Requiring the Use of Fully Burdened and Life Cycle Personnel Costs for all Components in Total Force Analysis and for Budgetary Purposes

Update Report to the Secretary of Defense

September 10, 2019

RFPB Report FY19-01
INFO MEMO

FOR: SECRETARY OF DEFENSE

FROM: MajGen Arnold L. Punaro, USMCR (Ret), Chairman, Reserve Forces Policy Board

SUBJECT: Report of Reserve Forces Policy Board on Requiring the Use of Fully Burdened and Life Cycle Personnel Costs for all Components in Total Force Analysis and for Budgetary Purposes

- The Reserve Forces Policy Board (RFPB) is a federal advisory committee established in law to provide you with independent advice and recommendations on strategies, policies and practices designed to improve and enhance the capabilities, efficiency, and effectiveness of the reserve components.

- The RFPB met on September 10, 2019 and voted to make three recommendations to you concerning policy changes needed to assure that you and your senior officials have better data about the financial costs of your Active and Reserve Component forces (TAB A).


  2. Calculate and report cost element figures annually using budgeted and actual costs.

  3. Develop a model to calculate and compare Active and Reserve Component fully burdened life cycle costs.

- As required by the Federal Advisory Committee Act, the recommendations were deliberated and approved in an open, public session. Also consistent with the Act, a copy of this report will be posted to the RFPB web site at http://ra.defense.gov/rfpb/reports.

- The project team consulted with Cost Assessment and Program Evaluation as well as the Office of the Under Secretary of Defense (Comptroller) on these matters.

COORDINATION: NONE
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Requiring the Use of Fully Burdened and Life Cycle Personnel Costs for all Components in Total Force Analysis and for Budgetary Purposes

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EXECUTIVE SUMMARY

Senior Department of Defense (DoD) officials, Congressional leaders, think tanks and subject matter experts acknowledge the fully burdened and life cycle cost growth trends of the All-Volunteer Force continues on an unsustainable basis. Further, major military manpower decisions over the last several decades continue to be less than fully informed regarding real, present and future costs. The Reserve Forces Policy Board (RFPB) concluded both in its 2013 Fully Burdened and Life Cycle Cost Report, and again in this 2019 update, that DoD lacks appropriate policy requiring a complete and consistent costing methodology to identify the true fully burdened and life cycle costs of military manpower. Consequently, using FY 2018 data to update the 2013 Fully Burdened and Life Cycle Cost Report, the RFPB makes the following three recommended updates and proposes specific cost elements that should be included in them:

2. Calculate and report cost element figures annually using budgeted and actual costs.
3. Develop a model to calculate and compare Active and Reserve Component fully burdened life cycle costs.

The primary purpose of these recommendations is to ensure senior DoD leaders receive accurate analytical products that are based on current, complete and consistent data. The Board believes that the establishment of a standard costing method for determining complete individual component costs is essential when exploring Active Component (AC)/Reserve Component (RC) force mix and mission alternatives in a fiscally responsible environment. The Director of Cost Assessment and Program Evaluation (CAPE) must take the lead for the Secretary of Defense in determining the cost methodology ground rules for the military departments and other DoD entities. The DoD should also know and implement a comprehensive, fully burdened life cycle cost policy for all of its personnel for informed decision making.

The Director of CAPE committed to address each of the recommendations from the 2013 RFPB report in an Information Memorandum dated 15 March 2013 (Appendix D). The RFPB applauded the willingness of CAPE to pursue their review. However, in the six years since, CAPE has only addressed four of the six recommendations, and only in part. In its FY 2015 Military, Civilian, and SES Manpower Rates for the Cost Guidance Portal, CAPE specified the cost elements that must be included when computing the fully burdened cost to DoD for military manpower in accordance with recommendations from the 2013 report (Appendix C). Those elements are specified in Appendix E. However, CAPE did not include major costs from the 2013 RFPB report associated with Procurement, Military Construction and Research Development Test and Evaluation (RDT&E). These are clearly essential and very large elements of the fully burdened cost to DoD.

The current CAPE policy and Full Cost of Manning (FCoM) tool provide updated cost figures annually and provide a model to possibly calculate and compare life cycle costs. However, they do not address RC costs and only address a single annual cost for Active Duty
service members and civilians, and do not calculate a fully burdened or life cycle cost for Active Duty service members.

In this 2019 update the RFPB staff team pursued a “top-down” quantitative analysis of the Fiscal Year 2018 federal budget request as detailed in DoD’s “Green Book” and related budget materials. The FY 2018 data is the most recent FY for which full-year data is available. The RFPB project team held a significant number of meetings over the past year including the RFPB and key DoD stakeholders for substantive discussion and metric examination. These meetings provided further validation of fully-burdened values for various cost elements used in the original report, confirming that the cost of a RC service member, when not activated, remains less than one third that of their AC counterpart. According to RFPB analysis of the Fiscal Year 2018 budget request (Appendix B), the RC per capita cost ranges from 28% to 32% of their AC counterparts’ per capita costs, depending on which cost elements are included. These calculations remain consistent with DoD, think tanks, Federally Funded Research and Development Centers (FFRDC), commissioned studies, and the independent statutory Commission on the National Guard and Reserve conclusions comparing active and reserve component costs since the advent of the All-Volunteer force.

This updated RFPB report answers the Secretaries’ call at the September 5, 2012 and December 12, 2018 RFPB meetings to provide advice and guidance on: the best balance between active and reserve forces, the cost of a strong reserve, and how to achieve savings in the Reserve Components. This analysis also begins to answer the “myth” that continues to be held by some that the Guard and Reserve are more expensive than the Active Component (Figure 1.0). In some cases, this is based on a refusal to account for the real estate, facilities, utilities, infrastructure, training and other costs required to support personnel who are on active duty 365 days per year. The RFPB intends to examine these areas in detail in a subsequent report. Therefore, the RFPB again recommends mandatory inclusion of specific cost factors for computing the fully-burdened and life-cycle costs of military manpower. This is essential to accurately compare the costs of Active and Reserve Components in present and future DoD force structure decisions.
Requiring the Use of Fully Burdened and Life Cycle Personnel Costs for all Components in Total Force Analysis and for Budgetary Purposes

THE TASK

At the November 29, 2011 meeting of the Reserve Forces Policy Board, the Chairman of the RFPB, in accordance with the RFPB statute, raised for Board consideration the need for DoD to develop a methodology to examine both the “fully burdened” and “life cycle” cost of its forces. This would contribute to senior leaders making fully informed decisions about the long term sustainability of the All-Volunteer Force as well as the future mix of Active and Reserve Component forces. This policy gap became apparent from comments made by the outgoing Assistant Secretary of Defense for Reserve Affairs and other senior DoD leaders. Upon Board approval and direction by the Chairman, the Military Executive of the Reserve Forces Policy Board initiated a staff project to examine DoD costing methodologies and policies for the Total Force.

The importance of completing this project was revealed at the September 5, 2012 meeting of the Reserve Forces Policy Board when the Secretary of Defense met with members of the RFPB. He charged them with providing advice and guidance regarding the best balance between active and reserve forces, the cost of a strong reserve, and how to achieve savings in the Reserve Components.

Yet again at the December 12, 2018 meeting of the Reserve Forces Policy Board, former Secretary of Defense, James N. Mattis, stated that “DoD needs to determine the correct level of a Strategic Reserve that can support Global Campaign Plans (GCPs) while still maintaining an Operational Reserve that can support ongoing contingencies.” He further requested help from the RFPB to determine what levels of deployment to dwell ratios can truly be sustained. This task includes incorporating cost as a metric when making force mix decisions. This update to the 2013 Fully Burdened and Life Cycle Cost Report addresses the issue of cost of the reserve component member with budget numbers from FY 2018, which is the most recent fiscal year where complete budget data is available. The issue of dwell ratios and employer support will be addressed in subsequent reports.

THE PROBLEM

The fully burdened and life cycle cost trends supporting the current All-Volunteer force continue on an unsustainable basis. Each Secretary of Defense over the last decade, current and former senior DoD officials, and prominent think tanks and commissions alike have all underscored these adverse trends of rising costs.

The DoD cost of “taking care of people” still consumes well over 50 percent of the total DoD budget. Former Defense Secretary Panetta stated that “the escalating growth in personnel costs must be confronted. Specifically, military healthcare and retirement costs have increased to about $50 billion (same testimony)” and have continued to climb. His predecessor, former Defense Secretary Gates stated that changing from “a culture…where cost is rarely a consideration” to a “culture of savings and restraint” is essential. Respected think tanks also produced analysis with similar conclusions, particularly the Report of the Military Compensation and Retirement Modernization Commission published January 29, 2015.
During the June 5, 2019 meeting of the Reserve Forces Policy Board, Secretary David L. Norquist, performing the Duties of the Deputy Secretary of Defense, echoed previous calls for fully burdened cost analysis. He explained that “allocating resources to grow Active Component end strength is a risky bet, since Congress may decrease the size of the military in any 2-year time frame, having to let them go after expending effort on recruiting and training of those forces.” Secretary Norquist then described that from this perspective, budgeting for investment and modernization while realizing the cost benefits of the Reserve Components provides the most consistent and durable way to implement the National Defense Strategy.

The Reserve Forces Policy Board maintains that DoD does not know, use, or track the fully burdened and life cycle costs of military personnel in the budgeting and programming of force mix decision making. The former Assistant Secretary of Defense for Reserve Affairs, Dennis McCarthy, called for “an apples to apples methodology that accurately calculates the true cost of people in the Active and Reserve Components.” The Board agrees with this conclusion and continues to trumpet the need for written policy on a Total Force (active, civilian, contractor, and reserve component personnel) truly fully burdened and life cycle manpower costing methodology to accurately program, budget, and support sound decisions on future force structure.

PROJECT PHILOSOPHY/APPROACH

In December 2018, the Secretary of Defense charged the RFPB with the task of giving him advice on the cost of a strategic reserve and the frequency of its use in support of contingency based operational missions. This report builds on the foundation of the 2013 RFPB report for fully burdened and life cycle costs of manpower and contributes to the Board’s ability to formulate fully informed recommendations on current and future force mix questions.

This report’s primary purpose is to again provide a starting point for further development of an objective costing metric/method. Its goal is to present repeatable data on the fully burdened and life cycle costs of military personnel and promote the directed development of an objective comparative analysis policy and capability, providing senior decision-makers with the ability to track trends over time, and make fully informed force structure decisions in support of the National Defense Strategy.

As the Nation faces an ever-increasing spending deficit, an inevitable era of prolonged fiscal constraint threatens the ability of DoD to successfully implement the National Defense Strategy. Cost will quickly become a limiting factor and an important metric/element in Defense decision-making. To support such decision-making it is essential that DoD’s cost estimating methodology – the purely objective side of the force mix equation – be as complete and consistent as possible.

The original RFPB report from 2013 found a significant DoD military personnel cost data gap in existing policy documents on costing methodology in DoD Comptroller and CAPE offices. Past cost studies provide no standardized costing process for use by all Services,
resulting in the services using different cost elements for comparison with no common consideration of all of the costs.

The Board’s recommendation for fully burdened and life cycle costing for manpower is consistent with DoD rationale requiring all costs to be included and considered in major acquisition decisions. The DoD uses the all-in program acquisition unit cost and provides life cycle operating costs. Neither DoD nor Congress make major acquisition decisions without knowing the full costs. Additionally, DoD uses the Fully Burdened Cost of Energy (FBCE) calculations to consider long-term fuel costs in procurement decisions. Finally, DoD requires contractors to invoice the fully burdened cost of their personnel working for DoD. The Board recommends DoD direct the same use of a fully burdened and life cycle approach to inform senior DoD leaders’ decisions on military personnel, where the life cycle and fully burdened costs are even more significant.

Military personnel costing within DoD is neither complete nor consistent. The Director of CAPE has annually published guidance in Department of Defense Instruction (DoDI) 7041.04 (Appendix F) providing a starting framework to move in the right direction, but the document does not provide the Services and Components with all the fully burdened and life cycle costing elements. Additionally, the document does not include any reference to Reserve Component costing.

This inconsistency in cost analysis is relevant because senior DoD officials are making uninformed decisions that impact future total force structure. This examination of all the costs within DoD’s budget, as well as applicable federal programs outside of DoD, confirms that Reserve Component service members cost less than 1/3 of Active Component service members, and these percentages remain accurate whether analyzing it on an annual basis or a life cycle basis.

**METHODOLOGY**

The foundation for analysis of this 2019 update to RFPB 2013 Fully Burdened and Life Cycle Cost Report began with the identification of updated data sources for the costs. From the previous analysis, we again used common business case analysis processes across the Services and Components (Appendix C). Following the methodology from the 2013 report, we allocated all DoD costs and appropriate costs of other Departments to either Active or Reserve Components. In this analysis, costs were allocated to Active and Reserve Components just as the funds were requested in the various component appropriation accounts. Defense-wide accounts were allocated based on identifiable “fair share” quantitative multipliers. Where no such multipliers were apparent, Defense-wide costs were allocated on an equal per capita basis. This method required some assumptions and even judgment calls that will promote future debate.

Next we vetted our work with key decision makers and subject matter experts from within DoD. This included visits with staff members from CAPE, Comptroller, DoD Office of the Actuary staff, the Director of USD (P&R), Reserve Integration leadership and staff.
From January 2 to March 6, 2019, the RFPB project team conducted a “bottom-up” review and update of FY 2018 AC/RC costs across the services and components. During eight meetings, the RFPB staff re-examined and re-calculated, for FY 2018, the fully burdened and life cycle costs for each metric of the 2013 report. First, the working group developed a schedule to identify all tasks and deliverables. Next, the project team examined DoDI 7041.04, DoD’s policy on the subject of “Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contract Support” dated July 3, 2013. This policy identifies for DoD analysts the cost elements to be examined when studying full-time staffing options.

Using the 2013 report and DoDI 7041.04 as a baseline, the RFPB staff identified actions by CAPE to address the six recommendations from the 2013 report, and found that CAPE took limited action on recommendations two, three, four and five. Addressing recommendations two and three, CAPE specified the cost elements and additional external costs that must be included or considered when computing the fully burdened cost to DoD for military manpower (Appendix E). However, CAPE did not include costs associated with Procurement, Military Construction and RDT&E. The RFPB considers these costs to be a fundamental part of the fully burdened cost to DoD and critical to obtaining a true picture of all components in a fully burdened cost model.

CAPE addressed recommendation four in its Full Cost of Manning (FCoM) tool, which provides updated cost figures annually and provides a model to calculate and compare annual costs. However, the FCoM tool only computes a single annual cost for Active Duty service members and civilians, not a fully-burdened and life-cycle cost for Active Duty service members. Further, neither the FCoM tool nor the policy update to DoDI 7041.04 (Appendix F) include any references to Reserve Components which are part of the Total Force associated with recommendation one.

CAPE addressed recommendation five in DoDI 7041.04 stating:

“…composite rates should not be the only source of data used when answering questions about the cost of the defense workforce, making workforce-mix decisions, or determining the cost impact of manpower conversions.”

**RECOMMENDATIONS & FINDINGS**

| Recommendation #1 - Establish DoD policy/guidance for computing fully-burdened Military Personnel Costs for the Total Force including Reserve Components. The Director of Cost Assessment and Program Evaluation (CAPE) should establish permanent DoD policy for calculating the “Fully Burdened” costs of individual members from both the Active and Reserve components to properly and completely identify actual costs. |

As noted in the RFPB’s Report in January 2013, DoD has no policy in place to define or require complete analytical data for the comparison of Active and Reserve Component costs to determine Total Force mix options. As a result, senior leaders within DoD do not have complete or uniform data on the total costs associated with such forces. Therefore, decisions about the
optimal mix of future Active and Reserve Component forces are not fully informed, and an “apples to apples” comparison is not possible.

While DoD has no policy in place to define or to require consistent or complete analytical data for the comparison of Active and Reserve Component costs for force mix options, it does have a policy guiding the collection and analysis of comprehensive cost data for comparing military, government civilian, and contractor full-time staffing options. Currently, DoDI 7041.04 identifies the cost elements necessary to calculate and compare the full cost of full-time staffing options. However, it does not examine part-time staffing. The DoDI identifies the costing elements as:

- Base Pay
- Retired Pay Accrual (RPA)
- Basic Allowance for Housing (BAH)
- Basic Allowances for Subsistence (BAS)
- Training
- Permanent Change of Station (PCS) / Relocation
- Miscellaneous Expenses
- Medicare-Eligible Retiree Health Care (MERHC) Education Assistance
- Recruitment and Advertising
- Child Development (Day Care Facilities)
- DoDEA and Family Assistance
- Health Care (Active Duty and Active Duty Family Members).

Costs from the 2013 RFPB report (Appendix C) associated with Procurement, Military Construction and RDT&E are not included as fully burdened cost elements in DoDI 7041.04. These are part of the fully burdened cost to DoD and merit explicit DoD guidance for inclusion in future AC/RC cost studies (Figure 2.0).
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AC FCoM / AC FCoM+RFPB 2018
One Year Comparison

Figure 3.0 is a one-year comparison of Active Component, Air Force service members and demonstrates the difference in per capita annual cost when these metrics are included as part of the fully burdened costs. These costs total more than $350 billion annually and must be considered. Excluding these costs creates a highly inaccurate and misleading indication of personnel costs. As an example, a decision to establish an Army Brigade Combat Team will include soldiers, equipment, motorpool space and headquarters facilities. For an Active Component unit, it will also need to include costs such as barracks facilities, soldier parking, as well as increased burdens on medical facilities, dependent care and day care centers. Generally, none of this is required for a similar Reserve Component unit.

**Procurement**

Funds from “Procurement” accounts are used to purchase major items of equipment including aircraft, armored vehicles, trucks, weapons, communications systems, missiles and ammunition. No Reserve Component has its own standard procurement account. Reserve Component equipment is funded and procured primarily through the Service procurement accounts, or a “last minute” National Guard and Reserve Equipment Account (NGREA) subject to congressional approval annually. The NGREA account fluctuates annually but is generally about $1 Billion. This amount does not change the AC/RC comparison in any material way.

The DoD Budget Request which is transmitted to Congress each year includes a publicly-available exhibit identifying which part of DoD’s procurement funding request it plans to use for the purchase of Reserve Component equipment. The “Procurement Programs – Reserve Components” (P-1R) exhibit is a subset of the Procurement Programs exhibit. It reflects the Service estimates for those funds used to procure equipment for the Reserve Component. This amount funds the procurement of new equipment or major upgrades to existing equipment. This issue was highlighted in the RFPB recommendation Reserve Forces Policy Board Proposed Implementation of Specific National Guard and Reserves Line Item Numbers in the President’s Budget Request dated August 16, 2019.
In developing future policy regarding AC/RC costing, DoD should consider allocation of procurement account costs when calculating comparative, fully burdened costs. The P-1R should be the basis for such an allocation.

**Military Construction Other than Family Housing**

Figure 4.0 shows the actual cumulative military construction costs from Fiscal Years 2011 to 2018 (MilCon, Appendix A). The Army and Air Force Reserve Components spent 28.8% and 22.7% respectively of their AC counterparts during this period. Navy and Marine Corps represent 7% of the DoD Total and have minimal impact on Figure 4.0. Since the Reserve Component does not require as much infrastructure as the Active Component, it incurs a far lower cost for base operations support, such as maintenance, security, and utilities costs associated with the housing, childcare and recreation facilities found on major bases. This is true whether the reservist is mobilized or in a drill status. Of the $730.8 billion in DoD Military Construction, over 85% is spent on the Active Component. Less than 15% was appropriated for Reserve Components.

The Board concludes that these other Military Construction costs should be considered and included in personnel fully burdened and life cycle cost studies and analysis as appropriate. Each Reserve Component has its own Military Construction account to which Congress appropriates funding based on the annual budget request. Consequently, most Military Construction funding is already clearly allocated between Active and Reserve Components.

One notable exception is the “Military Construction – Defense Wide” account. This account includes funding for construction of some facilities that support both Active and Reserve Components. Additionally, some facilities built with Active Component Military Construction funds may also, in part, serve Reserve Component forces. The reverse may also be true at times.

**Family Housing**

Reserve Component service members are ineligible to use the military family housing system, which required $7.3 billion to build and operate in FY’18 (Family Housing, Appendix A). Only RC service members on active duty orders qualify for on-base housing, and the majority do not use it. Therefore, this report also recommends that future DoD policy should
mandate that any AC/RC comparison cost study include the costs for both building and operating military family housing.

**RDT&E and Other**

Research, Development, Testing and Evaluation (RDT&E) funding is used to develop new technologies for DoD capabilities. None of the Reserve Components have an RDT&E account. Such basic research and testing would likely be required regardless of the relative Active/Reserve Component mix of the Total Force.

Other costs within DoD budget that are unlikely to be sensitive to changes in AC/RC mix include those for Environmental Restoration, Drug Interdiction, Cooperative Threat Reduction, and the Service-level Working Capital Funds.

In developing future policy regarding AC/RC costing, DoD should consider allocation of RDT&E and Other account costs on a per capita basis when calculating comparative, fully burdened costs.

**Training**

A significant portion of the training costs for Reserve Component members is conducted by the Active Component at their expense. This varies from service to service. In developing future policy regarding AC/RC costing, DoD should consider allocation of training costs borne by the Active Component to train the Reserve Component as well as costs realized by the Reserve Component to train the Active Component which is occurring more often at RC Regional Training Institutes (RTI).

Finally, DoDI 7041.04 does not address comparisons of Active and Reserve Component forces. Even so, this policy is the type of guidance DoD should produce with regard to Active/Reserve Component cost comparison. In its 2013 Report, the Board recommended that there should be such a policy. Subsequently, the Director of CAPE in a memorandum to the Secretary of Defense stated agreement in having such cost comparison guidance in place (Appendix D).

**Recommendation #2 - Calculate and report cost element figures annually using budgeted and actual costs.** The Director, Cost Assessment and Program Evaluation (CAPE) or the Under Secretary of Defense (Comptroller) should calculate and publish all cost elements for Total Force military personnel cost studies on an annual basis, and provide guidance on their use in an appropriate memo or report.

Annual standardized calculations for both budgeted and actual numbers of the required critical cost elements will provide updated and consistent numbers for the Services and other DoD components to use in costing studies. Additionally, publishing such cost elements annually will demonstrate DoD commitment to tracking costs in an increasingly budget constrained environment.
Recommendation #3 - Develop a model to calculate and compare Active and Reserve Component fully burdened life cycle costs. The Director, Cost Assessment and Program Evaluation (CAPE) should develop a model to calculate and compare the “life cycle” costs of Active and Reserve Component personnel.

On an annual basis, the cost of a Reserve Component service member is 28% to 32% compared to their Active Component counterpart, depending on what cost elements are included (Appendix B). This potential model should include the ability to selectively add the metrics of RDT&E and Other, Procurement, and Military Construction as well as select the basis whether budget estimate or actual expenditures for a given year or group of years. The model should further have the ability to calculate the full life cycle for an individual by service, occupation specialty and the ability to account for time spent in different components, such as a combination of Active Component and Reserve Component service. Finally, it should be linked to Comptroller databases for budgets as well as actuaries.

Figure 5.0 illustrates the comparison of both an AC and RC Air Force O-5 and E-7 for a 20 year career and life span of 78 years. The amounts were calculated using the Air Force Individual Cost Assessment Model (ICAM) in combination with RFPB report metrics of RDT&E and Other, Procurement, and Military Construction. These metrics are not included in the ICAM model. A 2.1% inflation factor was applied to these metrics in accordance with CAPE’s FCoM guidance for estimating future year costs.

The fully burdened and life cycle cost differential of a RC service member is 33% to 42% of the life cycle cost of an AC service member depending on number of deployments the RC service member conducted during the service member’s career. In this calculation, the same allocation of costs is given for AC and RC service members as was done in the 2013 report to maintain consistency of method. The RDT&E and Other line item represents nearly $1 million in the fully burdened and life cycle cost for an RC service member.

If the allocation of these costs were distributed to RC at 21.3% of AC costs, similar to the distribution of O&M costs for the same year, the Fully Burdened and Life Cycle Cost analysis would result in a significantly reduced RC service member life cycle cost of 22% to 34% of an AC service member depending on the number of deployments.
Existing Work to Leverage in Developing a DoD Life Cycle Cost Model

To assist DoD with the development of a life cycle model, the Board provides an example that already exists where life cycle costs are examined and modeled. The “Individual Cost Assessment Model” or ICAM (presently used by the US Air Force) draws on historical actual amounts and uses a stochastic model to account for the variation in service statuses (AC/RC) as well as lifespan.

Only by comparing the life cycle cost of Active and Reserve Component forces can fully informed information be quantified for decision making purposes. Fortunately, there has been some commendable work already done on the subject of identifying, calculating and using the life cycle costs of Reserve Component forces. In developing the model recommended above, DoD should leverage this existing work and translate the concepts and ideas for DoD wide use.

Air Force Reserve ICAM

The Air Force Reserve Command has developed a manpower life cycle cost model known as the Individual Cost Assessment Model (ICAM). It has been constructed with the intent of building an enduring analytical tool and capability to support more informed leader decisions.

Figure 6.0 is an ICAM one-year cost comparison of an Active Component O5 and E7 versus a traditional Reserve Component Air Force O5 and E7 conducting only the 39 training days associated with a normal non-deploying year. It is based on elements associated with the fully burdened costs for a single individual, including blended retirement (Appendix G). However, RDT&E and Other, Procurement, and Military Construction costs are not included. which the RFPB continues to argue provides an incomplete basis for analysis.

![ICAM 1 Year Not Deployed](image-url)
Reserve Forces Policy Board

Figure 7.0 is an ICAM five-year cost comparison of an Active Component O5 and E7 versus a traditional Reserve Component Air Force O5 and E7 conducting 39 training days associated with a normal non-deploying year for three years, 60 training days in a pre-mobilization train-up year and a one 365 day deployment in the fifth year. It is based on elements associated with the fully burdened costs for a single individual, including blended retirement (Appendix G). RDT&E and Other, Procurement, and Military Construction costs are not included, which the RFPB continues to argue provides an incomplete basis for analysis.

Figure 8.0 is an ICAM Full Life Cycle cost comparison of a 20-year career through retirement and death of an Active Component O5 and E7 versus a traditional Reserve Component Air Force O5 and E7. It accounts for 39 training days associated with non-deploying years, 60 training days in pre-mobilization train-up years, and four 365 day deployments. It is based on elements associated with the fully burdened costs for a single individual, including blended retirement (Appendix G). RDT&E and Other, Procurement, and Military Construction costs are not included, which the RFPB continues to argue provides an incomplete basis for analysis.

As DoD moves forward to develop a comprehensive model to examine life cycle costs, the above ICAM model examples show the type of scenario analysis capability expected to benefit force mix decision making from senior leaders in DoD.

CONCLUSION

In our report update, the RFPB answers the call to provide advice and guidance on the AC/RC mix of the Total Force. To make meaningful and accurate cost comparisons, all of the specific cost factors must be compared and included in a consistent manner. Therefore, the RFPB again recommends mandatory inclusion of specific cost factors for computing the fully burdened
and life cycle costs of military manpower (Appendix C). This is essential to accurately compare the costs of Active and Reserve Components in future DoD force structure decisions.

The RFPB renews three recommendations in this update to the 2013 report:


2. Calculate and report cost element figures annually using budgeted and all actual costs.

3. Develop a model to calculate and compare Active and Reserve Component fully burdened life cycle costs.

The Reserve Forces Policy Board makes these recommendations to the Secretary of Defense under our statutory charter. The RFPB stands ready to make its members and staff available for further consultation or discussion on these matters as DoD shall require.

Respectfully submitted,

Arnold L. Punaro
Major General, USMCR (Ret)
Chairman, Reserve Forces Policy Board
APPENDIX A

SOURCES
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Table 3-1 & 3-2 of the National Defense Budget Estimates for FY 2018 (Green Book) March 2018

DoD Procurement Programs – Reserve Components (P-1R) exhibit for FY 2018

Defense Health Prog FY 2018 Medical Workload Data

DoD Casualty Summary by Component as of April 2018

Statistical Report on the Military Retirement System for FY 10

DMDC data Military Retirees Currently in Receipt of Retired Pay.
DeCA survey data of Commissary Customers.
Source: The FY18 Estimated Data taken from the FY19 Defense Health Program budget exhibit PB-11B, Medical Workload and Productivity Data
Defense Health Program Beneficiaries - Medical Workload Data

Deaths per DMDC - Casualties by Component through January 9, 2019

Family Housing
Source: Greenbook Table 3-1 FY 2018

Family Housing
Source: OSD Comptroller ADVANA, Budget Execution – All DoD Family Housing
https://qlik.audit.usmc.mil/sense/app/aeca053c-d2a7-4afb-9ae0-08af62d91bd8/sheet/4b811bd5-d83a-4724-b5ff-925cf922cd45/state/analysis

O&M Defense-Wide
OSD Justification for FY 2013 Operation and Maintenance, Defense-Wide - Volume I

MilCon Defense-Wide FY18
DoD Fiscal Year 2018 Budget Estimates - Military Construction - Defense-Wide

MilCon
Source: OSD Comptroller ADVANA, Department Level Overview (1)
https://qlik.audit.usmc.mil/sense/app/aeca053c-d2a7-4afb-9ae0-08af62d91bd8/sheet/4b811bd5-d83a-4724-b5ff-925cf922cd45/state/analysis

Veterans Benefits Costs
US Dept Vet Affairs FY 2018 Budget Summary Vol. 1

FY 2018 Congressional Budget Justification - Veterans Employment and Training Service

Number of US Vets - FY18
Table 1L: VETPOP2016 LIVING VETERANS BY AGE GROUP, GENDER, 2015-2045

AGRs/TARs in FY 2018 DoD Budget
AGR and Technician figures from Defense Manpower Data Center, Summary Strength Report, August 22, 2018.

2018 Greenbook Table 3-2 pg 47

Dept of Education Impact Aid Costs
Department of Education IMPACT AID Fiscal Year 2018 Budget Request
https://www2.ed.gov/about/overview/budget/budget18/justifications/b-impactaid.pdf

September 2017 Military Retired Pay - in Receipt of Pay

Concurrent Receipt Liability

MERHCF Liability
Valuation of the Medicare-Eligible Retiree Health Care Fund, Table B2, Sept 30, 2017

Allocation of FY’17 Treasury Contributions
SOURCE FOR TREASURY CONTRIBUTION AMOUNTS:
Budget FY 2018 - Other Defense - Civil Programs, pages 1019-1020

Retirees by Age and Compo per DoD Actuary

Procurement for Active and Reserve Components in the FY 2018 Budget Request
Procurement Programs (P-1)

Procurement Programs Reserve Components (P-1R)
https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2018/p1r.xlsx
For Reserve Components Funding, must use breakout Exhibits in P-1R

RDT&E and Other Costs in the FY 2018 Budget Request
National Defense Budget Estimates for FY 2018 (Green Book)
http://comptroller.defense.gov/
APPENDIX B

SLIDES APPROVED BY RFPB ON 12 DECEMBER 2012
Active-Reserve Component Cost Comparison
Recalculation based on FY’18 Budget
6 March 2019
Purpose

- Continued elimination and refinement of major gaps in DoD data on the Fully-Burdened and Life-Cycle cost of military personnel
- Align AC and RC per capita costing methodology to support best practice analysis of force mix for the Total Force
- Host Reserve Compo G-8 / FM leaders to compare Fully-Burdened and Life-Cycle cost model
- Update DoD policy/guidance (DODI 7041.04) for computing fully-burdened military personnel costs for the Total Force
From DoD Base Budget request FY15 to FY18, per capita RC cost dropped from 29.4% to 28.6% of an AC service member
- AC Personnel Cost increased by 16% while RC increased by 13%
- AC O&M increase was almost double RC
- AC MilCon was almost three times RC

Bad news / Good news
- Increase in forces is concentrated in the AC
- RC troops are again an even better deal for the taxpayer

*decrease in per capita cost due to Procurement, Military Construction and RDT&E cuts
## FY 2018 Fully-Burdened Per-Capita Cost to the US Government

### Department of Defense

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Active Component</th>
<th>Reserve Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Personnel Account Costs</td>
<td>$90,383</td>
<td>$28,094</td>
</tr>
<tr>
<td>DoD Defense Health Program</td>
<td>$20,280</td>
<td>$8,600</td>
</tr>
<tr>
<td>DoD Dependent Education</td>
<td>$1,934</td>
<td>$31</td>
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<tr>
<td>DoD &amp; Service Family Housing</td>
<td>$1,071</td>
<td>-$</td>
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<tr>
<td>DoD Commissary Agency</td>
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<td>$41</td>
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<tr>
<td><strong>Subtotal - DoD Compensation Costs</strong></td>
<td><strong>$114,491</strong></td>
<td><strong>$36,767</strong></td>
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<tr>
<td>O&amp;M (Less DoD Dep Ed)</td>
<td>$126,041</td>
<td>$26,897</td>
</tr>
<tr>
<td>Procurement</td>
<td>$87,506</td>
<td>$1,767</td>
</tr>
<tr>
<td>Military Construction</td>
<td>$5,784</td>
<td>$716</td>
</tr>
<tr>
<td>RDTE &amp; Other</td>
<td>$40,976</td>
<td>$40,976</td>
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<tr>
<td><strong>Subtotal - DoD Non-Compensation Costs</strong></td>
<td><strong>$260,307</strong></td>
<td><strong>$70,355</strong></td>
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<tr>
<td><strong>Dept of Defense Grand Total</strong></td>
<td><strong>$374,798</strong></td>
<td><strong>$107,122</strong></td>
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### Other Federal Agencies

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<tr>
<th>Cost Category</th>
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### Change %

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<td>Dept of Treas - MERHCF</td>
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<td>Dept of Veteran Affairs</td>
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<td>Dept of Labor for Vet Education / Training</td>
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<tr>
<td>TOTAL COST TO US GOVERNMENT</td>
<td>16%</td>
<td>14%</td>
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</tbody>
</table>
APPENDIX C
FULLY-BURDENED AND LIFE-CYCLE COST REPORT 2013
INFO MEMO

FOR: SECRETARY OF DEFENSE

FROM: MajGen Arnold L. Punaro, USMCR (Ret), Chairman, Reserve Forces Policy Board


- The Reserve Forces Policy Board (RFPB) is a federal advisory committee established in law to provide you with independent advice and recommendations on strategies, policies and practices designed to improve and enhance the capabilities, efficiency, and effectiveness of the reserve components.

- The RFPB met on December 12, 2012 and voted to make six recommendations to you concerning policy changes needed to assure that you and your senior officials have better data about the financial costs of your Active and Reserve Component forces. (TAB A).


  2. Specify all the cost elements that must be included in cost studies.

  3. Identify mission support, Treasury contributions, and all other external costs that must be considered.

  4. Calculate and report cost element figures annually.

  5. Clarify the use of composite rates in studies.

  6. Develop a model to calculate and compare life-cycle costs.

- As required by the Federal Advisory Committee Act, the recommendations were deliberated and approved in an open, public session. Also consistent with the Act, a copy of this report will be posted to the RFPB web site at http://ra.defense.gov/rfpb/reports.

- The project team worked closely with the Director, Cost Assessment and Program Evaluation, as well as the Under Secretary of Defense (Comptroller) and the military departments. The Department was most helpful and cooperative throughout.

COORDINATION: NONE
Prepared by: Maj Gen James N. Stewart, 703-681-0600
Eliminating Major Gaps in DoD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy

Final Report to the Secretary of Defense

January 7, 2013

RFPB Report FY13-02
Eliminating Major Gaps in DoD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel:
Cost Elements Should be Mandated by Policy

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EXECUTIVE SUMMARY

It is increasingly apparent and documented by and to senior Department of Defense (DoD) and Congressional leaders, outside think tanks and subject matter experts, that the fully-burdened and life-cycle cost growth trends supporting the All-Volunteer force have reached unsustainable levels. Although the Department requires its contractors to provide fully-burdened and life-cycle cost computations on their invoices and the Department’s acquisition process require the same before approving the purchase of major weapon systems, The Reserve Forces Policy Board (RFPB) found that the Department does not know, use, or track the fully-burdened and life-cycle costs of its most expensive resource – its military personnel. Thus, major military manpower decisions are uninformed on the real present and future costs. The RFPB concluded that the Department suffers from a gap in its costing data, because it lacks proper policy to require a complete and consistent costing methodology that can identify the true fully-burdened and life-cycle costs. Consequently, in this report, the Board recommends the establishment of such policies and proposes specific cost elements that should be included in them.

In our interim report to the Secretary of Defense in June 2012, the RFPB noted that senior leaders within DoD do not have complete or uniform data on the total costs of Active and Reserve Component forces. This conclusion was based on several discussions with senior DoD leaders, military and civilian, who believed that Reserve Component (RC) members are more expensive than their Active Component (AC) counterparts. Those remarks and subsequent analysis indicated that there is a gap in the data provided to DoD leadership. As a result, decisions about military personnel as well as the optimal mix of Active and Reserve Component forces are not fully informed. Consequently, the Reserve Forces Policy Board (RFPB) recommended the establishment of appropriate DoD policy guidance to accurately and consistently capture the costs of both components in order to fill this data gap. The Board concluded that knowing the fully-burdened costs of each component (active, reserve, civilian and contractor) is foundational for senior DoD decision makers as they develop Courses of Action (COAs) and make assessments and decisions on future force mix options.

Also included in the June interim report was the observation that there have been many studies done in the past on component costing, but there is no consistency in identifying which costing elements should be included or how costing elements are used or counted when making comparisons. The RFPB recommended that DoD establish a policy to address this gap. Subsequently, the Deputy Director of Cost Assessment and Program Evaluation (CAPE) committed to address this gap and agreed to work on writing a policy to meet the need. The RFPB applauds the willingness of CAPE to pursue this objective.

Following the issuance of the interim report, the RFPB project team conducted additional quantitative fiscal analysis and met with a wide range of subject matter experts inside and outside of the Department of Defense. These discussions included personnel from each of the Services, the offices of Cost Assessment and Program Evaluation, Comptroller, Defense Human Resources Activity Office of Actuary, the Assistant Secretary of Defense for Reserve Affairs, the Government Accountability Office, Congressional Budget Office, and the Center for Strategic and Budgetary Assessment as well as private sector companies.
During the development of this cost methodology study, a bottom-up approach was utilized to accurately capture all costing elements. From January 29, 2012 to May 24, 2012 the Board’s project team convened 16 meetings with costing experts from across the Department in order to examine and compare current AC/RC costing practices across Services and Components. This “bottom-up” assessment of the current use of cost elements within the Department revealed the need for a new DoD policy and culminated in the Board’s Interim report delivered in June 2012. In subsequent months, the research team pursued a “top-down” quantitative analysis of the Fiscal Year 2013 federal budget request as detailed in DoD’s “Green Book” and related budget materials. In total, the RFPB project team held more than 100 meetings for substantive discussion and examination of the data. The meetings provided quantitative validation of the relative importance and fully-burdened value of the various cost elements and revealed the following findings:

1. The cost of an RC service member, when not activated, is less than one third that of their AC counterpart. According to RFPB analysis of the Fiscal Year 2013 budget request, the RC per capita cost ranges from 22% to 32% of their AC counterparts’ per capita costs, depending on which cost elements are included.

2. While Reserve Component forces account for 39% of military end strength, they consume only about 16% of the Defense budget.

3. Reserve component members receive a smaller retirement than their active component counterparts. The RC accounts for approximately 17% of DoD retiree payout. The FY 2013 average Retired Pay Accrual is $12,834 per AC service member, but only $3,419 per RC service member.

4. Reserve component members incur lower health care costs. For FY 2013, DoD requested $32.5 billion for the Defense Health Program (plus nearly $8 billion in military medical personnel funds and nearly $7 billion in Medicare-eligible Retiree Health Care accrual funds) to serve more than 9.5 million beneficiaries. Only about 21% of those beneficiaries are from the Reserve Components, and as a whole, the RC member uses the system less than AC members.

5. RC members serve in their home town and rarely incur military moving costs for “Permanent Change of Station”, for which DoD requested $3,260 per AC service member in FY’13.

6. With few exceptions, Reserve families do not send dependent children to DoD schools, and only reservists serving on active duty are counted for Impact Aid calculations. For FY 2013, the DoD Education Activity requested $2.7 billion and the Department of Education’s “Impact Aid” program requested $505 million. The project team estimates that reservists account for approximately 1% of the DoD’s and approximately 2% of the Department of Education’s funds to educate military dependents.

7. Generally, reservists are ineligible to use the military family housing system, which required $1.3 billion to build and operate in FY’13. Only reservists on active duty orders qualify for on-base housing, and few use it.

8. Reservists do not drive the need for military commissaries, which in FY 2013 cost $1.37 billion over and above revenue income in order to operate. Only 3% of commissary users are from the Reserve Component.

9. Since the Reserve Component does not require as much infrastructure as the Active Component, it incurs a far lower cost for base operations support, such as...
maintenance, security, and utilities costs associated with the housing, childcare and recreation facilities found on major bases. This is true whether the reservist is mobilized or in a drill status. Of the roughly $36 billion in DoD Base Operations Support costs, about 12% is appropriated for Reserve Components.

10. Reservists account for a relatively small portion of the contributions made by the U.S. Treasury over and above the DoD budget for defense-related costs.
   a. The U.S. Treasury’s direct contribution for “Concurrent Receipt” of both military retired pay and Veterans disability compensation was estimated at $6.95 billion for FY 2013, but only 9% is attributable to RC recipients.
   b. The U.S. Treasury direct contribution for Medicare-Eligible Retiree Health Care Fund (MERHCF) over and above the DoD contribution was estimated at $6.44 billion in FY 2013, but only 29% of the liability for that cost is attributable to the Reserve Components.
   c. The U.S. Treasury direct contribution to the Military Retirement Fund over and above the DoD contribution was estimated at $67.18 billion in FY 2013, but only 17% of the payout from that fund is made to RC retirees.

In this final report, the RFPB lays the foundation for answering the Secretary’s call at the September 5, 2012 RFPB meeting to provide him with advice and guidance on: the best balance between active and reserve forces, the cost of a strong reserve, and how to achieve savings in the Reserve Components. To meet these objectives, the Board felt that addressing all of the specific cost factors associated with Active Component and Reserve Component members must be compared and included in a consistent manner in order to significantly reduce the current data gap in its AC/RC cost analyses. Therefore, the RFPB recommends mandatory inclusion of specific cost factors in all future Departmental studies comparing the costs of Active and Reserve Components in order to accurately capture the fully-burdened and life-cycle costs of military manpower.

In particular, the RFPB found that the Department of Defense is neither complete nor consistent in its consideration of some of the most important cost factors when weighing the relative costs of Active and Reserve Component forces. While the Services generally do consider basic costs associated with Active and Reserve Component personnel accounts (like the annual appropriations pay accounts), there are significant costs paid from other accounts (either at the DoD level or by other federal agencies) that are not counted in AC/RC comparative cost analyses. Current methodologies used in DoD omit as much as $600 billion in annual costs. Consequently, such analyses fail to reflect the fully-burdened cost to the Department of Defense and other Federal agencies, much less to the American taxpayer.

In response, the RFPB makes six recommendations in this report. In short, they are:

2. Specify all the cost elements that must be included in cost studies.
3. Identify mission support, Treasury contributions, and all other external costs that must be considered.
4. Calculate and report cost element figures annually.

5. Clarify the use of composite rates in studies.

6. Develop a model to calculate and compare life-cycle costs.

Each of these recommendations is explored more fully in the body of this report. However, the primary purpose of the recommendations in this report is to ensure senior DoD leaders receive accurate analysis products that are based on more complete and consistent data. The Board believes that the establishment of a standard costing method for determining individual component costs is essential when exploring AC/RC component mix and mission alternatives in a budget constrained environment. The Director of CAPE must take the lead for the Secretary of Defense in determining the cost methodology ground rules for the military departments and other DoD entities.

THE TASK

At the November 29, 2011 meeting of the Reserve Forces Policy Board, the Chairman of the RFPB, in accordance with the RFPB statute, raised for Board consideration the need for the Department of Defense to develop a methodology to examine both the “fully-burdened” and “life-cycle” cost of its forces so that senior leaders could make more fully-informed decisions about the long-term sustainability of the All-Volunteer Force and the future mix of Active and Reserve Component forces. This policy gap became apparent from comments made by the outgoing Assistant Secretary of Defense for Reserve Affairs and other senior DoD leaders. Upon Board approval and direction by the Chairman, the Military Executive of the Reserve Forces Policy Board initiated a staff project to examine DoD costing methodologies and policies for the Total Force.

Additional focus on the importance of completing this project occurred when, at the September 5, 2012 meeting of the Reserve Forces Policy Board, the Secretary of Defense met with members of the RFPB and charged them to provide him with advice and guidance regarding the best balance between active and reserve forces, the cost of a strong reserve, and how to achieve savings in the Reserve Components. This report addresses the issue of cost of the reserve component member. Responses to the other topics raised by the Secretary will be included in future reports.

THE PROBLEM

The fully-burdened and life-cycle cost trends supporting the current All-Volunteer force are unsustainable. The Secretary of Defense, current and former senior DoD officials, and prominent think tanks alike have all underscored this problem.

The DoD cost of “taking care of people” now consumes more than $250 Billion or over 50 percent of the total DoD budget. An additional $200 Billion is spent by organizations outside of DoD for programs within the Departments of Veterans Affairs, Labor, Education, and Treasury. Secretary Panetta has stated that “the escalating growth in personnel costs must be confronted. This is an area of the budget that has grown by nearly 90 percent since 2001” for
approximately the same size force. Specifically, military healthcare and retirement costs have increased to about $50 billion (SECDEF’s words in same testimony) and $100 billion a year respectively and are projected to continue their climb.

Former Secretary Gates stated that changing from “a culture of endless money where cost is rarely a consideration” to a “culture of savings and restraint” is essential. Other senior officials with detailed knowledge have echoed the concern. Notably, the current Under Secretary of Defense Comptroller, the Honorable Robert Hale has said, “the cost of pay and benefits has risen more than 87 percent since 2001, 30 percent more than inflation.”

Respected think tanks have produced analysis with similar findings. This year, the Congressional Budget Office said that military compensation has outpaced inflation rates and private sector wages by more than 25 percent during the past decade. Additionally, the Center for Strategic and Budgetary Assessment offered the following sobering commentary in July 2012 on military personnel costs: “Over the past decade, the cost per person in the active duty force increased by 46 percent. If personnel costs continue growing at that rate and the overall defense budget remains flat with inflation, military personnel costs will consume the entire defense budget by 2039.”

The Reserve Forces Policy Board contends that DoD does not know, use, or track the fully-burdened and life-cycle costs of military personnel in decision-making. The former Assistant Secretary of Defense for Reserve Affairs, the Honorable Dennis McCarthy describes his experience dealing with this issue as follows: “One of my main tasks…was to lead a "comprehensive review" of the Guard and Reserve. My main frustration…was that we couldn't get agreement on how to calculate the cost of personnel. We need an apples-to-apples methodology that accurately calculates the true cost of people in the Active and Reserve Components.” The Board agrees with the former Assistant Secretary and further postulates that absent written policy on a Total Force (active, civilian, contractor, and reserve component personnel) costing methodology, major decisions on future force structure may be made that are uninformed on the true fully-burdened and life-cycle manpower costs.

PROJECT PHILOSOPHY/APPROACH

This report’s primary purpose is to provide Department senior decision-makers with an independent, objective method to develop and present repeatable data on the fully-burdened and life-cycle costs of military personnel, providing these decision-makers with the ability to track trends over time, and to permit objective comparative analysis. The Board wants to make clear at the onset that it is not advocating for more reserve or less active component forces. Nor is this study an effort to reform the pay, compensation, and benefits systems or challenge the rationale on current spending levels of the cash and non-cash cost elements supporting the All-Volunteer Force. In September, 2012, the Secretary of Defense charged the RFPB with the task of giving him advice on the cost of a strong reserve and how to achieve savings in the Reserve
components. This report establishes the foundation that will both educate Department senior decision-makers, and help the Board formulate future answers to the Secretary’s questions.

The Board notes that cost is not and should not be the sole basis for determining force structure and the mix of active, reserve, defense civilian and contractor personnel. Other key factors include requirements, capability, capacity, risk and expectations of future demand, such as deployment frequency, duration, speed of response, and the readiness levels necessary for given mission sets. Often these factors require subjective determinations based on military judgment. However, as the Nation faces an era of persistent fiscal constraint, cost will be an increasingly important element in Defense decision-making. To support such decision-making it is essential that DoD’s cost-estimating methodology – the objective side of the equation – be as complete and consistent as possible.

The staff study group addressed the DoD military personnel cost data gap by researching existing policy documents on costing methodology in the DoD Comptroller and Cost Assessment Program Evaluation (CAPE) offices to determine if there were any policy gaps. The group found that although individual cost studies have been conducted in the past, there is no DoD consensus or standardized costing process for use by all Services; they all use different cost elements for military personnel cost comparison and none consider all the costs.

The Board found it curious that DoD requires all costs to be included and considered in major acquisition decisions, but not for military personnel. In the acquisition world, mere “fly away” costs are deemed inadequate. DoD uses the all-in program acquisition unit cost and provides life-cycle operating costs. Neither DoD nor the Congress would make major acquisition decisions without knowing the full costs. Additionally, DoD now uses the Fully-Burdened Cost of Energy (FBCE) calculations to consider long-term fuel costs in procurement decisions. Finally, the Department requires contractors to invoice the fully-burdened cost of their personnel working for DoD. Thus, the Board feels that a similar fully-burdened and life-cycle approach should inform senior DoD leaders’ decisions on military personnel where the life-cycle and fully-burdened costs are just as substantial.

To better understand the current practice of how DoD compares the cost of both components of military personnel (Active and Reserve), the project team convened 16 working group meetings, consisting of cost experts from across the Department in order to examine and compare current Active/Reserve Component costing practices across Services and Components. The work group identified and compared all of the various cost elements. This group found that the inclusion and use of these cost elements varied widely. Within DoD today, military personnel costing is neither complete nor consistent. Although the Director of Cost Assessment Program Evaluation has published guidance (DTM 09-007 currently, with DoDI 7041.dd as a replacement) providing a starting framework to move in the right direction, the documents do not provide the Services and Components with all fully-burdened and life-cycle costing elements. Additionally, neither document includes Reserve Component costing tables.
The reason that this inconsistency in cost analysis matters is there are decisions being made by senior DoD officials that impact future total force structure, and there are vast differences between reality and myth on the costs of our All-Volunteer force, both Active and Reserve Component personnel. If one examines all of the costs within the DoD budget, as well as applicable federal programs outside of DoD, a Reserve Component service member costs less than 1/3 that of an Active Component service member.

METHODOLOGY

The project team used a “layer cake” approach built from the bottom up to ensure all stakeholders were included and heard. The first layer included costing experts from all of the Services and Components. These individuals reviewed previous costing studies, then identified the various fully-burdened and life-cycle individual cost elements and developed options and recommendations for use. The next three layers entailed vetting the work done with active and reserve leadership from each of the military services, and key decision makers and subject matter experts from within and outside the Department. These included visits with the Director, CAPE, USD (C), USD (P&R), Deputy Director, Joint Staff J8, Deputy Director, DOD Office of the Actuary, Government Accountability Office, Congressional Budget Office, and Center for Strategic & Budgetary Assessments just to name a few. Overall, RFPB members and/or staff conducted more than 100 meetings with senior officials and experts inside and outside the Department of Defense to collect data, conduct analysis, and receive a diverse range of inputs, opinions, and perspectives.

The foundation for analysis began with the identification of costs at the individual level in order to enable “apples-to-apples” comparisons. Seeking common business case analysis processes, identifying and capturing ‘lessons-learned’ from previous analysis across the Services and Components, and having DoD follow the same requirement they impose on contractors to allocate all costs were identified as keys to this study.

From January 29 to May 24, 2012, the RFPB project team conducted a “bottom-up” review of current AC/RC costing practices across the services and components. During 16 meetings, an informal working group, consisting of costing experts from across the Department, examined and compared these different methodologies. First, the working group developed a schedule to identify all tasks and deliverables. Next, based on the recommendation of the Deputy Director, CAPE, the project team examined Directive Type Memorandum (DTM) 09-007; the Department’s policy on the subject of “Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contract Support” dated September 2, 2011. This policy identifies for DoD analysts the cost elements to be examined when studying full-time staffing options. Using DTM 09-007 as a baseline, the task group identified several costing element discrepancies between the Service’s Reserve Components and missing cost elements. Finally, the group developed a model for presenting all Service cost elements and provided recommendations on needed DoD policy changes.

In June 2012, the project team began an independent “top down” analysis of the DoD FY 13 budget request in order to determine and demonstrate the feasibility of calculating a true, “fully-
burdened” per capita cost of Active and Reserve Component forces, and use those calculations to independently quantify the relevant cost factors.

Additionally, the project team conducted roughly 100 visits with senior officials and costing experts inside and outside of the Department of Defense.

RECOMMENDATIONS & FINDINGS

**Recommendation #1 - Establish DoD policy/guidance for computing fully-burdened Military Personnel Costs for the Total Force.** The Director of Cost Assessment and Program Evaluation (CAPE) should establish permanent DoD policy for calculating the “Fully-Burdened” costs of individual members from both the active and reserve components.

As noted in the RFPB’s Interim Report of June 2012, the Department of Defense has no policy in place to define or require complete analytical data for the comparison of Active and Reserve Component costs to determine Total Force mix options. As a result, senior leaders within DoD do not have complete or uniform data on the total costs associated with such forces. Therefore, decisions about the optimal mix of future Active and Reserve Component forces are not fully informed, and an “apples to apples” comparison is not possible.

While DoD has no policy in place to define or to require consistent or complete analytical data for the comparison of Active and Reserve Component costs for force mix options, it does have a policy guiding the collection and analysis of comprehensive cost data for comparing military, government civilian, and contractor full-time staffing options.

Directive Type Memorandum (DTM) 09-007 was DoD’s initial attempt at establishing policy on “Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contract Support,” dated September 2, 2011. Currently, the Deputy Director of CAPE is circulating a new Department of Defense Instruction (DODI 7041.dd) to replace DTM 09-007. It too identifies the cost elements necessary to calculate and compare the full cost of full-time staffing options. However, neither document examines part-time staffing, includes all costing elements, nor addresses comparisons of Active and Reserve Component forces. Even so, this product is a commendable example of the type of guidance that DoD should produce with regard to Active/Reserve Component cost comparison. In its Interim Report, the Board recommended that there should be such a policy.

Subsequently, the Director of CAPE has indicated that their office agrees that there is value in having such cost comparison guidance in place, and will begin crafting one. The RFPB applauds the willingness of CAPE to tackle this objective.
In the draft DODI 7041.01, the Director, Cost Assessment Program Evaluation’s staff has identified forty two (42) cost elements and data sources for the calculation of the “fully burdened” cost of full-time military manpower. Twenty nine (29) of these cost elements come from Personnel appropriation accounts that are included in the annually-calculated “Composite Rate” for each rank/grade within each Service, as required by the DoD Financial Management Regulation. The remaining cost elements are in the areas of Health Care, Education Assistance, Discount Groceries, Child Development Program, Training, Recruitment, Dependent Education, Veterans benefits and Treasury Contributions.

Taking the list of military cost elements from DTM 09-007 (converted to DODI 7041.01) as an apparently strong and comprehensive set, the RFPB project team sought to determine the degree to which the Services and Reserve Components were utilizing these costing elements in calculating the comparative costs of AC and RC personnel – even in the absence of a DoD policy directing them to do so.

From January 29 to May 24, 2012, the RFPB project team convened 16 meetings bringing together experts in the field of costing from the various Reserve Components as noted above in the Methodology section of this report. As a result of these meetings, the RFPB project team found that the services were neither complete nor consistent in the use and consideration of the various cost factors in determining Reserve Component costs. All components (predictably) used personnel costs such as Basic Pay and Housing Allowances in their cost analysis, but there was wide variance in the use of many other cost factors. No component consistently took into consideration the military-related costs borne by other federal agencies such as the Departments of Education, Treasury, Labor or Veterans Affairs. Notably, the working group identified that Family Housing was an additional relevant compensation cost factor, but one which is neither included in DTM 09-007 (or the replacement DODI 7041.dd), nor consistently used by components in cost analysis.

Subsequently, in order to quantify the relative importance of all of the possible military cost factors and identify those most critical for inclusion in future policy documents, the RFPB project team calculated a fully-burdened cost of Active and Reserve Component personnel based upon the Fiscal Year 2013 budget request for the Departments of Defense, Veterans Affairs,

**Recommendation #2 - Specify all of the cost elements that must be included in cost studies.** DoD Policy should require that any study conducted or contracted by the Services or other DoD component for the purpose of comparing the costs of active and reserve component personnel or forces include, at a minimum, the following cost factors: Basic Pay, Retired Pay Accrual, Allowances, Incentives & Special Pay, PCS Costs, Medicare-Eligible Retiree Health Fund Contribution, DoD Healthcare Costs, DoD & Department of Education Dependent Education Costs, DoD & Service Family Housing Costs, DoD Commissary Costs, Treasury Contribution for Concurrent Receipt, and Base Operations Support Costs.
Labor, Education and Treasury. The basic approach in this calculation was to allocate all DoD costs and appropriate costs of other Departments to either Active or Reserve Components. In this analysis, costs were allocated to Active and Reserve Components just as the funds were requested in the various component appropriation accounts. Defense-wide accounts were allocated based on identifiable “fair share” quantitative multipliers. Where no such multipliers were apparent, Defense-wide costs were allocated on an equal per capita basis. Unquestionably, this calculation required some assumptions and even judgment calls that not everyone will agree with. The actual numbers in the resulting calculations are less important from a policy perspective than their relative values, which clearly demonstrate the importance of addressing the existing data gap with an effective and comprehensive policy for the future. The results of this analysis are presented within Appendix B of this report.

In short, based upon findings from this analysis, the RFPB recommends that DoD policy mandate that any studies conducted, contracted, or commissioned by the military services or any other DoD component for the purpose of comparing the costs of Active and Reserve Component personnel or forces must, as a minimum, include the following cost factors:

- Personnel Costs
- Health Care
- Dependent Education
- Family Housing
- Commissaries
- Concurrent Receipt
- Base Operations Support

**Personnel Costs**

The annually-calculated “Composite Rate” for each rank/grade within each Service as required by the DoD Financial Management Regulation includes basic pay, allowances for housing, subsistence, uniforms, incentives and special pays, education assistance, contributions for retirement pay accrual and to the Medicare Eligible Retiree Health Care Fund (MERHCF), and essentially all other funds within the Service component’s personnel appropriation account.

While these cost elements alone are insufficient to arrive at a “fully-burdened” cost, all of them are essential when dealing with a comprehensive comparison of Active and Reserve Component costs.

Retirement pay accrual is a particularly important cost element needed for inclusion. In view of the differences in the Active and Reserve Component retirement systems, it is imperative that future AC/RC cost studies fully consider the impact of the resulting differences in retirement costs. Inclusion of the annual budget appropriations for retired pay accruals for Active and Reserve Components is an actuarially sound mechanism to capture the present value of these significant future costs. Using this approach recognizes the importance of life-cycle costs for Active and Reserve Component mix decisions. Consequently, the retired pay accruals are a critical cost element for inclusion.
The project team found that the Services and Components generally include these personnel costs (including the retirement accrual payments) in comparative cost calculations for Active and Reserve Components. This practice should be continued and codified in future DoD policy.

The test for completeness of such calculations should be whether or not the resulting aggregate sums account for essentially all of the service component’s personnel appropriation for a given fiscal year.

Health Care

Health care is a major cost to the Department of Defense. The cost of providing health care to Active Component service members is vastly higher than it is for Reserve Component members.

For Fiscal Year 2013, the Department of Defense has determined that the cost of medical health care for active duty personnel and their dependents is $10,563 per capita. This is included in the annual rate billable to other federal agencies when obtaining reimbursement for services provided to agencies outside of DoD. The Department publishes no similar annual calculation for Reserve Component members.

To illustrate one method of filling this data gap, the Reserve Forces Policy Board staff examined the $32.5 billion requested in the FY 2013 budget for the Defense Health Program. The program serves more than 9.6 million beneficiaries. Approximately 7.6 million beneficiaries are active component service members, while the vast majority of users are active component family members and retirees. On the other hand, Reserve Component service members, retirees and their family members comprise only about 21% of the total military healthcare beneficiaries (approximately 2 million). Thus, apportioned on a per capita basis across the two components, the project team estimates that Defense Health Program actually costs more than $19,000 per Active Component member, in contrast to just over $8,000 per Reserve Component member.

In addition to the $32.5 billion for the Defense Health Program, the Department also requested nearly $8 billion in military medical personnel funds and nearly $7 billion in Medicare-eligible Retiree Health Care accrual funds. The Congressional Budget Office further opines that the Fiscal year 2103 budget request understated military healthcare costs by about $4 billion so that the actual total cost is potentially more than $50 billion.

A major cost of the health care system that is frequently omitted from AC/RC cost comparisons is the cost of providing health care to Active Component retirees. This is a significant cost that is not reflected in the annual reimbursement rate calculated under the DoD Financial Management Regulation. It is, however, a legitimate cost of the Active Component and should be included in analyses.

When health care costs are ignored in AC/RC cost comparisons, the results are skewed. For example, DoD cost savings for a shift of force structure from Active to Reserve Components will be notably understated. Likewise, the additional cost burden of shifting force structure from Reserve to Active Components will be similarly understated.
In order for future cost comparison studies to more accurately reflect the true cost to the Department of Defense, it is imperative that future DoD policy require that such studies fully account for the costs of health care. These studies should include a calculation of the present value of the future cost burden the Department will bear for retirees.

**Dependent Education**

Dependent children of active component service members are eligible for education in schools operated by the Department of Defense. However, if the active duty service member sends his or her children to local public schools, then that public school system receives funding from the Department of Education on a per-child basis. Because active duty service members can live and work on federal property, and thus not pay local property taxes, “Impact Aid” provided by the Department of Education to local governments helps compensate the community for the cost of educating active duty military children.

The FY 2013 DoD budget includes more than $2.7 billion in Defense-wide Operations and Maintenance funding for dependent education. The Department of Education budget includes an additional $500 million to fund “Impact Aid” to civilian schools for the cost of students from military families.

Neither of these Department of Defense or Department of Education dependent education benefits is provided to part-time Reserve Component service members. Their children are ineligible for DoD schools and are not included in the Department of Education’s “Impact Aid” program. Reservists live in the communities and pay local and state taxes. Only a comparatively small number of reservists serving on full-time active duty incur these costs. As a result, the RFPB project team estimates that the annual federal government costs for dependent education totals $2,389 per active component service member compared to just $42 per Reserve Component service member.

In order for future cost comparison studies to more accurately reflect the true costs to the federal government, it is imperative that DoD policy require future studies to fully account for the costs of dependent education. This includes costs incurred by the Department of Defense, as well as those incurred by the Department of Education.

**Family Housing**

Part-time Reserve Component personnel are not eligible for military family housing when not mobilized. Only a comparatively small number of reservists serving on full-time, active duty orders qualify for this benefit. Because most reserve units are located in civilian communities rather than on major military installations, even these full-time reservists tend to live in civilian housing off-base.

In addition to the Basic Allowance for Housing paid to service members on active duty, the Department incurs yearly costs in both Service-level and DoD-wide accounts for new construction, as well as the operation and maintenance of 42,000 military family housing units. The FY 2013 DoD budget request included an annual cost of more than $1.6 billion for these purposes. This figure does not include “sunk costs” from any construction in past years.
In order for future cost comparison studies to more accurately reflect the true cost to the Department of Defense, DoD policy studies should require inclusion of the full costs of family housing, including costs in both service-level and defense-wide accounts for construction, as well as operations and maintenance of family housing.

**Commissaries**

The Department of Defense spends about $1.4 billion annually to subsidize discount groceries to service members and retirees through the operations of the Defense Commissary system. Reserve Component service members tend not to use military commissaries. Survey data from the Defense Commissary Agency shows that only 3% of commissary users are from the Reserve Component. This is consistent with the findings of a May 2000 study by the Food Marketing Institute, which estimated that 5% of commissary users were reservists. The relatively low usage by Reserve Component members is not surprising. The average American lives less than six miles from a supermarket. In contrast, 54 percent of Reserve and National Guard units are located more than 20 miles away from a military commissary.

In order for cost comparison studies to more accurately reflect the true costs to the Department of Defense, future DoD policy should require that such studies account for the costs of operating the Defense Commissary system and apportion those costs according to usage.

** Concurrent Receipt – Treasury Contribution**

Military Retirees are allowed to draw both their military retired pay from the Department of Defense, plus any disability compensation paid by the Department of Veterans Affairs. This benefit, established in the 2004 National Defense Authorization Act, is known as “concurrent receipt.” It is funded not by the Department of Defense, but rather by direct contributions made by the Department of the Treasury from the General Fund of the United States.

This benefit is disproportionately drawn by retirees from the Active Components. According to the September 30, 2011 Statistical Report on the Military Retirement System (the most current available), there were a total of nearly 319,000 retirees drawing concurrent retirement and disability pay. Only about 5% or 16,000 of these were reserve retirees. Moreover, the Reserve Component retirees who do draw the concurrent receipt draw smaller amounts. While the average active duty retiree draws almost $1,400 per month in concurrent receipt pay, the average Reserve Component retiree draws just over $1,000 per month. Overall, reservists draw approximately 4% of the total payout for concurrent receipt pay.

For the October 1, 2012, Treasury payment, the amount due to Concurrent Receipt totals $6.8 billion. This is $6.5 billion for full-time service members as compared to $0.3 billion for part-time service members. Even noting that roughly 5% of full-time service members are reservists on active duty in support of the reserves (also known as the Active Guard and Reserve program), the Reserve Component only accounts for 9% of the actuarial liability to the U.S. Treasury for Concurrent Receipt.

In order for cost comparison studies to more accurately reflect the true costs to the Department of Defense, future DoD policy should require that such studies account for the costs borne by the United States Treasury for Concurrent Receipt payments.
**Base Operations Support**

The Reserve Component does not require the huge facility and base infrastructure as does the Active Component. As a result, the Reserve Component incurs a far lower cost for base operations support such as maintenance, security, and utilities costs associated with the housing, childcare and recreation facilities found on major bases. Of the roughly $36 billion in DoD Base Operations Support Costs, about 12% is appropriated for Reserve Components.

In order for cost comparison studies to more accurately reflect the true costs to the Department of Defense, future DoD policy should require that such studies account for the costs of Base Operations Support.

**Recommendation #3 - Identify mission support, Treasury contributions, and all other external costs that must be considered.** DoD Policy should require that any study comparing the costs of Active and Reserve Component personnel or forces consider the amounts, degree and methodology for possible inclusion of all or part of the annual contributions made by the U.S. Treasury, Veterans costs, and the non-compensation costs of the Department of Defense.

**Treasury Costs**

The United States Treasury covers several costs of our national defense that are not appropriated in the annual budgets of the Department of Defense.

Reserve Component members account for a disproportionately small portion of the contributions made by the U.S. Treasury (over and above the DoD budget) to defense-related costs. The Treasury contribution for Concurrent Receipt was already noted above. Additionally, the U.S. Treasury direct contribution for the Medicare-Eligible Retiree Health Care Fund (MERHCF), over and above the DoD contribution of $6.7 billion, was estimated at another $6.44 billion in FY 13, but only 29% of the liability for that cost is attributable to the Reserve Components. The U.S. Treasury direct contribution to the Military Retirement Fund, over and above the DoD contribution, was estimated at $67.18 billion in FY 13, but only about 17% of the payout from that fund is made to RC retirees.

Developing a complete understanding of these costs to the federal government (the precise degree to which they can or should be allocated as Active or Reserve Component costs) and the circumstances where these costs should be included or considered is a significant task beyond the scope of this report. The Department should study these issues and develop a policy to appropriately account for and allocated them for the purpose of force-mix studies. The RFPB concluded that these costs should be included in future cost comparisons but recognizes the Department need to take the leadership role.
Contributions for Military Retirement

For FY 2013, DoD is projected to pay, from its appropriations, about $21.6 billion into the Military Retirement Fund. This amount is shown in each of the service’s military personnel budgets as “Retired Pay Accrual.” This appropriation covers the accruing costs of future retirement benefits being earned by today’s service members. This amount continues to increase due to the larger number of retirees as well as the increase in life expectancy of future retirees.

However, over and above this amount, the United States Treasury contributes an additional $67.2 billion into the Military Retirement Fund. This amount covers a portion of the accrued unfunded liability for all the retirees and current members who earned benefits before the accrual funding system was set up in 1985.

This additional Treasury contribution is necessary in order for the fund to make its anticipated disbursements in payments to retirees of $53.1 billion and to grow the fund toward eventual self-sufficiency. While the Reserve Components account for 39% of today’s Total Force, the project team estimates that Reserve Component retirees’ account for only about 17% of the payout from the Military Retirement Fund.

To function, the fund purchases United States Treasury Bonds and derives income from the interest on those bonds. While not a cost to the DoD budget, the additional Treasury contribution is a burden on the national debt. This burden could shift if significant changes were made in the mix of Active and Reserve Component forces. However, determining the degree and direction of this shift would require additional study beyond the scope or capability of this report. The RFPB believes the Department should undertake this additional analysis.

Contributions to Medicare-Eligible Retiree Health Care

The clear need to properly allocate the significant annual costs of military retirees who are under the age of 65 and thus not eligible for Medicare is addressed above in this report in the Health Care section under Recommendation #2. These costs are paid directly out of the DoD annual appropriations rather than on an accrual basis.

For those retirees who are age 65 and older (“Medicare Eligible”), some – but not all – of their health care expenses are paid for from the Medicare Eligible Retiree Health Care Fund. As with the Military Retirement Fund, this is also an accrual fund.

For FY 2013, DoD is projected to pay (from its appropriations) about $6.7 billion into the Military Retirement Fund. This amount is shown in the service military personnel budgets as “Medicare Eligible Health Care Fund Contribution” (MERHFC). This fund covers the liability for future benefits accruing to current service members.

However, over and above this amount, the United States Treasury will contribute an additional $6.4 billion into the Fund. This is an annual payment from the general fund of the Treasury on the accrued unfunded liability and is necessary to make the estimated $10 billion payout from the fund in 2013.
While the Reserve Components account for 39% of today’s Total Force, the project team estimates that Reserve Component retirees account for about 29% of the payout from the Medicare Eligible Retiree Health Care Fund.

Like the Military Retirement Fund, the Medicare Eligible Retiree Health Care Fund also purchases United States Treasury Bonds and derives income from the interest on these investments. While not a cost to the DoD budget, the additional Treasury contribution is a burden on the national debt. This resulting additional burden to the Nation’s debt could shift somewhat if major changes were made in the mix of Active and Reserve Component forces. Determining the degree and direction of this shift, however, would require additional study beyond the scope or capability of this report. The RFPB believes the Department should undertake this additional analysis.

**Veterans Costs**

The raising, maintaining, and employing of military forces eventually contributes to a bill for the American taxpayer for Veteran’s benefits and healthcare.

The budget request for the Department of Veterans Affairs for FY 2013 was more than $140 billion. Additionally, the Department of Labor sought nearly $259 million for its Veterans Education and Training Service. The programs of these two departments serve the estimated 22.2 million veterans in America. This comes to a little more than $6,200 per veteran, per year.

The project team did not find an obvious model or mechanism for determining different allocation costs for Active and Reserve Component veterans. Consequently, the project team assumed that Active and Reserve Component service members consume an equal level of veteran’s benefits and services. The question of whether there is, in fact, a difference merits more thorough analysis. If a subsequent analysis determines that there is such a difference, that difference should be included for consideration in future costing studies. The RFPB recommends that this additional analysis be done.

**Non-Compensation Costs of DoD**

Service-level non-compensation costs such as Other Operations and Maintenance, Procurement, Military Construction, Research and Development, and training costs vary from service to service, but still merit explicit DoD guidance for inclusion in future AC/RC cost studies. The costs total more than $350 billion and must be considered.

**Other Operations & Maintenance Costs**

As stated under Recommendation #2 above, the Board recommends that certain Operations and Maintenance costs such Base Operations Support costs, family housing operating costs, health care and dependent education should be consistently included in calculations of the fully-burdened cost of Active and Reserve Component forces.

Roughly $135 billion in other funds from “Operations and Maintenance” (O&M) accounts are used for a broad range of expenses including fuel, spare parts, supplies, service contracts, and civilian pay. These other O&M costs should be considered in costing studies and included when appropriate.
Each Reserve Component has its own O&M account that Congress appropriates funding into based on the annual budget request. Reserve Component O&M totals about $21 billion. Active Component O&M for the four Services totals about $120 billion. Consequently, most O&M funding is already clearly allocated between Active and Reserve Components.

One notable exception is the $32 billion “Operations & Maintenance – Defense-Wide” account. This account includes funding for activities which support both Active and Reserve Components. While the bulk of the account funds Active Component activities, it also funds some activities that at least partly support the Reserve Components. These activities include Civil Military Programs, Defense Finance and Accounting Service, National Defense University, Defense Media Activity, Defense Human Resources Activity and the United States Special Operations Command.

The O&M Defense-wide account also includes DoD Dependent Education ($2.7 billion), which is addressed separately in the report above because it is a form of compensation.

Overall, the project team estimates that only about 4% of the total $32 billion O&M Defense-wide account is attributable to Reserve Component expenses.

In developing future policy regarding AC/RC costing, DoD should consider allocation of the full O&M Defense Wide account as cost factors when calculating comparative, fully-burdened costs.

**Procurement**

Funds from “Procurement” accounts are used to purchase major items of equipment including aircraft, armored vehicles, trucks, weapons, communications systems, missiles and ammunition. No Reserve Component has its own procurement account. Reserve Component equipment is funded and procured strictly through the Service procurement accounts.

The DoD Budget Request which goes to Congress each year includes a publicly-available exhibit that identifies which part of the Department’s procurement funding request it plans to use for the purchase of Reserve Component equipment. The “Procurement Programs – Reserve Components” (P-1R) exhibit is a subset of the Procurement Programs exhibit. It reflects the Service estimates for those funds used to procure equipment for the National Guard and Reserve. For example, for FY 2013 DoD requested $98.8 billion in total procurement. The P-1R exhibit for FY 2013 shows that, of that amount, the Department intends to spend $3.1 billion for the purchase of Reserve Component equipment – only about 3% of the total.

This amount funds the procurement of new equipment or major upgrades to existing equipment. It does not cover transfers of used equipment from the active to the Reserve Component. Detailed information about such transfers of equipment can be found in the annually published “National Guard and Reserve Equipment Report” produced by the Assistant Secretary of Defense for Reserve Affairs. It is available on the internet.

In developing future policy regarding AC/RC costing, DoD should consider allocation of procurement account costs when calculating comparative, fully-burdened costs. The P-1R should be the basis for such an allocation.
Military Construction Other than Family Housing

Military Construction funding is used to build new facilities and infrastructure. For FY 2013, DoD requested $8.7 billion for this purpose.

The need to consistently include Family Housing construction and operating costs in future costing studies is addressed above. The Board feels that other Military Construction costs should be considered and included in such studies as appropriate.

Each Reserve Component has its own Military Construction account that Congress appropriates funding into based on the annual budget request. In Fiscal Year 2013 budget request, Reserve Component Military Construction totals about $1 billion. Active Component Military construction for the four Services totals about $4 billion. Consequently, most Military Construction funding is already clearly allocated between active and Reserve Components.

One notable exception is the $3.7 billion “Military Construction – Defense Wide” account. This account includes funding for construction of some facilities that support both active and Reserve Components. Additionally, some facilities built with active component Military Construction funds may also, in part, serve Reserve Component forces. The reverse may also be true at times.

This report recommends that future DoD policy should require that any AC/RC cost study include the costs for both building and operating military family housing.

Certain Military Construction costs other than family housing, such as that contained in Defense-wide military construction accounts or for projects which serve both Active and Reserve Components may also merit consideration.

RDTE & Other

Research, Development, Testing and Evaluation (RDT&E) funding is used to develop new technologies for DoD capabilities. None of the Reserve Components has an RDT&E account. Such basic research and testing would likely be required regardless of the relative active/Reserve Component mix of the Total Force.

Other costs within the Department of Defense budget that are unlikely to be sensitive to changes in AC/RC mix include those for Environmental Restoration, Drug Interdiction, Cooperative Threat Reduction, and the Service-level Working Capital Funds.

Consequently, the value of allocating the RDT&E costs and other accounts is uncertain.

In developing future policy regarding AC/RC costing, DoD could consider allocation of RDT&E and other account costs when calculating comparative, fully-burdened costs, but the project team feels there would be minimal value in such allocations.

Training

A significant portion of the training costs for Reserve Component members is conducted by the Active Component at their expense. This varies from service to service. In developing
future policy regarding AC/RC costing, DoD could consider allocation of training costs borne by the Active Component to train the Reserve Component.

**Recommendation #4 - Calculate and report cost element figures annually.** The Director, Cost Assessment and Program Evaluation (CAPE) or the Under Secretary of Defense (Comptroller) should calculate and publish all cost elements for Total Force military personnel cost studies on an annual basis, and provide guidance on their use in an appropriate memo or report.

Annual standardized calculations of the required critical cost elements will provide updated and consistent numbers for the Services and other DoD components to use in costing studies.

Additionally, publishing such cost elements annually demonstrates DoD commitment to tracking costs in an increasingly budget-constrained environment.

**Recommendation #5 - Clarify the use of composite rates in studies.** The Under Secretary of Defense (Comptroller) should modify the annual memo on “Military Personnel Composite Standard Pay and Reimbursement Rates” to eliminate the directive to use such rates “when determining the cost of military personnel for budget/management studies.”

This recommendation fixes two currently conflicting DoD policies; one from the DoD Comptroller and one from the Director, Cost Assessment and Program Evaluation (CAPE).

At present, the DoD Deputy Comptroller publishes an annual memo titled “Military Personnel Composite Standard Pay and Reimbursement Rates.” This memo is sent to disseminate the yearly calculation of composite rates. It provides a cost figure for a full-time service member, by grade, in each service. This cost figure is called the “Composite Rate” and includes a limited number of obvious cost elements: Base pay, allowances, PCS costs, retirement accrual and so on. The annual cost memo includes a statement that says, “The composite standard pay rates will be used when determining the cost of military personnel for budget/management studies.”

This guidance is in clear conflict with DTM 09-007 (draft DODI 7041.dd) which states, “the DoD composite rates, as published by the [DoD Comptroller], used to calculate manpower costs for program and budget submissions do not account for the full costs of military or DoD civilian personnel...For this reason, composite rates should not be the only source of data used when answering questions about the cost of the defense workforce, making workforce-mix decisions, or determining the cost impact of manpower conversions.”
The DTM 09-007 (draft DODI 7041.dd) guidance is especially significant, because the composite rate ignores the cost of health care.

DoD Comptroller officials explained to the RFPB project team that the language of the annual memo reference to "management studies" is intended to mean that the Composite Rate is used to calculate the cost of DoD manpower employed in the creation of written reports and studies. If such is the case, then Deputy Comptroller should articulate that point more clearly in their next annual “Military Personnel Composite Standard Pay and Reimbursement Rates” memo. Otherwise, the current wording can, and based on RFPB findings in its work group, has actually been interpreted to suggest that the Composite Rate is sufficient to be used as the basis for calculating manpower costs in studies about management of personnel, units, forces, etc. Consequently, the Comptroller should modify the wording of the annual memo to specify that the Composite Rate is intended to be used for reimbursement by federal agencies and for the calculation of manpower costs associated with the creation of written reports, but that the data (consistent with DTM 09-007) should not be the only source of data used when answering questions about the cost of the defense workforce, making workforce-mix decisions, or determining the cost impact of manpower conversions.

On an annual basis, the cost of a Reserve Component service member is 22% to 32% that of their active component counterpart, depending on what cost elements are included. This fact alone does not fully capture the entire scope of the costs to the Department of Defense or to the federal government, because it ignores the enormous cost of retirement and health care.

The retirement and health care costs for RC forces as compared to their AC counterparts are far lower. The RFPB believes that DoD needs to have improved visibility on these costs over the long term. To assist the Department with the development of a life-cycle model, the Board provides two specific examples that already exist where life-cycle costs are examined and modeled. A previous study by Jennifer Buck, a former Deputy Assistant Secretary of Defense for Reserve Affairs, published in 2008 and the “Individual Cost Assessment Model” or ICAM (presently being vetted by the US Air Force Reserve with the Air Force) are two examples of work that can be used.

Retirement Pay Costs

The Reserve Component retirement benefit is notably less than that of the Active Component. The Reserve Component member is paid a far lower amount for a far shorter period of time. While an Active Component service member can begin drawing retirement pay immediately upon completion of 20 years of service, a part-time Reserve Component member completing 20 years of service generally can draw no retirement pay until age 60. This means that while the Reserve Component retiree draws pay for the roughly 20 years from age 60 until

Recommendation #6 - Develop a model to calculate and compare life-cycle costs. The Director, Cost Assessment and Program Evaluation (CAPE) should develop a model to calculate and compare the “life-cycle” costs of Active and Reserve Component personnel.
death, an Active Component retiree leaving the service at age 38 can draw retirement pay for over 40 years – more than twice as long.

Additionally, the retirement pay of the Reserve Component member is less. According to the Statistical Report on the Military Retirement System for FY 2010 (the latest version available), there were 1.47 million non-disability retirees from active duty receiving retired pay. In FY 2010, non-disability retirees were paid $40.2 billion – an average of $27,347 per active duty retiree. In contrast, as of the same date, there were 357,000 reserve retirees receiving retired pay. In FY 2010, reserve retirees were paid $4.89 billion -- an average of $12,574 per reserve retiree. So, the average reserve retiree receives just 46% of what an active retiree receives. Roughly speaking, a Reserve Component retiree is paid less than half as much for potentially half as long.

These differences in retirement cost are at least partially accounted for in DoD budgeting through the annual retirement pay accrual. However, as noted above, this amount only covers part of total military retirement costs. The United States Treasury makes an additional direct contribution to the Military Retirement Fund in order for benefits to be paid.

**Retiree Health Care Costs**

Active Component service members retiring with 20 years of service not only receive immediate retirement pay, they also continue to receive lifetime military healthcare for themselves and their dependents. A service member retiring at age 38 can receive this health care benefit for over 40 years. The health care benefit received by active duty retirees until age 65 is not captured by an accrual, but must be fully paid out of the annual appropriations of the Department of Defense. This is roughly $10,000 per retiree, per year – a major cost which is not incurred by Reserve Component service members.

Up until recently, Reserve Component service members who completed 20 years of service, but had not yet reached age 60 (the so called “Grey area retirees”) were completely ineligible for military healthcare. Though now eligible to enroll, they must pay the full, unsubsidized premium for the coverage.

Retirees age 65 or over are eligible for Medicare. DoD makes an annual contribution into the Medicare Eligible Retiree Health Care Fund. However, that contribution by DoD does not cover the full cost of providing care to those older retirees. The United States Treasury must make an additional contribution to the Medicare Eligible Retiree Health Care Fund in order to meet expenses.

**Existing Work to Leverage in Developing a DoD Life-Cycle Cost Model**

Only by comparing the life-cycle cost of Active and Reserve Component forces can the full scale of potential savings be quantified for decision-making purposes.

Fortunately, there has been some commendable work already done on the subject of identifying, calculating and using the life-cycle costs of Reserve Component forces. In developing the model recommended above, the Department should leverage these existing works and translate their concepts and ideas into DoD-wide usage.
The Buck Model

Jennifer C. Buck’s paper “The Cost of the Reserves” was published as a chapter in the book, “The New Guard and Reserve” in 2008 by Falcon Books. In the paper, she identifies three alternative approaches in determining the cost of Reserve Component forces; the traditional, simple method of comparing budget and force structure, the method of evaluating unit costs, and the method of estimating the cost of the “use” of individual members over the course of a career. While Buck’s approach of calculating and comparing the life-cycle costs is a valid approach, the data she used did not reflect fully-burdened costs. This could be rectified in future applications.

To demonstrate the viability of comparing life-cycle Active and Reserve Component individual costs under a given usage level assumption, the project team applied its fully-burdened cost data from analysis of the FY 2013 budget to the Buck model to arrive at the AC/RC Life-Cycle Cost Illustration below.

The above illustration is based on a number of variables and assumptions.

- 20 years of demand for forces at current employ-to-dwell ratios (1:3 AC and 1:5 RC)
- AC annual cost: $385,000 per capita
- RC annual cost: $125,000 per capita
- RC costs same as AC for each of four mobilization/deployment years
- Career length: AC=22 years, RC=25 years
- Deployments completed: AC=7, RC=4
- AC retiree costs: $27,000 in retired pay, $10,000 in DoD-provided healthcare
- RC retiree draws no retired pay until age 57 (age 60 minus 36 months credit for four 9-month deployments)
• RC retiree costs: $13,000 in retired pay. At age 65 add $10,000 in healthcare (Medicare)
• Life Expectancy for both: Age 83

As the Department moves forward to develop a comprehensive model to examine life-cycle costs, the above assumption set shows the type of data needed for inclusion in an actual model.

**Air Force Reserve ICAM**

The Air Force Reserve Command has developed a manpower life cycle cost model known as the Individual Cost Assessment Model (ICAM). It has been constructed with the intent of building an enduring analytical tool and capability to support more informed leader decisions. While the ICAM, as of the project team’s review in June of 2012, did not include a true fully-burdened set of cost factors, it nonetheless provides a commendable example of the sort of tool that the Department should have available for all Services and Components.

**CONCLUSION**

The Reserve Forces Policy Board makes these recommendations to the Secretary of Defense under our statutory charter. The RFPB stands ready to make its members and staff available for further consultation or discussion on these matters as the Department shall require.

Respectfully submitted,

Arnold L. Punaro
Major General, USMCR (Ret)
Chairman, Reserve Forces Policy Board
APPENDIX A

SOURCES
Eliminating Major Gaps in DoD Data on the
Fully-Burdened and Life-Cycle Cost of Military Personnel

REPORT FY13-02

28
APPENDIX B

SLIDES APPROVED BY RFPB ON 12 DECEMBER 2012
Eliminating Major Gaps in DoD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel

Cost Elements should be Mandated by Policy

As approved by RFPB – 12 December 2012
The Problem
The Problem

• The Fully-burdened and Life-Cycle Cost trends supporting the All Volunteer Force are unsustainable.

• The Secretary of Defense, senior officials, and think tanks have all underscored this problem.

• DOD does not know, use or track the “Fully Burdened” and “Life Cycle” costs of military personnel in decision-making.

• Thus, major decisions are uninformed on the real costs.
Unsustainable Cost Trends of the All Volunteer Force

- The all-in DOD costs of “taking care of people” now consumes over 50% of the total DOD budget (More than $250 Billion).
- Costs outside DOD are in excess of another $200 Billion. (Programs within the Departments of Veterans Affairs, Labor, Education and Treasury)
- Currently, senior DOD officials do not know or calculate the “fully burdened” or “life cycle” costs of the All Volunteer Force.
  - Without knowing all of these costs, it is extremely difficult to address required changes or determine the proper force structure (active, civilian, contractor, or reserve component member).
- Both Secretaries of Defense Leon Panetta and Robert Gates expressed significant concern about the “unsustainability” of cost growth in the personnel and benefits area, including deferred compensation.
  - They both recommended reforms to the DOD healthcare system where costs have gone from $20B a year to $52B a year and (without reforms) are projected to rise to $70B a year for the over 9 million beneficiaries (5.5 million retirees and their dependents).
  - Military Retirement is a concern as well, since it costs the taxpayers over $100B a year for 2.4 million retirees.
“The fiscal reality facing us means that we also have to look at the growth in personnel costs, which are a major driver of budget growth and are, simply put, on an unsustainable course.”

“in order to build the force needed to defend the country under existing budget constraints, the escalating growth in personnel costs must be confronted. This is an area of the budget that has grown by nearly 90 percent since 2001.”

“growth in personnel costs must be addressed. If we fail to address it, then we won’t be able to afford the training and equipment our troops need in order to succeed on the battlefield.”

“This department simply cannot risk continuing down the same path where our investment priorities, bureaucratic habits and lax attitudes toward costs are increasingly divorced from the real threats of today, the growing perils of tomorrow and the nation's grim financial outlook.”

“My hope and expectation is that as a result of these changes over time, what had been a culture of endless money where cost is rarely a consideration will become a culture of savings and restraint.”
Senior Official Views

- **Hon. Robert Hale, USD (Comptroller)**: "The cost of pay and benefits has risen more than 87 percent since 2001, 30 percent more than inflation."

- **Hon. Clifford Stanley, USD (Personnel & Readiness)**: Rising personnel costs could “dramatically affect the readiness of the department” by leaving less money to fund operations.

- **Gen. Ron Fogelman, former Chief of Staff, USAF**: “The all-volunteer force, as it exists today, for the size of the force, is just simply unaffordable.”

- **Hon. Dennis McCarthy, former ASD (Reserve Affairs)**: “One of my main tasks…was to lead a "comprehensive review" of the Guard and Reserve. My main frustration…was that we couldn't get agreement on how to calculate the cost of personnel. We need an apples-to-apples methodology that accurately calculates the true cost of people in the AC and RC.”
Think Tank Views

- **Center for Strategic and Budgetary Assessment**, July 2012:
  - "Over the past decade, the cost per person in the active duty force increased by 46 percent."
  - "If personnel costs continue growing at that rate and the overall defense budget remains flat with inflation, military personnel costs will consume the entire defense budget by 2039."

- **Bipartisan Policy Center**, June 2012: DoD will soon spend more on health care and other benefits for former military personnel than on troops in uniform today.

- **Center for American Progress**, May 2012: "The all-volunteer force, in its current form, is unsustainable."

- **Congressional Budget Office**, 2012: Military compensation has outpaced inflation rates and private-sector wages by more than 25 percent the past decade.
RFPB

Philosophy and Approach
Project Philosophy

WHY

• Senior decision-makers do not know what the “fully burdened” and “life cycle” costs of military personnel are, and thus, are not able to track relevant trends, do accurate comparisons, or seriously address adverse cost trends.

• The current DoD directive (DTM 09-007), and the DoDI to replace it (DoDI 7041.dd), does NOT include all the relevant cost factors.

• There appears to be “resistance” to identifying all the costs and allocating them appropriately.

WHAT THIS IS NOT

• An effort to argue for smaller AC forces or larger RC forces

• An effort to reform the pay, compensation, and benefits system

• An effort to challenge the rationale on the levels of the cash and non-cash elements currently supporting the All-Volunteer Force

WHAT THIS IS

• An effort to provide an independent, objective method to develop and present repeatable data for “fully burdened” and “life cycle” costs of military personnel, to track these trends over time, and to permit objective comparative analysis.
On 5 September 2012, SECDEF met with the RFPB and asked us to provide advice and recommendations on four strategic topics:

- Best Ways to use the RC in the Future
- Cost of a Strong Reserve
- AC/RC Mix
- How to Achieve Savings in Reserve Components

Chairman established a Task Force led by the Hon. Grier Martin to draft recommendations in response to the Secretary of Defense.
What the RFPB Study Seeks to Address

Senior decision-makers do not know the full costs of active, guard or reserve forces, nor do they have an ability to track trends or do comparative analysis of costs when making crucial decisions.

• Reason: There is no permanent DoD-level policy on the subject. No process is in place to develop and update annual “Fully Burdened” or “Life Cycle” costs of individual military members for DoD Senior Leadership review.

• Result: Although individual cost studies have been conducted in the past, there is no DoD consensus or standardized process for use by all Services; they use different cost elements for AC/RC cost comparison and do not consider all costs.

• Good News: Temporary Directive-Type Memorandum (DTM) 09-007 provides a starting framework to move in the right direction. It includes many costing elements, but it does not provide the Services with all “Fully Burdened” and “Life Cycle” costing elements. Additionally, it does not include Reserve Component tables. The replacement DoD Instruction is being worked now by Cost Assessment Program Evaluation (CAPE) personnel, but it too lacks all costing elements and Reserve Component costing tables. This shortfall could be rectified by issuing a new DoD policy on AC/RC Costing.
Project Approach

Critical Considerations

• Foundation for analysis is to identify costs at the individual level
  – Need to know individual costs to be able to calculate unit costs
  – Enable Apples-to-Apples comparisons
  – Seek common Business Case Analysis Processes across the Services and Components
  – Have DoD follow the same requirement they impose on contractors to allocate all costs
  – Ensure all stakeholders are included and heard

• Identify and capture ‘lessons-learned’ from previous analysis

• Identify all individual “Fully Burdened” and “Life Cycle” costs
  – Identify all cost elements to include those covered by other agencies (Treasury, Education, VA, etc.)
  – Determine which are appropriate for consideration by DOD decision-makers

• Address Policy Concerns
  – Should DOD have an instruction in place to guide the Services on how to account for all “Fully Burdened” and “Life Cycle” costs with standardized accounting since today this does not exist?
  – What DoD organization should be required to institutionalize this analysis, formalize the process, and track and compare trends over time?
DOD Requires “Fully Burdened” and “Life Cycle” Costing in Other Areas

• DoD and Congress requires “all” costs to be included and considered in major acquisition decisions.
  - Mere “fly away” cost is deemed inadequate. DoD uses program acquisition unit cost and provides “life cycle” operating costs.

• DoD now uses “Fully Burdened Cost of Energy” (FBCE) calculations to assess long-term fuel costs in procurement decisions.

• A similar approach should inform decisions about military personnel where the “all in” costs are just as significant.
DoD Requires Contractors to Invoice the “Fully Burdened” Cost of Personnel

<table>
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<th>Description</th>
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<td>Other Direct Costs (ODC's)</td>
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<td>G&amp;A at 5%</td>
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<td>Total Contract Costs</td>
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<td>Total Price</td>
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- **Wrap Rate**: The ratio of direct to total labor cost. Based on a fully-burdened labor rate at which a business, such as a consultancy, must bill out its direct labor units in order to cover its direct and indirect costs - wages, benefits, facilities, overhead, general and administrative costs, deferred compensation and the fee.

- DoD should apply the same standard to its own internal costing.

Notes:
The “Fully Burdened” Total Contract Cost is more than 106% higher than the paycheck cost.
Fringe applied on direct/contract labor base
Overhead applied on direct/contract labor base
G&A (General & Administrative) applied on costs through overhead (i.e. direct/contract labor, fringe, overhead, other direct costs)
A “Layer Cake” approach to ensure stakeholders are informed and heard

- Layer 1: Identify/Develop “Fully Burdened” and “Life Cycle” individual cost elements, alternatives, and recommendations
  - Review Previous Costing Studies
  - Gather Service/Reserve Component cost experts to compare current approaches & identify cost elements.
  - Quantify/refine cost elements by analysis of FY13 Budget Request
  - Draft recommendations
- Layer 2: Military Service vetting
- Layer 3: Office of the Secretary of Defense vetting
- Layer 4: Subject Matter Expert vetting, both internal and external

Report findings to Secretary of Defense following RFPB deliberations
Inconsistent Use of Cost Elements in Military Personnel Cost Analyses in DoD

- The RFPB project team convened 16 meetings of an informal working group of costing experts from across the Department in order to examine and compare current military personnel costing practices across Services and Components.
- Found that military personnel costing is neither complete nor consistent.

### Cost Elements Used by Most Components
- Basic Pay
- Basic Allowance for Housing (BAH)
- Basic Allowance for Subsistence (BAS)
- Incentive Pays
- Special Pays
- Allowance - Uniform Clothing
- Allowance - Station Allowance Overseas
- Allowance - CONUS COLA
- Subsistence in Kind
- Family Subsistence Supplemental Allowance
- Social Security and Medicare (Employer's Contribution)
- Permanent Change of Station - All but Separation Travel
- Retired Pay Accrual
- Separation Payments
- Education Assistance (e.g., portion of GI Bill)
- Other Military Personnel Cost - Unemployment
- Other Military Personnel Cost - Death Gratuities
- Other Military Personnel Cost - Survivor Benefits
- Other Military Personnel Cost - Other
- Medicare - Elig Retiree Health Care Fund (MERHCF)

### Cost Elements with Wide Variance in Use
- Allowance - Family Separation
- Allowance - Personal Money Allowance, Gen & Flag Offs
- Permanent Change of Station - Separation Travel
- Other Military Personnel Cost - Adoption
- Other Military Personnel Cost - Partial Dislocation
- Other Military Personnel Cost - Transport Subsidies
- Family Housing Construction & Operation
- Military Construction
- Health Care
- Discount Groceries / Commissary Cost
- Child Day Care Facilities
- Training
- Recruitment Advertising, Etc.
- DoDEA and Family Assistance
- Child Education (Dept of Education Impact Aid)
- Operations & Maintenance
- Procurement

### Cost Elements Not Used
- Veteran's Employment and Training
- Treasury Contribution to Retirement
- Treasury Contribution for Concurrent Receipt
- Treasury Contribution to MERHCF
- Treasury Contribution to Survivor Benefits
- Veteran's Benefits (Cash and In-Kind)
- DoD Research Development Test & Evaluation

~ $130 Billion in FY 2013
~ $315 Billion in FY 2013
~ $290 Billion in FY 2013
### Why it matters

**FY 2013 Fully-Burdened Per-Capita Cost to the US Government**

**Omitting these costs ignores about 20% of compensation**

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<th>Military Personnel Account Costs*</th>
<th>Active Component</th>
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<td><strong>TOTAL DoD Compensation Costs</strong></td>
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<td><strong>TOTAL DoD Non-Compensation Costs</strong></td>
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<td><strong>$66,108</strong></td>
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<th>Dept of Defense Grand Total</th>
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<td>$12</td>
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<tr>
<td><strong>TOTAL COST TO US GOVERNMENT</strong></td>
<td><strong>$384,622</strong></td>
<td><strong>$123,351</strong></td>
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* Includes DoD contributions to MERHCF and Military Retirement Accrual.
Reserves Have Significantly Less Overhead and Infrastructure Costs

The 837,400 RC members are 39% of the 2.2 million-member Total Force but account for…

- 26% of Medicare-Eligible Retiree Health Fund Contribution
- 26% of Military retirees drawing pay
- 21% of Defense Health Program costs
- 17% of Retirement Payout costs
- 16% of Military Personnel costs
- 15% of Military Construction costs
- 13% of Operation & Maintenance
- 9% of Concurrent Receipt of disability and retirement costs
- 3% of Commissary users
- 3% of Procurement costs
- 1% of DoD Dependent Education costs
- 0% of Family Housing costs

SOURCES: FY 2013 Base Budget Request funding and end strength for active components and the selected reserves; survey data from Defense Commissary Agency, DMDC statistics on military retirees, analysis of FY2013 Treasury Budget documents.
RFPB Recommendations
• Director of Cost Assessment and Program Evaluation (CAPE) should establish permanent DoD policy (DoD Instruction) that covers “Fully Burdened” and “Life Cycle” costs for individual military members of both the active and reserve components and report these costs in an appropriate annual report
  
  – Ensure current draft DoD Instruction 7041.01 includes RC Costing tables (RC costing tables should be informed by RFPB analysis)
  
  – Extend and revise DTM 09-007 until RC costing data is included or issue other interim AC/RC cost comparison guidance to support near-term AC/RC mix decision-making
  
  – Standardize costing elements across Services
  
  – Provide DoD Senior Leadership with costing data to track cost trends and utilize them in comparative analysis
  
  – Goal - capture “fully burdened” and “life cycle” costs to DoD and to Federal Government and ensure outside independent agencies verify these costs to include GAO and CBO

• Comptroller should update current DoD Financial Management Regulation (FMR) (DoD 7000.14R), Volume 11A, Chapter 6, Appendix I, to include guidance to develop Military Composite Standard Pay and Reimbursement rate tables for the Reserve Components
Summary of Recommendations
The Secretary of Defense should…

1. Establish DoD policy/guidance for computing fully-burdened Military Personnel Cost for the Total Force
2. Specify all the cost elements that must be included in cost studies
3. Identify mission support, Treasury contributions, and all other external costs that must be considered
4. Calculate and report cost element figures annually
5. Clarify the use of composite rates in studies
6. Develop a model to calculate and compare life-cycle costs
Recommendation #1

Establish DoD policy for Total Force Personnel Costing

Director of Cost Assessment and Program Evaluation (CAPE) should establish permanent DoD policy for calculating the “Fully Burdened” costs for individual members of both active and reserve components.

• In its “Interim Report” of April 2012, RFPB recommended that such a policy be established.
• CAPE leadership agrees with need to draft such a policy.
• Details of the content of policy, annual calculation and “Life Cycle” costs are addressed in the RFPB recommendations which follow.
Recommendation #2
Specify Cost Elements for Inclusion in Total Force Personnel Cost Studies

DoD Policy should require that any study conducted or contracted by the Services or other DoD component for the purpose of comparing the costs of active and reserve component personnel or forces include, at a minimum, the following cost factors:

- Personnel Account Costs
  - Basic Pay
  - Retired Pay Accrual
  - Allowances, Incentives & Special Pay
  - PCS Costs
  - Medicare-Eligible Retiree Health Fund Contribution

- DoD Healthcare Costs

- DoD & Dept. Ed. Dependent Education Costs

- DoD & Service Family Housing Costs

- DoD Commissary Costs

- Treasury Contribution for Concurrent Receipt

- Base Operations Support Costs
Cost and Non-Cost Factors in Force Structure Decisions

- Cost should not be the sole basis for determining force structure and the mix of active, reserve, defense civilian and contractor personnel.
- Other key factors include requirements, capability, capacity, risk and expectations of future demand such as:
  - Frequency
  - Duration
  - Speed of response
  - Readiness levels for given mission sets

To support such decision-making it is essential that DoD’s cost-estimating methodology – the **objective** side of the equation – be as complete and consistent as possible.

COST
(Usually **objective**)

EFFECTIVENESS
(Includes both **subjective** and objective elements)
Military Personnel Account Costs

• Composite Rate calculation in DoD Financial Management Regulation includes key minimum cost elements:
  – Basic Pay
  – Retired Pay Accrual
  – Allowances, Incentives, Special Pays
  – PCS Cost
  – Miscellaneous Expense
  – Medicare-Eligible Retiree Health Care (MERHC) Accrual

• FY’13 average Retired Pay Accrual: $20.8 Billion.
  – $12,834 per AC service member
  – $3,419 per RC service member

• FY’13 PCS cost: $4.9 Billion. ($3,260 per AC service member)

• All of these elements are necessary – but not sufficient on their own – to fully capture the cost of personnel as these elements account for less than half of the total cost.

Military Personnel Costs must be fully included in future cost studies
DoD Health Care Costs

- FY’13 Defense Health Program: $32.5 Billion
  - Plus $8 Billion in Medical Personnel & $7 Billion for MERHCF
- Serves more than 9.5 million beneficiaries
  - Service members (1.7 million people)
  - Retirees (2.1 million people)
  - Family Members & Survivors (5.7 million people)
    - Active: 2.4 million / Retiree: 2.9 million / Survivors: .4 million
  - Approximately 26% of beneficiaries are Reserve Component
- RC uses the system less than AC & active retirees
- Current DoD estimate for per capita Active Duty health cost of $10,563 excludes cost of health care for under-65, non-Medicare-eligible retirees. This cost should be captured and attributed.

DoD Health Care Costs must be fully included in future cost studies
DoD & Department of Education
Dependent Education Costs

- FY’13 DoD Education Activity: $2.7 Billion
- FY’13 Department of Education military “Impact Aid”: $505 million
- Reservists generally do not send dependent children to DoD schools
- Only reservists serving on active duty are counted for Impact Aid calculations
- RFPB staff estimates that RC accounts only for about 1% of DODEA costs

DoD and Dept of Education Costs for dependent education must be fully included in future cost studies
DoD & Service Family Housing Costs

- FY’13 Total to build and operate: $1.65 Billion
- Almost exclusively used by Active Component Personnel
- Reservists, not on active duty, do not qualify for on-base housing
- Few Reservists on active duty use on-base family housing

DoD and Service cost for building and operating must be fully included in future cost studies
DoD Commissary Costs

- FY’13 Cost to Operate over and above revenue income: **$1.37 Billion**
- **Only 3%** of Commissary users are Reserve Component according to DoD Commissary Agency survey data.
  - Consistent with Food Marketing Institute study (May 2000) which estimated that 5% of commissary users were RC.
- The average American lives **less than 6 miles** from a supermarket.
- In contrast, 54% of RC units are located **more than 20 miles** away from a military commissary.

*DoD Commissary Costs must be fully included in future cost studies*
Base Operations Support Costs

• FY’13 BOS for DoD: $36 Billion
  – Less than 12% is Reserve Component

• Base Operations Support costs should be required to be included in cost studies.
  • Facilities Sustainment, Restoration, and Modernization (SRM)
  • Security and utilities
  • Base food service, transportation and communications
  • MWR Facilities
  • Chapels
  • Day care centers
  • DoD Dependent Schools
  • Family Housing
  • Barracks

Appropriate DoD and Service O&M Costs must be included in future cost studies
Recommendation #3
Identify Other Costs that must be Considered

DoD Policy should require that any study comparing the costs of active and reserve component personnel or forces consider the amounts, degree and methodology for possible inclusion of all or part of the annual contributions made by the US Treasury, Veterans costs, and the non-compensation costs of the Department of Defense.

- Complexity of Treasury Contributions requires expert study to determine which parts are attributable to active or reserve component force decisions
- Non-Compensation Costs such as O&M, Procurement, Military Construction and RDT&E will vary across Services, but still merit explicit DoD guidance for inclusion in future cost studies.
U.S. Treasury Contributions

- **Concurrent Receipt of both Retired Pay and Veterans Disability**
  - $6.95 Billion in FY 13
  - Only about 9% is attributable to Reserve recipients

- **Medicare-Eligible Retiree Health Care Fund (MERHCF)**
  - $6.44 Billion in FY 13
  - Only about 29% of actuarial liability is Reserve

- **Military Retirement Fund**
  - $67.18 Billion in FY 13
  - Only about 17% of payout is made to Reserve retirees

- While the Treasury contribution for Concurrent Receipt is a cost element that should be included in future cost studies, the other contributions should be considered. They involve unfunded liabilities due to existing retirees. Thus, an accurate attribution of such costs in force mix decisions requires more study.

**Treasury Contributions for Concurrent Receipt should be included in cost studies. Others require further study.**
Other DoD & Federal Costs

- These additional costs should be required to be considered in cost studies
  - DoD & Service Non-Compensation Costs
    - Operations & Maintenance (other than parts already required per recommendation #2)
    - Procurement
    - Military Construction
    - RDT&E & Other (e.g. Environmental Restoration, Drug Interdiction, BRAC, etc.)
  - Veterans Costs (Dept. of Veterans Affairs & Dept. of Labor)

Other DoD & Federal costs should be required to be considered in future Military Personnel cost studies
Recommendation #4
Calculate and Report All Cost Elements Annually

The Director, Cost Assessment and Program Evaluation (CAPE) or the Under Secretary of Defense (Comptroller) should calculate and publish all cost elements for Total Force military personnel cost studies on an annual basis, and provide guidance on their use in an appropriate memo or report.

• Will provide updated and consistent numbers for the Services and other DoD components to use in costing studies.
• Demonstrates DoD commitment to tracking costs in an increasingly budget-constrained environment
Recommendation #5
Clarify Use of Composite Rates in Studies

The Under Secretary of Defense (Comptroller) should modify the annual memo on “Military Personnel Composite Standard Pay and Reimbursement Rates” to eliminate the directive to use such rates “when determining the cost of military personnel for budget/management studies.”

- DTM 09-007 correctly states:
  - “The DoD composite rates… do not account for the full costs of military personnel”
  - “For this reason, composite rates should not be the only source of data used when answering questions about the cost of the defense workforce, making workforce-mix decisions, or determining the cost impact of manpower conversions.”

- If the Composite Rates are intended narrowly to be used to calculate the labor cost for the preparation of documents such as reports, studies or budget submissions, the annual memo should say this more clearly.
Recommendation #6

Develop a model to calculate and compare “life-cycle” costs

The Director, Cost Assessment and Program Evaluation (CAPE) should develop a model to calculate and compare the “life cycle” costs to the federal government of active and reserve component personnel.

- **DoD Model Development should include study of two key examples:**
  - “Cost of the Reserve Components” by Jennifer Buck, 2008
  - Air Forces Reserve’s “Individual Cost Assessment Model” (ICAM)

- **Long-term Costs of Active and Reserve Component forces are very different.**
  - RC Retirement is paid at a lower amount for a shorter period of time
  - RC Retiree Health Care costs are much lower than AC Retirees
  - “The DoD composite rates… do not account for the full costs of military personnel”

- **Leveraging previous “life-cycle” cost methodologies suggests that:**
  - The life-cycle cost of RC service member is less than half that of AC counterpart.
Notional AC/RC
Fully Burdened / Life Cycle Cost Illustration based on work by Jennifer Buck

Total Life Cycle Cost to the US Govt.
AC member: $10.3 Million
RC member: $4.8 Million
US Air Force Reserve’s “Individual Cost Assessment Model”

An exemplary “Life-Cycle” costing tool DoD should study

Source: AFRC/A9A, 9/28/12
AC/RC Retiree Pay Illustration
Total Cost Differences after 20-year Career
(Extrapolated based on FY2010 data, not discounted for accruals, not inflated)

Non-Disabled Military Retirees Retired

<table>
<thead>
<tr>
<th></th>
<th>Monthly Pay (Avg. Gross)</th>
<th>Age at Retirement*</th>
<th>Years to Life Expectancy</th>
<th>Total Retirement Pay</th>
<th>Percent of AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC O-5</td>
<td>$4,356</td>
<td>43</td>
<td>40.5</td>
<td>$2,117,016</td>
<td></td>
</tr>
<tr>
<td>RC O-5</td>
<td>$2,074</td>
<td>60</td>
<td>24.8</td>
<td>$617,222</td>
<td>29%</td>
</tr>
<tr>
<td>AC E-7</td>
<td>$2,088</td>
<td>40</td>
<td>38.8</td>
<td>$972,173</td>
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</tr>
<tr>
<td>RC E-7**</td>
<td>$1,005</td>
<td>60</td>
<td>21</td>
<td>$253,260</td>
<td>26%</td>
</tr>
</tbody>
</table>

*Longevity is based on military specific tables that assume an entry age of 23 for commissioned officers and warrant officers and an entry age of 20 for enlisted members.

** Average enlisted AC service member retires at E-7 while the average RC service member retires as an E-6 at a lifetime cost of $173,376.

The RC officer draws less than 1/2 the monthly pay for less than 2/3 the duration.

The RC enlisted member draws less than 1/2 the monthly pay for almost 1/2 the duration.

**AC/RC Retiree Health Cost Illustration**

**Total Cost Differences after 20-year Career**

(Extrapolated based on FY2010 data, not discounted for accruals, not inflated)

---

### Defense Health Program Beneficiaries

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Duty</td>
<td>1,682,908</td>
</tr>
<tr>
<td>Active Duty Family Members</td>
<td>2,377,162</td>
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<tr>
<td>CHAMPUS Retirees</td>
<td>1,066,430</td>
</tr>
<tr>
<td>CHAMPUS Family Members</td>
<td>2,261,027</td>
</tr>
<tr>
<td>Medicare-Active Duty Family</td>
<td>8,241</td>
</tr>
<tr>
<td>Medicare-Guard/Reserve Family</td>
<td>2,318</td>
</tr>
<tr>
<td>Medicare-Retirees</td>
<td>1,039,209</td>
</tr>
<tr>
<td>Medicare-Retiree Family Members</td>
<td>673,757</td>
</tr>
<tr>
<td>Medicare-Inactive Guard/Reserv</td>
<td>14</td>
</tr>
<tr>
<td>Medicare-Survivors</td>
<td>462,586</td>
</tr>
<tr>
<td>Medicare-Other</td>
<td>1,957</td>
</tr>
<tr>
<td><strong>TOTAL Beneficiaries</strong></td>
<td>9,575,609</td>
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</table>

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### Defense Health Program Costs

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHP O&amp;M, RDTE &amp; Procurement</td>
<td>$32.5 B</td>
</tr>
<tr>
<td>MERHFC Contributions</td>
<td>$6.7 B</td>
</tr>
<tr>
<td>DHP Mil Personnel</td>
<td>$8.4 B</td>
</tr>
<tr>
<td>DHP MilCon</td>
<td>$1.0 B</td>
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<tr>
<td><strong>Total Health Care Costs</strong></td>
<td>$48.6 B</td>
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</table>

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### Comparative AC/RC Retiree “Life Cycle” Healthcare Costs

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age at Retirement</th>
<th>Years to Life Expectancy</th>
<th>Years at $15,587 CHAMPUS Rate</th>
<th>Years at $8,377 Medicare-Eligible Rate</th>
<th>Health Care Cost TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC O-5</td>
<td>43</td>
<td>40.5</td>
<td>21</td>
<td>19.5</td>
<td>$496,349</td>
</tr>
<tr>
<td>RC O-5</td>
<td>60</td>
<td>24.8</td>
<td>4</td>
<td>20.8</td>
<td>$237,670</td>
</tr>
<tr>
<td>AC E-7</td>
<td>40</td>
<td>38.8</td>
<td>24</td>
<td>14.8</td>
<td>$504,548</td>
</tr>
<tr>
<td>RC E-7</td>
<td>60</td>
<td>21</td>
<td>4</td>
<td>17</td>
<td>$205,837</td>
</tr>
</tbody>
</table>

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**Younger AC retirees have more dependents and use the health care system longer.**

**RC Retiree’s Total Healthcare cost is less than half that of AC Retiree.**
AC & RC Retiree Total Cost of Pay and Healthcare to Life Expectancy
(Extrapolated based on FY2010 data, not discounted for accruals, not inflated)

Active O-5
Draws $4,356 monthly pay for 40.5 years starting at age 43.

RC O-5
Draws $2,074 monthly pay for 24.8 years starting at age 60.

Active E-7
Draws $2,088 monthly pay for 38.8 years starting at age 40.

RC E-7
Draws $1,005 monthly pay for 21 years starting at age 60.
Questions?

Maj Gen Jimmy Stewart, USAFR
Military Executive, Reserve Forces Policy Board
The FY’13 Federal Budget Request

<table>
<thead>
<tr>
<th>The DoD Budget</th>
<th>$ Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>O&amp;M (less DODEA &amp; DeCA)</td>
<td>$169.8</td>
</tr>
<tr>
<td>Military Personnel</td>
<td>$135.1</td>
</tr>
<tr>
<td>Procurement</td>
<td>$98.8</td>
</tr>
<tr>
<td>RDTE &amp; Other</td>
<td>$74.7</td>
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<tr>
<td>Defense Health Program</td>
<td>$32.5</td>
</tr>
<tr>
<td>Military Construction</td>
<td>$8.7</td>
</tr>
<tr>
<td>DoD Dependent Education (DODEA)</td>
<td>$2.7</td>
</tr>
<tr>
<td>Family Housing (Construction &amp; Ops)</td>
<td>$1.7</td>
</tr>
<tr>
<td>Defense Commissary Agency (DeCA)</td>
<td>$1.4</td>
</tr>
<tr>
<td><strong>DOD TOTAL</strong></td>
<td><strong>$525.4</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Other Federal Agencies</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Dept of Veteran Affairs (Total Budget)</td>
<td>$140.3</td>
</tr>
<tr>
<td>Dept of Labor (Veteran Ed &amp; Tng Svc)</td>
<td>$0.3</td>
</tr>
<tr>
<td>Dept of Education (Impact Aid)</td>
<td>$0.5</td>
</tr>
<tr>
<td>Dept of Treasury (Concurrent Receipt)</td>
<td>$7.0</td>
</tr>
<tr>
<td>Dept of Treasury (MERHCF)</td>
<td>$6.4</td>
</tr>
<tr>
<td>Dept of Treasury (Military Retirement Fund)</td>
<td>$67.2</td>
</tr>
<tr>
<td><strong>OTHER FEDERAL AGENCY TOTAL</strong></td>
<td><strong>$221.7</strong></td>
</tr>
</tbody>
</table>
# AC & RC Total and Per Capita Cost to DoD

Based on FY13 DoD Base Budget Request (Green Book)

<table>
<thead>
<tr>
<th>DOD TOTAL</th>
<th>ACTIVE COMPONENT ACCOUNTS</th>
<th>RESERVE COMPONENT ACCOUNTS</th>
<th>RC% of DOD Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ Million)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Personnel</td>
<td>135,112</td>
<td>42,624 28,274 13,155 29,260</td>
<td>113,312</td>
</tr>
<tr>
<td>O&amp;M (less DODDEA)</td>
<td>169,854</td>
<td>29,248 36,609 41,607 5,983 35,435</td>
<td>148,882</td>
</tr>
<tr>
<td>Military Construction</td>
<td>8,690</td>
<td>3,655 1,923 1,702</td>
<td>7,668</td>
</tr>
<tr>
<td>Family Housing</td>
<td>1,651</td>
<td>54 535 480</td>
<td>1,651</td>
</tr>
<tr>
<td>OMDW RC Adjustment</td>
<td></td>
<td>-1,200</td>
<td></td>
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<tr>
<td>MILCON DW RC Adj.</td>
<td></td>
<td>-244</td>
<td></td>
</tr>
<tr>
<td>Defense Health Program</td>
<td>32,529</td>
<td></td>
<td>25,698</td>
</tr>
<tr>
<td>DoD Dependent Ed</td>
<td>2,745</td>
<td></td>
<td>2,718</td>
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<tr>
<td>DoD Commissary Agency</td>
<td>1,372</td>
<td></td>
<td>1,330</td>
</tr>
<tr>
<td>TOTAL</td>
<td>351,952</td>
<td></td>
<td>299,814</td>
</tr>
<tr>
<td>Procurement</td>
<td>98,823</td>
<td>4,377 15,884 40,636 1,604 33,166</td>
<td>95,666</td>
</tr>
<tr>
<td>TOTAL w/Procurement</td>
<td>450,776</td>
<td></td>
<td>395,480</td>
</tr>
<tr>
<td>RDTE &amp; Other</td>
<td>74,654</td>
<td></td>
<td>45,892</td>
</tr>
<tr>
<td>TOTAL DOD Appropriation</td>
<td>525,430</td>
<td></td>
<td>441,372</td>
</tr>
</tbody>
</table>

| End Strength Base Budget 2013 | 502,400 | 322,700 | 182,100 | 328,900 | 1,336,100 | 205,000 | 62,500 | 39,600 | 70,500 | 358,200 | 101,600 | 837,400 |

<table>
<thead>
<tr>
<th>% of DOD Budget Allocated</th>
<th>AC/RC</th>
<th>RC/AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost ($) - Per Capita</td>
<td>67%</td>
<td>$ 224,395</td>
</tr>
<tr>
<td>Cost ($) - Per Capita with Procurement</td>
<td>86%</td>
<td>$ 295,996</td>
</tr>
<tr>
<td>Cost ($) - Per Capita with Every DoD Cost Allocated</td>
<td>100%</td>
<td>$ 330,343</td>
</tr>
</tbody>
</table>
## Recent and Ongoing Cost Studies

<table>
<thead>
<tr>
<th>Date</th>
<th>Org</th>
<th>Title</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2007</td>
<td>RAND/OSD-RA</td>
<td>Unpublished study reported to CNGR</td>
<td>NG BCT costs 28% of AC (not deployed) and 136% in a 1:5 rotation</td>
</tr>
<tr>
<td>May 2007</td>
<td>OUSD-C</td>
<td>Testimony to CNGR</td>
<td>RC Service member costs 28-29% of AC member</td>
</tr>
<tr>
<td>June 2007</td>
<td>GAO</td>
<td>Estimate of Total Compensation</td>
<td>RC annual compensation ($19k) is 15% of AC ($126k)</td>
</tr>
<tr>
<td>Jan 2008</td>
<td>CNGR</td>
<td>Transforming the National Guard and Reserves into a 21st Century Operational Force</td>
<td>RC per capita costs 23% of AC</td>
</tr>
<tr>
<td>2008</td>
<td>Falcon Books</td>
<td>“The Cost of the Reserves” by J. Buck in <em>The New Guard and Reserve</em></td>
<td>RC member costs 58% of AC per deployment in life cycle model</td>
</tr>
<tr>
<td>April 2011</td>
<td>OSD-RA</td>
<td>Comprehensive Review of the Future Role of the Reserve Component</td>
<td>DoD needs a common costing methodology for the Total Force</td>
</tr>
<tr>
<td>2011</td>
<td>RAND</td>
<td><em>Reshaping the Army’s Active and Reserve Components</em></td>
<td>RC BCT cost savings unlikely</td>
</tr>
<tr>
<td>Ongoing</td>
<td>OSD-CAPE</td>
<td>AC &amp; RC Unit Costs per NDAA 2012</td>
<td>TBD</td>
</tr>
<tr>
<td>Ongoing</td>
<td>IDA / OSD-RA</td>
<td><em>Analyzing the Costs of Alternative Army Active/Reserve Force Mixes</em></td>
<td>RC provides a more affordable force structure</td>
</tr>
<tr>
<td>Ongoing</td>
<td>RAND</td>
<td>Air Force Active/Reserve Mix</td>
<td>AC cost-per-flying-hour generally lower than RC</td>
</tr>
<tr>
<td>Ongoing</td>
<td>RAND</td>
<td><em>Reassessing the Army AC/RC Force Mix</em></td>
<td>Army RC unit averages 29% of AC. Current policy / usage requires 2 RC units to match 1 AC unit capacity.</td>
</tr>
</tbody>
</table>
Notional AC/RC
FullyBurdened/ Life Cycle
Cost Illustration Assumptions

- 20-year period of demand for 1:3 AC & 1:5 RC rotations
- AC annual cost: $385 K
- RC annual cost: $125 K
- RC costs same as AC for each of four mobilization/deployment years
- Career length: AC=22 years, RC=25 years
- Deployments completed: AC=7, RC=4
- AC retiree costs: $27 K in retired pay, $10K in DoD-provided healthcare
- RC retiree draws no retired pay until age 57 (age 60 minus 36 months credit for 4 x 9-month deployments)
- RC retiree costs: $13 K in retired pay. At age 65 add $10 K in healthcare (Medicare)
- Life Expectancy for both: Age 83
Selected Officials & Experts Consulted

- USD (P&R)
- USD (C)
- Director, CAPE
- CSA
- VCSAF
- ASD(RA)
- ASA (M&RA)
- ASN (M&RA)
- SAF/MR
- Chief, NGB
- Director, ARNG
- Chief, USAR
- Commander, Marine Forces Res.
- Chief, USNR
- Director, ANG
- Chief, USAFR

- ACJCS/NG&RM
- Deputy Director, Joint Staff J8
- Deputy Director, DOD Office of the Actuary
- Government Accountability Office
- Congressional Budget Office
- Center for Strategic & Budgetary Assessments
- Dr. John Winkler, RAND
- Ms. Jennifer Buck, Former Director Resources, OASD-RA

More than 100 meetings with senior officials and experts inside and outside the Department of Defense.
APPENDIX D

CAPE INFO MEMO TO SECDEF

(RESPONSE TO 2013 RFPB REPORT)
INFO MEMO

FOR: SECRETARY OF DEFENSE

FROM: Christine H. Fox, Director, Cost Assessment and Program Evaluation

SUBJECT: Comments on the Final Reserve Forces Policy Board Report on Costs of Military Personnel

Your office asked me to comment on the Reserve Force Policy Board report titled “Eliminating Major Gaps in DoD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel.” I provide individual comments on each of the six recommendations below. My overall assessment is:

- The Board’s recommendations properly identify the need for a consistent set of policy and guidelines on costing military personnel. We need reasonable consistency and completeness in our estimates of costs as we think about adjustments in our force composition.

- The Board’s singular focus on cost, however, obscures the fact that cost is but one of many factors determining force structure and the mix within the Total Force. Many other factors—inherently governmental jobs, peacetime and wartime demands, deployment frequency and duration, speed of response, and unit readiness for specific mission sets—are of equal or greater importance. The report argues these factors are mostly subjective, whereas cost is objective. I disagree, since many of these factors can be quantified, such as the quantity of training days a unit requires to perform the mission. Those other factors often play the more important role in our decision calculus for Total Force mix.

- Some of the Board’s recommendations go too far—they effectively propose a single cost model for personnel costs that would be applied to all studies involving costs of personnel. We believe force-composition questions are varied enough to warrant different approaches for different questions.

- The Board’s report contains Active and Reserve personnel costs and comparison statistics. The Board’s methodology itself fails to estimate accurately fully-burdened costs. While I agree we need to consider the cost elements identified in the report, the Board’s attempt poorly allocates such costs between the two Components. This is not to fault them—allocation schemas for many of the cost elements are extremely complicated, as the Board itself recognized. Some of the
cost elements are fixed (e.g., certain Dept. of Treasury contributions), and any capitation of these costs oversimplifies the basis for these costs. We will make progress on fully-burdened costing over time; in the meantime, however, the Board’s estimate of a reserve component service member costing one fifth to one third of an active service member now lingers in press reporting with no mention of the limitations of the Board’s costing approach.

- I also believe cost per unit of output is a better metric. We care about effectiveness as well as cost. The only suggestion of output is near the end of the report. From the report, you can easily compute that the active member provides three times the years of active service as the reserve member. So, at one third the cost, I conclude—as I have from our own cost analysis—that a reserve member, when you use him or her, costs about the same as an active member.

- I have included more specific comments for your awareness at TAB A.

COORDINATION: NONE

Attachment:
As stated

Prepared by: Matthew J. Schaffer. 695-0528
Comments on individual Board Recommendations


  Partially concur. The Department has an established policy for estimating the “fully-burdened” cost of active military, civilians and contractor personnel in DTM 09-007. The main purpose of the DTM is to estimate costs of full-time manpower. The DTM does not distinguish between active and reserve component service members. CAPE will investigate the feasibility of updating the DTM and separately costing active and reserve members.

- Board Recommendation #2 – Specify all of the cost elements that must be included in cost studies.

  Partially concur. We believe the current DTM captures all necessary cost elements for cost studies for which the DTM is relevant—that is, those studies looking at alternatives for filling a full-time position. Some cost studies, such as evaluating combat-force-mix alternatives, would necessitate additional cost elements and a different cost model. So, the set of cost elements is dependent on the nature of the study. CAPE will work to develop guidance that recognizes different analytic needs, the appropriate means for estimating costs, and the set of cost elements that are required.

- Board Recommendation #3 – Identify mission support, Treasury contributions, and all other external costs that must be considered.

  Partially concur. We believe that the DTM already establishes the procedures to properly capture the relevant external costs such as Treasury contributions and Veterans costs for both military and civilian personnel. Other mission support costs such as procurement and RDT&E are considered costs associated with equipping and employing our people. These cost elements are not included in the DTM because the DTM is not intended to be used to answer such questions. The appropriate set of cost elements will ultimately depend on the question being asked. Cost elements such as procurement and RDT&E are relevant to questions about future force mixes and require a separate approach. CAPE will work to develop guidance that clarifies the appropriate cost tool and the necessary cost elements to capture.

- Board Recommendation #4 – Calculate and report cost element figures annually.

  Partially concur. Certain cost elements may not have a “standardized calculation” that can be reported annually. Different active-reserve mixes would allocate some cost elements differently. For example, allocation of Veterans’ costs to reserve component is clearly dependent on what portion of the reserve component is on active duty and for how long. CAPE will work with Comptroller to determine how best to provide guidance and report the necessary cost figures for studies.

- Board Recommendation #5 – Clarify the use of composite rates in studies.

  Concur. CAPE will work with Comptroller to make clear the annual guidance for cost studies.
Board Recommendation #6 – Develop a model to calculate and compare life-cycle costs.

Partially concur. No single model is optimal for all studies. Determining the best person (civilian or military) to fill a full-time seat at a command is a far different a question than determining the best mix (active or reserve) of combat forces. It is also not clear that life-cycle costs are necessary in all such studies. CAPE will work to develop necessary guidance, tool sets, cost elements, and models as needed.
APPENDIX E

CAPE MANPOWER RATES NEW METHODOLOGY FY 2015
### FY 2015 Military, Civilian, and SES Manpower Rates for the Cost Guidance Portal

<table>
<thead>
<tr>
<th>Civilian Rates for CGWS</th>
<th>SES Rates for CGWS</th>
<th>Military Rates for CGWS</th>
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<tr>
<td><strong>Grade</strong></td>
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<td><strong>Rank</strong></td>
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<tr>
<td><strong>FY 2015 Annual Rate</strong></td>
<td><strong>FY 2015 Annual Rate</strong></td>
<td><strong>FY 2015 Annual Rate</strong></td>
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</table>

**Civilian Manpower Assumptions:**

**Source:**
https://fcom.cape.osd.mil/

### Manpower Unit/Qualifier Assumptions
- **Full Time Equivalent (FTE) = Annual Rate**
- **Man-Month = Annual Rate divided by 12**
- **Man-Day = Annual Rate divided by 260**
- **Man-Hour = Annual Rate divided by 2,087**

### Acronyms
- CGWS = Cost Guidance Web Site
- E = Enlisted [military personnel]
- FTE = Full Time Equivalent
- FY = Fiscal Year
- GS = General Schedule [civilian personnel]
- O = Officer [military personnel]
- OSD = Office of the Secretary of Defense
- SES = Senior Executive Service
- WO = Warrant Officer [military personnel]
Effective 1 October – New methodology for manpower rates in DoD Cost Guidance Portal

The new methodology accounts for the fully-burdened cost to DoD for military and civilian manpower consistent with DoDI 7041.04 and the Full Cost of Manpower (FCoM) tool. The previous methodology did not account for the fully-burdened cost to DoD. Thus, there is a perceived increase in manpower costs in the DoD Cost Guidance Tool, but actual manpower costs did not increase. The methodological change resulted in a significantly greater increase in civilian costs than military costs because previous military rates were already closely aligned with the current methodology.

The methodological change only affects cost estimates produced after October 1, 2015.

Military Manpower Rates

The previous methodology used DoD composite rates published annually by the Office of the Secretary of Defense, Comptroller. These rates include average base pay plus retired pay accrual, Medicare-eligible retiree health care (MERHC) accrual, basic allowance for housing, basic allowance for subsistence, incentive and special pay, permanent change of station expenses and miscellaneous pay.

The new methodology uses the fully burdened cost to DoD for military manpower consistent with DoDI 7041.04. These rates include base pay, retired pay accrual, basic allowance for housing, basic allowance for subsistence, training, permanent change of station expenses, miscellaneous expenses, Medicare-eligible retiree health care (MERHC) accrual, education assistance, recruitment and advertising expenses, discount groceries, child development and day care facilities expenses, DoDEA and family assistance, and health care expenses.

Civilian Manpower Rates

The previous methodology used the General Schedule annual salary rates associated with the District of Columbia region.

The new methodology uses the fully burdened cost to DoD for civilian manpower associated with the District of Columbia region. These rates account for the General Schedule rates associated with the District of Columbia region, Title 38 medical premium pay, overtime/holiday/other pay, incentive/performance awards, retention allowance, social security and Medicare (employer's contribution), recruitment/relocation bonuses, health care (employer's share of FEHBP), Permanent Change of Station (PCS), Federal Employee Group Life Insurance (FEGLI), transportation subsidies, worker's compensation payments, retirement accrual (employer's contribution), Federal Retirement Thrift Investment Board payments (TSP matching), unemployment insurance payments (FUTA), severance pay/separation incentives, severance health benefits, discount groceries (OCONUS only), recruitment and advertising, and training.
APPENDIX F

DEPARTMENT OF DEFENSE INSTRUCTION (DoDI 7041.04)
SUBJECT: Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support

References: See Enclosure 1

1. PURPOSE. This instruction, in accordance with the authority in DoD Directive 5105.84 (Reference (a)):

   a. Establishes policy, assigns responsibilities, and provides procedures to estimate and compare the full costs of active duty military and DoD civilian manpower and contract support.

   b. Provides a consistent approach for all DoD Components to estimate costs of manpower.

   c. Provides a list of the potential cost factors associated with manpower that should be considered in the decision-making process even when manpower costs are not the only factor.

   d. Incorporates and cancels Directive-type Memorandum 09-007 (Reference (b)).

2. APPLICABILITY. This instruction applies to:

   a. OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this instruction as the “DoD Components”).

   b. Only appropriated funded activities.

3. POLICY. It is DoD policy that:

   a. When developing national security policies and making program commitments, DoD officials must be aware of the full costs of manpower and have a thorough understanding of the implications of those costs to the DoD and, on a broader scale, to the Federal Government. This
instruction provides the business rules to estimate the full costs of the defense workforce and contracted support in support of planning, defense acquisition, and force structure decisions.

b. The business rules in this instruction will be used:

(1) When performing a benefit analysis, an economic analysis, or business case analysis in support of workforce mix decisions. This includes, but is not limited to, determining the workforce mix of new or expanding mission requirements that are not inherently governmental or exempt from private-sector performance.

(2) To decide whether to use DoD civilians to perform functions that are currently being performed by contractors.

c. The cost elements in this instruction can be modified or augmented in each specific case as necessary, but DoD Components should be prepared to support such decisions with sufficient justification.

4. RESPONSIBILITIES. See Enclosure 2.

5. PROCEDURES

a. Enclosure 3 provides a list of cost elements and methodologies for estimating and comparing the full costs of active duty military and civilian manpower and contract support. Reserve and National Guard military manpower costs are not addressed in this instruction. A cost model for DoD-wide employment of Enclosure 3’s business rules is at https://fcom.cape.osd.mil/.

b. Enclosure 4 provides the data sources and calculations for direct labor cost elements for active duty military and DoD civilian personnel.

c. Enclosure 5 provides a list of non-labor cost factors (goods, services, and benefits) associated with manpower that should be considered in the decision-making process when manpower costs are not the only factor.

6. RELEASABILITY. Unlimited. This instruction is approved for public release and is available on the Internet from the DoD Issuances Website at http://www.dtic.mil/whs/directives.

7. EFFECTIVE DATE. This instruction:

b. Must be reissued, cancelled, or certified current within 5 years of its publication in accordance with DoD Instruction 5025.01 (Reference (c)). If not, it will expire effective July 3, 2023 and be removed from the DoD Issuances Website.

Christine H. Fox  
Director of Cost Assessment and Program Evaluation

Enclosures
1. References  
2. Responsibilities  
4. Cost Elements and Data Sources  
5. List of Goods, Services, and Benefits  

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2. Agencies with Outlays for Military Personnel and Retirees, Typical Fiscal Year
DoDI 7041.04, July 3, 2013

ENCLOSURE 1

REFERENCES

(a) DoD Directive 5105.84, “Director of Cost Assessment and Program Evaluation (DCAPE),” May 11, 2012
(c) DoD Instruction 5025.01, “DoD Directives Program,” September 26, 2012
(d) Title 10, United States Code
(e) DoD Instruction 1100.22, “Policy and Procedures for Determining Workforce Mix,” April 12, 2010
(g) Office of Federal Procurement Policy Letter 11-01, October 12, 2011
(i) Section 1431 of Title 50, United States Code
(j) Title 42, United States Code
(k) Title 49, United States Code
(l) Title 5, United States Code
ENCLOSURE 2

RESPONSIBILITIES

1. DIRECTOR OF COST ASSESSMENT AND PROGRAM EVALUATION (DCAPE). In addition to the responsibilities in sections 2, 3, and 4 of this enclosure, the DCAPE will prepare clarifying guidance as needed for this instruction.

2. UNDER SECRETARY OF DEFENSE (COMPTROLLER)/CHIEF FINANCIAL OFFICER, DEPARTMENT OF DEFENSE (USD(C)/CFO) AND DCAPE. In addition to the responsibilities in sections 3 and 4 of this enclosure, the USD(C)/CFO and DCAPE will continue to issue separate guidance as part of the annual integrated program and budget review process for developing DoD civilian and military personnel and contract support costs for consideration in program and budget submissions.

3. USD(C)/CFO, UNDER SECRETARY OF DEFENSE FOR PERSONNEL AND READINESS (USD(P&R)), AND DCAPE. In addition to the responsibilities in section 4 of this enclosure, the USD(C)/CFO, USD(P&R), and DCAPE will develop a cost model for DoD-wide application that employs the business rules in Enclosure 3 of this instruction.

4. OSD AND DoD COMPONENT HEADS. The OSD and DoD Component heads will use the business rules set in Enclosure 3 of this instruction:

   a. To estimate the full costs of the defense workforce in support of planning, defense acquisition, and force structure decisions.

   b. When performing a cost benefit analysis, an economic analysis, or business case analysis in support of workforce mix decisions. This includes, but is not limited to, determining manpower costs associated with new or expanding mission requirements that are not inherently governmental or exempt from private-sector performance, in accordance with section 2463 of Title 10, United States Code (U.S.C.) (Reference (d)) and DoD Instruction 1100.22 (Reference (e)).

   c. To decide whether to use DoD civilians to perform functions that are currently being performed by contractors.
ENCLOSURE 3

BUSINESS RULES FOR ESTIMATING AND COMPARING
THE FULL COSTS OF DoD MANPOWER AND CONTRACT SUPPORT

1. GENERAL. These business rules establish standard DoD procedures for estimating and comparing the costs of different configurations of manpower (military and DoD civilian) and contract support.

a. Manpower Costs. When answering questions about the costs of manpower for a specific unit, organization, function, mission, or defense acquisition program, analysts should report the full costs of military and civilian DoD manpower (e.g., DoD Components should account for the full costs of manpower when developing independent cost estimates and analyses of alternatives for defense acquisition programs and when pricing units in the force structure). Manpower cost estimates normally address costs to the DoD. However, in certain cases, analysts may be asked to report full manpower costs to the Federal Government. These business rules address both kinds of requests.

b. Workforce Mix Decisions. Sections 129a, 2330a, 2461, and 2463 of Reference (d), Reference (e), Office of Management and Budget Circular A-76 (Reference (f)), and Office of Federal Procurement Policy letter 11-01 (Reference (g)) are particularly relevant to decisions on workforce mix. Cost analysts will consult these references and determine workforce mix options before using this instruction to calculate the costs of those workforce mix decisions. In all cases, if functions or activities are no longer required, they will be terminated.

(1) New or Expanded Missions. If a manpower analysis shows that a new or expanded mission requirement is not inherently governmental or exempt from private-sector performance, as required by section 2463 of Reference (d), the official responsible for the function(s) in question will conduct a cost comparison using the business rules prescribed in this enclosure to determine which would cost less: DoD civilian employees or a private-sector contractor.

(2) Conversion From Contractor to Government Performance - In-sourcing. If a review shows that a function is not inherently governmental or exempted by section 2463 of Reference (d) and Reference (e), conversion to DoD civilian employee performance must conduct a cost comparison using the business rules prescribed in this enclosure to determine whether DoD civilian employees or a private sector contractor would perform a function at a lower cost. Conversions must meet the cost differential requirements set by section 2463 of Reference (d).

(3) Manpower Conversions—Military to DoD Civilian or DoD Civilian to Military. Manpower may be either military or DoD civilian performance based, and can be converted from one to the other as needed in accordance with Reference (e). Although cost is not the only factor in such decisions, analysts may be asked to estimate the cost impact of the conversions. In such cases, an analyst will conduct a cost comparison using the business rules prescribed in this enclosure, to estimate the cost of converting a function from military to DoD civilian performance or from DoD civilian to military performance.
(4) **Conversions From Government to Contractor Performance.** DoD Components are required to conduct public-private competitions in accordance with Reference (f), section 2461 of Reference (d), and other applicable laws and regulations, in determining whether to convert a commercial activity performed by any number of civilian DoD personnel to private-sector performance.

c. **Program and Budget Submissions**

(1) Policies and procedures for calculating DoD civilian and military manpower costs for programming and budgeting purposes are established through separate guidance issued by the USD(C)/CFO and the DCAPE as part of the annual integrated program and budget review process.

(2) The DoD composite rates, as published by the USD(C)/CFO, pursuant to paragraph 6.1 of DoD Directive 5118.03 (Reference (h)), will be used to calculate manpower costs for program and budget submissions. However, these DoD composite rates do not account for the full costs of military or DoD civilian personnel. For example, the outlays for compensation costs and for retirement and medical accrual accounts for active-duty military personnel represent only a fraction of total federal outlays. For this reason, composite rates should not be the only source of data used when answering questions about the cost of the defense workforce, making workforce-mix decisions, or determining the cost impact of manpower conversions.
2. **BUSINESS RULES FOR DoD MANPOWER.** The cost elements and methodologies described in this section are to be used when estimating workforce costs, as detailed in paragraphs 2a(1) through 2b(3) of this enclosure. Cost elements for DoD civilian and military manpower can be divided into labor and non-labor costs and are detailed in Enclosures 4 and 5 (see Figure 1) of this instruction.

![Figure 1. Cost Elements of the Full Cost of Manpower](image)

<table>
<thead>
<tr>
<th>Military</th>
<th>DoD Civilian</th>
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<tbody>
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<td>Labor Costs</td>
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<td></td>
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<tr>
<td>• Current - Cash - In-Kind</td>
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<tr>
<td>• Deferred - Cash - In-Kind</td>
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<td>(detailed in Enclosure 4, Table 2)</td>
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<tr>
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<tr>
<td>Contract</td>
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</tr>
<tr>
<td>• Cost of the Contract to the Government</td>
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</tr>
<tr>
<td>(will include non-separable, non-labor costs)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. **Labor Costs**

(1) **Direct Labor Costs**

(a) Direct labor costs for military and DoD civilian manpower can be divided into two categories: costs paid by the DoD and costs paid by other federal agencies. Examples of military and DoD civilian personnel costs paid by other federal agencies include payments for concurrent receipts (a form of deferred compensation for military personnel with disabilities), which are paid by the Department of Treasury, and health benefits for civilian retirees, which are
paid by the Office of Personnel Management. Figure 2 lists the agencies that typically have outlays for Active and Reserve Component personnel and for retirees paid by the DoD and other federal agencies.

Figure 2. Agencies with Outlays for Military Personnel and Retirees, Typical Fiscal Year

(b) Direct labor costs for military and DoD civilian manpower can be further divided into three subcategories: costs that are variable in the short run, fixed in the short run, and pay-as-you-go costs that are deferred.

1. Costs That Are Variable in the Short Run. These costs directly relate to, and are driven by, the size of the workforce (e.g., basic pay, allowances, health care benefits). These costs vary annually in relation to the number of personnel in each pay status.

2. Costs That Are Fixed in the Short Run. These costs of benefits are not directly tied to, or driven by, the size of the workforce. They are adjusted over time if changes occur in the size of the workforce that are significant enough and of long enough duration to justify a change in the services provided (e.g., appropriated funds for commissaries, day care centers). These costs change only if workforce numbers grow or shrink so significantly that the size or number of commissaries or day care centers has to change in order to properly serve the population.

3. Costs That Are Deferred. These costs will be incurred in the future, including some, but not all, types of deferred compensation. Deferred compensation costs are funded in two ways.
a. Some deferred costs are pay-as-you-go costs that are fully funded. Operating accounts used for civilian and military pay are budgeted to fully fund accruals for future retirement benefits. For every Service member in an active or reserve status today, a payment is made into an accrual fund from which his or her retirement pay will be drawn in the future. Deferred compensation of this type is considered to be a variable cost in the short run because changes made today in the size of the workforce trigger corresponding changes in the amount of money that must be paid into the accrual fund today.

b. Other types of deferred compensation are not fully funded. One example is the non-Medicare-eligible retiree health benefit. In this situation, DoD incurs liabilities today that it pays for in the future, when the services actually are provided (i.e., when an employee retires and uses his or her health care benefits). To estimate these future liabilities, a proxy is used—the current annual cost of providing such a benefit or compensation.

c. The taxonomy described in paragraph 2a(1)(b) of this enclosure results in six distinct types of direct labor costs for both military and DoD civilian personnel. Table 1 lists the direct cost elements for each of the six types of direct labor costs for military and DoD civilian personnel incurred by the DoD and other federal agencies. Enclosure 4 of this instruction provides the data sources and calculations for the cost elements addressed in Table 1.
Table 1. Direct Labor Cost Elements for Military and DoD Civilian Personnel

<table>
<thead>
<tr>
<th>Variable Costs in the Short Run</th>
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<th>Other Federal Agency</th>
<th>Civilian</th>
<th>Other Federal Agency</th>
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<tr>
<td>Basic pay</td>
<td>DoD</td>
<td>Child education (Education)</td>
<td>Basic pay/locality pay</td>
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<tr>
<td>Retired pay (accrual)</td>
<td>DoD</td>
<td>Concurrent receipt (Treasury)</td>
<td>Allowances and special pays</td>
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<tr>
<td>Basic Allowance for Housing (BAH)</td>
<td>DoD</td>
<td>Contribution to MERHCF (Treasury)</td>
<td>Incentive/performance awards</td>
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<tr>
<td>Basic Allowance for Subsistence (BAS)</td>
<td>DoD</td>
<td>Contribution to Military retirement (Treasury)</td>
<td>Overtime/holiday/other pays</td>
<td></td>
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<tr>
<td>Incentive / Special Pays</td>
<td>DoD</td>
<td>Recruiting, advertising etc.</td>
<td>Life insurance/worker’s compensation benefits</td>
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<tr>
<td>Permanent Change of Station</td>
<td>DoD</td>
<td>Health benefit (government share of Federal Employee Health Benefit Program (FEHBP))</td>
<td></td>
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<tr>
<td>Miscellaneous (as defined by DoD Financial Management Regulation 7000.14-R, Volume 11A, Chapter 6); includes contribution to Social Security; transportation subsidies, separation pays, clothing allowance, etc.</td>
<td>DoD</td>
<td>Retired pay (government share)</td>
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<td></td>
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<tr>
<td>Health benefit, retiree (&gt;65 MERHCF accrual)</td>
<td>DoD</td>
<td>Social Security and Medicare</td>
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<tr>
<td>Health benefit, active duty and dependents</td>
<td>DoD</td>
<td>Travel/PCS/transportation subsidy/relocation bonus</td>
<td></td>
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<tr>
<td>Recruitment, advertising, etc.</td>
<td>DoD</td>
<td>(Object Class (OC) 11 &amp; 12 Load Factors)</td>
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<tr>
<td>Education assistance</td>
<td>DoD</td>
<td>Training costs</td>
<td></td>
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<tr>
<td>Fixed Costs in the Short Run</td>
<td>Child development</td>
<td>Discount groceries</td>
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<tr>
<td>Child development</td>
<td>DoD</td>
<td>Child development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discount groceries</td>
<td>DoD</td>
<td>Discount groceries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family support services</td>
<td>DoD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred Pay-as-you-Go Costs</td>
<td>Health benefit, retiree (&lt;65 Non-Medicare Eligible Retiree Health Care)</td>
<td>Employment training (Labor)</td>
<td>Severance health benefit</td>
<td>Retirement benefit (Civil Service Retirement System (CSRS) unfunded) (Treasury)</td>
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<tr>
<td>VA benefits (Veterans Affairs)</td>
<td>DoD</td>
<td>Severance pay/incentive</td>
<td>Life insurance benefit (for CSRS only)</td>
<td></td>
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<tr>
<td>(OC 13 Load Factors)</td>
<td>DoD</td>
<td></td>
<td>Health benefit (for CSRS only)</td>
<td></td>
</tr>
</tbody>
</table>

(2) **Indirect Labor Costs.** No indirect labor costs considerations are required.

b. **Non-Labor Costs**

(1) **Direct Non-Labor Costs.** Items that are rented and services that are contracted for by an organization belong to this cost category. For example, if an organization rents office space for its exclusive use, its monthly rental payments are a direct cost to that organization. If an office has its own copier, the costs of operating and maintaining the copier (including supply purchases and repair calls) are a direct cost to that office. See Enclosure 5 of this instruction for a listing of the kinds of goods, services, and benefits that should be considered when developing non-labor cost estimates. Common costs across manpower types under consideration may be set aside.
(2) Indirect Non-Labor Costs—General and Administrative (G&A) and Overhead Costs. Indirect costs for military and DoD civilian manpower are the costs of goods, services, and benefits that support more than one organization and thus are allocated across the organizations drawing on them rather than being borne by a single organization. While there are indirect labor costs associated with the provision of these services, consider the entirety of these costs together as a service.

(a) If an organization produces or provides more than one product or service, indirect costs would include the fair share of the recurring costs of higher-level management (i.e., the fair share of the labor and non-labor costs of higher-level management) and the fair share of the recurring costs of shared professional support services performed externally to, but in support of, the organization (e.g., the fair share of the labor and non-labor costs of accounting, legal, human resources, budget, data processing, and base operating support). Do not simply look at the fair share portion of the salaries of the personnel providing these functions and services, but rather at the fair share portion of total costs of these functions and services.

(b) Indirect costs also include the fair share of the recurring costs of commonly shared goods (e.g., materials, supplies, equipment, facilities, and other related items), services, and benefits. For example, the fair share of the rent, utility costs, and cleaning expenses incurred by an agency would be an indirect cost to all of the organizations encompassed within that agency. Also, the fair share of the costs of equipment, such as a commonly shared copier, including supply and maintenance costs, would be an indirect cost to all of the offices using the copier.

(c) See Enclosure 5 of this instruction for the kinds of goods, services, and benefits that should be considered when developing estimates of indirect costs. If these individual costs cannot be calculated, use an overhead rate of 12 percent applied to all the variable costs in the short run that are applicable to the DoD (see Table 1).

3. BUSINESS RULES FOR CONTRACT SUPPORT. The costs of service contracts are variable costs in the short run paid by the DoD. The full costs of contracts include the prices of the contracts plus any additional indirect costs.

a. When estimating the full costs of contract support, cost analysts for the requiring activity should begin with the negotiated price of the contract. If the estimate is for a new or expanded mission requirement for which a comparable, existing contract cannot be found, an estimate of the price of the contract obtained through market research and updated, if necessary and where available, with cost and manpower data from the enterprise Contract Manpower Reporting Application (eCMRA).

(1) Contractor rates for many services can be obtained from the General Services Administration (GSA) Advantage Web site at http://www.gsaadvantage.gov or from Army’s eCMRA at http://www.asamra.army.mil/scra but these rates are not available by location. Contractor rates for many services can also be obtained, if necessary and where available from the eCMRA. Army’s eCMRA has accumulated data over a number of years by location and
function at: http://www.asamra.army.mil/scra. The eCMRA data includes direct labor costs, total costs and non-labor costs for many services by location and year.

(2) Hourly rates reported in the GSA schedule can be converted to annual rates using the Office of Management and Budget’s standard rate for productive hours of 1,776 work-hours per year.

(3) If all the tasks being performed by a contract are planned for conversion to government performance, using an existing contract as the basis for determining the contract costs is appropriate. However, where only certain tasks in a contract are being considered for conversion to government performance, further analysis is required. Specifically, the costs for the direct labor hours corresponding to contracted tasks as described in the contract are to be compared to the hours corresponding to the tasks in the DoD civilian employee position descriptions when it is proposed to convert from contract to DoD civilian employee performance. These hours must not be converted to a full time equivalent but made on an hourly basis, unless there is documentation of the contractor’s leave and work-day shift policies that can inform an accurate full time equivalent for them. Costing associated with the tasks described in the contract should be analyzed at the skill level specified in the contract (and corresponding DoD civilian employee position description analyzed at that same skill level, with an accounting of any differences in skill levels or additional tasks performed in the DoD civilian employee position description).

(4) The negotiated price of the contract includes direct costs, including labor and non-labor, and indirect costs (e.g., overhead and G&A) borne by the contractor, plus an allowance for profit.

(5) When estimating the price of contract support, cost analysts should consider all direct and indirect costs discussed in paragraphs 3a and 3b of this enclosure.

b. Beyond the contract price, the full cost of a contract includes non-labor costs such as the costs of goods, services, and benefits provided in-kind to contractors or reimbursed to contractors by the DoD, plus the costs of services performed by the Department in support of the contract and contract administration:

(1) Goods, services, and benefits that are provided to contractors by the DoD should be identified when estimating the full costs of a contract since these are common costs. Included in this category are the costs of any goods that are provided to the contractor as government-furnished property. The estimate also should include the fair share of the costs of any higher-level management and professional DoD support under the terms of the service contract. In addition, if the contract calls for DoD provision of services or benefits, these costs should be identified since they are common costs. See Enclosure 5 of this instruction for the kinds of goods, services, and benefits that should be considered when estimating the full costs of a service contract.

(2) The costs incurred by the DoD for contract administration and oversight, including the costs of the contracting officer (CO), contracting officer’s representative (COR) (allocated by
the time spent on the contract), and supplies, equipment, transportation, etc., should be included in the estimate of the full costs of a service contract.

(3) An estimate of the full cost of a service contract should include expenses that are incurred by the DoD including, but not limited to those contained in section 1431 of Title 50, U.S.C. (Reference (i)) and, if known, other indemnification costs. Examples of expenses that are incurred include:

(a) Reimbursements to the contractor or its insurance company under standard federal contract clauses regarding liability to third parties.

(b) Reimbursements to a contractor for payments the contractor, its insurance company, or the Department of Labor makes in sections 1651 through 1654 of Title 42, U.S.C., also known as “the Defense Base Act and War Hazards Compensation Act” (Reference (j)).

(c) Reimbursements the DoD is obligated to make with respect to publicly-sponsored insurance (e.g., air carrier insurance sponsored by the Federal Aviation Administration pursuant to Title 49, U.S.C. (Reference (k))).

(d) Any costs associated with alleged patent or copyright infringement arising out of the performance of the contract or out of the use of any supplies furnished or work or services performed under the contract.

(e) If practical and if data are available, DoD Components should incorporate these costs into their estimates.

4. METHODOLOGY

a. Manpower Costs. Manpower costs discussed in paragraph 2a of this enclosure can be accounted for in four ways, each applicable in different situations. If analysis is required beyond the current year, future-year costs should be inflated at rates consistent with the President’s Budget updates. Cost Assessment and Program Evaluation (CAPE) developed a cost model, “Full Cost of Manpower,” for DoD-wide application that employs the business rules set in this enclosure. This cost model can be found at https://fcom.cape.osd.mil/.

(1) Base Pay with Locality Adjustments and Allowances. Analysts should use organizational information and judgment when selecting the base pay of an alternate pay schedule employee by cross-walking to general schedule (GS) table equivalency. Base pay, with locality adjustments and BAH, may be used as a reference point when comparing costs across types of personnel (e.g., military and DoD civilian) and across different organizations (e.g., Military Services, civilian components of the DoD, and other federal agencies).

(2) Programmed Amount
(a) For military personnel, the programmed amount is normally the annual DoD Composite Rate, which includes an average base pay, BAH, BAS, incentive and specialty pays, permanent change of station expenses, the DoD contribution to medical health care coverage and to the MERHCF, and the DoD contribution to the retired pay accrual account listed in Enclosure 4 of this instruction.

(b) For civilian personnel, the programmed amount includes base pay, adjusted for locality (listed in Enclosure 4), plus the applicable Civilian Personnel Fringe Benefit rate (established annually by the USD(C)/CFO pursuant to Reference (h), and published at OUSD(C)/CFO website. This rate varies by Military Service and DoD Component. It includes miscellaneous fringe benefits and DoD contributions to Federal Employees Retirement System (FERS), FEHBP, Federal Employees Group Life Insurance (FEGLI), Old Age, Survivors, and Disability Insurance (OASDI), and Medicare.

(3) **Full Cost to DoD.** Full cost to the DoD is determined by adding the programmed amount to the costs of additional benefits that are borne by the DoD as a result of employing military or DoD civilian personnel (e.g., subsidized groceries, child development and family support services, family housing subsidies, education assistance, training, and advertising and recruiting). These additional benefits borne by the DoD are listed in Enclosure 4 of this instruction.

(4) **Full Cost to the Federal Government.** Full cost to the Federal Government is determined by adding the full cost to the DoD to the additional costs that are borne by other federal agencies as a result of the Department employing military or DoD civilian personnel. For military personnel, the additional costs that must be taken into account include Department of Treasury contributions toward payments for concurrent receipts; Department of Education contributions to the Impact Aid Program; Department of Labor contributions for the training and employment of veterans; and the full costs of the Department of Veterans Affairs. See Enclosure 4 for specifics. For civilian personnel, costs that must be taken into account include Department of Treasury contributions to the unfunded portion of the civilian retirement fund and to the annuitants’ health and life insurance benefits listed in Enclosure 4 of this instruction.

b. **Manpower Conversions - Military to DoD Civilian or DoD Civilian to Military.** When comparing the costs of military and DoD civilian manpower, as discussed in paragraph 2a, all cost elements in paragraph 4a(3) should be considered in determining the full costs to the DoD, and all costs elements in paragraph 4a(4) should be considered in determining the full costs to the Federal Government. The direct non-labor costs addressed in paragraph 2b(1) and the indirect non-labor costs addressed in paragraph 2b(2) should also be reviewed. Direct and indirect non-labor costs that are common costs may be excluded from both estimates provided the cost comparison is for an equal number of DoD civilian and military personnel. Where the number of military and DoD civilian personnel differ, adjustments must be made to the estimates to account for the difference in indirect costs that result from the difference in the number of military and DoD civilian personnel.

c. **Cost Comparisons of DoD Manpower and Contract Support.** The rules that appear in paragraphs 4c(1) through 4c(3) of this enclosure apply when comparing the costs of DoD
manpower and contract support, as discussed in sections 2 and 3 of this enclosure. However, the methodology will vary depending on whether or not the work is performed at a DoD installation or some other location, and whether the DoD will provide any or all of the goods, services, and benefits required to perform the function. When developing cost estimates for DoD manpower and contract support, the full costs to the DoD are considered and only common costs are excluded.

(1) Cost Estimates for Services Performed at a Government Site. The full cost of a service contract includes the price of the contract, as discussed in paragraph 3a of this enclosure. In addition, the costs of goods, services, and benefits discussed in paragraph 3b of this enclosure must also be reviewed. If a function is performed on government property, the costs of goods, services, and benefits that are common costs may be excluded from both estimates provided the number of government and contractor personnel is equivalent. Where the number of government and contractor personnel differs, adjustments must be made to the estimates to account for the difference in number of government and contractor personnel. When estimating the full cost of DoD manpower, all of the cost elements in paragraphs 2a and 2b of this enclosure should be considered and only common costs excluded.

(2) Cost Estimates for Services Performed Off-Site. The full cost of a service contract includes the price of the contract, as discussed in paragraph 3a, plus any additional expenses the government incurs for goods, services, or benefits addressed in paragraph 3b that would not be incurred if government personnel performed the work.

(a) When estimating these costs, consider the scope of the function to be performed and whether the DoD is providing any of the direct or indirect support services or is continuing to perform a portion of the direct labor. For example, military personnel in combat service support units provide their own security. When a contractor provides the support service, however, the DoD might have to provide the security. In such cases, the cost of the security is not a common cost but is an additional expense that must be factored into the cost of the service contract.

(b) Also, if a contractor is performing a function at a location that is not owned either by the contractor or the DoD, the Department might have to provide additional services and benefits (e.g., medical care, housing). If the contractor is performing the work at one of its facilities, all indirect costs addressed in paragraph 3b should be considered and only common costs excluded.

(c) When estimating the full cost of DoD manpower, all of the cost elements in paragraphs 2a and 2b should be considered and only common costs excluded.

(3) Miscellaneous Costs

(a) Any other significant costs associated with converting from contract to government performance, as discussed in paragraph 2b, that are not common costs should be included in the cost estimate. Such costs might include a phase-in or transition plan, training costs, relocation costs (for federal civilians only), security clearance costs, professional
certification costs, transportation benefit costs, educational loan forgiveness costs, or other costs not common to both alternatives.

(b) Section 2461(a)(1)(G) of Reference (d) prohibits contractors from receiving an advantage for proposals that reduce costs to the DoD in a public-private competition by:

1. Not making an employer-sponsored health insurance plan, health savings account, or medical savings account available to workers who would be employed to perform the function under the contract.

2. Offering workers an employer-sponsored health benefits plan that requires the employer to contribute less toward the premium or subscription share than the amount that the DoD pays for health benefits for civilian employees pursuant to chapter 89 of Title 5, U.S.C. (Reference (l)).

3. Offering workers a retirement benefit that, in any year, costs less than the annual retirement cost element applicable to DoD civilian employees pursuant to chapter 84 of Reference (l).

(c) Where possible and appropriate, cost analysts should make adjustments to the full costs of a service contract by adding an amount equivalent to the amount borne by the government (as listed in Enclosure 4 of this instruction) to the contract’s cost.

d. Other Considerations. Other cost factors may exist that should be considered in estimating the costs of manpower that are not included in Enclosure 4, Tables 2 or 3, nor in Enclosure 5 of this instruction. For example, the cost factors in paragraphs 4d(1) through 4d(3) of this enclosure could be considered when estimating the costs of manpower to the Federal Government:

(1) Tax Revenue. Corporate income tax revenue that is generated by hiring a contractor to complete work for the DoD could partially offset costs of the contract to the Federal Government, but not to the DoD.

(2) Lost Productivity During Periods of Transition. Some workforce decisions that result in a transition from public-to-private sourcing, private-to-public sourcing, or private-to-private sourcing, might result in productivity losses. These costs could be taken into consideration.

(3) Other Costs Related to Manpower. Analysts should include any other costs that they deem relevant to the calculation of the costs of manpower. Cost analysts must support such decisions with sufficient justification.
### Table 2. Military Cost Elements and Data Sources

<table>
<thead>
<tr>
<th>Military Cost Element</th>
<th>Service</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic pay</td>
<td>ALL</td>
<td>If computing using these tables, use the DoD Composite Rate (including the normal per capita rate for MERHCF and the acceleration factor for medical health care costs of active duty military members and their dependents) to capture all of these costs; <a href="http://comptroller.defense.gov/rates/fyxxxx/fyxxxx_k.pdf">http://comptroller.defense.gov/rates/fyxxxx/fyxxxx_k.pdf</a> (where xxxx is the four digit year) Users of the web-based cost model under development by CAPE will be able to generate a more precise figure by inputting specific entries for location (BAH), occupational specialty (incentive/special pays), etc.</td>
<td>N/A</td>
</tr>
<tr>
<td>Retired pay (accrual)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Allowance for Housing (BAH)</td>
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</tr>
<tr>
<td>Basic Allowance for Subsistence (BAS)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Incentive / Special Pays</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Permanent Change of Station</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous (as defined by DoD Financial Management Regulation 7000.14-R, Volume 11A, Chapter 6); includes contribution to Social Security; transportation subsidies, separation pays, clothing allowance, etc.</td>
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</tr>
<tr>
<td>Health benefit, retiree (&gt;65 MERHCF accrual)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Health benefit, active duty and dependents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development Program</td>
<td>ALL</td>
<td>Sum of all elements of Child Development Services for all components (Active, National Guard, and Reserves, as appropriate) from Service budget justification material (Operation and Maintenance (O&amp;M) exhibits in year xxxx, where xxxx is the four digit year)</td>
<td>Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
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### Table 2. Military Cost Elements and Data Sources, Continued

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<th>Military Cost Element</th>
<th>Service</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Education (Impact Aid)</td>
<td>ALL</td>
<td>Use &quot;Appropriated Impact Aid&quot; total. <a href="http://www2.ed.gov/about/overview/budget/budgetxx/summary/xxsummary.pdf">http://www2.ed.gov/about/overview/budget/budgetxx/summary/xxsummary.pdf</a>, Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
<td></td>
</tr>
<tr>
<td>Discount Groceries</td>
<td>ALL</td>
<td>Appropriations for FYxxxx (where xxxx is the four digit year) <a href="http://comptroller.defense.gov/defbudget/fyxxxx/budget_justification/pdfs/06_Defense_Working_Capital_Fund/DeCA_FY_xxxx_PB.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/budget_justification/pdfs/06_Defense_Working_Capital_Fund/DeCA_FY_xxxx_PB.pdf</a>, Number of Military Retirees <a href="http://actuary.defense.gov/statbookxx.pdf">http://actuary.defense.gov/statbookxx.pdf</a>, where xx is the two-digit year) + Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
<td></td>
</tr>
<tr>
<td>Department of Defense Education Activity (DoDEA) and Family Assistance</td>
<td>ALL</td>
<td>DODEA appropriated funds <a href="http://dodea.edu/home/facts.cfm?clid=budget">http://dodea.edu/home/facts.cfm?clid=budget</a>FYxx Appropriated Funds, (where xx is the two digit year). Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
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Table 2. Military Cost Elements and Data Sources, Continued

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<th>Numerator</th>
<th>Denominator</th>
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<td>Education Assistance</td>
<td>Army</td>
<td>Sub-Activity Group (SAG) Long Title = &quot;Off-Duty And Voluntary Education&quot;; SAG Number 333</td>
<td>Service End Strength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel.Active Force Personnel&quot; for actual endstrength figures by service</td>
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<tr>
<td>Education Assistance</td>
<td>Navy</td>
<td>SAG Long Title = &quot;Off-Duty And Voluntary Education&quot;; SAG Number 3C3L</td>
<td>Service End Strength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel.Active Force Personnel&quot; for actual endstrength figures by service</td>
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<td>Air Force</td>
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<td>Education Assistance</td>
<td>Marine Corps</td>
<td>SAG Long Title = &quot;Off-Duty And Voluntary Education&quot;; SAG Number 3C2F</td>
<td>Service End Strength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel.Active Force Personnel&quot; for actual endstrength figures by service</td>
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<td>Health benefit, retiree (&lt;65 Non-Medicare Eligible Retiree Health Care)</td>
<td>ALL</td>
<td>If computing using these tables, use the normal per capita rate for MERHCF accrual as published in OUSD(C)'s FYXXXX Department of Defense (DoD) Military Personnel Composite Standard Pay and Reimbursement Rates Memo, available at <a href="http://comptroller.defense.gov/rates/fyxxxx/fyxxxx_k.pdf">http://comptroller.defense.gov/rates/fyxxxx/fyxxxx_k.pdf</a> (where xxxx is the four digit year) Users of the web-based cost model under development by CAPE will be able to retrieve a more precise figure generated by DoD actuaries (using non-publicly available sources).</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table 2. Military Cost Elements and Data Sources, Continued

<table>
<thead>
<tr>
<th>Military Cost Element</th>
<th>Service</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment, Advertising, Other Training</td>
<td>Army</td>
<td>Sum of all recruiting, advertising and other training costs from O&amp;M budget justification documents (Sum of BA-3, Activity Group/Sub-activity Group (AGSAG) 331 + 332 + 335)</td>
<td>Service End Strength</td>
</tr>
<tr>
<td>Recruitment, Advertising, Other Training</td>
<td>Navy</td>
<td>Sum of all recruiting, advertising and other training costs from O&amp;M budget justification documents (Sum of BA-3, AGSAG 3C1L + 3C5L)</td>
<td>Service End Strength</td>
</tr>
<tr>
<td>Recruitment, Advertising, Other Training</td>
<td>Air Force</td>
<td>Sum of all recruiting, advertising and other training costs from O&amp;M budget justification documents (Sum of BA-3, AGSAG 033A + 033B + 033E)</td>
<td>Service End Strength</td>
</tr>
<tr>
<td>Recruitment, Advertising, Other Training</td>
<td>Marine Corps</td>
<td>Sum of all recruiting, advertising and other training costs from O&amp;M budget justification documents (Sum of BA-3, AGSAG 3C1F + 3C3F)</td>
<td>End Strength</td>
</tr>
<tr>
<td>Training</td>
<td>Army</td>
<td>Sum of all training costs from O&amp;M budget justification documents (Sum of BA-3, AGSAG 311 + 312 + 313 + 314 + 321 + 322 + 323 + 324)</td>
<td>Service End Strength</td>
</tr>
<tr>
<td>Military Cost Element</td>
<td>Service</td>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Training</td>
<td>Air Force</td>
<td>Sum of all training costs from O&amp;M budget justification documents (Sum of BA-3, AGSAG 031A + 031B + 031D + 032A + 032B + 032C + 032D)</td>
<td>Service End Strength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service</td>
</tr>
<tr>
<td>Training</td>
<td>Marine Corp</td>
<td>Sum of all training costs from O&amp;M budget justification documents (Sum of BA-3, AGSAG 3A1C + 3A2C + 3B1D + 3B2D + 3B3D + 3B4D)</td>
<td>Service End Strength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service</td>
</tr>
<tr>
<td>Treasury Contribution for Concurrent Receipts</td>
<td>ALL</td>
<td>&quot;Federal Contributions (concurrent Receipt Accruals), Military Retirement Fund&quot;, (The Budget for Fiscal Year xxxx, <a href="http://www.gpoaccess.gov/usbudget/">http://www.gpoaccess.gov/usbudget/</a> (navigate to year of interest), Other Defense-Civil Programs, Trust Funds, Military Retirement Fund)</td>
<td>Number of Military Retirees (<a href="http://actuary.defense.gov/statbookxx.pdf">http://actuary.defense.gov/statbookxx.pdf</a> , where xx is the two-digit year)</td>
</tr>
<tr>
<td>Treasury Contribution to MERHCF</td>
<td>ALL</td>
<td>&quot;Federal Contributions, DoD Medicare-Eligible Retiree Health Care Fund&quot;, (The Budget for Fiscal Year xxxx, <a href="http://www.gpoaccess.gov/usbudget/">http://www.gpoaccess.gov/usbudget/</a> (navigate to year of interest), Other Defense-Civil Programs, Retiree Health Care, DEPARTMENT OF DEFENSE MEDICARE-ELIGIBLE RETIREE HEALTH CARE FUND)</td>
<td>Number of Military Retirees (<a href="http://actuary.defense.gov/statbookxx.pdf">http://actuary.defense.gov/statbookxx.pdf</a> , where xx is the two-digit year) + Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
</tr>
<tr>
<td>Military Cost Element</td>
<td>Service</td>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Treasury Contribution to Retirement</td>
<td>ALL</td>
<td>Use Other Defense-Civil Programs, Treasury payment to Military Retirement Fund<a href="http://www.gpo.gov/fdsys/pkg/BUDGET-xxxx-APP/pdf/BUDGET-xxxx-APP-1-22.pdf">http://www.gpo.gov/fdsys/pkg/BUDGET-xxxx-APP/pdf/BUDGET-xxxx-APP-1-22.pdf</a>, (where xxxx is the four digit year);</td>
<td>Number of Military Retirees (<a href="http://actuary.defense.gov/statbookxxx.pdf">http://actuary.defense.gov/statbookxxx.pdf</a>, where xx is the two-digit year) + Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military Personnel/Active Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
</tr>
<tr>
<td>Veterans' Benefits (Cash and In-Kind)</td>
<td>ALL</td>
<td>&quot;Total expenditure&quot; for year xxxx (Use year xxxx figures from &quot;Expenditure Tables&quot; (as appropriate) <a href="http://www.va.gov/vetdata/Expenditures.asp">http://www.va.gov/vetdata/Expenditures.asp</a>); (where xxxx is the four digit year).</td>
<td>&quot;Veteran population&quot; for year xxxx (Use year xxxx figures from &quot;Expenditure Tables&quot; (as appropriate) <a href="http://www.va.gov/vetdata/Expenditures.asp">http://www.va.gov/vetdata/Expenditures.asp</a>)</td>
</tr>
<tr>
<td>Veterans' Employment and Training</td>
<td>ALL</td>
<td>Use Vocational Rehabilitation &amp; Employment <a href="http://www.whitehouse.gov/sites/default/files/omb/budget/fyxxxx/assets/veterans.pdf">http://www.whitehouse.gov/sites/default/files/omb/budget/fyxxxx/assets/veterans.pdf</a>; (where xxxx is the four digit year).</td>
<td>&quot;Veteran population&quot; for year xxxx (Use year xxxx figures from &quot;Expenditure Tables&quot; (as appropriate) <a href="http://www.va.gov/vetdata/Expenditures.asp">http://www.va.gov/vetdata/Expenditures.asp</a>)</td>
</tr>
<tr>
<td>Civilian Cost Element</td>
<td>Service</td>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Basic Pay / Locality Pay / COLA / Title 38 Special Salary Rates</td>
<td>ALL</td>
<td>GS Pay Schedule with Locality Adjustments (<a href="http://www.opm.gov/oca/xxtables/indexgs.asp">http://www.opm.gov/oca/xxtables/indexgs.asp</a>), where xx is the two digit year</td>
<td>N/A</td>
</tr>
<tr>
<td>Discount Groceries (Outside of the Continental United States only)</td>
<td>ALL</td>
<td><a href="http://comptroller.defense.gov/defbudget/fyxxxx/budget_justification/pdfs/06_Defense_Working_Capital_Fund/DeCA_FY_xxxx_PB.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/budget_justification/pdfs/06_Defense_Working_Capital_Fund/DeCA_FY_xxxx_PB.pdf</a> Appropriations (page 7) (where xxxx is the four digit year)</td>
<td>Number of Military Retirees (<a href="http://actuary.defense.gov/statbookxx.pdf">http://actuary.defense.gov/statbookxx.pdf</a>, where xx is the two-digit year) + Authorized Active Duty Endstrength <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a> (where xxxx is the four digit year) Use table &quot;Military PersonnelActive Force Personnel&quot; for actual endstrength figures by service + END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES (&lt;From the NDAA for year xxxx&gt;) + MAXIMUM NUMBER OF RESERVE PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY FOR OPERATIONAL SUPPORT (&lt;From the NDAA for year xxxx&gt;)</td>
</tr>
<tr>
<td>OC11 Load Factor (as percentage of base pay)</td>
<td>ALL</td>
<td>Total Civilian Personnel Costs <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a>, (where xxxx is the four digit year) OSD Comptroller Operations &amp; Maintenance (O&amp;M) Overview; TABLE: Total Civilian Personnel Costs; Column &quot;O&quot;</td>
<td>N/A</td>
</tr>
<tr>
<td>OC12 Load Factor (Fringe Benefits; as percentage of base pay)</td>
<td>ALL</td>
<td>Use &quot;Funded Benefits Rate 2/nd &quot;Overall&quot; <a href="http://comptroller.defense.gov/rates/fyxxxx/xxxx_d.pdf">http://comptroller.defense.gov/rates/fyxxxx/xxxx_d.pdf</a>, (where xxxx is the four digit year)</td>
<td>N/A</td>
</tr>
<tr>
<td>OC13 Load Factor (as percentage of base pay)</td>
<td>ALL</td>
<td><a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a>, (where xxxx is the four digit year) OSD Comptroller Operations &amp; Maintenance (O&amp;M) Overview; TABLE: Total Civilian Personnel Costs; Column &quot;P&quot; -- BE SURE TO SUBTRACT OUT O.C. 12 (listed above)</td>
<td>N/A</td>
</tr>
<tr>
<td>Civilian Cost Element</td>
<td>Service</td>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Postretirement Health Benefit (government’s share FEHBP)</td>
<td>ALL</td>
<td>Total new obligations (object class 13.0)</td>
<td>FEHB Annuities; <a href="http://www.gpo.gov/fdsys/pkg/BUDGET-xxxx-APP/pdf/BUDGET-xxxx-APP-1-28.pdf">http://www.gpo.gov/fdsys/pkg/BUDGET-xxxx-APP/pdf/BUDGET-xxxx-APP-1-28.pdf</a> (where xxxx is the four digit year), OPM Federal Budget Appendix; GOVERNMENT PAYMENT FOR ANNUITANTS, EMPLOYEES HEALTH BENEFITS - Program &amp; Financing; &quot;Total new obligations (object class 13.0)&quot;;</td>
</tr>
<tr>
<td>Postretirement Life Insurance (government’s share Federal Employee Group Life Insurance)</td>
<td>ALL</td>
<td>Total new obligations (object class 25.2)</td>
<td>FEHB Annuities; <a href="http://www.gpo.gov/fdsys/pkg/BUDGET-xxxx-APP/pdf/BUDGET-xxxx-APP-1-28.pdf">http://www.gpo.gov/fdsys/pkg/BUDGET-xxxx-APP/pdf/BUDGET-xxxx-APP-1-28.pdf</a> (where xxxx is the four digit year), OPM Federal Budget Appendix; GOVERNMENT PAYMENT FOR ANNUITANTS, EMPLOYEES HEALTH BENEFITS - Program &amp; Financing; &quot;Total new obligations (object class 25.2)&quot;;</td>
</tr>
<tr>
<td>Training</td>
<td>Army</td>
<td>O-1: Army BA-3, AGSAG 334</td>
<td>Civilian U.S. Direct Hires (<a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a>, where xxxx is the four digit year) Use table &quot;Civilian Personnel&quot; for U.S. Direct Hire (FTE) by service</td>
</tr>
</tbody>
</table>
Table 3. Civilian Cost Elements and Data Sources, Continued

<table>
<thead>
<tr>
<th>Civilian Cost Element</th>
<th>Service</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfunded Civilian Retirement (CSRS only)</td>
<td>ALL</td>
<td>&quot;General Fund Payment to the Civil Service Retirement and Disability Fund&quot; <a href="http://www.gpo.gov/fdsys/pkg/BUDGET-yyyy-APP/pdf/BUDGET-yyyy-APP-1-28.pdf">http://www.gpo.gov/fdsys/pkg/BUDGET-yyyy-APP/pdf/BUDGET-yyyy-APP-1-28.pdf</a> (where yyyy is the four digit year), OPM Federal Budget Appendix; Trust Funds - Civil Service Retirement &amp; Disability Fund; Status of Funds; General Fund Payment to the Civil Service Retirement and Disability Fund</td>
<td>Active Employees <a href="http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf">http://comptroller.defense.gov/defbudget/fyxxxx/fyxxxx_OM_Overview.pdf</a>; use &quot;Total Civilian Personnel Costs&quot; Table; FTE figure) + Total Annuities (FEHB Annuities; <a href="http://www.gpo.gov/fdsys/pkg/BUDGET-yyyy-APP/pdf/BUDGET-yyyy-APP-1-28.pdf">http://www.gpo.gov/fdsys/pkg/BUDGET-yyyy-APP/pdf/BUDGET-yyyy-APP-1-28.pdf</a> (where yyyy is the four digit year), OPM Federal Budget Appendix; GOVERNMENT PAYMENT FOR ANNUITANTS, EMPLOYEES HEALTH BENEFITS - Program &amp; Financing; uses FEHB Annuities as a proxy for Retired Annuities)</td>
</tr>
</tbody>
</table>
ENCLOSURE 5

LIST OF GOODS, SERVICES, AND BENEFITS

The list of goods, services, and benefits presented in this enclosure is not all inclusive, but should be used as starting point when developing estimates for non-labor cost factors. While the entire cost of such items may not be attributable, some “fair share” generally is applicable. When conducting a cost comparison between potential sources (e.g., DoD civilian versus contract support), costs that would be common to both may be set aside. Depending on the activity under review, the costs associated with individual items could be either direct or indirect.

a. Costs of capital assets, to include property, plant and equipment, valued at $25,000 or more, plus the costs of depreciation, maintenance, and repair.

b. Cleaning services.

c. Contract administration and oversight, including the costs of the CO, COR, and supplies, equipment, transportation, etc.

d. Costs for maintenance and repair of equipment (DoD Components should not include, in cost estimates, depreciation costs for items valued at less than $25,000).

e. Costs of maintenance and repair of facilities.

f. Costs of registration and penalty fees.

g. Insurance, including (but not limited to) the costs of casualty and liability insurance.

h. The costs of raw materials, parts, and subassemblies, plus any material-related costs (e.g., transportation, handling, and delay costs and normal allowances for scrap and spoilage).

i. Office equipment and supplies, including (but not limited to) the costs of chairs, desks, tables, overhead projectors, cabinets, fax machines, and copy machines.

j. Printing.

k. Rent for leased assets, including (but not limited to) the costs for the use, operation, and maintenance of land, building space, plant, and machinery.

l. Security.

m. Support services and benefits, including (but not limited to) the costs of higher-level management and professional support services (e.g., accounting, legal, human resources, budget, data processing, and base operation support).
(1) For military and civilian personnel, this also could include subsidized groceries, child development and family support services, family housing subsidies, training, and recruiting.

(2) For contractor personnel at overseas or remote locations, this could include government-furnished support (e.g., transportation, training, and housing) as well as access to government benefits and services (e.g., subsidized groceries, child education and development services).

(3) Support services could also include mail service; morale, welfare, and recreation services; exchange privileges; and medical care in austere or non-permissive environments, as provided by DoD Instruction 3020.41 (Reference (m)). They could also include special training, including training for contractor personnel who support contingency operations, as provided by Reference (m).

n. Travel.

o. Utilities, including (but not limited to) the costs of telephone services, electricity, water, and sewage disposal.

p. Cost of rights to proprietary software or data rights.
ENCLOSURE 6

COST COMPARISON EXAMPLE

1. SAMPLE COST COMPARISON. This enclosure provides an example of a cost comparison for a Department of the Army operations research analyst position in the Washington, D.C., metropolitan area. For this example, assume military and DoD civilians work at a government site.

Table 4. Sample Cost Comparison

<table>
<thead>
<tr>
<th>Type of Personnel</th>
<th>Base Pay with Locality and BAH</th>
<th>Programmed Amount</th>
<th>Full Cost to DoD</th>
<th>Full Cost to Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military O-5, 20 Years of Service</td>
<td>$137,164</td>
<td>$193,920</td>
<td>$209,009</td>
<td>$236,814</td>
</tr>
<tr>
<td>Civilian GS-14, Step 5</td>
<td>$119,238</td>
<td>$155,367</td>
<td>$164,570</td>
<td>$178,971</td>
</tr>
<tr>
<td>Contractor (government site)</td>
<td>N/A</td>
<td>$195,667</td>
<td>$195,667</td>
<td>$195,667</td>
</tr>
<tr>
<td>Contractor (contractor site)</td>
<td>N/A</td>
<td>$240,390</td>
<td>$240,390</td>
<td>$240,390</td>
</tr>
</tbody>
</table>

2. BASE PAY WITH LOCALITY AND BAH. This column applies to military and civilian personnel only.

   a. For military personnel, the amount shown in Table 4 represents base pay plus the Washington, D.C., BAH.

   b. For civilian personnel, the figure depicted in Table 4 is the salary level from the GS pay schedule for an employee in the National Capital Region. For overseas sites, civilian personnel costs should include the living quarters allowance set by the Department of State.

3. PROGRAMMED AMOUNT. This column applies to military, civilian, and contractor personnel.

   a. For military personnel, the figure given in Table 4 is the Annual DoD Composite Rate, which includes average base pay, BAH, BAS, incentive and specialty pays, permanent change of station costs, Treasury Department contributions into MERHCF, retired pay accrual, and miscellaneous costs.
b. For civilian personnel, the figure shown represents base pay plus the Army’s civilian fringe-benefit rate of 30.3 percent, which includes miscellaneous fringe benefits and the employer’s contribution to FERS, FEHB, FEGLI, OASDI, and Medicare.

c. For contractors, the figures shown are the costs of the contract, which may vary depending on the location of the work site. This example includes two rates. Both are from the GSA Federal Services Schedule at http://www.gsaadvantage.gov. One is for a lead operations research Analyst billet at a government site; the other is for an identical billet at a contractor site. Rates are provided per hour; conversions to an annual rate were made by multiplying the hourly rate by 1,776 (the number of productive work-hours assumed in the DoD work-year).

4. FULL COST TO DoD. This column applies to military, civilian, and contractor personnel.

a. For military personnel, the amount shown represents the “Programmed Amount” plus costs for recruitment and advertising, training, subsidized groceries, education assistance, child development, and other costs that are incurred through the provision of nonmonetary benefits to military members.

b. For civilian personnel, the figure provided in the table is the “Programmed Amount” plus costs for recruitment and advertising, training, and child development. In overseas sites, civilian personnel costs also should include costs for subsidized education and commissary privileges, where available.

c. For contractors, the figures represent the total cost of the contract, which may vary depending on the location of the contract site, plus any additional expenses the government incurs for goods, services, or benefits that would not be entailed if government personnel performed the function (e.g., indemnification).

5. FULL COST TO FEDERAL GOVERNMENT. This column applies to military, civilian, and contractor personnel.

a. For military personnel, the estimate of full government costs is based on several sets of assumptions on how to apportion non-DoD costs at an individual level. In Table 4, the full cost to the Federal Government is calculated by adding to the “Full Cost to DoD” the amounts attributable to the Department of Treasury contributions toward payments for concurrent receipts; Department of Education contributions to the Impact Aid Program; Department of Labor contributions for the training and employment of veterans; and the full costs of the Department of Veterans Affairs.

b. For civilian personnel, the full cost to the Federal Government equals the “Full Cost to DoD” plus the Unfunded Civilian Retirement, Post-Retirement Life Insurance, and Post-Retirement Health Benefit.
c. For contractors, full costs to the government represent the total cost of the contract, which may vary depending on the location of the contract site, plus any additional expenses the government incurs for goods, services, or other benefits that would not be incurred if government personnel performed the function.
## GLOSSARY

### PART I. ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSAG</td>
<td>activity group/sub-activity group</td>
</tr>
<tr>
<td>BAH</td>
<td>basic allowance for housing</td>
</tr>
<tr>
<td>BAS</td>
<td>basic allowance for subsistence</td>
</tr>
<tr>
<td>CAPE</td>
<td>Cost Assessment and Program Evaluation</td>
</tr>
<tr>
<td>CO</td>
<td>contracting officer</td>
</tr>
<tr>
<td>COR</td>
<td>contracting officer’s representative</td>
</tr>
<tr>
<td>CSRS</td>
<td>Civil Service Retirement System</td>
</tr>
<tr>
<td>DCAPE</td>
<td>Director, Cost Assessment and Program Evaluation</td>
</tr>
<tr>
<td>eCMRA</td>
<td>enterprise Contract Manpower Reporting Application</td>
</tr>
<tr>
<td>FEGLI</td>
<td>Federal Employees Group Life Insurance</td>
</tr>
<tr>
<td>FEHBP</td>
<td>Federal Employees Health Benefits Plan</td>
</tr>
<tr>
<td>FERS</td>
<td>Federal Employees Retirement System</td>
</tr>
<tr>
<td>G&amp;A</td>
<td>general and administrative</td>
</tr>
<tr>
<td>GS</td>
<td>general schedule</td>
</tr>
<tr>
<td>GSA</td>
<td>General Services Administration</td>
</tr>
<tr>
<td>HRO</td>
<td>Human Resources Office</td>
</tr>
<tr>
<td>MERHCF</td>
<td>Medicare-Eligible Retiree Health Care Fund</td>
</tr>
<tr>
<td>NDAA</td>
<td>National Defense Authorization Act</td>
</tr>
<tr>
<td>OASDI</td>
<td>Old Age, Survivors, and Disability Insurance</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>operations and maintenance</td>
</tr>
<tr>
<td>OC</td>
<td>object class</td>
</tr>
</tbody>
</table>
SAG sub-activity group

USD(C)/CFO Under Secretary of Defense (Comptroller)/Chief Financial Officer, Department of Defense
USD(P&R) Under Secretary of Defense for Personnel and Readiness

PART II. DEFINITIONS

These terms and their definitions are for the purpose of this instruction.

**base pay.** The amount payable to each military or civilian employee each pay period, as determined by pay plan or general schedule table, plus locality adjustments and allowances.

**commercial activity.** A recurring service that could be performed by the private sector.

**common costs.** Costs that are borne by the DoD regardless of the provider (military, DoD civilian, or private-sector contractor). Examples of common costs include government-furnished property and security clearances.

**cost element.** One of many cost items that make up a cost estimate.

**cost estimate.** A general calculation or approximate computation of the probable cost of the performance of a specific function, service, or mission.

**defense workforce.** All military, DoD civilian, and contractor personnel who perform defense missions or provide services in support of a defense mission.

**direct costs.** Costs that are related directly to the production of a specific good or the performance of a specific service.

**direct non-labor costs.** The costs of goods (e.g., materials, supplies, equipment, facilities, and other items), services, and benefits that are used exclusively by an organization.

**full cost of manpower.** Costs include labor costs (both current and deferred compensation costs paid in cash and in-kind) as well as non-labor costs.

**government-furnished property.** Facilities, equipment, materiel, supplies, or other related items or services provided by the government for use by all prospective providers of a support service.

**indirect costs.** Costs that are not directly related to the production of a specific good or service, but instead are associated with the production of a variety of goods and services. For example, the cost of the administration of a large company is an indirect cost that must be spread over the products or services that are produced by the company.
inherently governmental. Activities so intimately related to the public interest as to mandate performance by federal employees.

labor cost. A cost, either current or deferred, paid either in cash or in-kind, that is associated with the compensation of a person (military or civilian). In the case of a contractor, the cost of a contract will include the compensation of the contractor(s) as well as other costs that the contracting agency bundles into the price. These will include items such as profit for the contracting agency, insurance and overhead costs, all of which will be inextricably mixed in the price of the contract. Labor cost for a contract is considered to be the price of the contract to the government.

manpower. A standard measure of recurring work (labor or service) that equates to 1 year of full-time support needed to accomplish a discrete set of duties at a required level of performance, working at a normal rate (operating tempo) under specified working conditions.

non-labor cost. Any cost associated with the performance of a task that is not provided to the person(s) performing the task in the form of compensation. Examples include general administration and oversight, office supplies and equipment, facilities costs, insurance, capital assets, security, and contract oversight and administration.

programmed amount. Amount commonly used in budgeting and programming deliberations and reported in the President’s Budget Future Years Defense Program.

sovereign immunity. A judicial doctrine that prevents the government or its political subdivisions, departments, and agencies from being sued without its consent.
APPENDIX G

SLIDES JUNE 2019 RFPB BOARD MEETING AC-RC LIFE CYCLE COST UPDATE
Active & Reserve Components Fully Burdened Life Cycle Cost Update
5 June 2019
Agenda

• Previous RFPB Fully Burdened Cost to the Government

• Example Comparisons using CAPE’s Full Cost of Manning (FCoM) model, the Air Force’s Individual Cost Assessment Model (ICAM) and the 2018 updated RFPB model

• Potential timeline for future FCoM RC calculation/comparison ability and Update DoD policy/guidance (DODI 7041.04) to include RC
Previous RFPB Fully Burdened Cost to the Government Comparison

<table>
<thead>
<tr>
<th>FY 13</th>
<th>FY 15</th>
<th>FY 18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC</strong></td>
<td></td>
<td><strong>AC</strong></td>
</tr>
<tr>
<td>$384,622</td>
<td></td>
<td>$441,645</td>
</tr>
<tr>
<td><strong>RC</strong></td>
<td></td>
<td><strong>RC</strong></td>
</tr>
<tr>
<td>$123,351</td>
<td>$379,367*</td>
<td>$137,467</td>
</tr>
</tbody>
</table>

32.1% of AC  
31.7% of AC  
31.1% of AC

*decrease in per capita cost due to Procurement, Military Construction and RDT&E cuts
# AC & RC Fully-Burdened Per-Capita Cost to the US Government

<table>
<thead>
<tr>
<th>Department of Defense</th>
<th>FY 2013 Budget Request</th>
<th>FY 2015 Budget Request</th>
<th>FY 2018 Budget Request</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active Component</td>
<td>Reserve Component</td>
<td>Active Component</td>
<td>Reserve Component</td>
</tr>
<tr>
<td>Military Personnel Account Costs</td>
<td>$84,808</td>
<td>$26,033</td>
<td>$87,396</td>
<td>$25,524</td>
</tr>
<tr>
<td>DoD Defense Health Program</td>
<td>$19,233</td>
<td>$8,157</td>
<td>$19,336</td>
<td>$8,186</td>
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<tr>
<td>DoD Dependent Education</td>
<td>$2,034</td>
<td>$33</td>
<td>$1,944</td>
<td>$31</td>
</tr>
<tr>
<td>DoD &amp; Service Family Housing</td>
<td>$1,235</td>
<td>-</td>
<td>$911</td>
<td>-</td>
</tr>
<tr>
<td>DoD Commissary Agency</td>
<td>$996</td>
<td>49</td>
<td>$827</td>
<td>41</td>
</tr>
<tr>
<td>Subtotal - DoD Compensation Costs</td>
<td>$108,307</td>
<td>$34,272</td>
<td>$110,414</td>
<td>$33,782</td>
</tr>
<tr>
<td>O&amp;M (Less DoD Dep Ed)</td>
<td>$110,532</td>
<td>$26,477</td>
<td>$109,831</td>
<td>$24,792</td>
</tr>
<tr>
<td>Procurement</td>
<td>$71,601</td>
<td>$3,771</td>
<td>$66,802</td>
<td>$4,020</td>
</tr>
<tr>
<td>Military Construction</td>
<td>$5,556</td>
<td>$1,512</td>
<td>$3,417</td>
<td>$563</td>
</tr>
<tr>
<td>RDTE &amp; Other</td>
<td>$34,348</td>
<td>$34,348</td>
<td>$31,535</td>
<td>$31,535</td>
</tr>
<tr>
<td>Subtotal- DoD Non-Compensation Costs</td>
<td>$222,037</td>
<td>$66,108</td>
<td>$211,585</td>
<td>$60,910</td>
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<tr>
<td>Dept of Defense Grand Total</td>
<td>$330,343</td>
<td>$100,380</td>
<td>$322,000</td>
<td>$94,692</td>
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<tr>
<td>Other Federal Agencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Dept of Education &quot;Impact Aid&quot;</td>
<td>$355</td>
<td>9</td>
<td>$393</td>
<td>11</td>
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<tr>
<td>Dept of Treas - Concurrent Receipt</td>
<td>$4,514</td>
<td>$747</td>
<td>$4,253</td>
<td>$791</td>
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<tr>
<td>Dept of Treas - MERHCF</td>
<td>$3,264</td>
<td>$2,230</td>
<td>$2,292</td>
<td>$1,418</td>
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<tr>
<td>Dept of Treas - Mil Retirement</td>
<td>$39,800</td>
<td>$13,638</td>
<td>$42,836</td>
<td>$15,732</td>
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<tr>
<td>Dept of Veteran Affairs</td>
<td>$6,334</td>
<td>$6,334</td>
<td>$7,582</td>
<td>$7,582</td>
</tr>
<tr>
<td>Dept of Labor for Vet Education / Training</td>
<td>$12</td>
<td>$12</td>
<td>$11</td>
<td>$11</td>
</tr>
<tr>
<td>TOTAL COST TO US GOVERNMENT</td>
<td>$384,622</td>
<td>$123,351</td>
<td>$379,367</td>
<td>$120,236</td>
</tr>
</tbody>
</table>
FCoM / ICAM / RFPB 2018 One Year Comparison (No Deployments)

<table>
<thead>
<tr>
<th></th>
<th>FCoM AF O-5</th>
<th>ICAM AF O-5</th>
<th>RFPB Per Capita</th>
<th>FCoM AF E-7</th>
<th>ICAM AF E-7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC</strong></td>
<td>$206,310</td>
<td>$212,259</td>
<td>$181,338</td>
<td>$130,287</td>
<td>$128,127</td>
</tr>
<tr>
<td><strong>RC</strong></td>
<td>$28,945</td>
<td>$42,378</td>
<td>$67,112</td>
<td>$28,945</td>
<td>$28,945</td>
</tr>
<tr>
<td><strong>% of AC</strong></td>
<td>20.0%</td>
<td>37.0%</td>
<td>37.0%</td>
<td>22.6%</td>
<td>22.6%</td>
</tr>
</tbody>
</table>

*RFPB is per capita cost; all are without costs associated with Procurement, Military Construction and RDT&E*
FCoM / ICAM / RFPB 2018 One Year Comparison (No Deployments)

<table>
<thead>
<tr>
<th>FCoM+RFPB AF O-5</th>
<th>ICAM+RFPB AF O-5</th>
<th>RFPB Per Capita</th>
<th>FCoM+RFPB AF E-7</th>
<th>ICAM+RFPB AF E-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC $466,617</td>
<td>AC $472,566</td>
<td>AC $441,645</td>
<td>AC $390,594</td>
<td>AC $388,434</td>
</tr>
<tr>
<td>RC $????,???,??</td>
<td>RC $112,733</td>
<td>RC $137,467</td>
<td>RC $????,???,??</td>
<td>RC $99,300</td>
</tr>
<tr>
<td>23.9% of AC</td>
<td></td>
<td>31.1% of AC</td>
<td></td>
<td>25.6% of AC</td>
</tr>
</tbody>
</table>

*All are with costs associated with Procurement, Military Construction and RDT&E from RFPB 2018 update*
AC & RC FBLCC Comparison
(1 Deployment)

<table>
<thead>
<tr>
<th>FCoM+IF</th>
<th>ICAM</th>
<th>ICAM+RFPB</th>
<th>FCoM+IF</th>
<th>ICAM</th>
<th>ICAM+RFPB</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF O-5</td>
<td>AF O-5</td>
<td>AF O-5</td>
<td>AF E-7</td>
<td>AF E-7</td>
<td>AF E-7</td>
</tr>
<tr>
<td><strong>AC</strong></td>
<td>$7,149,553</td>
<td>$6,833,000</td>
<td><strong>AC</strong></td>
<td>$9,706,494</td>
<td><strong>AC</strong></td>
</tr>
<tr>
<td><strong>RC</strong></td>
<td>$??,???,???</td>
<td>$2,324,000</td>
<td><strong>RC</strong></td>
<td>$3,270,898</td>
<td><strong>RC</strong></td>
</tr>
</tbody>
</table>

- **FCoM+IF** is 2.1% annual increase IAW OSD Comptroller Inflation Guidance: [link](https://fcom.cape.osd.mil/admin/tutorials/FY%202020%20Inflation%20Guidance.pdf)
- ICAM+RFPB equals Procurement, Military Construction and RDT&E from RFPB 2018 update included and 2.1% annual increase IAW OSD Comptroller Inflation Guidance.
AC & RC FBLCC Comparison (2 Deployments)

ICAM AF O-5
AC $6,833,000
RC $2,827,000
41.4% of AC

ICAM+RFPB AF O-5
AC $9,706,494
RC $3,773,898
38.9% of AC

ICAM AF E-7
AC $3,978,000
RC $1,517,000
38.1% of AC

ICAM+RFPB AF E-7
AC $6,851,494
RC $2,463,898
36.0% of AC

*ICAM+RFPB equals Procurement, Military Construction and RDT&E from RFPB 2018 update included and 2.1% annual increase of those costs IAW OSD Comptroller Inflation Guidance
ICAM AF O-5

AC $6,833,000
RC $3,125,000
45.7% of AC

ICAM+RFPB AF O-5

AC $9,706,494
RC $4,071,898
42.0% of AC

ICAM AF E-7

AC $3,978,000
RC $1,738,000
43.7% of AC

ICAM+RFPB AF E-7

AC $6,851,494
RC $2,684,898
39.2% of AC

*ICAM+RFPB equals Procurement, Military Construction and RDT&E from RFPB 2018 update included and 2.1% annual increase of those costs IAW OSD Comptroller Inflation Guidance
AC & RC 5 Year Cost Comparison (1 Deployment)

<table>
<thead>
<tr>
<th>ICAM+IF</th>
<th>ICAM+RFPB</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF O-5</td>
<td>AF O-5</td>
</tr>
</tbody>
</table>

**AC**
- ICAM+IF: $1,107,691
- ICAM+RFPB: $2,048,533

**RC**
- ICAM+IF: $372,234
- ICAM+RFPB: $702,061

**Percentage of AC**
- ICAM+IF: 33.6%
- ICAM+RFPB: 34.3%

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<table>
<thead>
<tr>
<th>ICAM+IF</th>
<th>ICAM+RFPB</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF E-7</td>
<td>AF E-7</td>
</tr>
</tbody>
</table>

**AC**
- ICAM+IF: $665,975
- ICAM+RFPB: $1,512,830

**RC**
- ICAM+IF: $192,867
- ICAM+RFPB: $484,529

**Percentage of AC**
- ICAM+IF: 29.0%
- ICAM+RFPB: 32.0%

---

*ICAM+IF is 2.1% annual increase IAW OSD Comptroller Inflation Guidance - https://fcom.cape.osd.mil/admin/tutorials/FY%202014%20Inflation%20Guidance.pdf

*ICAM+RFPB equals Procurement, Military Construction and RDT&E from RFPB 2018 update included and 2.1% annual increase IAW OSD Comptroller Inflation Guidance*