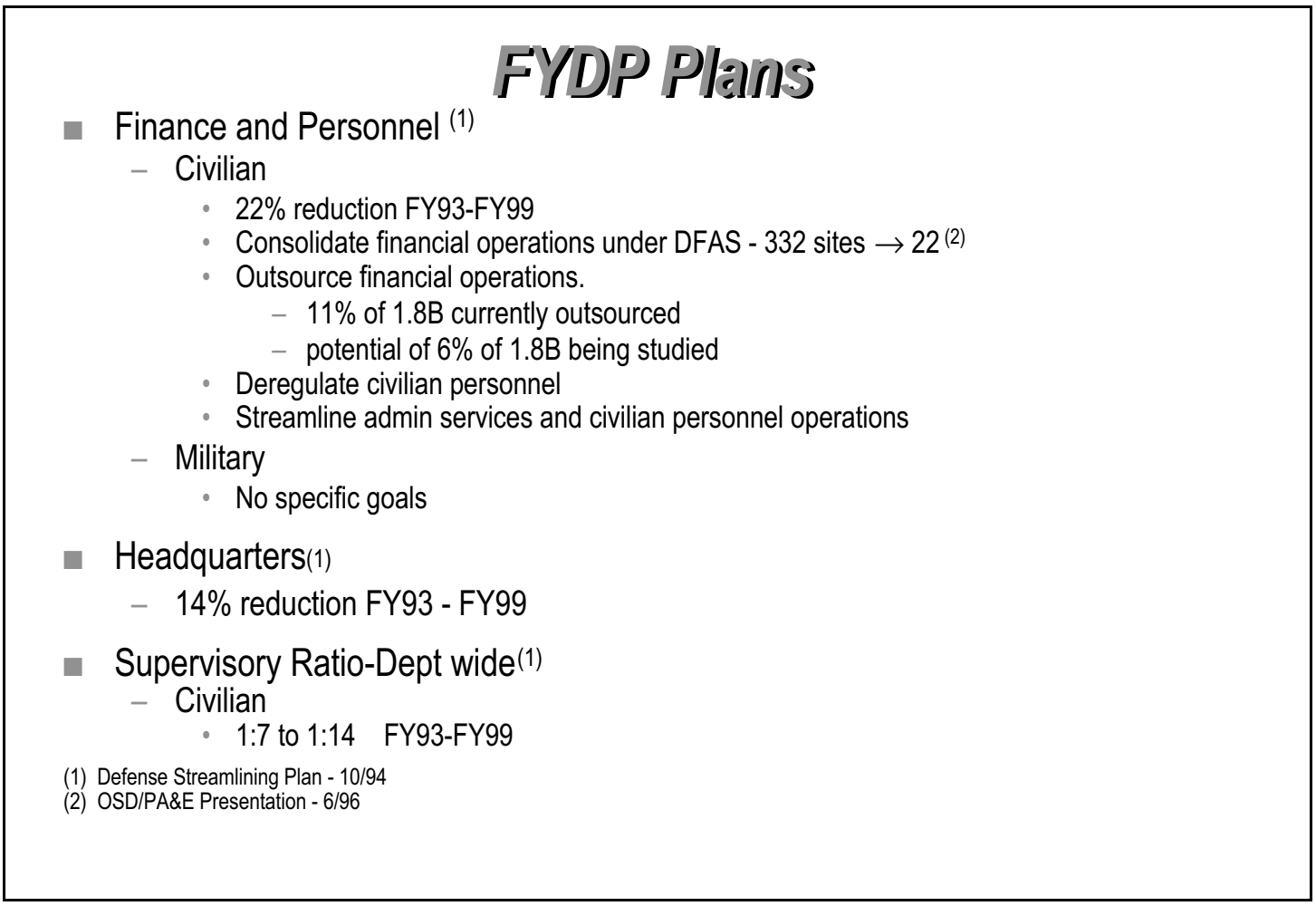


Figure 3-3.2

The President's memorandum of September 11, 1993, "Streamlining the Bureaucracy," directs that each executive department and agency prepare a streamlining plan consistent with National Performance Review (NPR) recommendations. The Department submitted its initial streamlining plan to the Office of Management and Budget (OMB) in January of 1994. On August 19, the OMB directed that each agency submit an updated streamlining plan in support of their FY 1996 budget requests.

The Defense Streamlining Plan, published October 1994, describes strategies, initiatives, and goals for streamlining the DoD bureaucracy and accomplishing NPR objectives. This plan provides an overview of the Defense establishment and establishes an order of magnitude for the size of DoD's workforce in FY 1993.

- Over 3.7 million military and civilian personnel
- Over 984,000 civilians, including:
    - Over 931,000 direct hire (the focus for NPR reductions)
    - Plus 53,000 indirect hire foreign nationals

The plan describes the Department's ongoing process to rightsize its workforce based on mission and workload. The plan discusses DoD's primary avenues for achieving savings in civilian personnel and DoD infrastructure costs: outsourcing, consolidation, and better business practices. It also identifies ongoing initiatives applicable to each strategy area such as business process re-engineering, corporate information management initiatives, benchmarking, reinvention laboratories, regulatory reform, and implementation of the Government Performance and Results Act. Specific goals for workforce savings through FY 99 include:

- Programmed reductions in direct hire civilians between FY 1993-99 of 22% (or 208,000);
- Programmed reductions in primary areas between FY 1993-99, as follows:
    - Supervisory ratios (from 1:7 to 1:14) - assumes civilian only;
    - Management headquarters/headquarters support (-14% or 8,500 spaces) - both military and civilian;
    - No specific goals for reducing officer to enlisted ratios;
    - High grade GS-14 and above (-3,700 by the end of FY95 with plans to do more through FY 1999); and
    - Primary occupation groups—i.e., finance, personnel, and procurement (reduction rates equal to overall
    - DoD reduction—i.e., 22% between FY 93-99).

The plan discusses DoD's experience using primary personnel downsizing tools—i.e., hiring freeze, early retirement authorities, buyouts, and involuntary separations (RIFs) and identifies potential impediments, in and outside of the Department, to fully implement objectives.

The specific, year-by-year goals and actual drawdown levels achieved were shown earlier on page I-29. The Task Force found relatively small planned reductions in Department-wide administration and headquarters (62,639—> 58,311) and central personnel (11,613 —> 11,490). Also, the 1994 Streamlining Plan calls for a supervisor ratio by FY97 of 1:10. The current rate at the end of FY96 is 1:8.

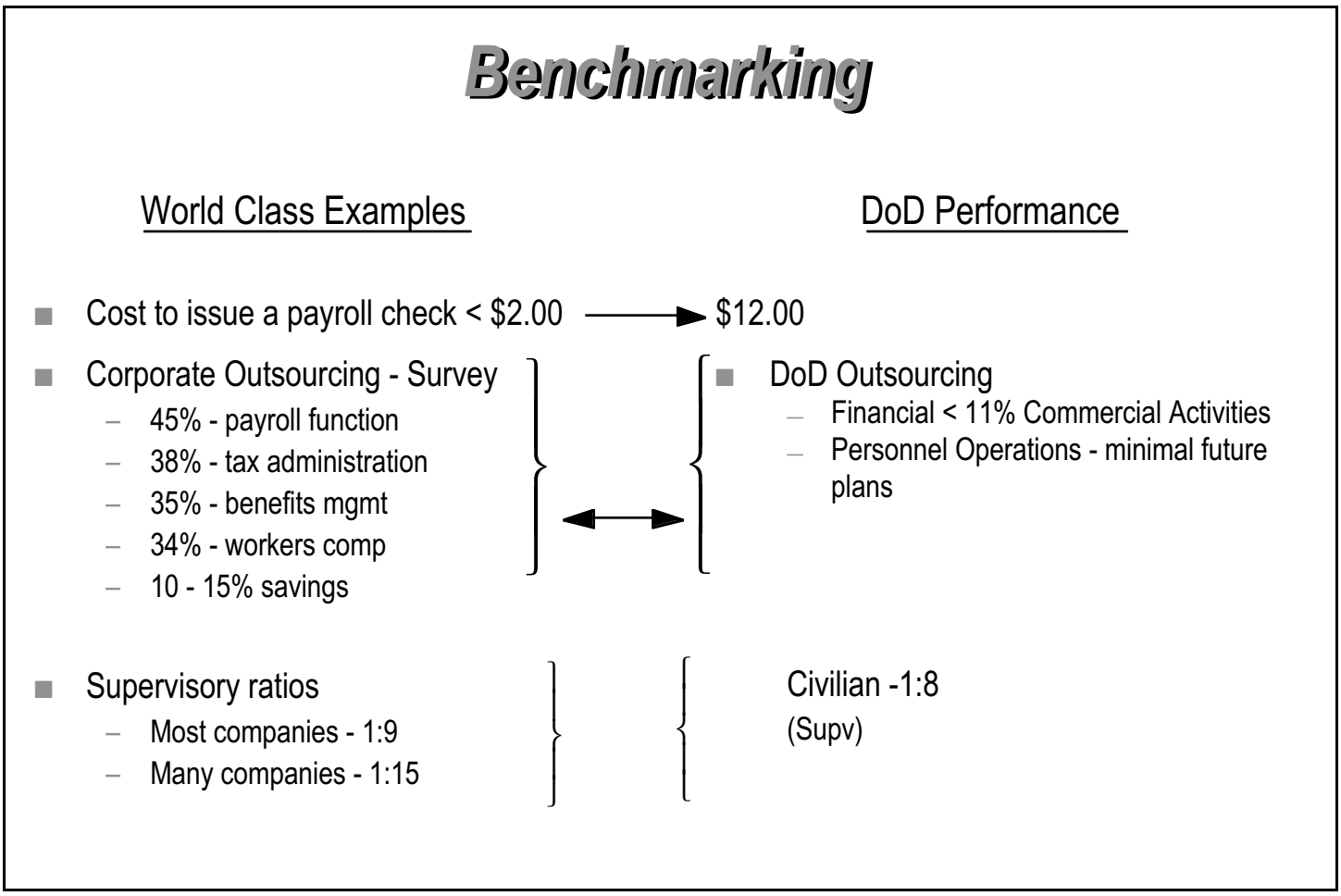


Figure 3-3.3

Outsourcing: The DSB Task Force on Outsourcing and Privatization has performed an exhaustive study and has provided recommendations to OSD. These results are given in their April, 1996 final report. Some of their findings are reiterated here:

"Outsourcing" refers to the transfer of a support function traditionally performed by an in-house organization to an outside service provider. Outsourcing occurs in both the public and private sectors. While the outsourcing firm or government organization continues to provide appropriate oversight, the vendor is typically granted extensive flexibility regarding how the work is performed. In successful outsourcing arrangements, the vendor utilizes new technologies and business practices to improve service delivery and/or reduce support costs. Vendors are usually selected as the result of a competition among qualified bidders."

U.S. industry regards outsourcing as an effective response to competitive pressures. A growing share of major U.S. and international companies outsource a broad range of support functions. For example, a 1994 study of 100 *Fortune 500* corporations indicates that 77 percent of the firms studied had already outsourced or were in the process of outsourcing some aspect of their business support services. Business support service include back office operations such as records management, mailroom and copy center operations.

There is a strong industry trend toward outsourcing business functions and processes, rather than narrow functions or tasks. This approach streamlines contract management and oversight, encourages greater synergy between outsourced activities, and provides senior executives with greater control and accountability over outsourced functions. The contracting out of specific tasks or small groups of tasks represents a sub-optimal approach to outsourcing, as it results in higher oversight costs, reduced executive control, and poor coordination among support functions

The Outsourcing Institute is a private, non-profit research organization that analyzes outsourcing trends and outcomes, and provides advice to firms and other organizations considering the outsourcing of major business functions. According to the Outsourcing Institute, U.S. firms will spend an estimated $100 billion for outsourced services in 1996, saving an estimated 10 to 15 percent of total function costs.

It is important to note that potential outsourcing savings (based on empirical results from the government outsourcing to date) are significantly higher in government organizations than the private sector. This differential reflects the relative efficiency of in-house support organizations in the private sector, as compared to their government counterparts.

The private sector initially viewed outsourcing primarily as a tool for reducing support costs. However, as companies have become more experienced with outsourcing, they have developed a broader view of its benefits. These benefits include the opportunity to concentrate resources on core capabilities, greater access to innovative technologies and business practices, and improved service quality and responsiveness.

Business services is an area in which outsourcing is making a prominent impact. Business services range from general administrative and "back room" support to facility management and benefits administration. While firms have for many years outsourced portions of such support functions, this outsourcing was usually performed at the task level by outside consultants or small, specialized firms. Increasingly, however, pressures to reduce administrative costs and increase flexibility are encouraging firms to look to providers of a broad range of services not only to perform specific tasks, but to manage and integrate these activities.

Supervisor Ratios: American industry has historically patterned its organization after the hierarchical model of the military, with many layers of command, and relatively small spans of control. This model worked

reasonably well until faced with global competition. During the late 1970s and 1980s, American industry found itself behind the power curve in global competition due to its bureaucracy and non-agility. Survival required paradigm changes in organization and personnel empowerment. "Redefining the Middle Manager," 1995, reports that span of control has increased 50% across industries in their study. In 1991, over half of the companies reported spans of control of less than six employees. By 1995, over half had increased span of control in excess of 1:9 with many achieving up to 1:15.

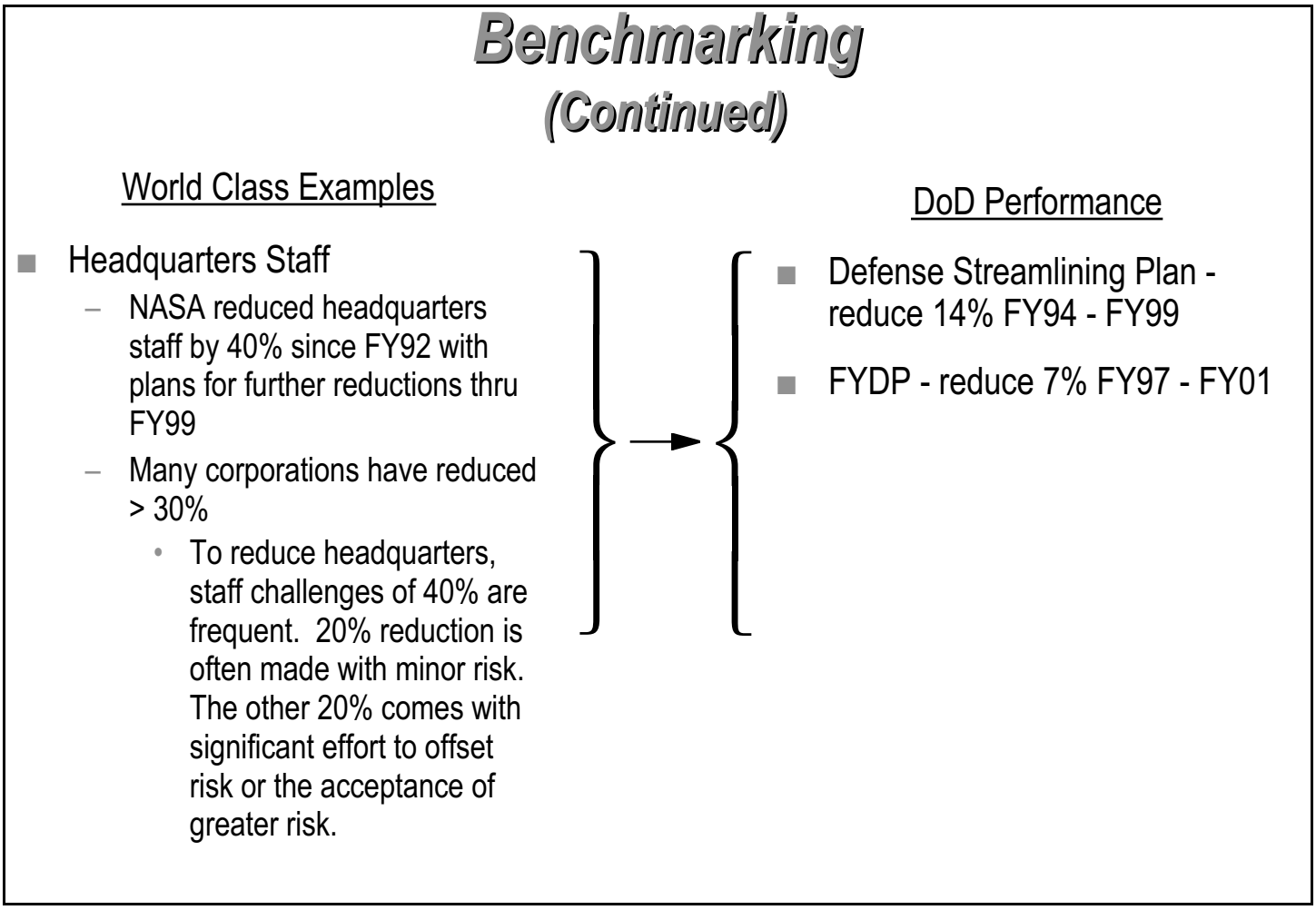


Figure 3-3.4

Headquarters Staff: NASA official, Michael I. Mott, Associate Deputy Administrator (Technical), reports that Headquarters has reduced its staff from 2400 in FY92 to 1400 in FY96 with plans for additional reduction to 900 by FY99. Accompanying reduction in budget estimates from FY94 through FY00 is 10%.

McKinsey & Co. Inc., has studied the subject of corporate headquarter size for some time. They have found that there really is no correlation between the size of a corporations headquarters and its degree of success. There are very successful companies who have large headquarters and there are very successful companies who have small headquarters and the same for unsuccessful companies. However, they also found that when a company decided to reduce its headquarters, challenges by top management of 40% are frequent. 20% reduction is often made with minor risk. The other 20% comes with significant effort to offset risk or the acceptance of greater risk.

Suggested Approach

- Structure or Process Change
  - Outsourcing of most DFAS functions
    - Broad financial/accounting functions, e.g., payroll
    - Successful bidder define the most economical process
  - Outsource many administrative and personnel functions such as
    - Library
    - Personnel
    - Travel
    - Security Clearances/Investigations
  - Change hierarchical organization
    - Project accountability
    - Use of cross discipline teams
    - People empowerment, etc., Resulting in fewer organization levels and increased span of control
  - Force change in Headquarters
    - Directed change
    - Reengineered processes
    - Transfer accountability to lower organization levels
  - Develop a win/win personnel reduction plan
    - Incentivized voluntary retirement
    - Buyouts
    - Re-employment assistance
    - Minimize RIFs

Figure 3-3.5

Roadmap to Implementation

- Barriers
  - Lack of policy statement that the private sector is the preferred provider of support services
  - A-76
  - Lack of a comprehensive win/win severance plan
  - Lack of defined process for eliminating functions and delegating accountability in headquarters
  - multiplicity of reports required of Headquarters by Congress/other Gov't agencies
- Costs
  - Severance cost for win/win personnel reduction plan. Actual dollars TBD
- Enablers
  - Top down policy decisions to "get out of the business"
  - A-76 waivers/exemptions - outsource broad functions
  - Aggressive action to eliminate statutory/institutional barriers
  - Top down directions to change org hierarchy; reduce org levels and reduce supervisor ratios
  - Sunset requirements for congressional reports

Figure 3-3.6

The Task Force recommends that the Secretary of Defense reiterate in a formal policy statement that the private sector is the preferred provider of support services to DoD. The Secretary should stress that all non-combat support services must be considered for outsourcing, except those functions that are inherently governmental or for which no adequate and competitive private sector capability exists or can be expected to be established, given procurement opportunities. The Secretary should also emphasize these principles in his public statements.

There is little rationale for DoD to maintain most of the internal organizations established to perform many support services. Private vendors can easily provide such services such as payroll, accounting, benefits, document control and security, and printing usually at lower cost and with superior quality.

The Task Force recommends that DoD initiate business case analyses on these and similar support functions to identify those services that could be transferred immediately to the private sector. Although OSD/PA&E reports that consolidation and cutting of central personnel programs is very promising, the 1997-2001 FYDP incorporates few plans for reduction of personnel even while consolidation is taking place (~1%).

The Secretary should then establish a DoD-wide policy aimed at re-engineering its operations to "get out of the business" of performing such functions. Senior DoD officials should expedite the outsourcing process by waiving the requirement to perform A-76 public/private cost comparisons. The Department should also work closely with Congressional leaders to eliminate statutory barriers to contracting out these functions.

The Defense Finance and Accounting Service (DFAS) performs DoD-wide accounting, payroll, travel reimbursement, invoicing, debt management, and other support functions. DFAS has a FY96 operating budget of $1.8 Billion and a staff of 25,000. Since such functions are routinely performed in the private sector by a range of outside vendors, the Task Force believes that DoD should move immediately to outsource as many of these functions as possible. Unfortunately, most finance and accounting functions are not fully consolidated in DFAS; for example, bill paying actions originate in the Services, are processed by DFAS, and are forwarded to DISA for further manipulation. In order to achieve the full benefits of outsourcing, DoD must work with vendors to consolidate these fragmented processes.

The Task Force proposes a dramatic departure from the current reliance on A-76. DoD should reverse the current presumption in favor of organic support; vendors should provide all support unless there are compelling reasons for the workload to remain in-house. DoD and the Military Services should take full advantage of existing waivers and exemptions to avoid time-consuming public/private competitions imposed by A-76 in cases where this doesn't make economic sense. To date, DoD has never exercised its waiver authority or claimed a national defense exemption as permitted by existing A-76 rules. For some support functions, the Task Force also believes that DoD can avoid A-76 jurisdiction by making DoD-side policy decisions to "get out of the business" of performing such services. For example, DLA successfully used this approach to transfer the pharmaceutical warehousing and distribution functions to vendors.

There is little rational to retain the classic military organizational hierarchy. Industry has demonstrated the use of Integrated Product Teams, people empowerment through flatter organizations and higher employee to supervisor ratios not only reduces costs but in bringing product to the market faster with higher quality. DoD has embraced this concept for civilian personnel in their "Defense Streamlining Plan," but is slow in implementation (at least 1 year behind goals).

DoD must take aggressive action to reduce civilian personnel levels and to increase the employee to supervisor ratios in order to meet the cost reductions recommended by this Task Force. The DoD Office of Personnel and Readiness reports that the current civilian supervisor ratio is 1:8. This is an improvement from FY94 ratio of 1:7. However, at the current rate, DoD will only achieve a 9:1 supervisor ratio by FY-01. A supervisor ratio of 14:1 by FY01 would have a significant cost benefit.

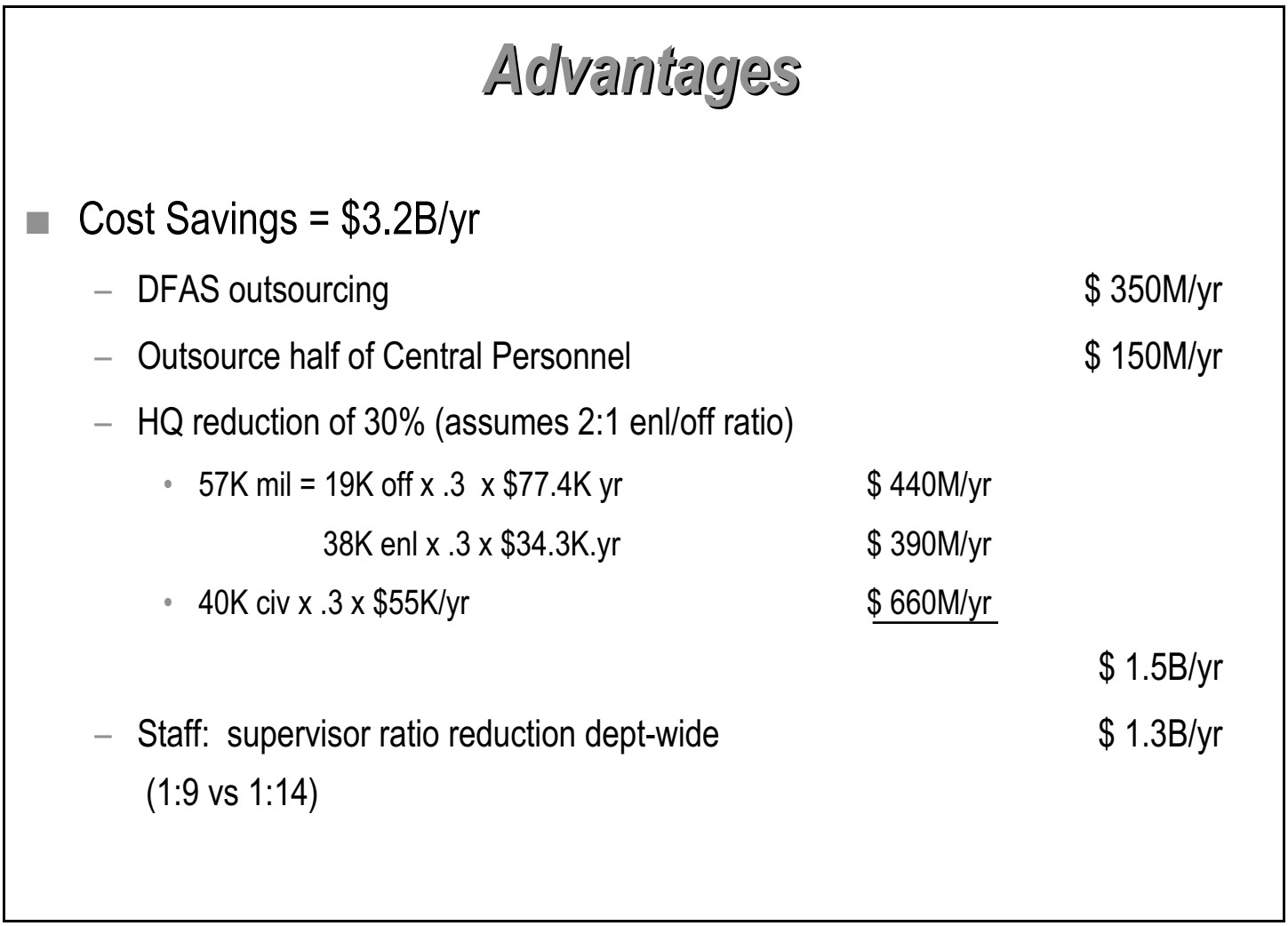


Figure 3-3.7

The Task Force sees significant advantages in its approaches to reducing cost while enhancing performance in administration, finance, and headquarters functions:

- Cost reductions of $3.2B per year can be achieved in this area. The specific cost reduction estimates are based on the following:

- Competitive outsourcing of the functions of the Defense Finance and Accounting Service whose budget is $1.8B. An in-depth look at DFAS (based on the DSB 1996 Task Force Study) reveals that over 50% of the work currently performed by DFAS can be outsourced with an expected 40% reduction in costs. This leads to a cost reduction of $350M which could be realized.

- DoD is centralizing civilian personnel office functions. Many of these functions could be outsourced. Assuming that 60% of the current Central Personnel functions performed by civilian personnel can be outsourced with at least a 40% reduction in costs, $150M/year reduction could be realized.

- Defense headquarters have remained proportionately less subject to reductions than the rest of the department. DoD headquarters costs (as reported by an IDA study, May 1996) has increased by

170% between FY 85 and FY 95. DoD has programmed a 14% reduction in headquarters over 6 years. (93-99). NASA reduced its headquarters 40% in 4 years (FY 92 - FY 96). A similar reduction in DoD can be achieved by an additional 30% reduction by FY99, yielding an overall cumulative reduction of 40%. By eliminating the pay and benefits for these personnel, costs can be reduced by 1.5B per year. Civilian buyout costs could be $150M over 3 years; military would simply not be replaced upon departure.

- Current projection of progress in achieving civilian supervisor ratio would forecast an outcome of 1:9 in FY 01. Accelerating to meet the objective of the Streamlining Plan of 1:14 would result in a reduction of $1.2B over the current FYDP.

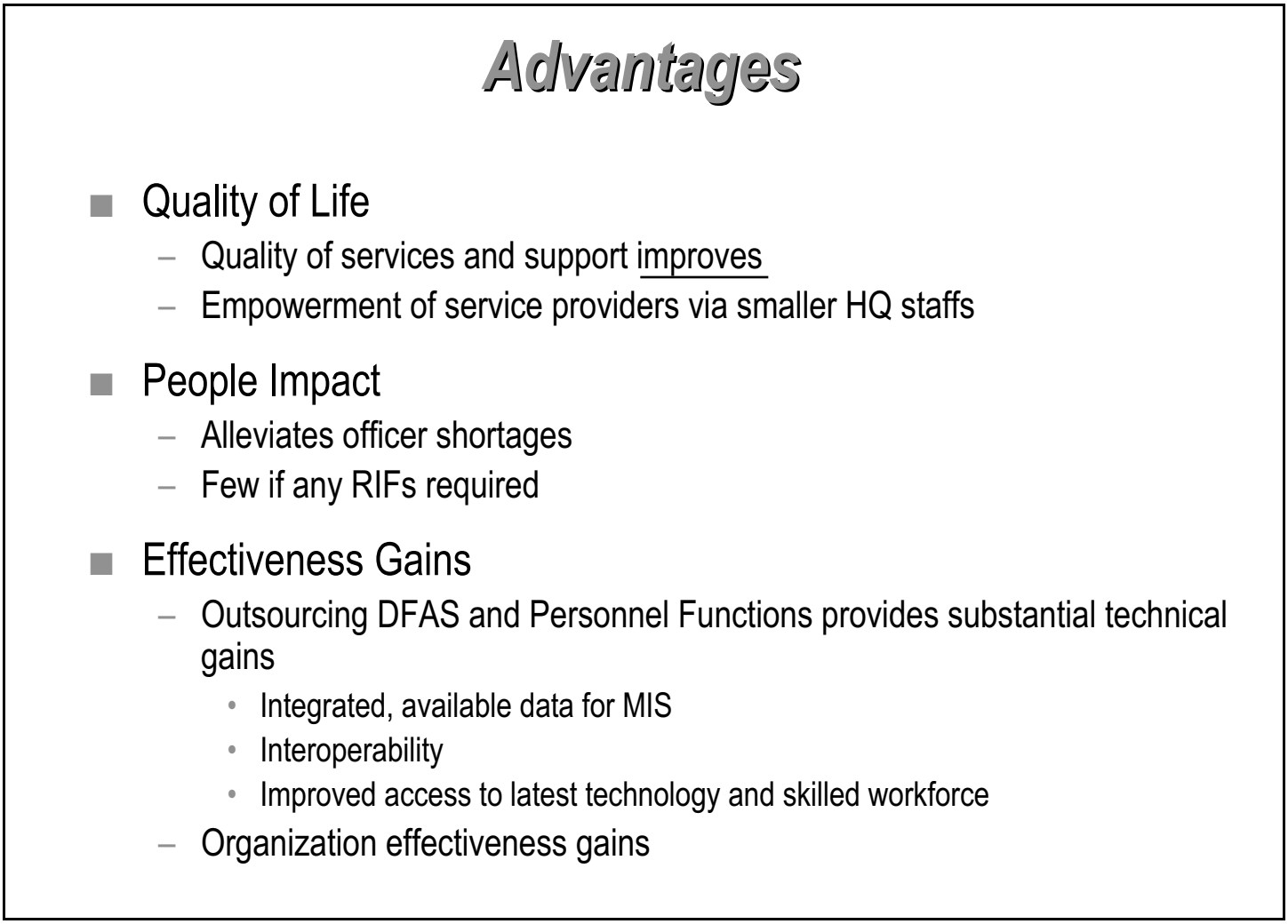


Figure 3-3.8

In addition to cost reductions of $3.4B/yr, there are other significant advantages to the approaches outlined earlier. A variety of services and support will actually improve as layers of review and approval are removed. Smaller headquarters staffs will help accelerate DoD efforts to empower service providers in the field. By not replacing officers as they depart support billets, the Military Departments can retain key combat skills in combat billets while still reducing overall officer numbers. Few, if any, RIFs will be required under an active incentive program for civilians. Substantial technology benefits will accrue from outsourcing DFAS and civilian

personnel functions, including better MIS data, enhanced interoperability with greater commercialization, and competition among providers for better technology and greater skill in the workforce as well as for cost reductions. These advantages collectively will lead to effectiveness gains across the entire DoD organization.

What To Do When

- Near Term
  - Issue policy - private sector is the preferred provider of support services
  - Acquire waivers to A-76
  - Initiate case analyses on broad support functions; e.g. accts payable, personnel office, to identify those services that can be transferred immediately to the private sector
  - Turn up wick for achieving civilian supervisor ratios (1:14) by FY99
  - Issue an order to reduce headquarters 40% by FY99 -- Develop yearly goals, and implement a Business Process Improvement systematics methodology
  - Develop a win/win personnel reduction plan
- Intermediate
  - Change of accounting system to Activity Base Costing (will force change in hierarchical organization and use of interdisciplinary teams)
  - Change or eliminate A-76

Figure 3-3.9

There are many actions that can be taken in the very near future which can be initiated with DoD directive. This has been discussed in suggested approach and implementation. The major issues involve outsourcing policy, A-76, and organization structure. Recent comments from the House Statement on the FY97 Defense Authorization Bill support the need to deal with these issues in the near term:

- A smarter Pentagon - Despite declining budgets and shrinking forces, the pentagon has maintained unnecessarily high overhead, antiquated training and organizational techniques, and outdated business practices. In an on-going effort to address these problems, the conference report builds on the reforms mandated in last year's defense authorization bill. These reforms are not only intended to save taxpayer dollars, but to maximize the return on every defense dollar — an increasingly important issue in today's fiscally constrained environment.

- Military Department headquarters. Despite several years of reduced defense budgets, the organizational structure of each military department's headquarters remains oversized and inefficient. The conferees directed the Secretary of Defense to review each military department's military headquarters organization (both uniformed and civilian staff) and to report to Congress on consolidation, streamlining, and downsizing options.

Task Force on outsourcing and privatization has made several near and intermediate term recommendations. These are specifically contained in their final report dated April 1996.

This Task Force has looked at DoD administration, finance and headquarters on a broad basis. Considering recent reductions in NASA headquarters, as well as some world class companies, DoD could make significant reductions, with only minimal to moderate risk. They just have to decide they want to do it. Yearly goals must be established, and a systematic method for business process improvement must be established. DoD need not reinvent the methods for making their business processes more effective and efficient. There are world class companies who have successfully gone through this process with the help of very capable consultants. Using the capability which exists within the private sector will greatly accelerate DoD's progress toward reduction of headquarters staff, and benefit the total Department.

3.4 ACQUISITION MANAGEMENT

The DoD Acquisition Infrastructure (not including S&T or T&E which were covered by other cost reduction panels) has a total of 19,600 military personnel and 65,600 civilians according to the data provided to this Task Force by OSD (PA&E). In fact this is only a small fraction of the vast DoD Acquisition Infrastructure. Each of the Services has several large product centers to support program management. In addition, there are a number of DoD organizations such as DCMC and DCAA which support acquisition. The bottom line is simply that it is not possible to identify the people and dollars in the infrastructure because it has become so pervasive.

OSD has recognized that acquisition reform is necessary, and a number of excellent reforms (such as cutting specifications, reducing paperwork, etc.) have already been instituted in program management. It is now time to move to reduce the infrastructure.

As a first step USD (A&T) should undertake a study to identify all parts of the infrastructure, with a focus on civilian and military personnel. The second step would, of course, be to develop a plan to reduce the infrastructure followed by implementation of that plan. As an example of the kind of excesses that currently exist, one need only examine a recent program. After a competition, it was decided that a program "kick-off," which involved government and contractor people, should take place. Almost 100 government people attended the several day "kick-off" meeting. During that meeting the contractor basically briefed the data that had been presented in the proposal. The stated objective of the session was to assure that all of the players were fully aware of the program content. However, it is not possible under "streamlined acquisition" for 100 government people to have a substantive role in program management. People reductions must be made.

In addition, consistent with our overall theme, the Service product centers should be dramatically transformed. Since the Program Executive Officer's are now directly responsible for program management, much of the center support infrastructures can be cut and/or contracted out.

The savings associated with these cuts are impossible to identify before the study regarding the extent of the infrastructure is known. However, an annual savings of approximately $1B and the associated reductions in personnel (3,300 in military personnel and 10,900 in civilian personnel) is not unreasonable to expect and in all probability the reductions will greatly exceed these numbers.

4.0 COST REDUCTION ANALYSES OF PEOPLE-RELATED AREAS

4.1 SPECIALIZED SKILL TRAINING

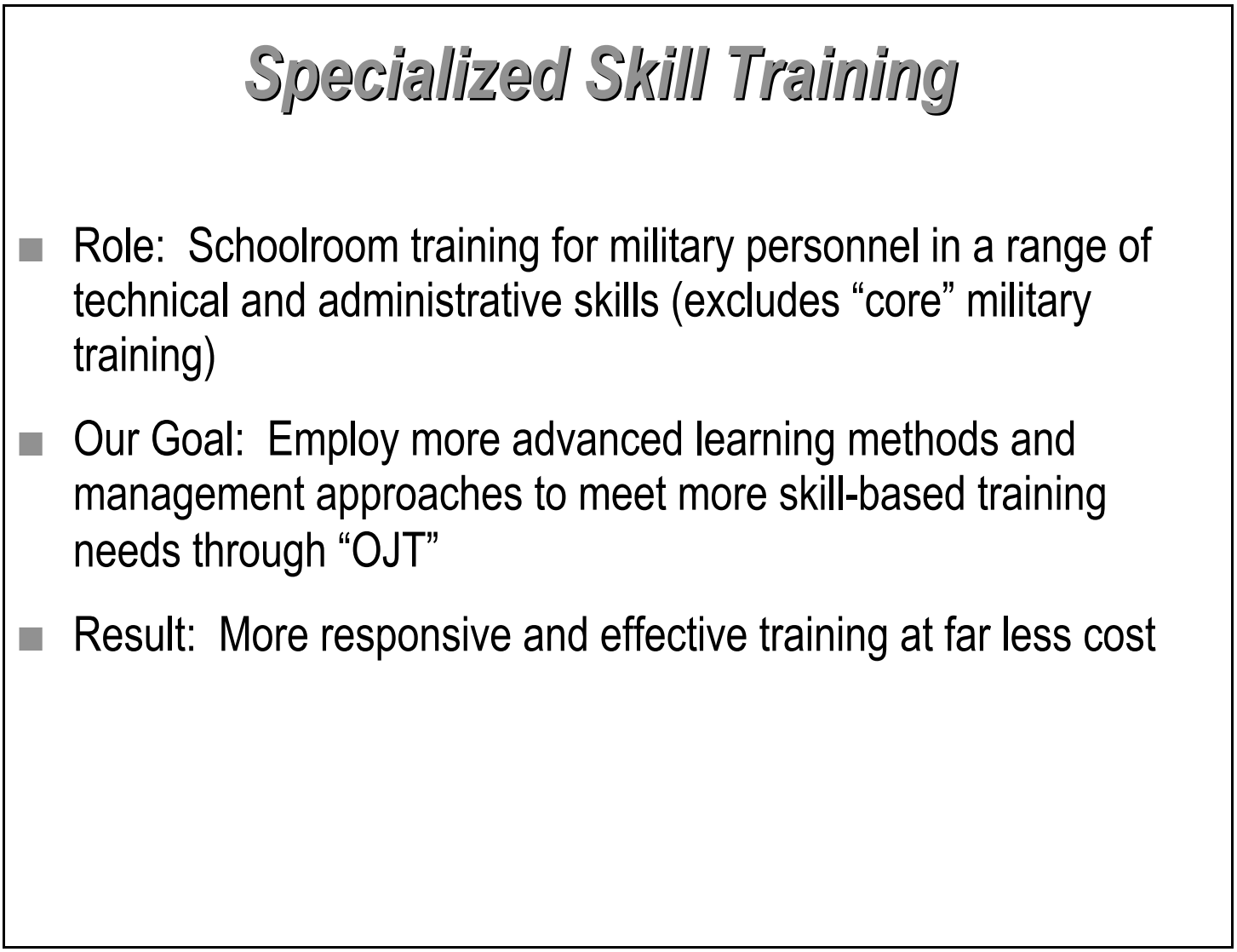


Figure 4-1.1

The Department of Defense spends over $16B per year on training and education. Much of this training involves uniquely military skills, such as flight training for combat aircraft. Other segments involve entry level military indoctrination, including the basic training of recruits and officers. However, a significant fraction — about $5B/yr — is spent on formal classroom schooling of enlisted personnel to obtain certain specialized technical and administrative skills.

In total, central training consists of programs that furnish funding, equipment, and personnel to provide non-unit, or central, training of defense personnel. Central training activities provide for the training of new

personnel, multiple types of skill and proficiency training, management of the central training system, and support of central training installations. The following are subcategories of central training:

- ***Training - Administrative Support*** includes management headquarters and visual information activities which support central training activities.

- ***Training - Installation Support*** includes base operations and support, real property maintenance activities, and base communications for central training infrastructure.

- ***Command Managed Training Programs*** includes non-unit training activities managed by the operational commands. These activities, such as transition training into new weapon systems, are not considered unit training. Other command managed training activities include supplemental flying to maintain pilot proficiency and the training conducted in Naval Readiness Groups.

- ***General Central Training Activities*** includes general support to the training establishment and training developments. These resources provide training aides for troops schools and training centers.

- ***Training of New Personnel*** includes recruit or accession training, and On Stations Unit Training (OSUT).

- ***Officer Training and Academies*** includes reserve officer training corps (ROTC), other college commissioning programs, officer training schools (OTS), and the service academies.

- ***Aviations and Flight Training*** includes flight-screening, undergraduate pilot training, navigator training, EURO-NATO training and the procurement of new training aircraft.

- ***Professional and Skill Training*** includes academic and professional military education programs as well as multiple types of skill training. This activity includes DoD civilian training, education and development, language training. Undergraduate Space training, acquisition training, general skill training, and other professional education.

This Task Force assessment addresses only the last category, professional and skill training.

The Task Force notes that the Department's outyear training and education plans reflect a continued "business as usual" approach to providing the specialized skill training needed by many military personnel. This approach is reflected in both the steady level of planned spending, and in the continued programming of large numbers of personnel to spend lengthy periods of time in formal schoolroom training.

The Task Force believes that the increasing availability of wide area computer networks and advanced learning methods, together with the demonstrated availability of such training from the commercial sector, provide a major opportunity to streamline this component of DoD's training activities.

Modern commercial computer aided teaching techniques, if aggressively adopted by the Department of Defense, have the potential for significantly reducing the overall cost of specialized skill training, while improving the effectiveness of the training.

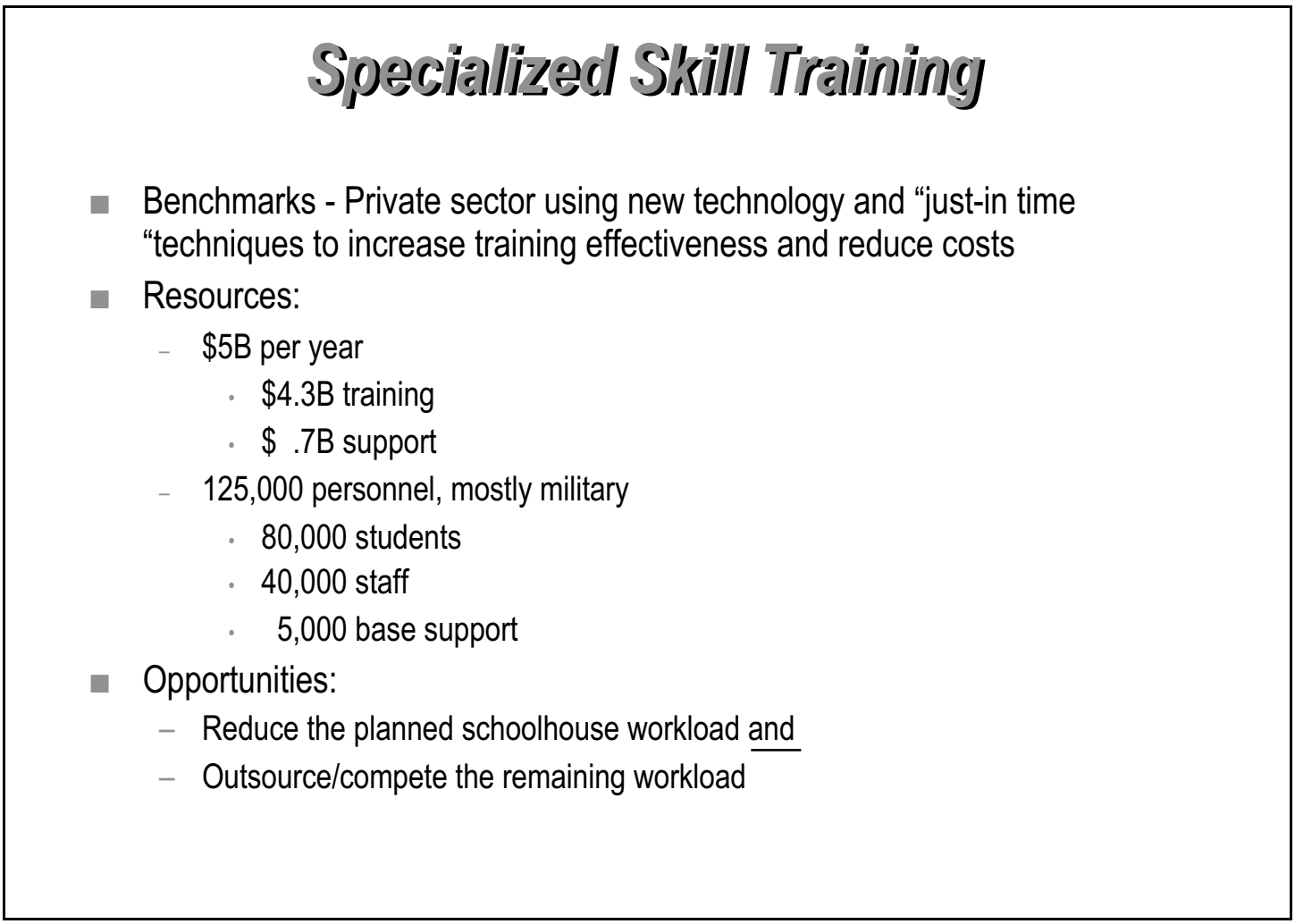


Figure 4-1.2

The growing availability of networked computers, together with increased sophistication in the design and delivery of "courseware" has permitted world class companies to "target" their education programs both in time and content. The result has been a measurable reduction in training costs accompanied by improved performance by the trained personnel.

Military personnel are trained in specialized skills mostly by other military personnel, even though the particular skills do not require extensive military experience. On an annualized basis, 80,000 military students are taught specialized skills in a formal classroom setting by 40,000 military instructors, and supported by an additional 5000 base personnel. The $5B annual cost is comprised primarily of the wages and benefits of the personnel that are so assigned.

The Department plans to continue to keep about the current number of military personnel tied up in schoolroom training for the foreseeable future. These plans do not take advantage of either:

- The ability of the increased training effectiveness of modern computer-aided education and diagnostic techniques, as well as other management changes, to reduce the amount of formal schoolhouse training needed, or

- The ability of expert commercial providers of such education to do so at much lower cost than is currently being incurred by DoD.

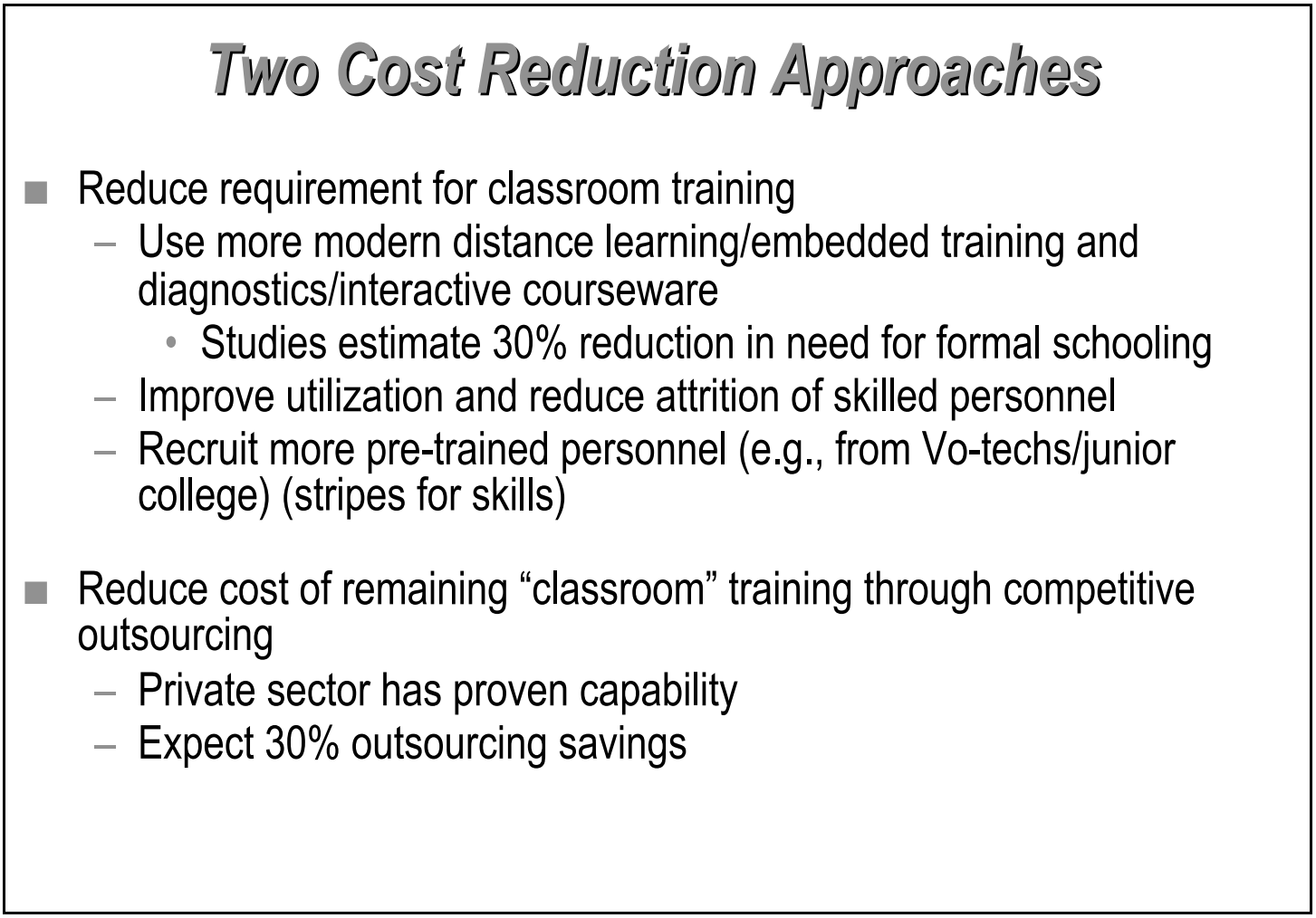


Figure 4-1.3

To the extent that required specialized skills can be provided with less formal classroom time than currently planned, DoD can reduce the number of personnel tied up in the formal schooling process, and DoD's personnel costs. Additional reductions can be made to the extent that the need for schooling can be reduced through better utilization and lower attrition of existing skilled personnel as well as through increased recruiting of pre-trained personnel.

"Distance Learning" is being increasingly utilized in the private sector to provide highly specialized training to designated personnel precisely when it is needed ("just in time"). This approach significantly reduces training costs by permitting the student to learn at his or her assigned job location, frequently on a schedule that allows continued performance of his or her primary tasks. This approach also permits the training to be tailored for the specific job at hand, rather than being generalized in a "one size fits all" curriculum that results in a significant amount of follow-on "on the job training" (OJT). Such techniques are also being studied by the Military Services, (particular the Army), but have not resulted in any visible reduction in the number of personnel planned for formal schooling, either on a temporary or more permanent basis.

"Embedded Training and Diagnostics" are also increasingly available in most of DoD's current and planned weapons systems – which are increasingly dependent on embedded computers. Well planned use of such embedded tools "on the job" can significantly reduce the amount of time that must be devoted to formal operator and maintenance training in a formal school room setting.

DoD sponsored studies conclude that full use of the new techniques would permit a 30% reduction in the resources devoted to formal specialized skill training.

In addition to the efficiencies available for increased use of modern training techniques and technologies, increased management attention to the utilization and retention of serving personnel that have needed skills could reduce the requirement for new trainees. Greater job satisfaction and less attrition generally results from continued use of key skills, and longer assignments also directly reduce the need for newly trained personnel.

Finally, some of the specialized skills needed in the Services are routinely available in the civilian sector. Community colleges and vocational-technical schools graduate significant numbers of laboratory technicians and computer operators, for example. Targeted recruiting of such personnel through "stripes for skills" programs can save tens of thousands of dollars per recruit in foregone training costs. CNA reports that the Navy is saving $50,000 per new hospital corpsman recruited with community college training.

It is likely that, even after maximum advantage is taken of modern learning technology and techniques, there will still be some need for formal classroom training. But there is a growing private sector capability to provide such training across a broad range of specialized skills. For example, the technical maintenance training provided to military technicians for most new weapons systems is initially conducted by the original equipment manufacturer, or a subcontractor.

Given the wide availability of competitive commercial training contractors, DoD costs can be reduced further by outsourcing such work. It is reasonable to expect that the Department will be able to achieve roughly the same 30% reduction in costs by outsourcing schoolroom training as it does by competitively outsourcing other services.

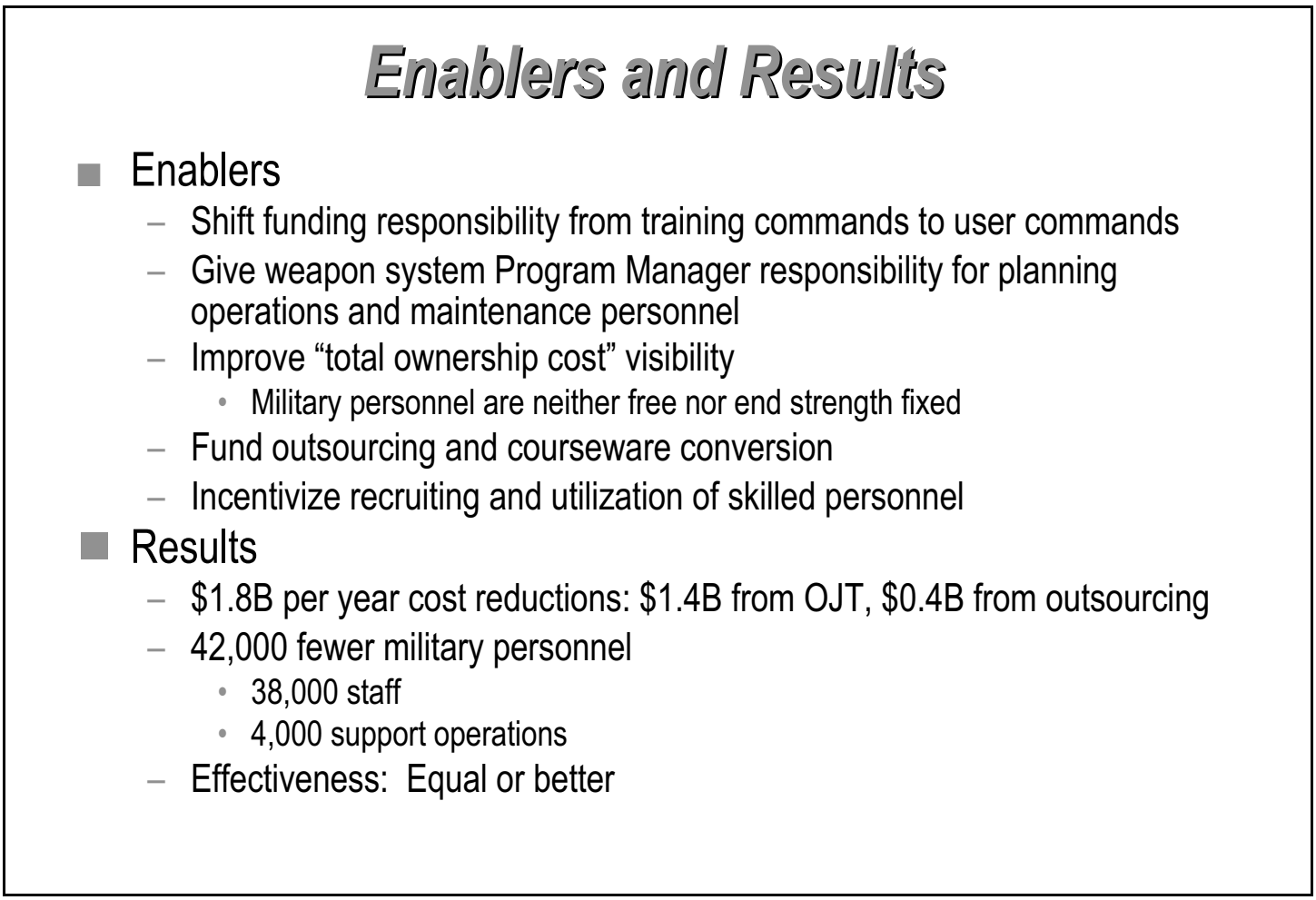


Figure 4-1.4

The primary enabler needed in this area is the full recognition that military personnel costs should be fully accounted for and treated no differently than other costs when attempting to establish an optimally efficient Department of Defense.

In contrast to most of the other infrastructure areas in which it is primarily DoD civilian personnel that provide support, specialized skill training almost exclusively involves military personnel, not only as students, but also as instructors. Because military personnel are funded through pay and end strength appropriations and authorizations, the cost of military personnel has been considered only indirectly, if at all, in the design of most military forces, equipment, and support structures. As a result, there is a long history of treating military personnel as "free assets" when plans are made. The perverse impact of this legacy is exacerbated by the unwillingness of some Service planners to seriously consider trading off military end-strength reductions for other contributors to military capability, such as weapons.

For the foregoing reasons, for this initiative to be fully effective, it will be necessary to not only provide full visibility to the total cost of planning the use of military personnel for support activities, but also to give the "planners" and "users" of such support much greater authority to decide on the numbers and skills of such personnel that will be need to be funded. Program managers that are responsible for the design of future weapons systems must also have incentive to design an operating and support structure that meets realistic life

cycle cost goals - much as the Navy is attempting to do by limiting the manning for its "Arsenal Ship." Similarly, the planners of all elements of the defense program should be freed from arbitrary military "end strength" constraints in order to improve Service and DoD efficiency and effectiveness across the board.

There will also need to be strong leadership and support for this initiative at the operational level. Finding time for OJT will have to be a command responsibility, not just that of the student. Commanders who previously "lost" personnel to TDY training (at a cost visible to the unit) may be more sensitive to this need than those whose technicians come after PCS training, when costs are funded elsewhere.

In addition to ensuring that the costs of military personnel are properly reflected in the various decision making processes for this initiative to be fully implemented, it will be necessary to aggressively pursue both the upgrade/conversion of existing courseware for distance learning, provide local distance learning facilities at relevant bases, and ensure that new systems reflect an appropriate amount of embedded training and diagnostic functionality. This Task Force recommends an investment of about $300M-$500M per year over the FYDP period to reduce costs.

Based on the studies conducted to date, a 30% reduction in formal school room training for specialized skills should result from the increased use of distance learning and embedded training. This equates to about $1.4B per year after the conversion costs are paid. Additional reductions in costs should be possible through better utilization and increased recruiting of skilled personnel, but there is insufficient data currently available in this area to support a quantitative estimate.

The competitive outsourcing of the formal schoolroom training that is still found to be needed after distance learning and embedded training is fully implemented should reduce costs another $0.4B per year.

As noted earlier, almost all of the cost reductions come from the reduced military end strength made possible through shortened courses and outsourcing the residual instructional tasks. The figure shown here retain enough military personnel to oversee the curricula and contract management activities that would remain as inherently governmental activities.

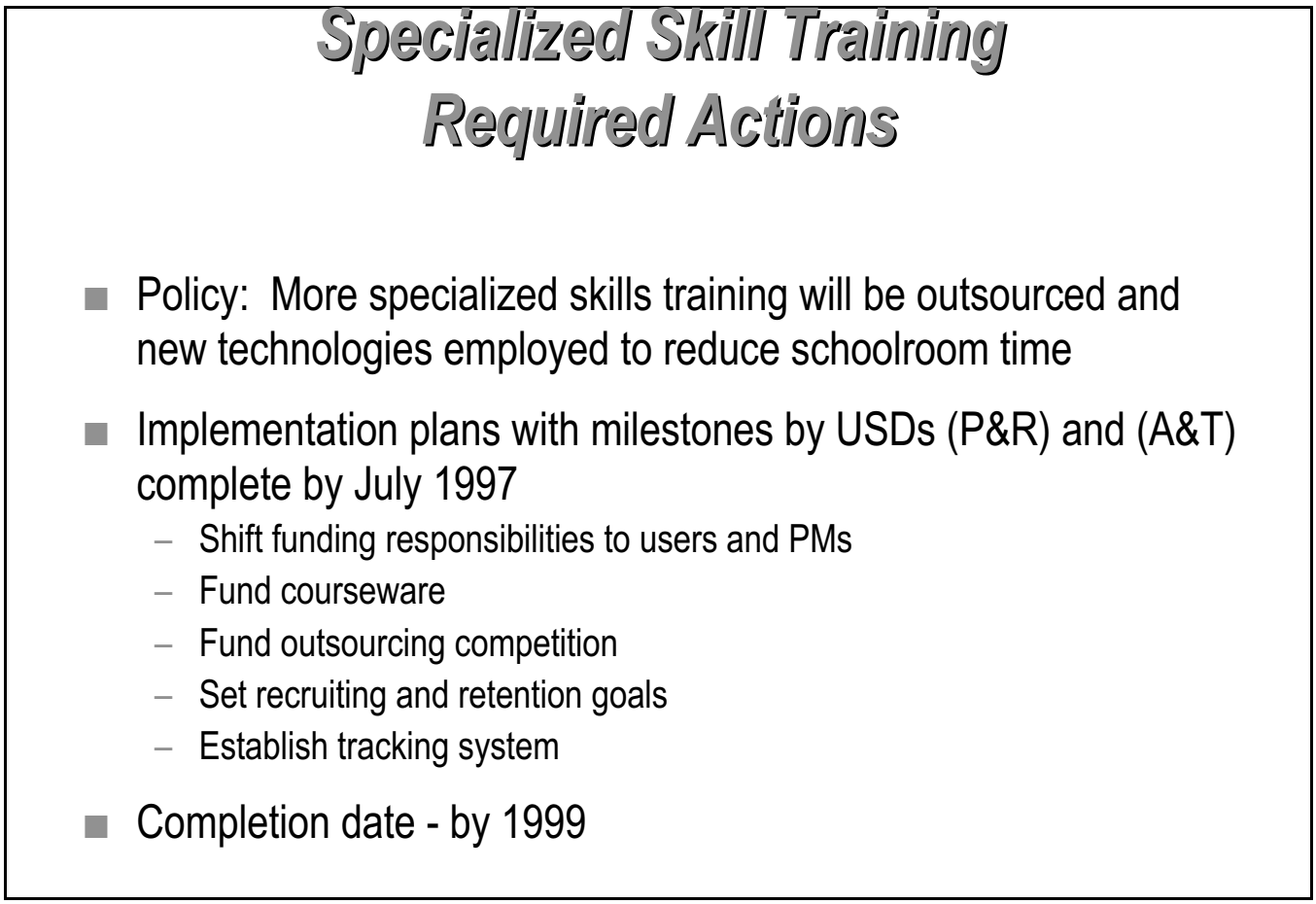


Figure 4-1.5

The Undersecretary of Defense (Personnel and Readiness) should establish as a clear policy that the military services are to institute the types of changes recommended in this report in order to sharply reduce the number of personnel that are planned to receive formal classroom specialized skills training away from their home unit.

To this end, the USD (P&R) should prepare an implementation plan, including appropriate milestones, for: 1) the shift of budgeting responsibility to "users", 2) funding the requirements for course conversions and local training facilities other than those embedded in weapons systems, 3)conducting outsourcing competitions for provision of the residual schoolroom training, 4) establishing goals for the increased recruiting, utilization, and retention of skilled personnel and 5) establishing an appropriate tracking system.

Similarly, the Undersecretary of Defense (Acquisition and Technology) should insist that the new initiatives in the planning of new acquisition programs that are intended to treat ownership costs as an independent variable (CAIV) fully reflect the potential cost reductions recommended in this Report. In particular, the USD (A&T) should ensure that full advantage is taken of the opportunity to embed cost-effective training and diagnostic functionality in all new weapons systems that contain digital processors and user interface devices by ensuring the provision of adequate memory, programmability, connectivity, and courseware development.

These implementation plans should be established by July 1997, with the intent of completing the streamlining of current course requirements by 1999, recognizing that some distance learning opportunities will be paced by

the rate of installation of the Defense Information Infrastructure as well as the rate at which any needed local learning centers can be stood up.

4.2 BASE SUPPORT

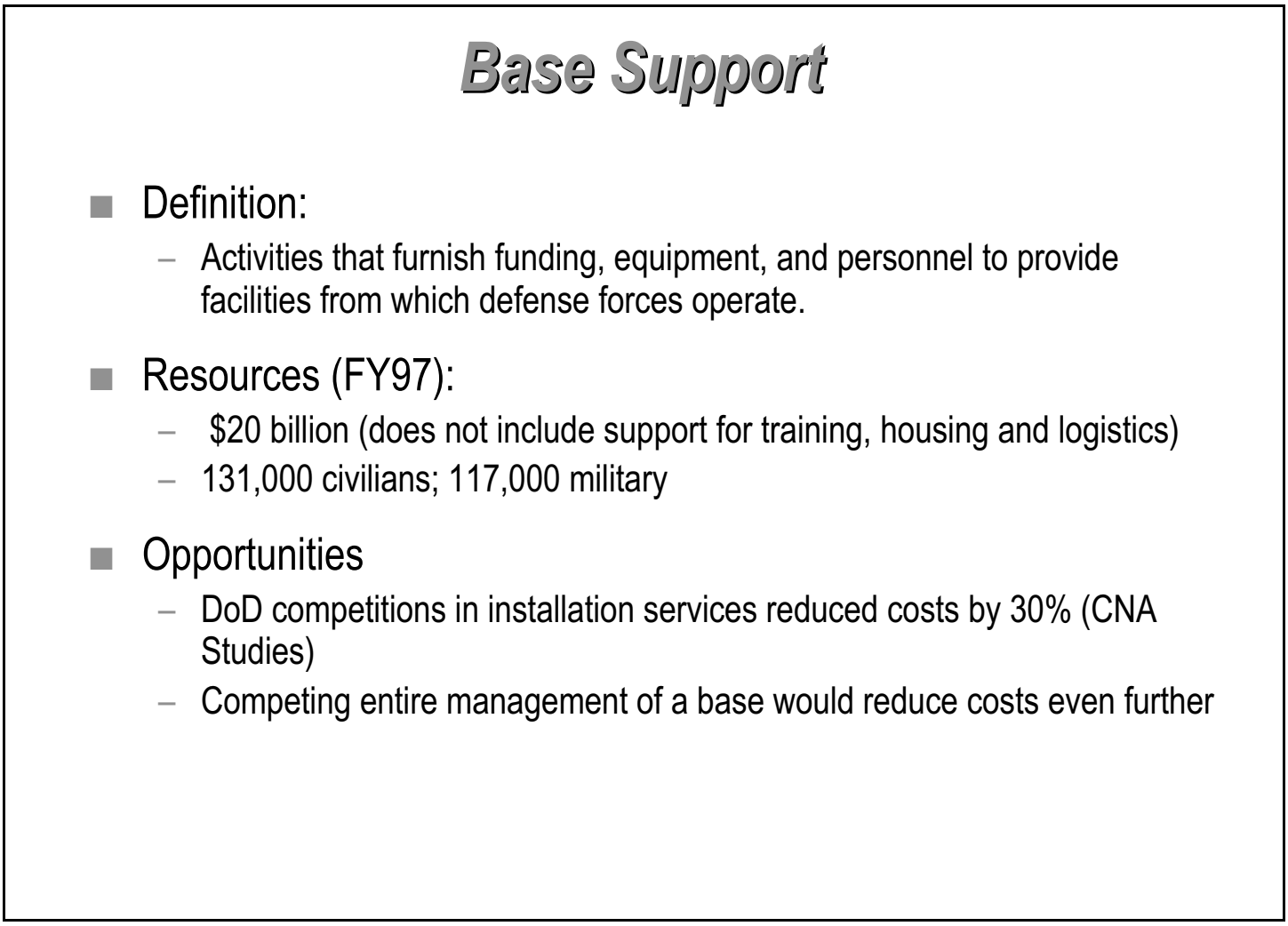


Figure 4-2.1

A large portion of the support resources are used to maintain and operate DoD's installations. Within this section, the Task Force examines only costs associated with CONUS bases whose primary mission is to support operational units. Following the breakdown developed by PA&E, the installation costs for support areas, such as training and logistics, are excluded. They are part of the areas they support. So as not to double count, the Task Force has also excluded the costs of the barracks, which are included in the housing review. The remaining cost of base installation support is $20 billion. Almost 250,000 people — nearly half of which are military — will provide base support in FY 1997.

There are opportunities for considerable savings here. Of the 2,000 A-76 competitions conducted by DoD between 1978 and 1994, over half were for installation support activities. The average savings were 30% (20% when government won the A-76 competitions and 40% when the private sector won the competitions). Based

on experiences to date, savings have been larger when several functions were joined together for competition and, in general, when a larger number of positions were competed. Such savings materialize even when in-house teams win the competition. All of this demonstrates that base installation costs can be brought down.

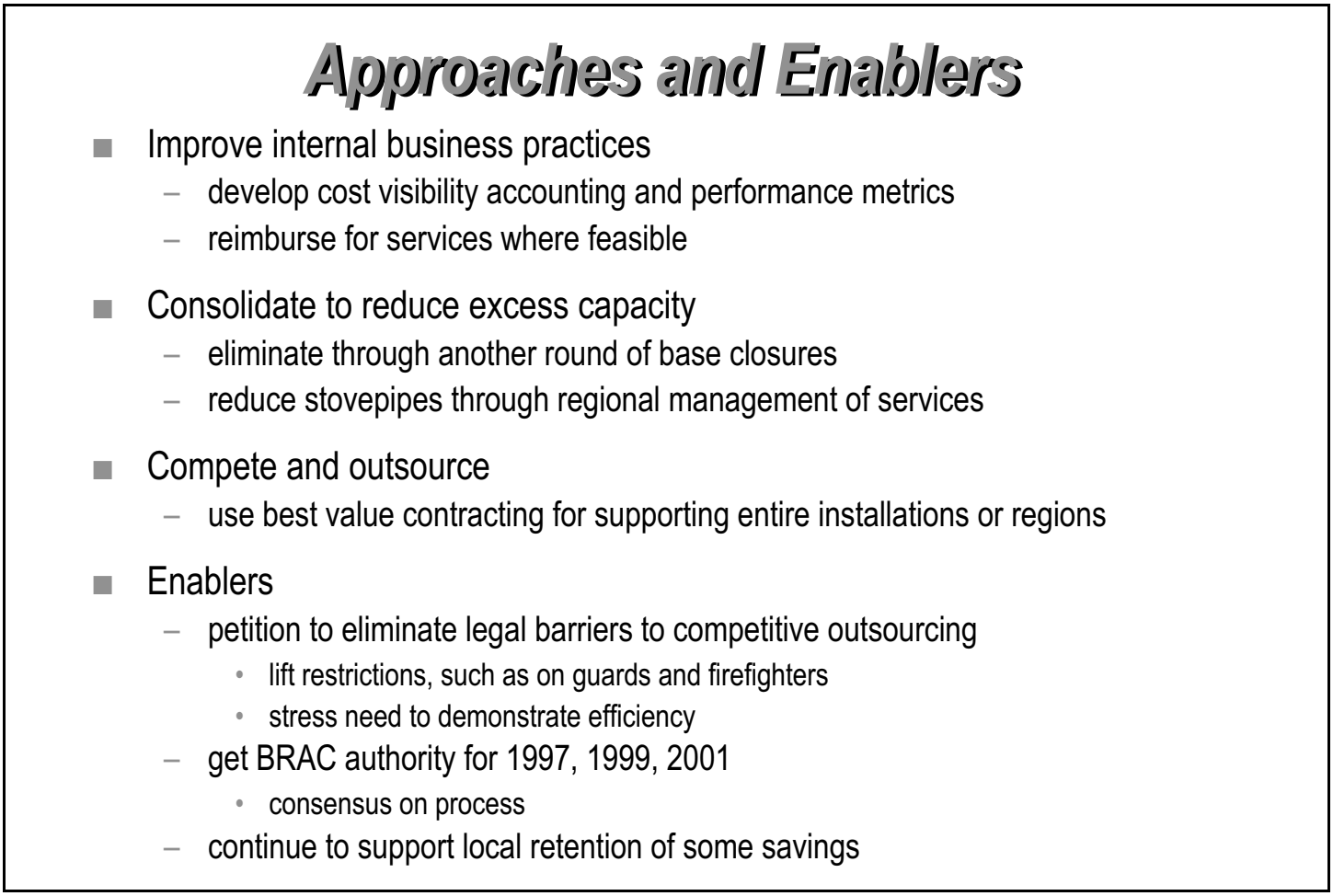


Figure 4-2.2

This Task Force recommends three approaches to reducing costs in this area: improve internal business practices, reduce excess capacity through consolidation, and competitively outsource. As in many other areas, the lack of cost and performance visibility limits effective management. Costs can't be controlled if they are not known. For example, military personnel costs are not in facility budgets and the opportunity costs of buildings and land are generally excluded. Activity-based costing is a simple solution, and the Task Force recommends that DoD institute such an approach.

Although it is difficult to establish performance metrics, facility managers must do a better job at constructing them. The Services are trying to address this issue and the Task Force supports this effort.

To the fullest extent possible, it is recommended that budgets be given to units that are being serviced by the installations. Then they can pay for the services directly. This mechanism lets the users of services know the cost of their decisions and, in the long run, will keep pressure on for achieving the most support for the least cost.

The Task Force believes that there is still excess capacity in DoD. This is partly due to the lack of cost visibility. The cost of the excess capacity is hidden and many tenants and bases perform tasks that could be performed elsewhere at less cost. Another series of base closures is clearly required.

DoD should attempt to get authority for three additional BRAC rounds. This move would be bold, but will not likely be able to discard unnecessary facilities and bases without such authority. The process has been politically accepted. Less extreme, but equally important, the individual Departments must reduce the local stovepipes through increased regional management of its facilities. Several initiatives are now underway and this Task Force endorses them.

Finally, competition and outsourcing should be aggressively pursued. At a minimum, the Army and Air Force should match the Navy's program for the next five years. Activities should be bundled for competition in order to achieve the greatest benefit. The Services have traditionally competed small activities. Such an approach produces the least savings and merely transfers stovepipes to contractors. Contracting for support of entire bases or specific functions across regions would produce greater savings. More importantly, to produce greater long run savings, the Services should use their authority to set up "best-value" competitions. This should limit contractor defaults and performance problems. This may cost a little more up front, but it is worth the investment. DoD should no longer accept the assertion that in-house provision delivers the best value without comparisons to the best in the private sector.

There are also some opportunities to privatize or sell assets. For example, power plants and sewage treatment plants could be sold to the private sector or transferred for service in kind. The Services need to conduct business case analyses of these opportunities. DoD should continue to work to eliminate the laws that restrict outsourcing. The Department can work with the current legislation, but it would be easier if the restrictions on competing security guards and firefighting were lifted. The most severe restrictions are on depots and logistics activities.

The A-76 regulation is biased toward incumbent, usually government, teams and is an unnecessary burden to small competitions. At a minimum, the Task Force recommends that for incumbent teams to retain work, they should have to come to within 2% of the best outside bid (the difference is currently 10%), that A-76 procedures not apply to activities with less than 50 civilians (it currently doesn't apply for ten or less civilians), and that the streamlined process should be for activities with 150 civilians or less (now it is for 65 or less).

Finally, the individual Departments have followed OSD's lead and will allow some local command retention of savings for a defined period. The cost to the local commands in manpower and morale is large and DoD can no longer continue the practice of taking away all the accrued savings. A 100% tax provides no incentive for the base. Despite the policy statements, many installations still doubt that they can retain funds for base improvements. OSD and the Services must continue to support these incentives.

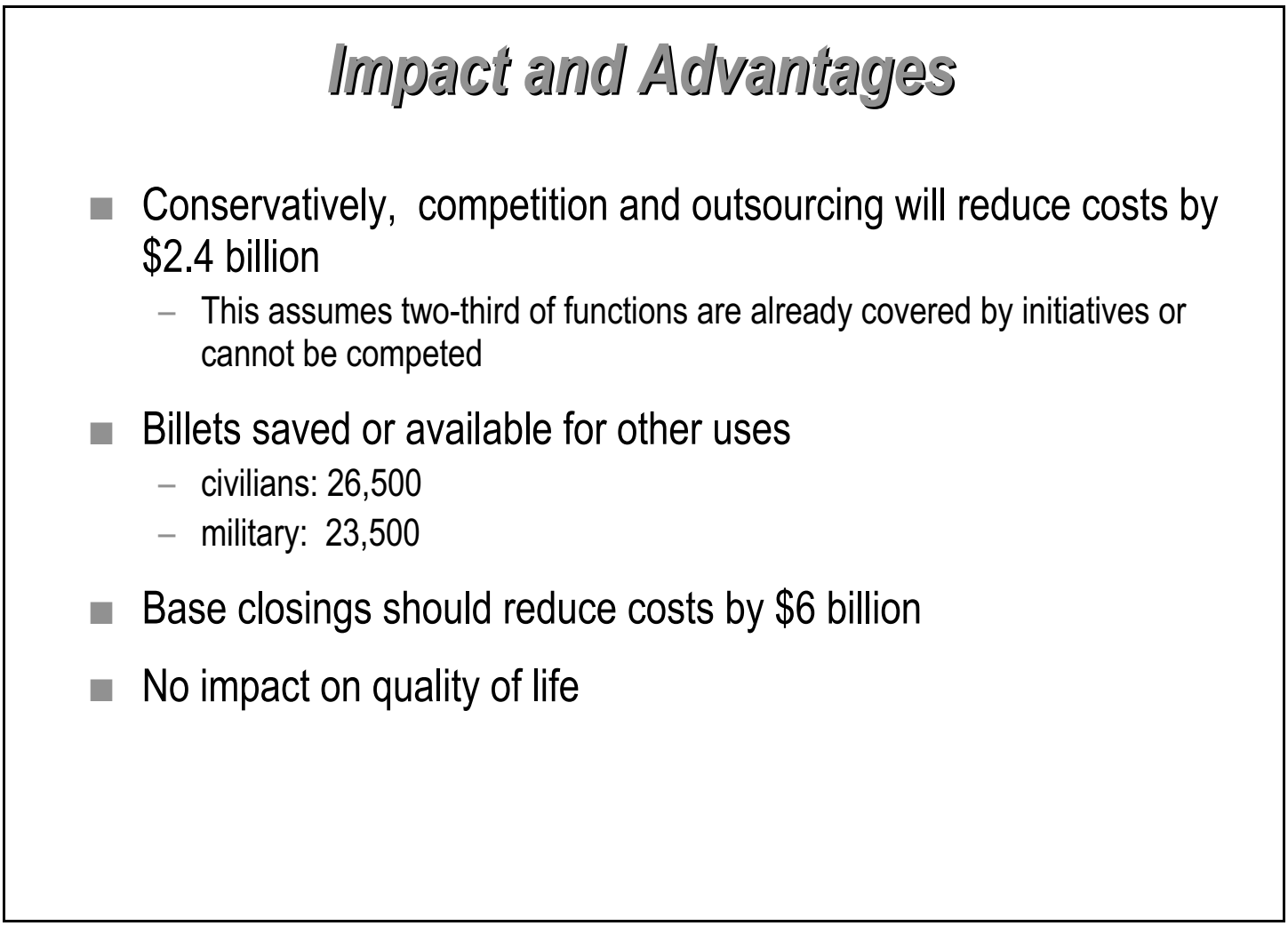


Figure 4-2.3

The Task Force conservatively estimates that DoD can save $2.4 billion in the area of base installations through outsourcing and better business practices. The Task Force estimates that a one-time cost of $600 million will be needed to compete this work. There are currently many initiatives, both in outsourcing and regionalization, but it is unclear what portion is targeted to base installation operations and maintenance. The Task Force estimate conservatively assumes that two-thirds of the base installation resources are either covered by these initiatives or are excluded because they are inherently governmental activities or provide a required rotation base for military personnel. This still leaves one-third of these resources for additional competition and outsourcing or for equivalent savings through improved business practices and consolidation. This should eliminate or make available for other uses 26,500 civilian positions and 23,500 military positions.

The past three round of base closings have saved $6 billion per year. The next series should target reductions of equal magnitude. To produce the $6B per year savings requires a large investment; but it is justified by the large annual return.

Taking these actions should cause no degradation on the quality of life of military personnel. In fact, it should even lead to improvements. Improved business practices and consolidations will allow the Department to make

better use of its resources, and shifting functions to private firms that specialize in those areas should improve the quality of service at reduced costs.

4.3 HOUSING

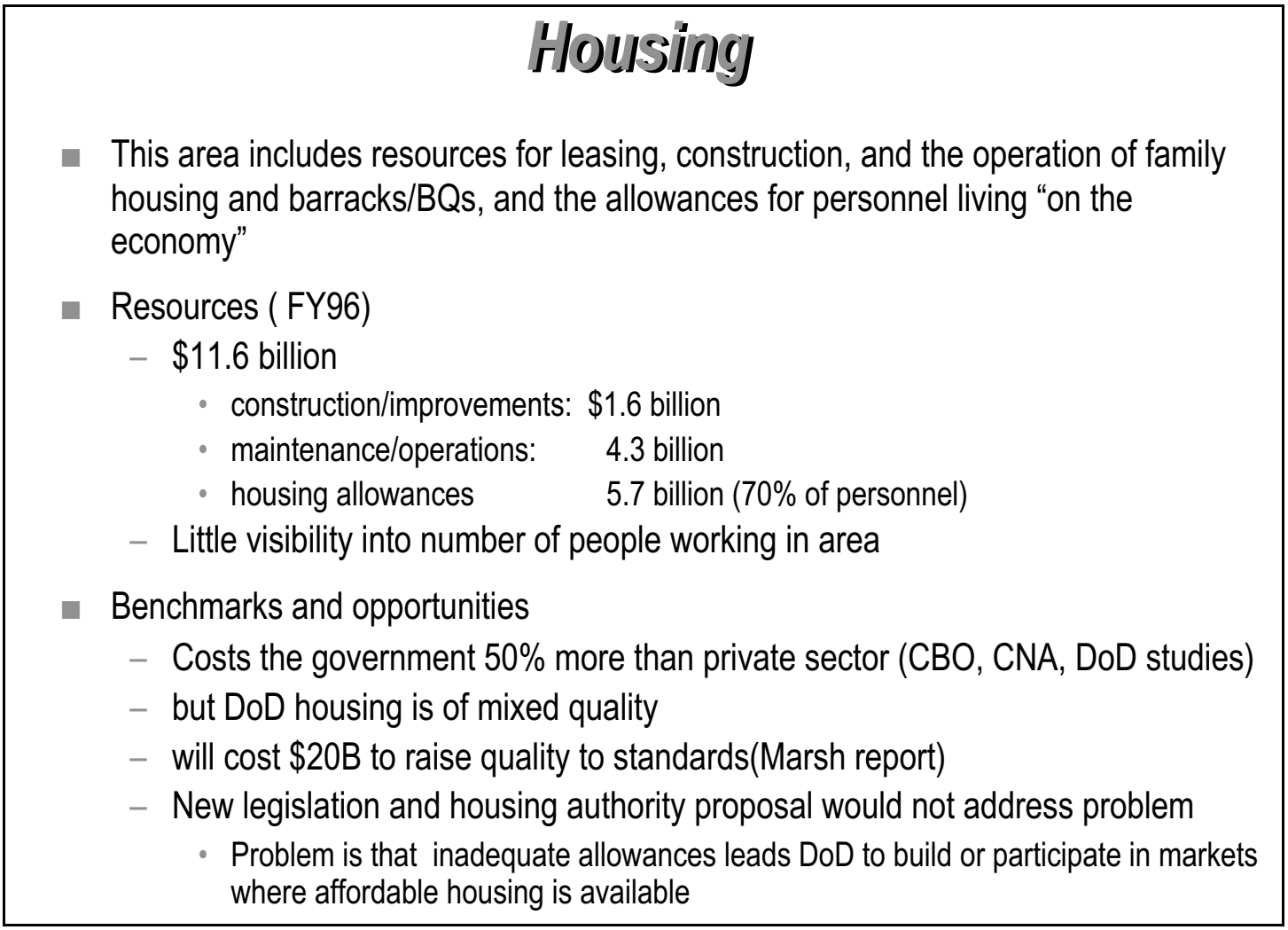


Figure 4-3.1

The Task Force examined the housing benefit for DoD's personnel. The Department has a long standing commitment to guarantee shelter for its forces. Military personnel live in private sector housing, military family housing, or barracks. There is a general sense, shared by this study group, that DoD provides housing of mixed quality, spends more money than the private sector for comparable housing, and uses the wrong data to compute its variable housing allowances. This Task Force believes that the benefit can be improved, costs can be reduced and money transferred to modernization accounts or additional allowances. It also believes that recent initiatives do not address some of the basic problems.

Because the money to house forces are in many account, it was not easy to arrive at the total cost to house military personnel. In FY96, DoD spent $11.6 B to house its personnel and their dependents.[1] Of that money, $1.6 B was to construct new units or renovate existing units. The maintenance and operation cost was $4.3B, of

[1] The numbers are derived from data provided by ODASD(I) Housing.

which $3.5B was for married family housing and the remainder for the barracks. The allowances for personnel living in the private sector was $5.7B.

There is little visibility into the number of personnel maintaining and operating housing and the Task Force is unable to provide an estimate for that number.

About two-thirds of married personnel live in the private sector. For bachelors, approximately 35% live off the base. In the Navy, approximately 50,000 junior enlisted bachelors are required to live on ships.

There are many problems with the current delivery system. First, DoD spends more money to house its military families than does the private sector. This cost disparity has been identified in a 1993 Congressional Budget Office study and confirmed by DoD analysis, a Center for Naval Analyses report and a soon to be published GAO report. Yet, with all this additional expenditure, military housing is of mixed quality. There are many modern, quality units for DoD personnel, but there are even more houses that need to be replaced or must undergo major renovation. DoD reports, and this was also noted by the Marsh panel, that the cost to raise the quality of military family housing to acceptable standards is $20B. There are additional billions that must be invested in barracks. This is an unfunded liability that reflects the Department's historically poor performance in this area.

FY96 legislative authority and the proposed housing authority do not address the fundamental problem that inadequate allowances encourage personnel to want to live in military housing. They focus on building more units by tapping into private capital markets, but at the cost of up-front payments, asset transfers, and guaranteed occupancy. They ignore the role of allowances in fulfilling the housing obligation. DoD has stated that its goal is to cover 85% of rent, but it covers only 78%. And, in high-cost areas, military personnel are not fully compensated for the higher rents. The Department justifies building housing and participating in housing markets based on this self-generated demand for military housing.

Approach and Enablers

- Approach
  - Use private sector where housing markets exist, raise allowances, and use contractors to build and manage housing where no markets exist
    - Reduce military housing stock and raise allowances
    - Change method to compute variable housing allowances
    - Move to a rental market for military housing
- Enablers
  - DoD needs to correct how it computes variable housing allowances
    - raise overall level
    - correct for differences across regions
  - Need Congressional authority to use proceeds from sale as trust fund for allowances

Figure 4-3.2

The Task Force proposes that, within the United States, DoD use the private sector almost exclusively. This is DoD's stated position, but it continues to build in markets with adequate affordable housing. The only exception should be where housing markets don't exist. For these few cases, contractors should both build and maintain housing for the Services. It is in these cases that the new legislation should be used.

The Task Force agrees with the Marsh Panel review that the bachelor housing has too long been treated separately from family housing, to the detriment of the bachelors. The Task Force recommends a common policy. However, junior enlisted personnel (those with less than two years of service) should remain on base for military socialization.

DoD should start selling or razing houses that must undergo major renovations. DoD can't afford to maintain them and can't continue to invest the money needed to renovate and replace. This will immediately release money, as much as $1.6B for additional allowances.

Allowances should be raised, particularly in high cost areas. DoD needs to correct the way it computes the variable housing allowance. Research by CNA and RAND reports that these allowances are incorrectly based on housing expenditures and not housing prices. That is, housing allowances are based on what the average military person pays and since these personnel are buying smaller and more distant units in high-cost areas, the variable housing allowance underestimates the cost of comparable housing across regions. In the Navy, this has resulted in personnel being significantly less satisfied with their housing in high-cost areas.

The Task Force recommends that all military personnel receive allowances. The only exception would be the very junior enlisted personnel. The remaining military housing should be rented to willing members at rates to cover the cost of operating and maintaining units. DoD should seek authority to set up a trust fund with money. DoD should seek authority to set up a trust fund with money received from selling houses. This fund should be drawn on to supplement housing allowances. DoD will also have to seek the saved school impact aid, which comes from non-DoD accounts.

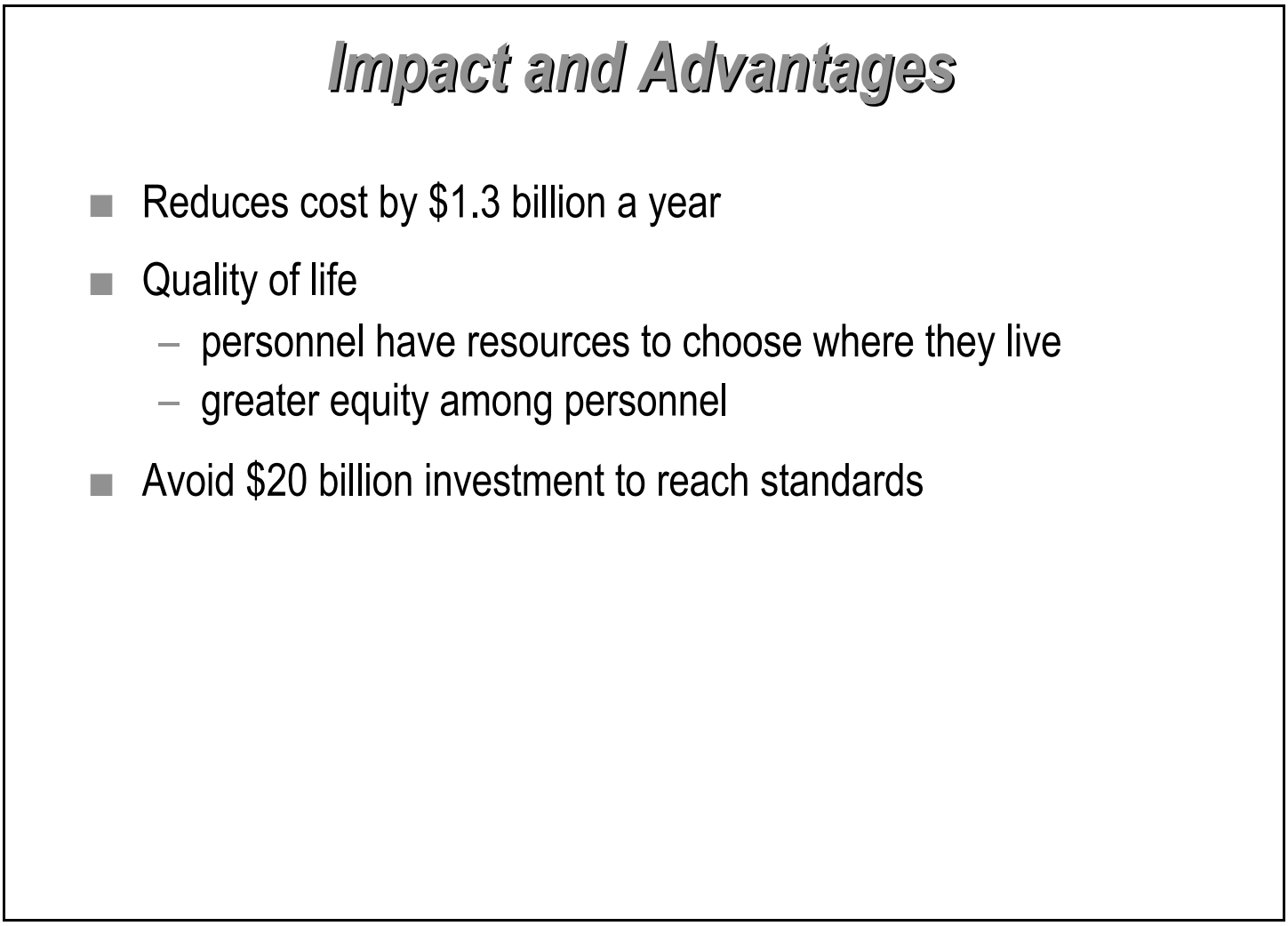


Figure 4-3.3

It is estimated that annual costs can be reduced by $1.3 billion, which could be made available for modernization of the force while at the same time allowing for a 7% increase in the allowance to 85% of the average rent paid, the current stated DoD goal. DoD may choose to use all of the savings to raise allowances. This would bring the

allowance up to 97% of the average rent. This does not include any return from selling military housing. Converting that to allowances could add another 5%.[2]

Personnel will have more resources to choose where they live. Also, because we are making this proposal for both married and single members, we reduce that inequity. And with the correction of the variable housing allowance, DoD would correct the inequity across regions. Finally, DoD would avoid investing $20 billion in family housing and additional billions on barracks to bring them up to standards.

[2] In addition to ODASD(I) Housing data, the housing portion of the study used the CBO Study, Military Housing in the United States, September 1993; the Defense Science Board Task Force on Quality of Life Report; A Better Way to Set Housing Allowances, by Aline Quester, briefing, CNA96-1050, July 1996; and CNA Overview of Housing Solutions, by Alan Marcus and Glenn Ackerman, CAB 96-023, March 1996. This assumes DoD gets 25% of the book value and a return of 5% a year from the trust fund.

4.4 MEDICAL

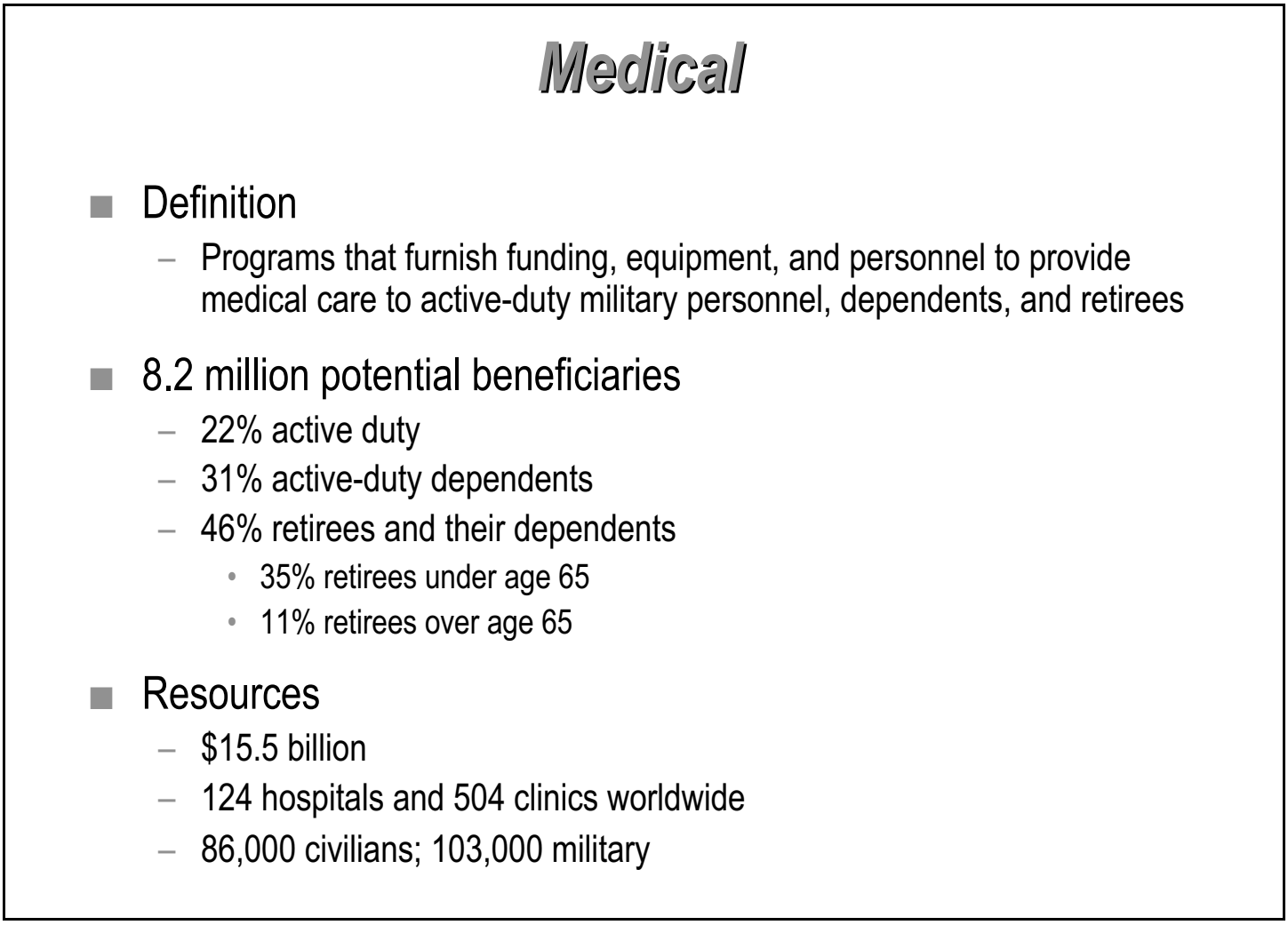


Figure 4-4.1

The military medical system supports military operations by active-duty personnel; and it provides a highly valued fringe benefit for serving personnel, their dependents, and retirees. In the post-Cold War era, the benefits mission consumes the larger share of the system's resources: Almost 80 percent of the 8.2 million potential beneficiaries of the DoD health care are active-duty dependents, and retirees and their dependents. As retirees from the Cold War era age, their large numbers and long life spans will continue to increase military medical costs and draw funds away from modernization and investment.

The military medical system provides services to its beneficiaries through a variety of programs. Active duty personnel generally receive all their health care at military treatment facilities (MTFs), comprising 124 hospitals and 504 clinics worldwide. Active-duty family members, retirees, and retirees' family members may use the MTFs when space is available; DoD also finances civilian health care through age 65 in the CHAMPUS program. At age 65, Medicare replaces CHAMPUS, although retirees over the age of 65 can still receive free care in the MTFs. This represents a commitment made to active-duty personnel and retirees since World War II.

The Assistant Secretary for Health Affairs estimates that the military health system costs $15.5 billion to operate in FY 1996. The recent Comprehensive Study of the Military Health Care System (the so-called "733 study") concluded that this estimate should be increased by 14 percent to account for all direct and indirect costs; applying this factor yields an estimate of total annual medical costs closer to $18 billion a year. Three-quarters of these costs are for operating the MTFs and sustaining a field medical capability. The remaining one-quarter pays for CHAMPUS.

In terms of manpower, DoD devotes over 180,000 personnel to the medical function. These figures include personnel in traditional hospital and clinic settings, as well as those in combat units, shipboard sickbays, aeromedical evacuation squadrons, headquarters activities, medical recruiting, and health care education and training.

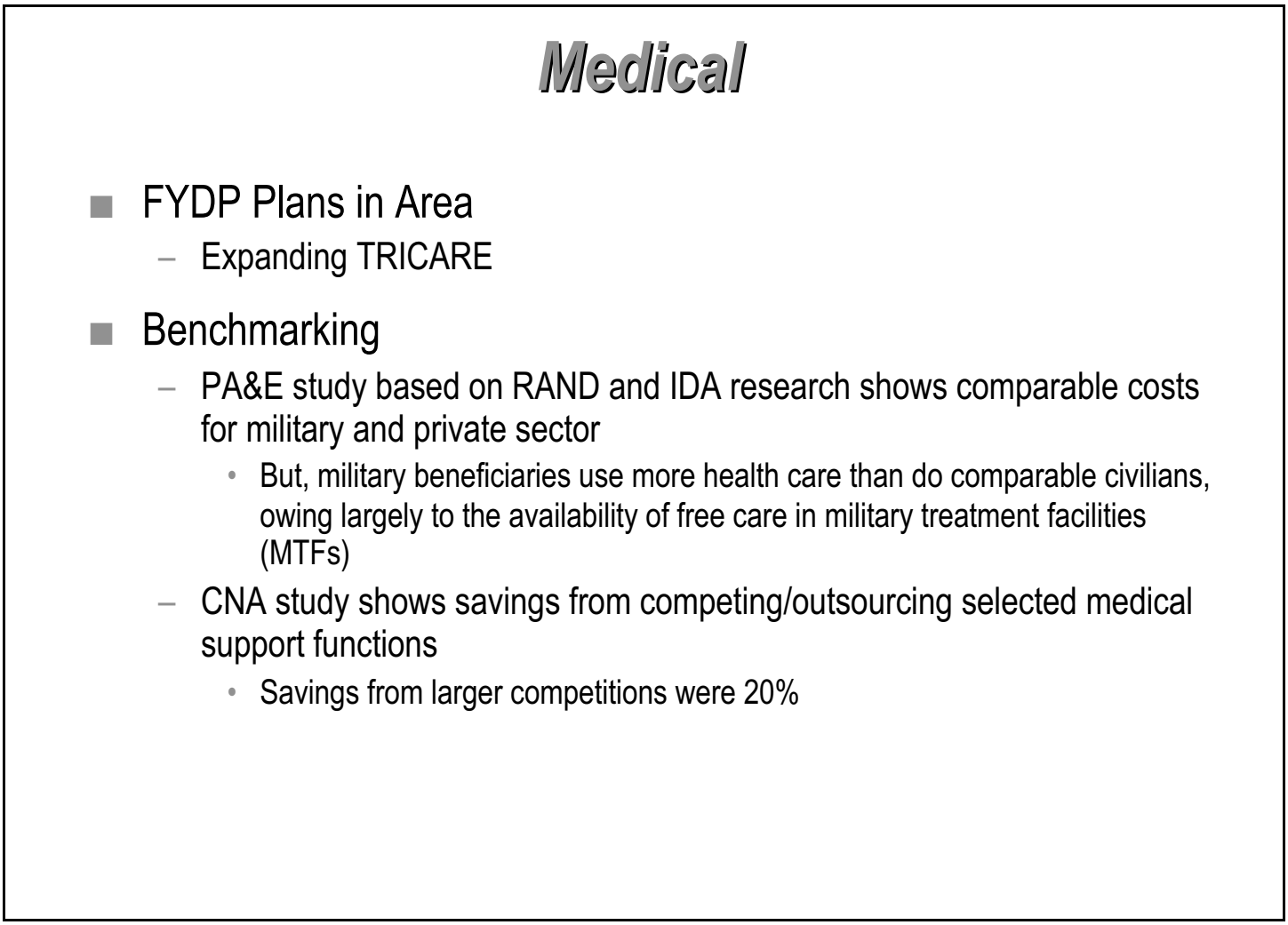


Figure 4-4.2

The major cost-savings initiative in the defense program is TRICARE, which began in March 1995 and is expected to be implemented throughout the United States by the end of 1997. TRICARE adds managed-care options with enhanced benefits to the MTF-CHAMPUS benefits and establishes regional DoD health managers to better integrate military and civilian health care and contains costs in both sectors. Those who choose TRICARE can still receive free care at MTFs.

The success of TRICARE in containing costs will depend critically on five factors:

- How many beneficiaries participate in the managed-care options;
- How many beneficiaries respond to the enhanced benefits;
- The strength of the incentives that the regional managers have to control costs and their ability to respond to these incentives by allocating manpower and other resources efficiently;
- The availability of the management information needed for effective managed care; and
- TRICARE administrative costs

An earlier demonstration program similar to TRICARE (the CHAMPUS Reform Initiative) actually increased costs, because all but the first factor worked against cost savings. TRICARE has strengthened manager incentives somewhat and modified the benefits for retirees to contain demand. But, it has not significantly facilitated the regional managers' flexibility in acquiring and allocating resources, nor does it have an appropriate management information system. It will be several years before its success can be gauged.

Given that most of the costs of the system derive from operating the MTFs, it is tempting to ask whether the MTFs could be operated with greater efficiency. During the Cold War, large requirements for hospital beds, physicians, and other medical personnel justified an extensive system of DoD medical facilities. However, closing MTFs would not necessarily save money because those who use the military hospitals and clinics would get their care in the civilian health system, largely at DoD expense. Moreover, while some studies argue that care can be provided at lower costs in the MTFs, PA&E has concluded, based on research by RAND and IDA, that the available data on costs, patient mix, and utilization are inadequate for reliable comparisons between CHAMPUS and MTFs.

What does seem clear is that all groups of military beneficiaries use appreciably more care than comparable civilians (e.g., those of similar age, insurance status, health status, income, etc.). There are several potential reasons for this, but the most important is availability of free care in the MTFs.[3] This is important because earlier health care research indicates that limiting utilization is key to controlling costs.

There has been some exploration of opportunities for cost savings from competing and subsequently outsourcing selected medical support functions. CNA has concluded that the larger competitions for medical support functions have yielded savings estimated to be 20 percent. The database in the medical area is small, only 30 competitions, but this finding is on the low end of savings in competitions over a wide-range of DoD areas.

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[3] See Susan D. Hosek, et al. The Demand for Military Health Care: Supporting Research for a Comprehensive Study of the Military Health-Care System, RAND, MR-407-1-OSD, 1995. For in-patient care, the evidence is a little murkier. A CNA study shows that, controlling for demographic differences, there is no difference between civilian and military utilization. See John A. Wilson, A Comparison of Civilian and Military Utilization Rates, Center for Naval Analyses, CRM 95-170, October 1995.

Medical

- Suggested approaches
  - Bring non-active-duty beneficiaries' costs more in line with private sector plans
    - Copayments for MTF services equivalent to CHAMPUS copayments
    - Annual enrollment charge for retirees (e.g., at least $100 per month)
    - Offer employed retirees payment for premiums in employers' plans in lieu of DoD benefits
    - Where retiree does use employer plan, limit supplemental CHAMPUS payment so total does not cover copayment
    - Redesign benefits for 65+ retirees to encourage use of Medicare plans
  - Complete selected medical support functions
  - Strengthen incentives for Tricare providers (MTFs and civilian providers) to deliver cost-effective care
    - Offer purely commercial plans (esp. HMOs) in addition to Tricare
    - Continue to develop MTF budget allocation methods to strengthen incentives

Figure 4-4.3

In research performed for the 7th Quadrennial Review of Military Compensation, RAND compared military health benefits with the benefits provided by large civilian employers. The standard CHAMPUS benefit was found to be relatively generous by civilian standards. Therefore, one option for cost savings is to bring benefits more in line with civilian employer plans by requiring non-active-duty beneficiaries to pay more than they now do for their care.

Such benefit changes could include: (1) charging a modest fee for MTF care, which is now free, and (2) imposing an enrollment charge for retiree coverage. An MTF fee would help bring military beneficiaries high health-care utilization rates more in line with civilian rates. An enrollment charge would also raise revenue, but its main purpose would be to discourage retirees from refusing their employers health coverage. About half of retiree families, pre-Medicare, are also covered by private insurance through employers. The charge would be based on the prevailing charges for similar employer coverage, i.e., at least $1200 per year. If military retirees could be induced to make full use of their employer benefits, the 733 Study estimated that DoD could save as much as $4 billion a year. (This assumes that employed retirees are eligible for their employers' plans and have not relinquished eligibility contractually.)

A variant would have DoD pay the employed retirees' premium as required by their employers plans. This would naturally reduce the estimated savings, but they would still be substantial. In either case, care must be taken not to cover the co-payment almost certainly required under the private-employer plans. That would eliminate one of the effective utilization and cost containment mechanisms of those plans.

Similarly, there could be changes to encourage retirees over 65 years of age to use Medicare plans. For instance, retirees switching to Medicare might be allowed to trade their MTF free-care eligibility for DoD-paid supplemental coverage. Some demonstration projects have already started in this area.

Another set of options involve competing selected medical support functions. It is important in such competitions to evaluate the cost savings on a system-wide basis rather than just for the outsourced function to account for any transfer of workload and cost to other functions. Of course, in most cases, the function would not move, only the delivery would change, and there would be no shifting of workload.

Finally, there are options for strengthening the incentives for TRICARE providers (both MTFs and civilian providers) to deliver cost-effective care. One way would be to offer purely commercial plans (especially HMOs) in addition to the TRICARE options. This would expand the choices available to military beneficiaries. The options would be priced so that beneficiaries have strong incentives to pick the most cost-effective plan for them. However, it will be difficult for MTF managers to make significant gains in efficiency until they acquire a better budget allocation system. The current one relies too heavily on historical costs per patient at each MTF.

Advantages and Impact

- Advantages
  - From reducing MTF utilization (induced by a $10 per visit copayment requirement)
    - About $100 million per year
  - From shift to employer plans (induced by annual enrollment charge)
    - Up to $4 billion (RAND)
    - Less if offset by allowances
  - From competition/outsourcing selected medical support functions
    - Up to $1 billion (CNA),
    - More, if commercial plans able to compete with TRICARE on terms that favor least-cost plans
- Impact on people
  - Increased cost to beneficiaries - could be offset by additional allowances for active duty and still save money
  - But, lower utilization rates should not adversely affect health (except perhaps lowest income group) (RAND)

Figure 4-4.4

AN MTF co-payment of $10 per visit would allow DoD to recover about $100 million per year. The 733 Study estimated that if military retirees could be induced to make full use of their employee benefits, the DoD could save as much as $4 billion a year. Since the population continues to grow, there would be additional cost avoidance.

MTF fees have been proposed by OMB and others for 20 years, but in the face of strong beneficiary resistance the idea has never been seriously considered. Such fees could, however, be packaged with other medical program improvements desired by beneficiaries.

For active-duty personnel, DoD might choose to provide an allowance, pegged to comparable civilian health-care utilization rates and costs as a way of offsetting the effect of these charges. That would reduce resistance but also reduce estimated cost savings from the $4 billion estimate above. In this study, the Task Force assumed the savings would be only $3 billion.

CNA has concluded that effective competition of selected medical support functions — say, a third of the functions now performed in MTFs — would save up to $1 billion a year. This allows for competing 90% of civilian billets and 10% of the military billets. A more ambitious plan for competition would be to allow private health plans to compete directly with TRICARE. Beneficiaries would be given a choice among the current

medical program and commercial plans like those now offered by the Federal Employees Health Benefits Plan, with DoD paying the same premium for all plans and beneficiaries paying additional costs if they chose plans with extra services.

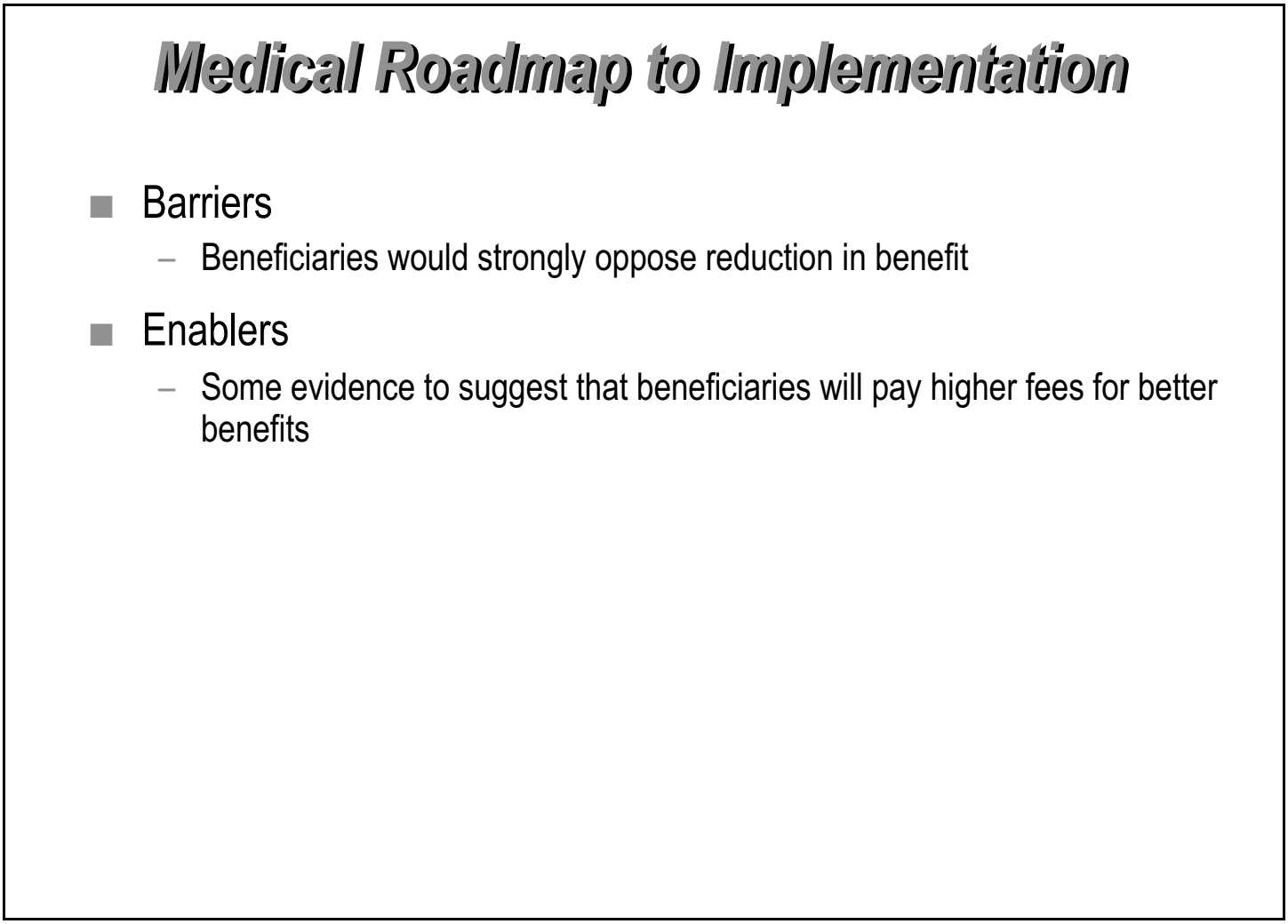

Figure 4-4.5

The major barrier to changes designed to reduce MTF utilization and increase reliance on employer and other civilian health plans would be strong beneficiary resistance. There is some evidence from early TRICARE experience that retirees are willing to pay higher fees for enhanced benefits, but they would likely view a fee for the standard benefit far more negatively. Nevertheless, the substantial savings associated with lower MTF utilization and greater reliance on civilian employer plans make benefits charges a promising avenue for cost reduction. This benefit, which is greater than that in the civilian sector, must now be seriously weighed against the modernization and other needs of US forces.[4]

[4] Joseph P. Newhouse, Free for All, Harvard University Press, 1993.

What To Do and When

- Add copayments, but do not charge to E1s to E3s; consider offsetting allowance for others if resistance high
- Introduce enrollment charge for retirees over a ten year period
  - Do not charge those now over 55
- Offer several health care packages for different fees so that beneficiaries have choice of military and civilian plans
- Institute rigorous quality-of-care measurement system to inform beneficiaries' and providers' choices
- But first, get in place a simple, workable data system including records for MTF outpatient care, improved resource expenditure records
  - Competitively select a large HMO to design and install this

Figure 4-4.6

One plan worthy of closer consideration would add an MTF co-payment of at least $10 per visit, applicable to all above E-4 (since previous research has shown that co-payments, while not diminishing health status for most, could hurt the lowest income groups). In addition, DoD would introduce an enrollment charge for retirees over a ten-year period, perhaps exempting all retirees older than 55. If reliance on employer coverage cannot be mandated, DoD could probably achieve much the same result by allowing military families to trade in their current military benefits for a subsidy (or even a supplement to) employer coverage.

A more ambitious step would introduce expanded competition. Currently, the military system benefits from competition only insofar as it competitively contracts with civilian providers to augment MTF care. DoD should follow the lead of large private employers and offer its beneficiaries a full choice of plans, priced to stimulate enrollment in the most efficient plans.

DoD's ability to institute these changes, and monitor their effects, is hindered by its lack of a rigorous means to measure quality of care at its own facilities (those of its commercial providers). New information systems are being procured, but it is unclear if, by themselves, they will support information management needs. DoD should proceed aggressively to develop such a system, together with a sophisticated, HMO-like medical resource expenditure system.

4.5 COMMISSARIES

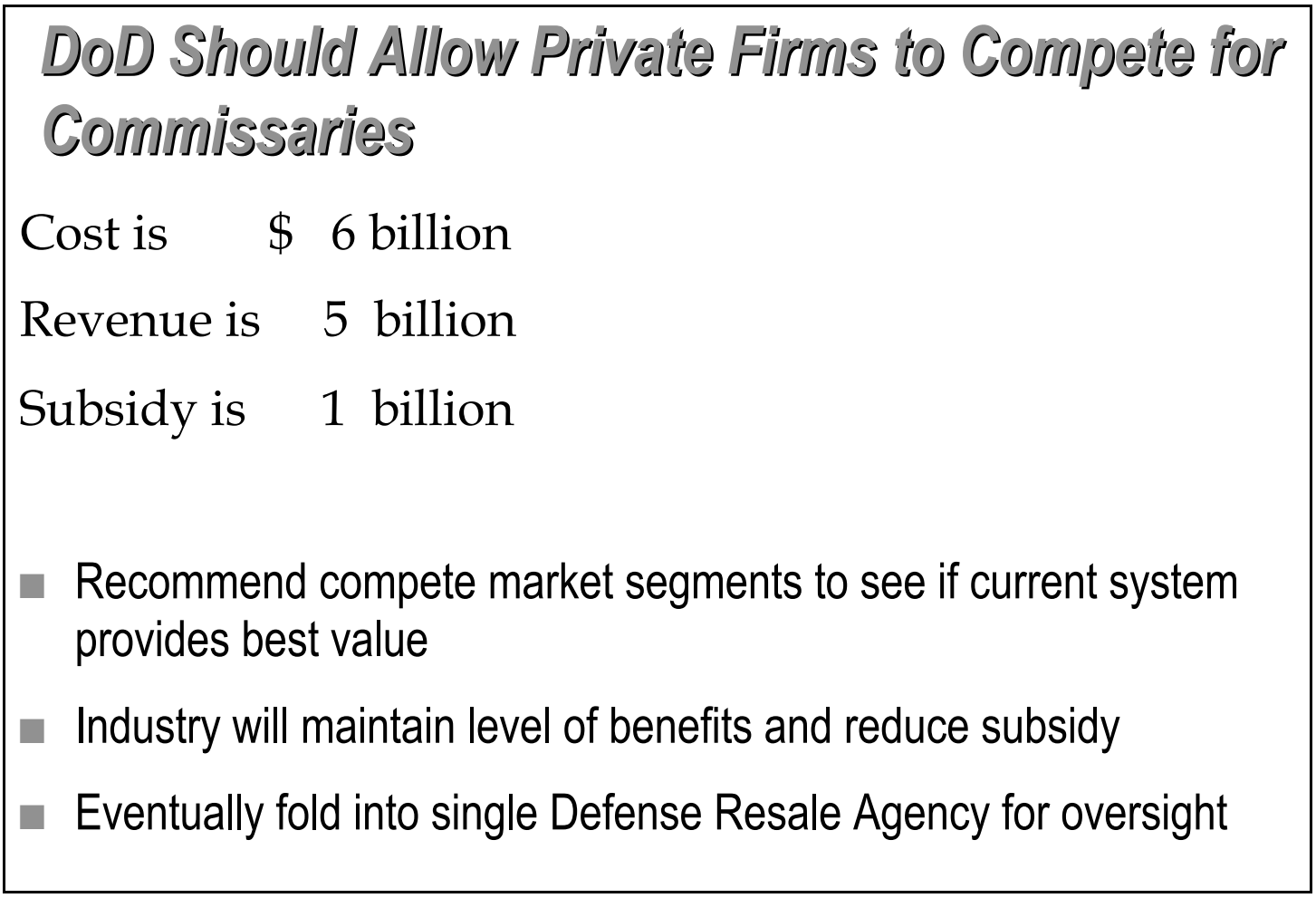

Figure 4-5.1

Military commissaries are operated by the Defense Commissary Agency (DECA). It is the ninth largest grocery chain in the nation. Operating and maintaining a grocery chain is clearly a commercial activity and not core to the successful performance of DoD's mission. This Task Force does not recommend changing the benefit. Rather the study team recommends that market segments be competed to see if private firms can provide better value to DoD and commissary customers. Eventually, commissaries in most regions would be operated by the private sector, possibly by the same firm.

A private operator would be required to maintain the current price structure below market prices. DoD would pay the operator a certain percent of the revenue. This would provide an incentive to maintain customer satisfaction and the customer base. The Task Force also recommends that the Defense Resale Agency provide the oversight. This proposal is estimated to reduce costs by $100 to 200 million a year.

5.0 SELECTED OTHER COST REDUCTION OPPORTUNITIES

5.1 DEFENSE BUSINESS OPERATIONS FUND (DBOF)

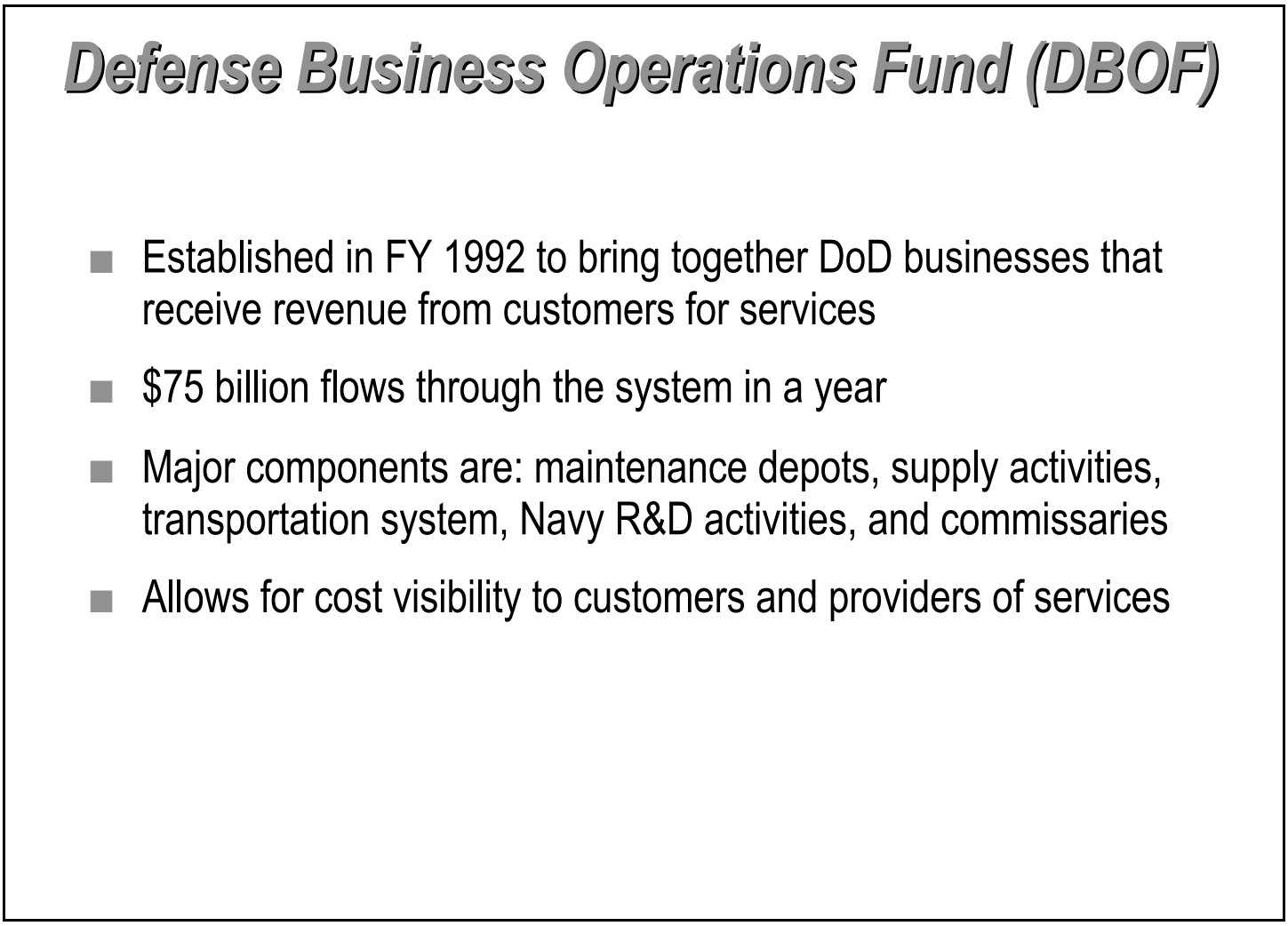

Figure 5-1.1

In October 1991, DoD set up the Defense Business Operations Fund (DBOF).[1] It is a collection of accounts for DoD activities that are paid by internal customers for their services. Approximately $75 billion will flow through this system in FY 96. The major components of the system are supply activities, maintenance depots, the transportation system, the Navy R&D activities, and the commissaries. A major virtue of DBOF, and any customer reimbursable system, is that it provides cost visibility to both customers and suppliers of services. This year Congress directed DoD to develop a plan that addresses certain aspects of DBOF. This plan must be submitted by September 1997. This review is an opportunity for DoD to improve DBOF as a management tool.

[1] The material in this section draws heavily from "The Defense Business Operations Fund," by R.Derek Trunkey and Jino Choi, CR< 95-196, Center for Naval Analyses, March 1996.

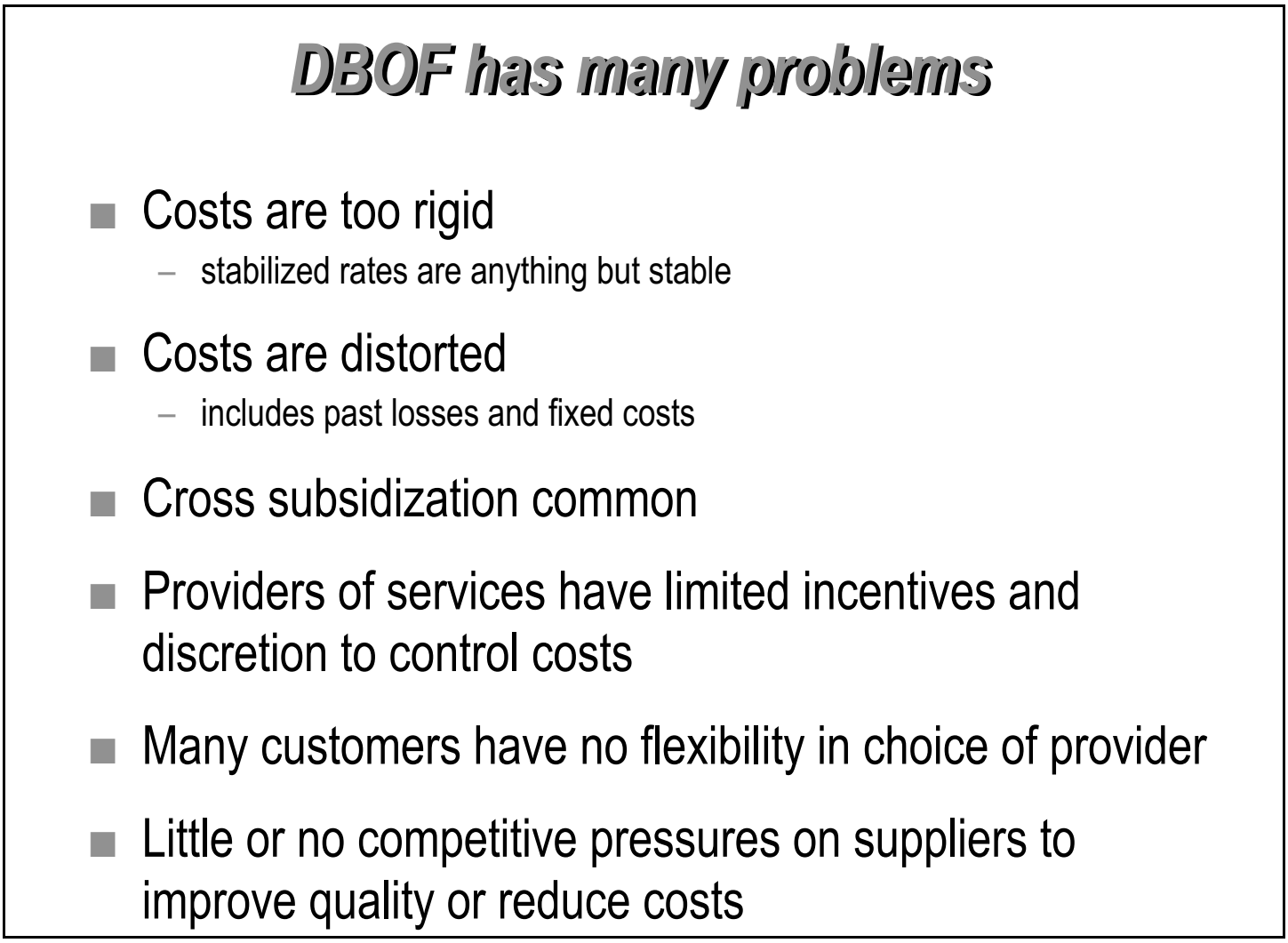

Figure 5-1.2

Unfortunately, DBOF pricing has not done what it was intended to do and has had some unintended adverse results. Prices have been distorted and have created perverse incentives. Operational customers, responding to excessive charges, have reduced their demands, while the depots and other providers of services feel powerless in reducing costs. Several DBOF rules and some traditional practices have caused these problems. Below, the Task Force identifies some specific problems.

The charges for services are based on centrally-constructed "stabilized" rates. These stabilized rates, which are generally constructed two years prior to their implementation , often deviate from the actual realized costs. This creates losses and profits that carry forward to the following year. The new rates are raised to cover losses and reduced to eliminate the profits. Thus, activities that couldn't attract sufficient customers are forced to raise rates and attract even less customers. Another way the system handles profits and losses is to cross-subsidize activities. The profit-makers transfer funds to the losers, creating perverse incentives. An activity that finds ways to reduce costs loses money to those activities that didn't reduce their costs. Additionally, in many cases customers have no flexibility in selecting a supplier. Thus, a few captured customers must carry the full costs of

the system. Finally, without competitive pressures on the suppliers, there is little incentive to improve performance or lower costs.

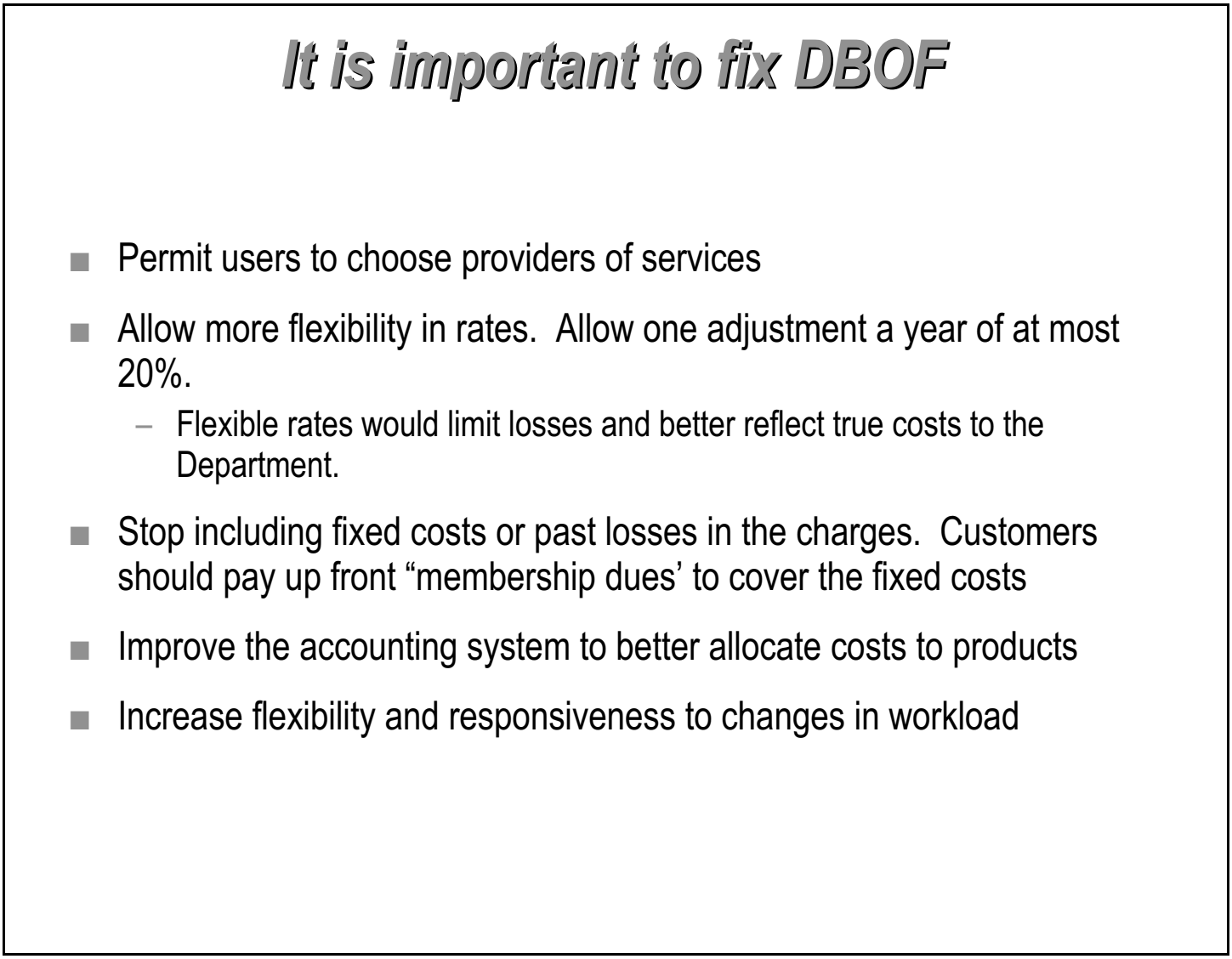

Figure 5-1.3

Independent of the Congressionally-directed study, DoD needs to fix DBOF. It is the way costs are made visible in a large part of DoD's support activities, and it is broken. Rates should reflect marginal costs to DoD. DoD should allow some change to the stabilized rates during the year. One change of no more than 20% should bring the rates closer to current costs and not disrupt operational units. To the extent that there are still losses, they should not be carried into the following year's rates. A way to handle this is to charge an entry fee to all operational units using the activity. This way current marginal costs determine usage and the entry fee covers the losses. The service provider should also have to develop a plan to bring down costs.

Profits may be more difficult to handle. The providers of services should receive a reward for keeping costs down or attracting additional customers. Some of the profits could be used for bonuses or improving the work environment.

Local providers should develop better cost accounting. Within facilities, average costs are charged for very different work. For example, at shipyards, work on nuclear and conventional ships have the same stabilized rates, even though the nuclear work is more costly to the facility and to the Navy. This contributes to driving out the conventional work.

Internal sellers of services need greater flexibility to adjust to fluctuating workloads. A larger portion of the workload should be met by temporaries, part-timers, and overtime hours. The traditional practice of maintaining a large permanent workforce cannot be economically sustained. Customers should have more discretion in choosing providers of services. DoD and the Services have unnecessarily created internal monopolies with captured customers. Customer discretion is key to containing costs.

5.2 SIMULATION/OPTEMPO

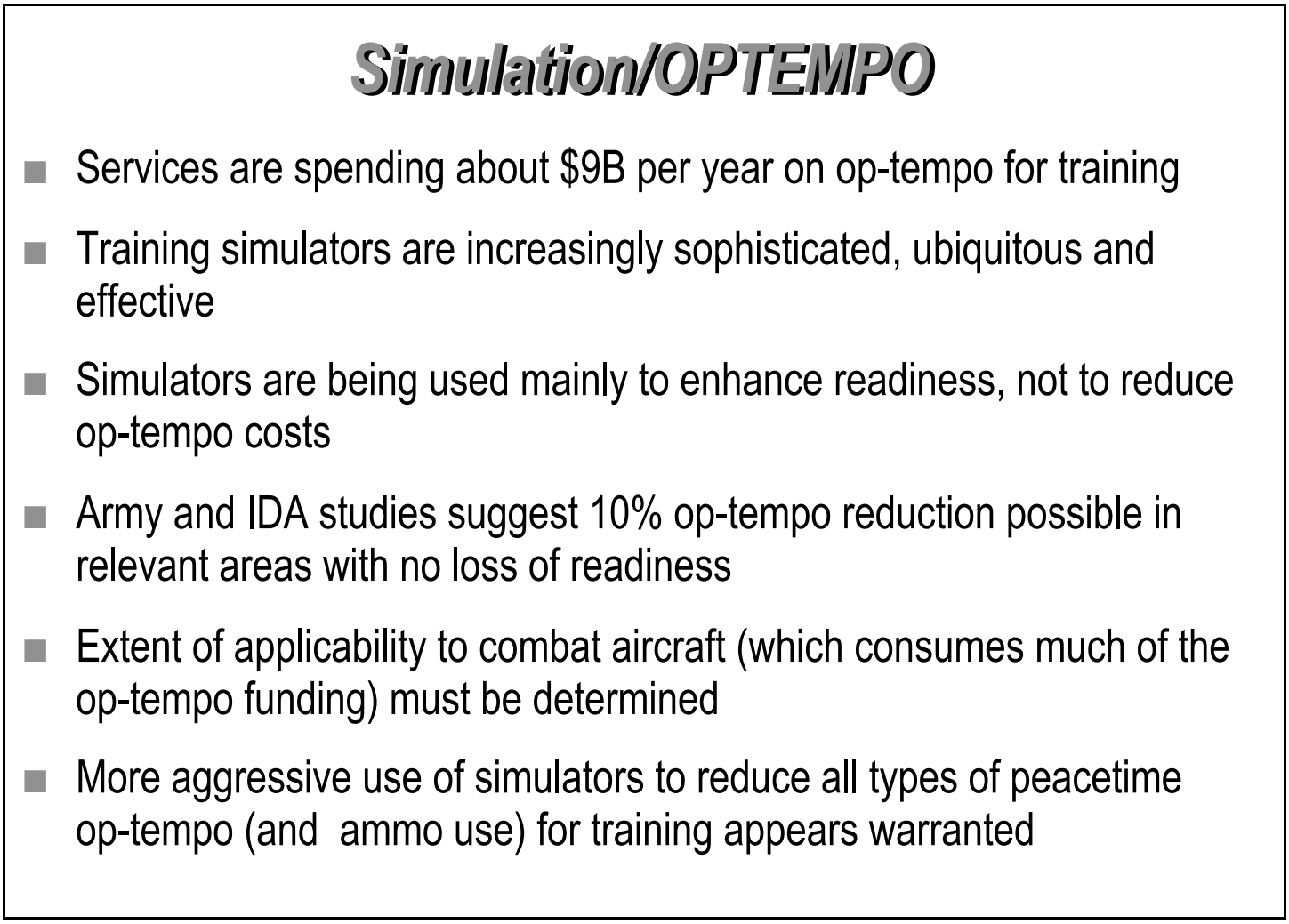

Figure 5-2.1

In contrast to the other changes recommended in this report, which deal almost exclusively with the infrastructure that supports military forces, this initiative deals with the peacetime operating tempo (OPTEMPO) of the forces themselves.

The routine peacetime operation of U.S. military forces currently consumes about $17B/year, exclusive of the costs of the military personnel themselves. The large majority of these costs result from the peacetime operation of military aircraft (fixed and rotary wing), with the next largest category being ship "steaming days." Military forces operate in "peacetime" both for training and to meet specific operational commitments, such as patrolling demilitarized zones and building coalition relations with allies. The accounting systems within DoD do not systematically differentiate between the cost of operations for training and the costs expended for non-training operations. Indeed, meeting many, if not most, of DoD's "operational commitments" also provide significant collateral training – training that would need to be funded and conducted anyway, even in the absence of operational commitments, in order to maintain the prescribed level of readiness.

Nevertheless, it is clear that a significant fraction of the $17B expended each year – probably at least half – can be fairly characterized as being used primarily for training. The cost of this "unit training" is additive to the $18B spent each year on individual training in the infrastructure accounts.

DoD's future plans for peacetime operations for training largely reflect a continued steady rate of funding. At the same time the Department continues to invest heavily in increasingly sophisticated computer driven simulators that create ever more realistic synthetic environments. To date the Services (particularly the field commanders) have been reluctant to use this growing capability to reduce live field training. The proliferating new simulators are used instead to enhance the overall readiness of the units. For example, the Army reduced its planned consumption of tank training ammunition only enough to exactly pay for the new Conduct of Fire Trainers (COFT), preferring to use the additional capability of the simulator to further increase skills, rather than to reduce net costs and preserve current readiness.

Recent studies by the Army and IDA of the training effectiveness of several types of simulators suggests that the peacetime optempo for training on relevant systems can be reduced by about 10%. While the long history of successful use of sophisticated simulators by the airlines and other segments of the transportation industry provide some confidence in the validity of such estimates, caution is warranted in extrapolating specific results to the category of forces that consume most of DoD's Optempo funding combat aircraft. The training syllabus already includes considerable simulator time, and many combat evolutions are impractical to simulate with enough fidelity to be very effective. Still, simulators have been and are continuing to get better while the DoD flying hour program remains essentially level funded per aircraft. It is logical to conclude therefore that, in addition to those systems for which good training effectiveness data exist, there could be some reduction in combat aircraft peacetime optempo as new simulators become available, with no loss of combat effectiveness. Indeed, the Army is already planning to reduce the flying hours of Army helicopters for just this reason.

The Task Force recommends that the Undersecretary of Defense (Personnel and Readiness), in conjunction with his Service counterparts, clarify the Department's policy toward the use of simulators in lieu of selected field training. The goal should be to achieve and maintain the specified level of readiness in the most efficient manner. Systematic studies and tests should be aggressively conducted to determine the degree to which simulators can substitute for peacetime operations for training, including the expenditure of training ammunition, with the goal of achieving a significant net reduction in such peacetime costs.

Appendix A

TERMS OF REFERENCE

Appendix B

GLOSSARY OF ACRONYMS

Acronyms

A&T	Acquisition and Technology
A-76	OMB circular prescribing procedures for government vs. industry competitions
ABC	Activity-based cost
ACTD	Advanced Concept Technology Demonstration
ADP	Automated Data Processing
AFCAP	Contingency Support Contract - Air Force
BMC3	Battle Management Command, Control Communications
BMC4I	Battle Management Command, Control, Communications, Computing
BMD	Ballistic Missile Defense
BOQ	Bachelor Office Quarters
BOS/RPMA	Base Operating Support/Real Property Management Accounts
BRAC	Base Realignment and Closure
C3I	Command, Control, Communications and Intelligence
C4I	Command, Control, Communications, Computing and Intelligence
C4ISR	Command, Control, Communications, Intelligence, Surveillance and Reconnaissance
CAIV	Cost as an Independent Variable
CBO	Congressional Budget Office
CDA	Central Design Activity
CENTCOM	US Central Command
CHAMPUS	Medical service program for the military
CIO	Central Imaging Office
CJCS	Chairman, Joint Chief of Staff
CLS	Contractor Logistics Support
CNA	Center for Naval Analysis
COCO	Contractor-Owned, Contractor- Operated
CONCAP	Contingency Support Contract - Army
CONUS	Continental United States
COTS	Commercial-off-the-Shelf
CPU	Central Operating Unit
CRM	Commission on Roles and Missions
DARPA	Defense Advanced Research Projects Agency
DBOF	Defense Business Operations Fund
DCAA	Defense Contract Audit Agency
DCMC	Defense Contract Management College
DFAC	Defense Finance and Accounting Center
DFAS	Defense Finance and Accounting Service
DII	Defense Information Infrastructure
DISA	Defense Information Systems Agency
DLA	Defense Logistics Agency
DMC	Defense Mega Center
DMRD	Defense Management Review Directive
DoD	Department of Defense
DODD	DoD Directive
DRAM	Dynamic Random Access Memory
DRB	Defense Resources Board
E1-E3	Enlisted Ranks
EDI	Electronic Data Interchange
EW	Electronic Warfare

FFG	Fast Frigate
FTE	Full-Time Equivalent
GAO	General Accounting Office
GOCO	Government-Owned, Contractor- Operated
GOGO	Government -Owned, Government -Operated
GSA	General Services Administration
GTN	Global Transportation Network
HQ	Headquarters
ICP	Inventory Control Point
IDA	Institute for Defense Analyses
IT	Information Technology
JCS	Joint Chiefs of Staff
JTAV	Joint Total Asset Visibility
KC	Transport Aircraft
LMI	Logistics Management Institute
LOGCAP	Contingency Support Contract - Navy
MIPS	Millions of Instructions Per Second
MIS	Management Information Systems
MOD	Minister of Defense
MRC	Major Regional Conflict
MSE	Mobile Subscriber Equipment
MTF	Mean Time to Failure
MTF	Military treatment facility
NAWC	Naval Air Warfare Center
NPR	National Performance Review
O&M	Operations and Management
O&S	Operating and Support
OJT	On the job training
OMB	Office of Management and Budget
OPTEMPO	Operating tempo
OSD	Office of the Secretary of Defense
P&R	Personnel and Readiness
PA&E	Program Analysis & Evaluation
PACOM	US Pacific Command
PCS	Permanent Change of Station
POM	Program Objective Memorandum
R&D	Research and Development
RCCSA	Regional Computing Combat Support Activities
RDT&E	Research, Development, Test and Evaluation
RIF	Reduction in Force
S&T	Science and Technology
SIA	Semiconductor Industry Association
SMC	Services' Materiel Commands
SOUTHCOM	US Southern Command
SPO	System Project Office
T&E	Test and Evaluation
TAV	Total Asset Visibility
TBD	To Be Determined
TDY	Temporary Duty
TF	Task Force

TRICARE	Medical service program for the military
USAF	US Air Force
USEUCOM	US European Command
USD	Under Secretary of Defense
USDA&T	Under Secretary of Defense for Acquisition and Technology
USMC	US Marine Corps
USN	US Navy
VAMOSC	Visibility and Management of O&S Costs
VCJCS	Vice Chairman Joint Chief of Staff
VHA	Variable Housing Allowance

Appendix C

BRIEFINGS PRESENTED TO TASK FORCE

Appendix C - Briefings Presented to Task Force

PA&E Briefing	Dr. Dave McNichol
Related RAND Studies	Mr. Michael Rich
Related LMI Studies	Mr. James Forbes and Mr. Dennis Whiteman
Army Velocity Management	LTC Glenn Harrold
DSB Logistics TF	Bill Tuttle
AF Long Range Planning	Col Dave Zorich
IDA Research & DSB Strategic Mobility Task Force	Gen Larry Welch
AF Operations & Plans	MGen Bob Linhard
Army After Next	COL Killibrew
USMC Sea Dragon	COL Tom Harkins
Army Force XXI	COL Bob Billings
Regional Maintenance	RADM James Taylor
Smart Ship Initiative	CAPT Tom Zysk
Navy Privatization and Outsourcing	RADM John Scudi
USMC Streamlined Support	BG Gary McKissock
GE Aircraft Engines	Tom Brisken and Sue Pittman
DARPA Advanced Logistics Program	Brian Sharkey
Logistics ACTDs	Mo Schreiber
AT&T Global Manufacturing	Larry Seifert
Defense Program Projection	Bill Lynn
Air Force Budget & Personnel	BrigGen Lee Wilson
USMC Budget & Personnel	Col Larry Wells
Army Budget & Personnel	
Caterpillar Worldwide Logistics	James Baldwin, Bob Mylott and Richard Carver
Navy Budget & Personnel	VADM Joseph Lopez
PA&E O&S Visibility	Mr. Steve Grundman
Boeing: Global Logistics	Darce Lamb
DSB Summer Study on Tactics and Technology for 21st Century Military Superiority	Mr. Donald Latham