Financial Management Issues for PBL

WHAT ARE "WORKING CAPITAL" FUNDS?

The concept of working capital management originated with the old Yankee peddler, who would load up his wagon with goods and then go off on his route to peddle his wares. The merchandise was called "working capital" because it was what he actually sold, or "turned over," to produce his profits. The wagon and horse were his fixed assets. He generally owned the horse and wagon, so they were financed with "equity" capital, but he borrowed the funds to buy the merchandise. These borrowings were called *working capital loans,* and they had to be repaid after each trip to demonstrate to the bank that the credit was sound. If the peddler was able to repay the loan, then the bank would make another loan, and banks that followed this procedure were said to be employing "sound banking practices."[1]

For the private sector, working capital consists of: cash, inventory, and accounts receivable (what customers owe the company). All are necessary to conduct business, but the hard question is: *In what quantities?* The greater the inventory, the smaller the danger of running out, results in less operating risk; but if inventories are too large, they earn zero dollars, or in reality, a negative return due to storage and obsolescence costs. Therefore, there is an extreme pressure to hold the working capital carried to the *minimum consistent while running the business without interruption.*

DEFENSE WORKING CAPITAL FUND (DWCF)

The DWCF is a revolving fund, or account, in which all income is derived from its operations and is available without fiscal year limitations. It provides financial accountability within a business-like atmosphere with customer-provider relationships between government entities and commercial vendors. It creates incentives by identifying the total cost of providing goods/services, minimizing costs, and measuring performance. Under WCF a provider does not perform work without a funded order or anticipated sale, nor can they exceed capital costs or run out of cash.

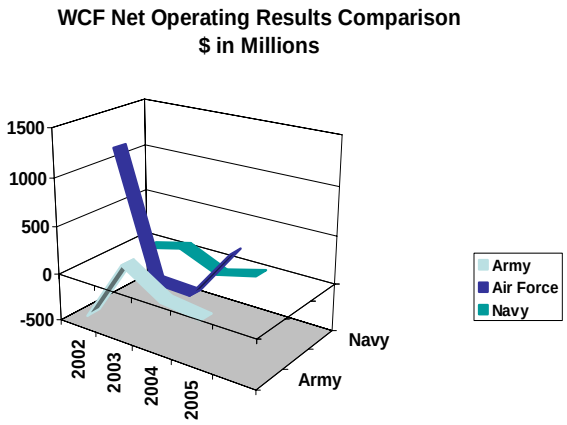
The DWCF is established under Title 10 USC, Section 2208, and funds activities (depot maintenance, supply, R&D, ordnances, DFAS, transportation, base support, information services, etc.); each financed primarily with O&M funds. There are two types of revolving funds: the stock funds for supplies, fuel, food, etc., and the industrial funds for maintenance, overhaul, repair, and modification of weapon systems and components, as well as other functions such as research and development (R&D).

DWCF Management

The management of the DWCF falls under the Anti Deficiency Act. Examples of ADA violations include: obligations for capital purchases exceeding the limitation on the operating budget, cash outlays in excess of the fund, and obligations exceeding

available budgetary resources. The DWCF is managed by a policy board of Defense and OMB financial representatives. It maintains a central policy approach, with decentralized execution. Components manage their own business areas. Each business area is managed and operated as an independent entity, but cash is corporately held by each Fund and OSD.

The purpose of the DWCF is to improve cost awareness, promote cost consciousness, mirror private sector operations, identify full cost, keep decision makers aware of the cost of their decision, create buyer-seller relationships, etc. As such, the WCF does not save or lose money, but focuses on cost and cash management. The primary way DWCF working capital funds differ from the commercial version is one of incentives. While "profit" is the incentive in the private sector, "breaking even" is the motivating force in DWCF. Each working capital fund activity has the goal of achieving a Net Operating Result (NOR) of zero in a given fiscal year, which means the activity generates sufficient revenues to match the cost incurred. If profits (losses) occur during the year, the unit responsible for pricing, such as NAVSUP, lowers (raises) price to compensate in the next fiscal year.



For 2002, the AWCF is the only one with a negative NOR. The AWCF also appears to be the only one needing supplemental appropriations from Congress. In 1997, prior to Gen Babbitt's cost management activities the AF had significant financial losses. They have a very high positive NOR for 2002 and are now explaining how it happened to Congress.

FIGURE 1: WCF NET OPERATING RESULTS

Funds provided to a working capital fund activity span fiscal years and remain available in order to pay for the goods or services being provided by the activity. In contrast, appropriations are earmarked for specific purposes and have a finite period of time in which they must be used. Working capital fund activities recover all costs through the stabilized billing rates charged to customers. These include direct costs, indirect costs, general and administrative (G&A) costs (overhead), and any prior year gains or losses.

DWCF RATE SETTING CATEGORIES

The customer rates are established for products/services furnished by a provider on a unit cost or activity based costing processes. Rates are based on full costs (direct,

indirect, G&A, gains and losses from prior years, and depreciation). Depreciation is straight line basis with ADP equipment and COTS software at 5 years; internally developed software and equipment at 10 years, and facilities at 20 years.

- For supply, rates include cost of the goods plus a surcharge that recovers the actual costs of operating the supply business.

- Distribution Depot rates include cost of receipt, storage, packing, and shipping for goods ordered by customers, expressed as cost per line item received, stored, or shipped.

- Depot Maintenance rates include cost incurred in repair, rework, or modification of depot level reparable items or components, expressed as cost per direct labor hour.

In the following table is the annual percentage of change and the hourly depot rates for the three services from 2002 to 2005. FY 2002 is actual, the rest are projections.

WCF CUSTOMER RATE CHANGE (PERCENTAGE)				
Supply	**2002**	**2003**	**2004**	**2005**
Army	-2.5	9.2	4.5	1.5
Air Force	3.7	4.6	7.2	3.8
Navy	7.6	8.8	1.3	4.0
Depot Maintenance	**2002**	**2003**	**2004**	**2005**
Army	4.0	7.4	8.3	2.0
Air Force	16.9	26.6	19.1	9.4
Navy	2.3	5.4	0.5	2.7
Depot Maintenance Hourly Rates				
Army	124.57	133.80	144.91	147.85
Air Force	157.73	199.66	237.84	260.16
Navy	151.61	160.58	162.44	165.30

TABLE 1: WCF CUSTOMER RATE CHANGE & DEPOT MAINTENANCE HOURLY RATES

Supply Management Business Areas

Individual item prices are established by including the cost recovery elements, by percentage or fixed amount, with the commodity acquisition cost of the item. The commodity cost (or acquisition cost) is the most current cost of a representative procurement. The cost recovery factor is developed based on operating costs plus prior year gains/losses; shipping and transportation (inventory issues, customer returned items with/without credit, depot level reparable (DLP) exchange carcasses, lateral redistribution), inventory expenses, inventory maintenance, economic adjustments for inflation, and repair cost including attrition (washouts and losses). Supply operations includes civilian labor, military personnel at supply activities, a portion of the Headquarters costs related to inventory management, the receipt and issue of material, and the depreciation of capital assets.

The supply management entities for the AWCF are shown in the following table.

AWCF – SUPPLY MANAGEMENT ENTITIES	
U.S. Army Tank-Automotive and Armaments Command, Rock Island, Il	Non Army Managed Items (NAMI) – Central Business Unit
DLA and General Services Administration (GSA) Items:	Includes repair parts, industrial supplies, general supplies, and ground support supplies
U. S. Army Aviation and Missile Command, (AMCOM) Huntsville, AL	Aircraft and ground support items, missile systems items
U. S. Army Communications-Electronics Command, Fort Monmouth, NJ	Communication and electronics items
U.S. Army Tank-Automotive and Armaments Command, Warren, MI (TACOM-W)	Combat, automotive, and construction items
U.S. Army Tank-Automotive and Armaments Command, (TACOM-RI) Rock Island, Il	Weapons, special weapons, and fire control systems
U.S. Army Soldier and Biological Chemical Command, Aberdeen Proving Ground, MDSBCCOM	Ground support items, and chemical weapons
HQ, U.S. Army Materiel Command (AMC), Alexandria, VA	Propositioned War Reserves: DLA/GSA items: repair parts, clothing, subsistence, medical supplies, industrial supplies, ground forces supplies

TABLE 2: AWCF SUPPLY MANAGEMENT ARMY ACTIVITY GROUP MAJOR SUBORDINATE COMMANDS

Each Air Force Logistics Center (ALC) functions as an inventory control point (ICP) for specific type items (electronics, engines, command and control, etc). Each center has its "niche" and these responsibilities are neither redundant nor competitive. As the Logistics Centers perform maintenance, they buy from each other's ICPs.

Non-Supply Management Business Areas

Include depot maintenance, research and development, distribution depots, etc. and use unit cost rates based on identified input/output measures. These measures establish fully cost burdened rates, such as cost per direct labor hour, cost per product, cost per item received, cost per item shipped, stored, etc. Rates are based on full costs, which include: direct, indirect, general and administrative costs, gains and losses of prior years, and depreciation.

Cost is the language that every one understands. To be competitive an organization must know **true cost** prior to determining what they will charge to provide a service. In a service organization the biggest expense is labor. How an organization is structured and how efficiently the workers produce a service determines profit. *(See charts*

comparing WCF revenue and expense per employee.) Typically, processes use resources (people, technology, etc.) from several functional areas, or cost centers.

The Aviation TechLoop process is an example of the complexity of procurement of items for weapons systems. The Technical Loop can include over 50 check points prior to forwarding a procurement work directive (PWD) to the Acquisition Center. Depending on the item, check points may do a cursory review or an in-depth review and approval process. To determine the true cost of procurement, the fully loaded labor cost for each person who reviews the procurement action must be included, in addition to the labor cost of employees in the acquisition center.

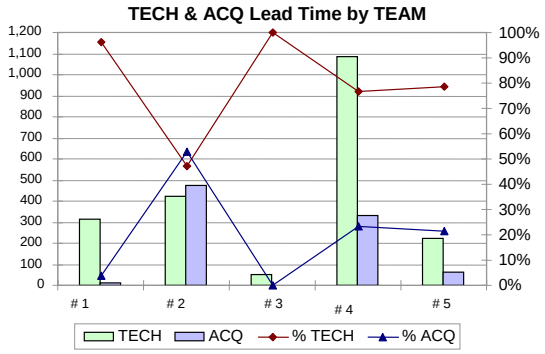


FIGURE 2: AVIATION TECHLOOP EXAMPLE

For each PBL initiative, NAVICP conducts a Business Case Analysis (BCA). The BCA is designed to quantify any cost benefits the Navy will realize through the initiation of a PBL contract. The BCA process involves determining the Navy's current cost of doing business. This "without PBL" cost is compared to the cost to the Navy with a PBL arrangement. The "with PBL" cost includes both the PBL supplier's costs as well as residual cost the Navy will retain even under a PBL arrangement. These cost benefits may take the form of cost saving or cost avoidance. The savings goal is to break even or better in both the NWCF and in total cost to the Navy. Some cost areas considered in the BCA are:

Fleet maintenance labor	Spare parts procurement	Warehousing
Transportation	Sustaining engineering	Fleet consumables
Other government labor	Other supply system costs	Depot repair

The Navy has two inventory control points – Aviation and Sea. Both are aggressively into PBL. The NAVICP buys *performance* (Honeywell on the APU) and sells *parts*. They must then translate performance into parts for accounting purposes. As the NAVICP develops the BCA they include a cash management plan in order to continue to have money to pay the NAVICP overhead. If all of the WCF dollars are obligated to contracts, they will have no cash to pay themselves. When a contract is in place, all of the cash must be paid on the first day of the FY versus the traditional method of paying for each transaction over the entire fiscal year.

Comparisons of WCF Activity Groups

ARMY, AIR FORCE, & NAVY ACTIVITY GROUPS [2]		
Army Activity Groups	**Air Force Activity Groups**	**Navy Activity Groups**
Supply Management buys and maintains assigned stocks of materiel for sale to customers, primarily Army operating units. The Single Stock Fund (SSF) provides total asset visibility, down to and including the Division Authorized Stockage Level. The implementation of the SSF and the Logistics Modernization Program (LMP) will provide real time management of the inventory and greater flexibility to optimize assets for AMC MSCs.	**Supply Management** activities procure and manage inventories of consumable and reparable spare parts required to keep all elements of the force structure mission ready. New flat-rate surcharge to reduce the item price volatility from year-to-year. Focus on filling backorders and improving performance factors, aggressively pursue reducing impact of growing parts obsolescence, 19% of electronic warfare components have no qualified manufacturing or repair source.	**Supply Management** provides inventory management functions for shipboard and aviation repairable and consumable items, management of overseas Fleet Industrial Supply Centers and miscellaneous support functions for ashore and Fleet commanders. NWCF funds such initiatives as Serial Number Tracking and Enterprise Resource Planning (ERP) to be used to reengineer and standardize business processes, integrate operations, and optimize management of resources while controlling cost and improving readiness.
Depot Maintenance provides organic industrial capability to repair, overhaul, and upgrade weapons systems equipment; compete and partner with private industry to deliver goods and services from five major depots: Anniston, Corpus Christi, Letterkenny, Red River, and Tobyhanna, all managed by AMC.	**Depot Maintenance** provides the equipment, skills, and repair services necessary to keep forces operating worldwide. Higher material cost driven by costs of engine parts and higher consumption. Double digit sales rate growth associated with increasing age of aircraft fleet.	**Depot Maintenance** includes three active shipyards which perform functions such as logistics support for assigned ships and service craft, three active aviation depots to repair aircraft, engines and components, and two Marine Corps depots which inspect, repair, rebuild all types of ground combat and combat support equipment. Converting Puget Sound to mission funding for 2-year pilot in FY 2004.
Ordnance provides organic capability to produce quality munitions and large caliber weapons, ammunition maintenance and renovation, manufacture, storage and demilitarization. There are three arsenals, two ammunition plants, five ammunition storage depots, and three munitions centers managed by AMC MSCs.	**Transportation** provides the worldwide mobility element of the global engagement vision through a partnership of military and commercial assets. Over 80% of cost base is in support of contracts and materials, productivity initiatives resulted in savings of over $1.3B. AF has cash management responsibility but does not have day-to-day management responsibility for transportation operations.	**Transportation** Military Sealift Command operates service-unique vessels, primarily civilian manned, to provide material support to the Fleet, Special Mission Ships which provide unique seagoing platforms and Afloat Propositioning Force ships which deploy advance material for strategic lifts; managed from five area and three sub-area commands around world.
Information Services provides for development and sustainment of automated information and communications system; commercial sources for purchase of small/medium computers, hardware and software and support services. Operates on a cost reimbursable basis and will decapitalize at end of FY03.	**Information Services** activities make it possible to operate and improve data collection and management systems essential to war fighting and support activities. *The use of the Software Engineering Institute/Capability Maturity Model* certification helps insure the level of competence is comparable to private industry. Uses over hires to access direct labor personnel to accomplish user requested programs; will allow for lower rates. Adding IDE personnel and personnel related to contracting systems in FY 04.	**Research & Development** consists of the Naval Research Laboratory, the Naval Air Warfare Center, the Naval Surface Warfare Center, the Naval Undersea Warfare Center, and the Space and Naval Warfare Systems Centers to provide a wide range of R&D, test, evaluation, and engineering support functions. **Base Support** consists of nine Public Works Centers and the Naval Facilities Engineering Service Center providing utilities services, facilities maintenance, transportation support, engineering services, and shore facilities planning support.

TABLE 3: ARMY, AIR FORCE, & NAVY ACTIVITY GROUPS

WORKING CAPITAL FUND OPERATION

The WCF operates, in theory, as follows:

1. Congress provides a one-time cash deposit.

2. Customer (warfighter) receives annual appropriations.

3. Customer sends work orders or project orders to the WCF provider.

4. Provider furnishes the service or product, pays for expenses incurred, and bills the customer.

5. Customer pays the bill.

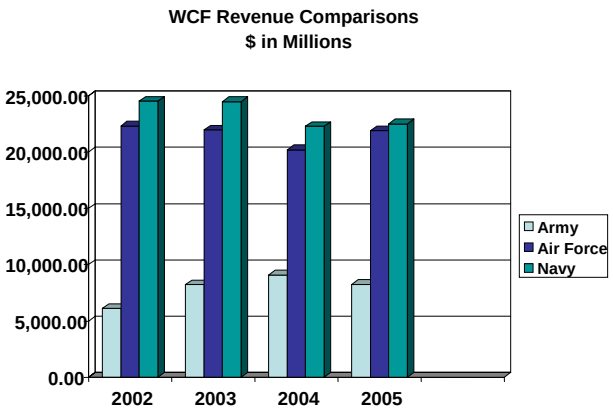
6. Provider operating losses/gains (in the current year) increase/decrease customer rates in the following year.

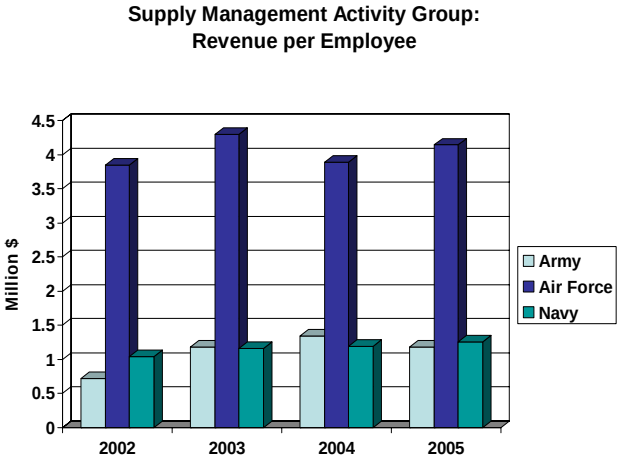
An example of combining types of money is the Joint Surveillance and Target Attack Radar System (JSTARS). The platform is a Boeing 707 commercial plane. The standard items are in the WCF. However, inside the Boeing 707 are newly developed items – with PBL support agreements outside the WCF. With JSTARS, the prime contractor (Northrop Grumman Corporation) is a Product Support Integrator (PSI) or sole-source contractor for Total Systems Support Responsibility (TSSR) and has dual responsibility to manage buying items from the government (WCF provider) and for buying unique items from commercial sources.

The AF holds the PSI responsible for supply and maintenance, whether the parts and services are organic or commercial. Consequently, the PSI has some flexibility. For example, if the PSI orders a part from the government, with an expected delivery time of 10 days, and the government provider cannot meet the delivery date, the contractor is allowed to go to another source of supply. This element of competition exists to keep the government provider customer focused. Contract clauses are also in place to protect the contractor in case there is a defect or problem with the government provided parts or services.[3] There are also "off ramps" to protect the interest of the government. If the contractor does not deliver satisfactory services, provisions are written into the contract to allow the government an exit strategy. (See Appendix II for a JSTARS summary.)

The charts below compare the dollar amounts of WCFs. Budget tables for the actual amounts in the Fiscal Year (FY) 2004/FY 2005 Biennial Budget Estimates are in Appendix V.

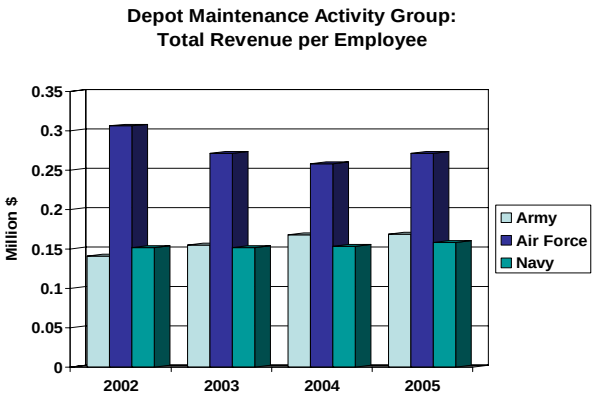
The Working Capital Funds (WCF) operate under the same rules across DoD. A perception exists across services that the operation of the funds varies from service to service. After comparing the funds, the most significant difference is the amount of revenue in each fund. As indicated in this chart, the Navy and Air Force funds are almost five times as large as the Army fund. This may explain why the Army is concerned about the impact of funding large PBL contracts.

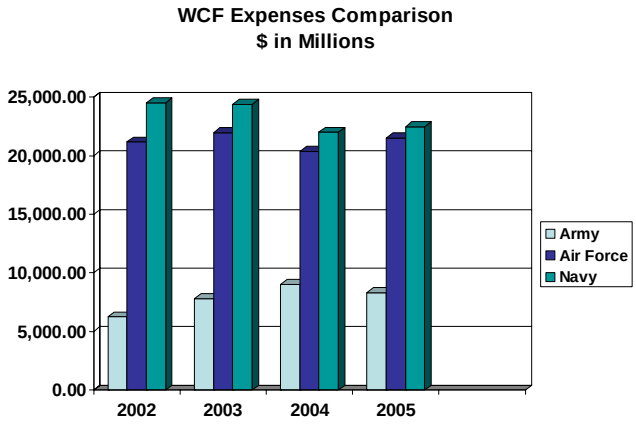




One method of measuring the productivity of an organization is to compare "activity" measures. The amount of revenue generated for each employee of the organization is an example. From this chart, we can see that, based on the total number of civilian and military employees with WCF salaries, the revenue generated per employee is considerably higher for the Air Force Supply Management Activity Group than for the other two services' supply management groups.

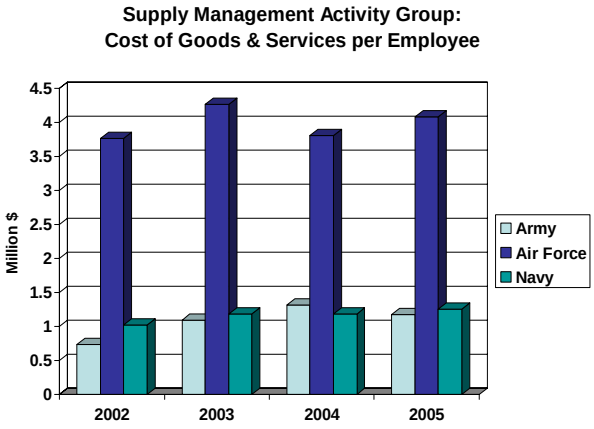
The revenue per employee for the Depot Maintenance Activity Group is approximately twice as high for the Air Force as it is for the other two services. Multiple variables exist that could affect an activity rate. The number of employee supporting Air Force may not be as large as the other services due to the number of contractors supporting the weapon systems. An increase in the number of employees would result in less revenue per employee.

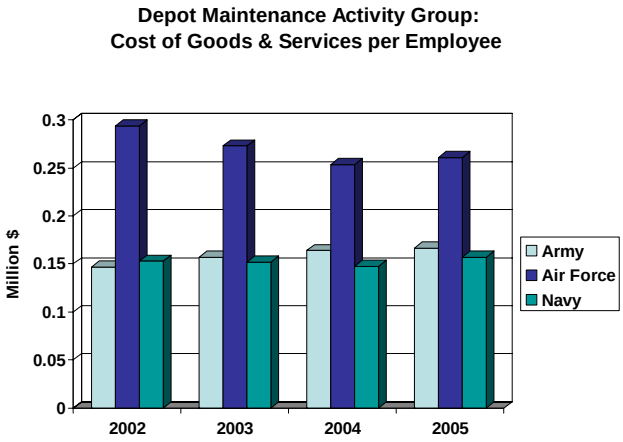




The comparison of overall expense across the AWCF, the NWCF and the AFWCF is similar to the comparison of total revenue per fund. Expenses are necessary to generate revenue and should match revenue since the net operating results of the DWCF is zero. Once again, just the difference in amounts between these funds explains why the impacts of certain policies are so significant.

The Depot Maintenance Activity Group is the largest customer of the Supply Management Activity Group. The utilization rate of supplies and other goods per employee may be considered an indicator of how much inventory is purchased, distributed, and managed by each supply employee funded by DWCFs. Once again, the AF use of contracts for total system support may be inflating the cost per employee.





Cost of Goods and Services per Employee is another activity ratio. As an employee accomplishes depot repairs they must use parts and other services to accomplish maintenance. Cost per employee is a measure of the activity, not how cost effective the available parts and supplies are, nor how efficient the labor is when using those same parts and supplies.

FIGURE 3: DWCF COMPARISON CHARTS FOR SUPPLY & MAINTENANCE SERVICES

The WCF is viewed in terms of supply and maintenance, not platforms or systems. One proposal is to establish WCFs that are program unique. Then, if the WCF wishes to issue a PBL to buy performance from vendors, the separate fund would be used for the total life cycle cost of the program (e.g., Cargo WCF, Apache WCF, etc.). The creation of such a WCF would raise the question of how to apply the overhead from the MSCs (AMCOM, TACOM, etc.) to multi-systems.

The NWCF and the AFWCF activities are heavily involved in strategic sourcing initiatives and expect to continue to produce savings through actions such as A-76 competitions and functionality reviews. No mention is made of AWCF savings from these same competitions and reviews.

The Army has eliminated the wholesale/retail concept from the AWCF. It is now a 'single stock fund' and in the future should show savings from the elimination of duplicate bookkeeping.

By law, the WCFs are required to include performance indicators. Figure 7 shows additional comparisons of the WCFs. Additional tables are in Appendix V. These charts compare the budgets for the Army, Navy and AF WCFs.

Working capital funds present unique challenges. The other services have embraced the WCFs and have found opportunities to exploit the positives. AMCOM will need to work with the Army's financial managers to develop a similar situation. This area requires in-depth knowledge and understanding. It is also the most misunderstood concept that we explored with our interviewees. There is an abundance of information and we have tried to provide a concise financial management summary.

APPENDIX:

Financial Management

AWCF FY 2004/2005 BIENNIAL BUDGET ESTIMATES				
Personnel	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
Supply Management				
Civilian Full Time Equivalent (FTE)	3,063	2,869	2,937	2,904
Military Average Strength	13	13	13	13
Depot Management				
Civilian FTE	11,788	11,134	11,054	11,205
Military Average Strength	33	31	19	19
Ordnance Management				
Civilian FTE	5,957	5,559	5,581	5,401
Military Average Strength	17	18	18	18
Information Services				
Civilian FTE	276	266	0	0
Military Average Strength	7	6		
Total				
Civilian FTE	**21,084**	**19,828**	**19,571**	**19,510**
Military Average Strength	**70**	**69**	**56**	**50**
Revenue				
Supply Management	3,656.8	5,784.2	6,626.7	5,789.6
Depot Maintenance	1,668.4	1,731.3	1,858.2	1,891.7
Ordnance	669.8	609.0	600.5	554.0
Information Services	103.8	95.3	N/A	N/A
Total	**6,098.8**	**8,219.8**	**9,085.4**	**8,235.3**
Cost of Goods & Services Produced (Expenses) (All $ in millions)				
Supply Management [1]	3,720.7	5,356.6	6,532.1	5,789.6
Depot Maintenance [2]	1,733.3	1,749.6	1,814.7	1,871.1
Ordnance [3]	694.3	604.8	673.5	663.4
Information Services [4]	100.2	95.3	N/A	N/A
Total	**6,248.5**	**7,806.3**	**9,020.3**	**8,324.1**
Net (NOR) and Accumulated Operating Results (AOR) [5]				
Supply Management				
Net Operating Results	-317.9	238.6	-10.8	0
Accumulated Operating Results	-227.8	10.8	0	0
Depot Maintenance				
Net Operating Results	-98.5	-18.3	43.5	20.6
Accumulated Operating Results	-45.8	-64.1	-20.6	0.0
Ordnance				
Net Operating Results	-28.2	0.1	-72.4	-109.4
Accumulated Operating Results	181.6	181.7	109.4	0.0
Information Services				
Net Operating Results	3.7	0	N/A	N/A
Accumulated Operating Results	9.8	9.8	N/A	N/A
Totals				
Net Operating Results	**-440.9**	**220.4**	**-39.7**	**-88.8**
Accumulated Operating Results	**-82.2**	**138.2**	**88.8**	**0**

Notes:
[1] Spike in FY2004 cost reflects efforts to increase spare availability and reduce backorder levels.
[2] Growth due to price growth and program increases for recapitalization of legacy systems and equipment.
[3] Reduction includes a reduction of $65.5M in direct UPC funding.
[4] Cost reimbursable and will be decapitalized at end of FY2003.
[5] AWCF operates on breakeven basis and set revenue rates to achieve positive or negative results in order to bring the AOR to zero over the budget cycle; effectiveness is measured by comparing performance to the NOR goal.

TABLE A-1: AWCF FY 2004/2005 BIENNIAL BUDGET ESTIMATES

AFWCF FY 2004/2005 BIENNIAL BUDGET ESTIMATES				
Personnel	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
Supply Management				
Civilian Full Time Equivalent (FTE)	2,174	2,190	2,462	2,496
Military Average Strength	60	60	60	60
Depot Management				
Civilian FTE	21,728	21,898	21,966	21,546
Military Average Strength	297	237	238	235
Transportation - MSC				
Civilian FTE	NA	NA	NA	NA
Military Average Strength				
Information Services				
Civilian FTE	1,128	1,172	1,221	1,221
Military Average Strength	839	817	809	804
Total				
Civilian FTE	**25,030**	**25,260**	**25,649**	**25,263**
Military Average Strength	**1,196**	**1,114**	**1,107**	**1,099**
Revenue				
Supply Management	8,596.4	9,665.9	9,826.5	10,592.3
Depot Maintenance	6,746.5	6,015.3	5,734.7	5,917.2
Transportation	6,328.0	5,679.0	4,012.0	4,719.0
Information Services	629.6	608.0	641.4	675.3
Total	**22,300.5**	**21,968.2**	**20,214.6**	**21,903.8**
Cost of Goods & Services Produced (Expenses) (All $ in millions)				
Supply Management	8,420.8	9,597.0	9,593.6	10,436.2
Depot Maintenance	6,473.8	6,040.7	5,623.4	5,685.7
Transportation	5,648.0	5,706.0	4,542.0	4,732.0
Information Services	632.6	613.2	631.3	675.3
Total	**21,175.2**	**21,956.9**	**20,390.3**	**21,529.2**
Net (NOR) and Accumulated Operating Results (AOR)				
Supply Management				
Net Operating Results	204.6	88.8	264.0	187.9
Accumulated Operating Results	316.0	404.7	668.7	856.6
Depot Maintenance				
Net Operating Results	272.7	-25.4	111.3	231.5
Accumulated Operating Results	9.1	-16.3	70.0	231.5
Transportation				
Net Operating Results	723.0	-186.0	-529.0	-13.0
Accumulated Operating Results	728.0	524.0	13.0	0
Information Services				
Net Operating Results	-3.0	-5.2	10.1	0
Accumulated Operating Results	-2.6	-10.1	0	0
Totals				
Net Operating Results	**1,197.3**	**-127.8**	**-143.6**	**406.4**
Accumulated Operating Results	**1,050.5**	**902.3**	**751.7**	**1,088.1**

TABLE A-2: AFWCF FY 2004/2005 BIENNIAL BUDGET ESTIMATES

NWCF FY 2004/2005 BIENNIAL BUDGET ESTIMATES				
Personnel	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
Supply Management				
Civilian Full Time Equivalent (FTE)	6,450	6,171	5,360	5,254
Military Average Strength	418	428	424	419
Depot Management				
Civilian FTE	30,866	31,091	22,496	22,832
Military Average Strength	220	264	219	219
Research & Development				
Civilian FTE	39,027	39,001	37,706	37,713
Military Average Strength	657	636	631	633
Transportation – MSC				
Civilian FTE	5,907	6,146	6,466	6,768
Military Average Strength	731	719	624	637
Base Support				
Civilian FTE	8,099	8,317	8,300	8,275
Military Average Strength	106	108	108	108
Total				
Civilian FTE	**90,349**	**90,726**	**80,328**	**80,842**
Military Average Strength	**2,132**	**2,155**	**2,006**	**2,016**
Revenue				
Supply Management	7,109.2	7,635.4	6,876.3	7,120.8
Depot Management	4,720.6	4,751.7	3,488.6	3,644.5
Research & Development	9,463.5	8,731.0	8,711.4	8,365.6
Transportation	1,518.7	1,732.5	1,723.2	1,848.3
Base Support	1,692.0	1,622.6	1,469.4	1,522.1
Total	**24,504.0**	**24,473.2**	**22,268.9**	**22,501.3**
Cost of Goods & Services Produced (Expenses) (All $ in millions)				
Supply Management	6,977.2	7,797.3	6,864.5	7,120.8
Depot Maintenance	4,752.8	4,621.2	3,567.4	3,625.9
R&D	9,517.5	8,703.9	8,371.5	8,365.6
Transportation - MSC	1,553.3	1,723.3	1,701.1	1,848.3
Base Support	1,719.4	1,540.6	1,513.2	1,522.1
Total	**24,520.1**	**24,386.2**	**22,017.6**	**22,482.8**
Net (NOR) and Accumulated Operating Results (AOR)				
Supply Management				
Net Operating Results	132.3	-161.9	30.8	0
Accumulated Operating Results	131.1	-30.8	0	0
Depot Maintenance				
Net Operating Results	-32.2	130.5	-78.8	18.6
Accumulated Operating Results	87.5	42.9	-18.3	0
R&D				
Net Operating Results	-54.0	27.1	-20.1	0
Accumulated Operating Results	-7.0	20.1	0	0
Transportation				
Net Operating Results	-34.6	9.2	22.1	0
Accumulated Operating Results	-31.3	-22.1	0	0
Base Support				
Net Operating Results	-27.4	82.0	-43.8	0
Accumulated Operating Results	-38.2	43.8	0	0
Totals				
Net Operating Results	**-15.9**	**86.9**	**-89.8**	**18.6**
Accumulated Operating Results	**142.1**	**53.9**	**-18.3**	**0**

TABLE A-3: NWCF FY 2004/2005 BIENNIAL BUDGET ESTIMATES

PERFORMANCE INDICATORS LISTED IN WCF BUDGET FOR MILITARY SERVICES

AF WCF Stockage Effectiveness				
Measures how often the supply system has available for immediate sale that items it intends to maintain at base and depot level supply locations.				
Division	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
Materiel Support	73%	74%	75%	77%
General Support	87%	87%	87%	87%
Medical-Dental	94%	95%	95%	95%
Academy	97%	97%	97%	97%

NMCSR – Not Mission capable Supply Rate				
Percentage of time a weapons system is down for parts. Assuming no other factors impact aircraft availability, then the aircraft availability is computed 1 minus NMCSR. NMCSR is computed only for weapon systems, it is not computed for weapons system parts: such as engines.				
Weapon System	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
A-10	12.9%	12.9%	14.3%	14.9%
B-1B	21.1%	21.1%	22.4%	23.2%
B-2	5.6%	5.6%	6.4%	6.9%
B-52	10.7%	10.7%	11.8%	12.3%
C-5	17.5%	17.5%	18.7%	19.4%
C-130	13.0%	13.0%	14.3%	14.9%
C-135	9.8%	9.8%	10.6%	11.5%
C-141	14.0%	14.0%	15.5%	16.1%
E-3	9.4%	9.4%	10.1%	10.8%
E-4	11.7%	11.5%	11.0%	7.9%
E-8	4.9%	4.9%	4.9%	6.9%
F-4	0.0%	4.2%	5.6%	0.0%
F-15	9.6%	9.6%	10.7%	11.2%
F-16	12.0%	12.0%	13.1%	13.7%
F-22	0.0%	0.0%	0.0%	0.0%
F-111	0.0%	0.0%	0.0%	0.0%
F-117	4.1%	4.1%	4.9%	4.9%
H-1	0.0%	0.0%	0.05%	0.0%
H-53	11.0%	13.6%	12.7%	3.1%
H-60	17.5%	23.3%	26.8%	4.6%

TABLE A-4: PERFORMANCE INDICATORS LISTED IN WCF BUDGET FOR MILITARY SERVICES

US TRANSCOM Unit Cost				
Air Mobility Command Unit Cost	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
Channel Passenger (million passenger miles)	$238,663	$296,562	$261,714	$252,661
Channel Cargo (million ton miles)	$1,473,134	$1,701,372	$2,212,505	$2,393,948
SAAM/JCS (million ton miles)	$523,921	$681,963	$809,698	$832,650
Training C-17 (cost per flying hour)	$10,389	$7,818	$9,077	$9,200
Military Sealift Command Unit Cost	**FY 2002**	**FY 2003**	**FY2004**	**FY 2005**
Petroleum Tankership Ship Days	$40,073	$48,821	$36,134	$42,770
Surge Reduced Operating Status (ROS) Ship Days	$22,106	$18,262	$20,334	$21,947
Army Afloat Prepo Ship Days	$37,463	$40,991	$46,015	$46,210
Chartered Cargo Ship Days	$28,975	$31,466	$28,657	$28,214
Military Traffic Management Command Unit Cost				
Global POV	$3,172.00	$3,085.00	$3,112.00	$3,165.00
Liner Ocean Transport	$79.15	$61.59	$49.59	$49.69
Defense Courier Service Unit Cost				
Cost per 1,000 pounds delivered	$7,009	$5,638	$5,550	$5,650

US TRANSCOM Workload Actual and Forecast				
Recurring Peacetime Workload				
Air Mobility Command	**FY 2002**	**FY 2003**	**FY2004**	**FY 2005**
Training Flying Hours C-17 (AMC)	17,303	36,703	42,245	45,268
Channel Cargo Ton Miles	901.9	845.7	549.0	546.9
SAAM/JCS Ton Miles	3,845.4	2,858.3	1,166.3	1,163.8
Military Sealift Command				
Petroleum Tankership Ship Days (MSC)	3,843	2,503	2,928	2,628
Army Afloat Prepo Ship Days	3,365	4,745	4,392	4,380
DLA Afloat Prepo Ship Days	1,095	1,095	732	730
Defense Courier Service				
Pounds Delivered (thousands)	3,010	3,600	2,000	2,000

US TRANSCOM Customer Rate Changes				
Customer Rate Changes				
Air Mobility Command	**FY 2002**	**FY 2003**	**FY2004**	**FY 2005**
Channel Passengers	6.0%	10.7%	1.7%	1.8%
Channel Cargo	7.2%	11.0%	1.7%	1.8%
SAAM/JCS	-3.8%	0.4%	-1.3%	5.7%
Training	9.6%	-1.9%	2.7%	3.8%
Military Sealift Command				
Chartered Cargo	-4.4%	37.4%	-42.7%	33.4%
Petroleum Tankerships	14.4%	13.4%	-50.8%	54.0%
Surge FOS	45.6%	-8.7%	-5.4%	-5.3%
Surge ROS	45.6%	-8.7%	-9.6%	6.1%
Army Afloat Prepositioning	14.5%	11.7%	8.2%	-1.5%
Air Force Afloat Prepositioning	14.5%	11.7%	-2.9%	2.4%
DLA Afloat Prepositioning	14.5%	11.7%	-28.4%	22.5%
Military Traffic Management	**FY 2002**	**FY 2003**	**FY2004**	**FY 2005**
Cargo Operations	-40.0%	-38.3%	20.0%	23.9%
Global POV	-7.0%	-14.7%	15.6%	13.0%
Liner Ocean Transportation	-1.4%	-8.4%	-2.6%	-7.6%
Defense Courier Service				
Pounds Delivered	-22%	-4.4%	-.4%	3.7%

Marine Corps Depots				
Performance Indicators:	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**
Schedule Conformance	97.5%	97.4%	99.5%	99.3%
Quality Deficiency Reports	0.2%	0.2%	0.2%	0.2%
Inventory Turnover Ratio	5.2:1	6.1:1	6.7:1	7.5:1
Stabilized Customer Rate	$105.81	$117.62	$126.30	
Composite Rate Change*	7.0%	11.17%	7.38%	1.02%
* The FY 2004 rate increase over the FY 2003 President's Budget is due to decreased workload and cost.				
Cost per Direct Labor Hour	$115.70	$136.08*	$135.05	$132.20
* Increase by18% due to declining workload coupled with increase hourly rate of direct material. , removal of VSIP cost, increased direct material cost for material intensive workload				

TABLE A-5: PERFORMANCE INDICATORS FOR US TRANSCOM AND MARINE CORPS DEPOTS

[1] Brigham, Eugene F. and Louis C. Gapenski, 1990, "Cases in Financial Management," p. 857.

[2] AWCF, AFWCF, NWCF, FY 204-2005 Biennial Budget Estimates.
www.defenselink.mil/comptroller/defbudget/fy2004

[3] Telephone interview with John Nauseef, Brig Gen, USAF (Ret), Dayton Aerospace, 4141 Colonel Glenn Highway, Suite 252, Dayton, Ohio 45431, 937.426.4300.