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## **MILITARY PERSONNEL COSTS**

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We conducted an analysis of personnel costs in order to compare the cost of AC, RC, and civilian personnel. The main text describes the data and methods used to project the costs of contracted civilians. The analysis of military personnel costs is documented here.

### **MILITARY COMPENSATION**

Military compensation is composed of several pays, allowances, and other benefits. Military pay includes basic pay and a number of special and incentive pays such as flight pay, hazardous duty pay, and bonuses. Allowances are provided to members to offset the cost of living in the form of allowances for quarters, subsistence, and clothing. Other benefits include factors such as the availability of medical care, retirement pay, and other similar considerations. However, not all members of the Armed Forces receive the same compensation elements nor at the same rate. Many of these costs vary based on the service member's grade, longevity, and component of military service.

We included the following elements of cost in our analysis: Basic Pay, Basic Allowance for Quarters (BAQ), Variable Housing Allowance (VHA), Basic Allowance for Subsistence (BAS), clothing-replacement allowance, retirement pay accrual, military medical care, and FICA. Added to this amount for Active Component personnel was the cost of permanent change of station (PCS). Table B.1 lists the AC and RC entitlements to these pays and benefits. As shown in the table, RC pays and benefits differ during inactive duty training (IDT) drills and annual training (AT).

**Table B.1**  
**Federal Benefits for Armed Forces Personnel**

Benefit	Active Component Personnel	Reservists During Inactive Duty Training (IDT) Assemblies	Reservists During Annual Training (AT)
Pay and allowances	Basic Pay, BAS, BAQ, VHA, Clothing, and Special Pay, if authorized	Basic Pay only computed at 1 day pay for each drill period	Basic Pay, BAS, BAQ, and Special Pay, if authorized
Retirement	Upon retirement from active-duty service	1 retirement point per UTA (maximum 75 points per year)	1 retirement point per day (maximum 365/366 points per year)
Medical care for service member	Yes	Only if duty-related	Yes
Medical care for family members	Yes	No	No if on active duty for less than 30 days
FICA	Yes	Yes	Yes
PCS costs	Yes	Does not apply	Does not apply

SOURCES: *1996 Uniformed Services Almanac* and *1996 Reserve Forces Almanac*.

## COST ELEMENTS

The following describes the assumptions and data used to calculate the costs for each cost element.

### Basic Pay

Under the military pay structure, basic pay by pay grade increases as the soldier's time in service increases. This accrual in seniority can substantially affect the cost differences between populations, especially if one population is significantly senior to another. Therefore, our cost model estimated the average cost associated with each pay grade based on the distribution of military personnel strengths across years of service.

Strength figures by grade and time-in-service for both AC and RC personnel were obtained from the Defense Manpower Data Center (DMDC) Information Delivery System. Strength figures were as of June 1996. We also used in our analysis the military compensation rates that went into effect January 1, 1996, contained in the *1996 Uniformed Services Almanac* and *1996 Reserve Forces Almanac*.

### **Basic Allowance for Quarters (BAQ)**

Active Component members (and reservists during AT) receive an allowance to offset the cost of living in nongovernment quarters. Reservists in an inactive-duty status, such as unit training assemblies (UTAs), are not authorized an allowance for quarters. Basic Allowance for Quarters (BAQ) also varies by pay grade and family member status (i.e., with dependents or without).

We used the BAQ rates that went into effect January 1, 1996, contained in the *1996 Uniformed Services Almanac*. The family member status of AC and RC personnel was obtained from the DMDC Information Delivery System. Using these rates and family member status, we calculated the average amount by grade paid to service members in nongovernment quarters. For the purposes of this study, the (higher) “with dependents rate” was applied to all service members occupying government quarters to establish an “in-kind” rate for their government housing, regardless of their family status. This represents only an estimate of the government’s cost of providing quarters.

### **Variable Housing Allowance (VHA)**

Active Component members also receive a Variable Housing Allowance (VHA) to supplement their allowance for quarters in high-housing-cost areas. VHA is only paid to reservists activated for more than 139 days. As with BAQ, VHA varies by pay grade and family member status of the service member.

We used the average VHA rate by pay grade from the *DoD Selected Military Compensation Tables January 1996 Pay Rates*, published by the DoD Directorate of Compensation. The family member status of service members was obtained from the DMDC Information Delivery

System. For the purposes of this study, the “with dependents rate” was applied to service members occupying government quarters to establish an “in-kind” rate for this allowance.

### **Basic Allowance for Subsistence (BAS)**

Active Component members and reservists during AT receive an allowance to offset the cost of meals. Reservists in an inactive-duty status, such as unit training assemblies, are not authorized an allowance for subsistence (BAS). We used the “authorized to mess separately” rates for officers and enlisted personnel that went into effect January 1, 1996, contained in the *1996 Uniformed Services Almanac*.

### **Clothing-Replacement Allowance**

Active Component enlisted members are issued a standard wardrobe when they enter active duty and receive a clothing replacement allowance each year. The replacement allowance is paid at the “basic” rate for members with less than three years of service and a “standard” rate for members with three or more years of service. Active Component officers receive a one-time payment upon commissioning to buy clothing and do not receive any allowance to maintain their uniforms. Reservists are not usually eligible for a clothing replacement allowance unless they are called to active duty for more than six months. We used the “clothing-replacement allowance” rates for enlisted personnel that went into effect October 1, 1995, contained in the *1996 Uniformed Services Almanac*.

### **Retirement Benefit Accrual**

Members of the Armed Forces accrue retirement benefits based on their service component and the retirement plan in effect when they entered military service. Active Component personnel receive monthly retirement income from the military retirement system upon retirement from active duty. Reserve Component personnel earn retirement points during inactive-duty training and annual training and must achieve 20 satisfactory years of service and be 60 years old before retirement pay commences. (Satisfactory years of

service are ones in which the reservist earns a minimum of 50 retirement points.)

There are also three distinct nondisability benefit formulas within the military retirement system. Military personnel who entered the Armed Services before September 8, 1980, receive retirement pay based on their terminal basic pay. For members entering service on or after September 8, 1980, a “high-three” average of basic pay is used in the computation. In addition, members entering the Armed Services on or after August 1, 1986, are subject to a penalty if they retire with fewer than 30 years of service (until they reach age 62).

The true effect of staffing decisions on retirement costs depends on how the Army alters its force structure, for example reducing accessions and/or reducing various promotion rates. The conventional budgeting approach uses retirement accrual normal cost percentage (NCP) rates for each retirement benefit formula to calculate the retirement benefit cost. We used current years of service to indicate which benefit formula applied, assuming that the service members had served continuously for those years of service. This calculation used the retirement NCP rates in effect during FY96 contained in the *Valuation of the Military Retirement System* dated September 30, 1996, published by the DoD Office of the Actuary.

### **Military Medical Care**

Active Component and Reserve Component personnel during AT are entitled to health care services provided by the military health care system. Reservists while on inactive-duty training only have limited access to military medical care. Family members of AC personnel are also eligible to receive health care from the military health care system. Reserve family members are not eligible during short-term reserve duty.

The cost to DoD to provide health care services differs by beneficiary category, e.g., for service members as opposed to family members. We used the cost per user by beneficiary category for FY96 to calculate the cost of the military health care benefit by pay grade. We valued the health care benefit for reservists with limited access during inactive-duty training at 50 percent of the total cost for full-time service members.

The cost per user by beneficiary category was provided by the Assistant Secretary of Defense for Health Affairs Health Budget and Program. We used the family member status of service members from the DMDC Information Delivery System to determine the number of family members eligible for military health care services.

### **FICA**

The government pays Federal Insurance Contributions Act (FICA) taxes on all military members' basic pay. We applied the current rate of 7.65 percent to the basic pay for each pay grade across years of service.

### **Permanent Change of Station (PCS)**

Active Component service members and their family members are provided transportation, movement of their personal property, and reimbursement of relocation expenses when a permanent change of station (PCS) is required. We used the average PCS costs for FY96 to estimate the annual PCS cost for officers and enlisted personnel by grade, averaging over all members. The total PCS costs for FY96 are contained in the *FY97 Budget Estimates* published by the Department of the Army, Military Personnel.

### **ANNUAL COMPENSATION RATES**

We combined all the pay and benefits detailed above into annual averages for each grade and applied one-year inflation of 3.2 percent to translate the 1996 rates into 1997 dollars. Table B.2 displays these annual compensation rates for the AC and RC by grade and grouped by SROTC position. We calculated the annual compensation for RC personnel using a standard 48-drill inactive-duty training year and 18.5-day AT. A typical schedule for a reservist in a TPU involves drilling one weekend per month during the year (48 drills) plus two weeks during the summer (14-day AT). Because of the need to staff SROTC summer camps and accompany the battalions on weekend exercises during the school year, we estimate that reservists would average 48 drills plus 18.5 days AT. The increased costs for the extra

**Table B.2**  
**Annual Compensation Rates (1997\$)**

Position and Grade	Active		Reserve	
	Compensation	Distribution	Compensation	Distribution
<b>Instructor</b>				
O-6	128,068	0.0%	16,938	7.0%
O-5	107,597	0.0%	14,029	24.8%
O-4	88,262	28.8%	11,662	29.1%
O-3	71,006	71.2%	9,797	39.1%
Average	75,981		11,888	
<b>Trainer</b>				
E-8	66,510	10.8%	8,225	0.0%
E-7	57,915	89.2%	7,017	100.0%
Average	58,845		7,017	
<b>Admin/Log</b>				
E-6	49,870	50.9%	5,557	19.3%
E-5	41,993	49.1%	4,885	27.2%
E-4	34,298	0.0%	3,998	53.5%
Average	45,999		4,540	

4.5 days AT would represent incremental cash costs for using RC personnel in SROTC.

We assumed that reservist compensation for each grade would be the same for members of the IRR or Selected Reserves. As noted in the text, IRR members could function in two different statuses, but at equivalent compensation. They could join the Selected Reserves and participate in SROTC through a TPU, earning pay and benefits as described above. Alternatively, they could remain in the IRR but be activated with a specified rate of pay for each period worked. (Although more complicated, this method might be employed because these IRR members would not count against the endstrength ceiling for the Selected Reserves as long as they do not serve on continuous duty for more than 180 days.)

To compute average costs for each AC and RC position, we used grade distributions. For AC positions to be replaced, we used an estimate of the grades that would likely be subject to replacement for each current position. For RC replacements, we used estimates of

the populations that would be available to fill each position. For instructors, we used the distribution of O-3 through O-6 TPU members whose civilian occupations are in secondary or postsecondary teaching. For trainers, we used the average E-7 pay rate. For the admin/log support positions, we used the population distribution of E-4 through E-6 in the OCAR-designated admin/log MOSS.<sup>1</sup> Populations were derived from SIDPERS using the appropriate criteria. To compute the estimated costs of the TPU/IRR SROTC battalion staffing, we combined these average rates with the staffing plan in Chapter Two of the report.

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<sup>1</sup>This admin/log support position is used to fill part of the replacements for APMS and trainer positions. It is not related to the full-time admin/log staff position.