



VALUATION OF THE MILITARY RETIREMENT SYSTEM

SEPTEMBER 30, 2010

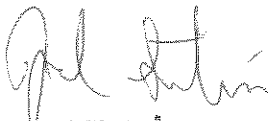
DoD Office of the Actuary
January 2012

ACTUARIAL CERTIFICATION

This report on the military retirement system as of September 30, 2010, has been prepared in accordance with generally accepted actuarial principles, standards, and practices. In preparing the report, we have relied upon information maintained by the Office of the Secretary of Defense regarding plan provisions, finances, and participants. The purpose of the actuarial valuation documented in this report is to develop actuarial liability and funding amounts to support the Secretary of Defense and the DoD Board of Actuaries (Board) in meeting the requirements of Chapter 74, Title 10, United States Code. Use of these results for other purposes may not be appropriate. Any rates or parameters included in this report should not be used for other purposes without complete comprehension of the underlying derivation. Please contact the DoD Office of the Actuary for further information.

We have performed the valuation using methods and assumptions approved by the Board. In general, the decrement rates used in the valuation are based on actual experience under the military retirement system. The annual economic assumptions include a 3% rate of inflation, a 3.75% across-the-board salary increase, and a 5.75% interest rate.

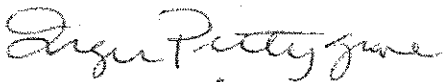
In our opinion, the actuarial methods and assumptions used in the preparation of this report are reasonable, and the valuation results present a fair picture of the financial condition of the military retirement system for purposes of meeting the requirements of Chapter 74, Title 10, United States Code.



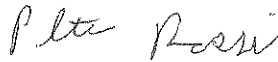
Joel Sitrin *
Chief Actuary
ASA, MAAA
Joel.Sitrin@osd.pentagon.mil



Pete Zouras
Deputy Chief Actuary
ASA, Enrolled Actuary No. 11-5314
Pete.Zouras@osd.pentagon.mil



Inger Pettygrove *
Actuary
FSA
Inger.Pettygrove@osd.pentagon.mil



Pete Rossi *
Actuary
FSA, CERA, FCA, MAAA
Peter.Rossi@osd.pentagon.mil

To contact the office by mail you can write to: Defense Human Resources Activity (DHRA)
Office of the Actuary
4800 Mark Center Drive, Suite 06J25-01
Alexandria, VA 22350-4000
(571) 372-1993

* Meets the qualification standards of the American Academy of Actuaries to render the actuarial opinion referenced above.

USE OF THIS REPORT

- **Intended Audience:** Those seeking actuarial information about the Military Retirement System (MRS) or financial information about the Military Retirement Fund (MRF).
- **Report Limitations:** Stated in “*Actuarial Certification*” section of this report (page 2).
- For a high-level summary and “bottom line” results, refer to the “*General Information and Key Result*” section (page 4).
- For those new to the MRS, the main text and associated tables/figures can be found in the main text (“*Valuation of the MRS*”).
- For those familiar with the MRS, the appendices and supplementary information provide additional technical and background information to DoD Office of the Actuary work.
- In various places throughout this report, figures may not add exactly due to rounding.
- Many references to “active duty” personnel throughout the report also include full-time support reservists. Similarly, many references to “reservists” or “selected reservists” exclude full-time support reservists.
- DoD Office of the Actuary contact information is located in the “*Actuarial Certification*” section of this report (page 2).

ABBREVIATIONS AND TERMS

Board	DoD Board of Actuaries
COLA	Cost-of-Living Adjustment
CPI	Consumer Price Index
CSB	Career Status Bonus
DIC	Dependency and Indemnity Compensation
DoD	Department of Defense
FY	Fiscal Year
GORGO	Actuarial Projection Model used by DoD OACT
MRF	Military Retirement Fund
MRS	Military Retirement System
NCP	Normal Cost Percentage
P.L.	Public Law
Redux	Reduced Benefit Formula
RSFPP	Retired Serviceman’s Family Protection Plan
OACT	DoD Office of the Actuary
SBP	Survivor Benefit Plan
Services	Army, Navy, Air Force, Marines
UFL	Unfunded Liability
U.S.C.	United States Code
VA	Department of Veterans Affairs

GENERAL INFORMATION AND KEY RESULTS
Military Retirement System – For Fiscal Year ending September 30, 2010

1. Name of Plan:

Military Retirement System

2. Name and Address of Plan Sponsor:

Department of Defense
1400 Defense Pentagon
Washington, DC 20301-1400

3. Type of Plan Entity:

Single-employer

4. Type of Plan:

Defined Benefit

5. Establishment of Funding Arrangement:

Public Law 98-94 (currently Chapter 74 of Title 10, U.S.C.)

6. Administrative Costs:

Not borne by the Plan

7. Funding Arrangement:

Trust Fund

8. Actuarial Normal Cost Method:

Aggregate Entry-Age Normal (AEAN) funding method

9. Oversight:

DoD Board of Actuaries. The Board approves methods and assumptions used in the valuation. The current members of the Board are:

James F. Verlautz, Chairman
Marcia A. Dush
Ronald Gebhardtsbauer

10. Plan Participant Information at End of Plan Year:

	<u>Members</u> (in 000s)	<u>Monthly Pay</u> (\$ in billions)
Active Duty and Full-time Reservists:	1,493	\$4.68
Selected Drilling Reservists:	773	\$0.48
Non-Selected Reservists – w/ 20 years:	220	(Not Paid)
Nondisability Retirees:	1,825	\$3.79
Disability Retirees:	93	\$0.11
Surviving Families:	295	\$0.30

GENERAL INFORMATION AND KEY RESULTS (Continued)
Military Retirement System – For Fiscal Year ending September 30, 2010

11. Valuation Input Data:

Extracts from files maintained by the Defense Manpower Data Center (DMDC)

12. Retirement Criteria:

- A. Nondisabled Retirement from Active Duty - Immediate after 20 years of service
- B. Disabled Retirement – Immediate, generally with no years of service requirement
- C. Nondisabled Retirement from Reserve Duty - Deferred to age 60 (or earlier in some cases) after 20 years of service

13. Actuarial Assumptions:

A. Economic:

(Annual Rates)

- 1) Inflation – 3.0%
- 2) Salary – 3.75%
- 3) Interest – 5.75%

B. Demographic:

- 1) Mortality and other assumptions: Based on Plan experience.
- 2) Mortality Improvement: Assumed to improve based the Society of Actuaries’ (SOA) Scale AA trend.

14. Accounting Results During Fiscal Year:

(\$ in billions)

- A. Benefits paid to participants: \$ 50.6
- B. Contributions from services: \$ 20.4
- C. Contributions from Treasury: \$ 63.1
- D. Investment Income: \$ 10.4

15. Actuarial Results at End of Fiscal Year:

(\$ in billions)

- A. Present Value of Future Benefits: \$1,458.1
- B. Actuarial Accrued Liability: \$1,225.2
- C. Actuarial Value of Assets: \$ 321.7
- D. Unfunded Accrued Liability: \$ 903.5
- E. Funded Ratio: 26%

16. Normal Cost Percentages (NCPs) Applied to Fiscal Year 2012 Basic Pay:

	<u>DoD</u>	<u>Treasury</u>	<u>Total</u>
Full-time:	34.3%	8.8%	43.1%
Part-time:	24.3%	3.6%	27.9%

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SUMMARY OF CHANGES FOR THE SEPTEMBER 30, 2010, VALUATION

Changes in Actuarial Assumptions

At its July 2010 meeting, the Office of the Actuary proposed and the DoD Board of Actuaries approved the following changes for the September 30, 2010, valuation.

Active Duty Valuation Non-Death Rates and Factors

The Board approved an update and refinements to non-death rates and factors used to value full-time (active duty) benefits. They increased the full-time DoD normal cost percentage (NCP)* by 1.4 percentage points, and had no effect on the part-time NCP. The new rates and factors led to an actuarial loss of \$2.1 billion (or 0.2% of the Accrued Liability) to the Fund. See Appendix F and Appendix G.

Active Duty Valuation Death Rates

The Board approved an update and refinements to the death rates used to value full-time benefits. They had no effect on the full- and part-time DoD NCPs to the nearest 0.1 percentage-point. The updated death rates led to an actuarial loss of \$0.1 billion (or 0.0%) to the Fund. See Appendix G.

Nondisabled Retiree Death and Other Loss Rates

The Board approved an update to the nondisabled retiree death and other loss rates used for the nondisability retiree benefits valuation. They increased the full-time DoD NCP by 0.2 percentage points, and decreased the part-time DoD NCP by 0.1 percentage-point. The updated rates led to an actuarial loss of \$20.0 billion (or 1.6%) to the Fund. See Appendix I.

* DoD pays only a portion of the total NCP. The portion attributable to concurrent receipt benefits is paid by Treasury.

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**SUMMARY OF ANTICIPATED CHANGES
FOR THE SEPTEMBER 30, 2011, VALUATION**

Changes in Actuarial Assumptions

At its July 2011 meeting, the DoD Board of Actuaries approved the following changes for the September 30, 2011, valuation.

Retired Pay Offset Factors

The Board approved an updated set of full and partial offset factors, and retired pay adjustment factors primarily related to compensation from the Department of Veterans Affairs (VA). They decrease the full-time DoD NCP by 2.6 percentage points, and have no impact on the part-time NCP to the nearest 0.1 percentage-point. The Office of the Actuary (OACT) estimates the new factors lead to an actuarial gain of \$5.3 billion (or 0.4% of the Accrued Liability) to the Fund. For the September 30, 2010, valuation, retired pay offset factors are described in Appendix F.

Mortality Improvement Factors

The Board approved the use of new factors that are based on military experience. They increase the full-time DoD NCP by 0.4 percentage points, and increase the part-time DoD NCP by 0.1 percentage-point. OACT estimates the new factors lead to an actuarial loss of \$9.2 billion (or 0.8%) to the Fund. For the September 30, 2010, valuation, mortality improvement factors are described in Appendix J.

Miscellaneous Refinements

The Board approved the implementation of other miscellaneous rate and factor updates including retiree divorce rates, and changing of the actuarial modeling platform. They have no effect on the full- and part-time DoD NCPs to the nearest 0.1 percentage-point. OACT estimates they have no effect to the nearest \$0.1 billion (or 0.0%) to the Fund accrued liability. For the September 30, 2010, valuation, the retiree divorce rates are found in Appendix I.

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VALUATION OF THE MILITARY RETIREMENT SYSTEM

Introduction

The military retirement system provides benefits for retirement from active duty and from the reserves, disability retirement benefits, optional survivor coverage, and a special compensation program for certain disabled retirees. A detailed description of benefits can be found in Appendix A, and a history of the system is in Appendix B.

Public Law 98-94 (currently Chapter 74 of Title 10, U.S.C.) established an aggregate entry-age normal cost funding method for the military retirement system starting October 1, 1984. Under this law, DoD pays the normal cost of the system and the Treasury Department makes payments from general revenues to amortize the unfunded liability, including any gains or losses that have arisen from assumption or benefit changes, or from assumed experience differing from actual experience. Public Law 108-136 modified this process such that DoD's normal cost contribution excludes the cost due to Concurrent Receipt benefits (refer to Appendix A for more information on Concurrent Receipt provisions). Treasury's total contribution includes an additional amount to fund the normal cost for Concurrent Receipt benefits.

Public Law 98-94 also established an independent three-member DoD Retirement Board of Actuaries who were appointed by the President. The Board is required to review valuations of the military retirement system; to determine the method of amortizing unfunded liabilities; to report annually to the Secretary of Defense; and to report to the President and the Congress on the status of the Military Retirement Fund at least every four years. The DoD Office of the Actuary provides all technical and administrative support to the Board. Public Law 110-181 eliminated the Retirement and Education Benefits Boards, and created a new single DoD Board of Actuaries appointed by the Secretary of Defense. Board duties with respect to the Retirement and Education Benefits Funds are similar, and the new law expands the Board's responsibilities to include oversight of any other Fund the Secretary of Defense deems necessary.

The terms of the Board members are fifteen years and a member can be removed only for misconduct or failure to perform the duties of the office. The current Board members are James F. Verlantz (Chairman), Marcia A. Dush, and Ronald Gebhardtsbauer. The DoD Chief Actuary is the Executive Secretary for the Board.

Military retired pay is based on "basic pay." This is the principal element of military compensation that all members receive; however, it is not analogous to private or public sector salaries for comparative purposes. Reasonable comparisons can be made to Regular Military Compensation (RMC). RMC is the sum of (1) basic pay, (2) the housing allowance, which varies by grade, location, and dependency status, (3) the subsistence allowance and, (4) the tax advantages accruing to allowances because they are not subject to federal income tax. Consequently, comparisons of military retired pay to other pension systems should recognize the relationship to RMC rather than to basic pay only. Appendix A contains a more complete description of this topic.

Valuation Data and Procedure

The valuation input data were extracted from files maintained at the Defense Manpower Data Center (DMDC). Data on individual retirees and survivors came from official files submitted by the Defense Finance and Accounting Service (DFAS). Reserve data were obtained from the Reserve Component Common Personnel Data System (RCCPDS), the official source for all reserve strengths and statistics. The DoD Office of the Actuary (OACT) reviews the data for reasonableness and consistency, but does not audit the data and relies on the file suppliers for its accuracy and comprehensiveness.

The most recent active duty data came from files provided by the four military personnel centers; these data were edited and adjusted by less than 0.1 percent to agree with official totals supplied by the DoD Comptroller. Reserve duty data was also edited and adjusted by less than 0.1 percent to agree with DoD Comptroller official totals. Dollar amounts for 2010 include the January 1, 2011, across-the-board pay raise. These totals are summarized in Table 1.

TABLE 1
INITIAL ACCOUNTING FIGURES AS OF SEPTEMBER 30

	<u>2010</u>	<u>2009</u>
Total Active Duty Personnel + Full-Time Reservists	1,493,233	1,480,142
Total Monthly Basic Pay	\$4.68 billion	\$4.56 billion
Total Selected Drilling Reservists	773,286	770,656
Total Monthly Basic Pay	\$0.48 billion	\$0.47 billion
Total Non-Selected Reservists (with 20 years)	220,080	223,901
Total Monthly Basic Pay	(Not Paid)	(Not Paid)
Total Number of Nondisability Retirees	1,824,539	1,812,771
Total Monthly Retired Pay	\$3.79 billion	\$3.76 billion
Total Number of Disability Retirees	92,804	91,539
Total Monthly Retired Pay	\$0.11 billion	\$0.12 billion
Total Number of Surviving Families	294,707	290,902
Total Monthly Survivor Annuities	\$0.30 billion	\$0.30 billion

Note: Some amounts do not reflect benefit increases described in Appendix A. Costs, liabilities, and outlays in this report, however, reflect these benefit increases unless otherwise stated.

Population and pay projections are generated by an actuarial projection model (GORGO¹). GORGO is a deterministic model; use of a deterministic model assumes the average outcome will occur annually over a period of time. A deterministic model uses the law of large numbers to capture various financial risks (such as mortality), making it an appropriate approach in projecting a large population such as the United States military.

Due to law changes, additional adjustments to the pay projection are made outside of GORGO. For use in this model, the data on active duty personnel and drilling reservists are grouped into cells by age and number of years of service. Each cell contains the number and the average basic pay for personnel with that particular combination of age and length of service. Data on the retired population and surviving families are grouped into cells by age, and each cell contains the number and total net annualized retired pay or survivor annuity.

Separate data arrays are maintained in GORGO for each of the population categories listed in Table 2. These data arrays are displayed in Appendix C.

In GORGO, these starting populations are projected year by year into the future. Each year personnel are moved from one population category to another (e.g., from active to retired, or dropped from the system altogether) by means of decrement rates such as withdrawal, nondisability retirement, temporary disability, permanent disability, transfer, death with and without survivors, etc. Basic pay scale increases are assumed to be 3.75 percent per year. Basic pay is also increased by individual promotion and longevity increases. Generally, retired pay and survivor annuities are increased by cost-of-living adjustments (COLAs) of 3 percent per year for retirees and survivors who receive a full COLA. At the end of each year, the number of people and the amounts paid in basic pay and benefits are saved, and the population is aged. After 100 years, when an immaterial number (less than 0.01 percent) of basic pay and benefit expenditures are projected, the present values of the series of future benefit payments and future basic pay outlays are determined, using the valuation interest rate of 5.75 percent per year. Because no new entrants come into the system, the projection is said to be “closed group.”

There is also an option in GORGO for an “open group” projection in which new entrants are added each year to meet projected endstrengths. Detailed results of an open group projection of the military retirement system appear in Appendix K.

An open group projection also appears later in this text (Table 9). This projection, which shows the past and projected flow of plan assets, includes the total basic payroll over the next 100 years, the normal cost contributions, the payments to amortize the unfunded liability, investment income, fund disbursements, and the fund balance. All of these items are discussed in detail throughout the text of this report. An overview of the GORGO process is illustrated in Figure 1.

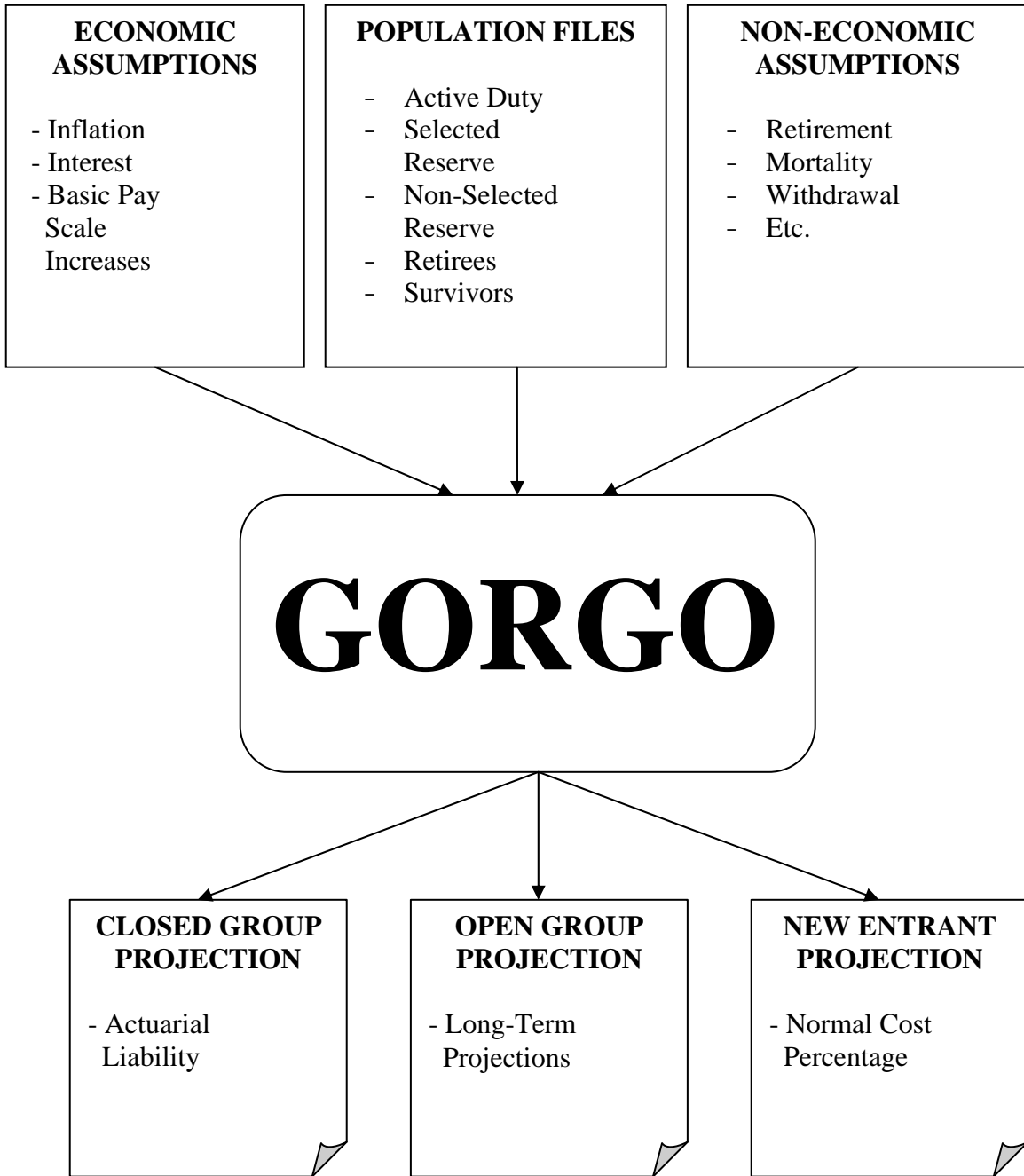
¹ GORGO is the name given to the program by a former DoD Chief Actuary. It was named after a monster featured in a 1961 British science fiction movie based on a variation of *Godzilla*.

TABLE 2

GORGO POPULATION CATEGORIES

1. Active duty populations and basic pay
 - a. Officers
 - b. Enlistees
2. Selected reserve populations, basic pay, and benefit formula
 - a. Officers
 - b. Enlistees
3. Non-selected reserve (those who have completed 20 good years and have not reached paid retirement) populations, basic pay, and benefit formula
 - a. Officers
 - b. Enlistees
4. Retiree populations, retired pay, and benefit formula
 - a. Nondisabled officers
 - b. Nondisabled enlistees
 - c. Reserve officers
 - d. Reserve enlistees
 - e. Disabled officers (Permanent and Temporary)
 - f. Disabled enlistees (Permanent and Temporary)
5. Surviving families in a survivor benefit plan, total annuities, and benefit formula
 - a. Retired Serviceman's Family Protection Plan (RSFPP)
 - b. Survivor Benefit Plan (SBP)
 - c. Reserve Component Survivor Benefit Plan (RCSBP)
 - d. Death on active duty
 - e. Minimum income
6. Typical new-entrant cohort
 - a. Officers
 - b. Enlistees

FIGURE 1
GORGO PROCESS OVERVIEW



Economic assumptions, i.e., the annual rate of inflation, the annual basic pay scale increases, and the annual valuation interest rate, were decided upon by the DoD Board of Actuaries after extensive analysis of past trends, current environment, and future expectations. A discussion of these trends and other considerations is contained in Appendix D.

The decrement rates and other non-economic assumptions can be categorized as follows:

1. Active duty decrement rates
2. Retiree and survivor decrement rates
3. Drilling and non-drilling (with 20 good years) reserve decrement rates
4. Internal computer program parameters
5. Other rates (e.g., mortality improvement)

In general, the decrement rates and GORGO parameters are based on military-specific experience. The rates and descriptions of how they were derived appear in Appendixes G through J. The internal computer program parameters, dealing with such matters as the survivor benefit elections, premium deductions, and member/beneficiary age differences, appear in Appendix F.

Assets

The assets of the Military Retirement Fund (the Fund) are invested in special issue Treasury obligations bearing interest at rates determined by the Secretary of the Treasury taking into consideration current market yields for outstanding marketable U.S. obligations of comparable maturities. Each security issued to the Fund “mirrors” a security that has been issued to the public, i.e., it has the same maturity date and coupon rate. The special issue security that is mirrored may have been issued recently, or at any time in the past. Under current procedures adopted by Treasury, the investment manager (DFAS Trust Fund Accounting Division) is permitted to redeem long-term special issue securities at any time before maturity for their fair market value, which is based on the bid price for the public issue with the same maturity date and coupon rate. However, Treasury policy encourages a buy-and-hold approach giving consideration to the needs of the Fund in determining the maturities of securities purchased.

The investment manager must follow the asset investment strategy approved by the DFAS Investment Board at their semiannual meetings. The current asset investment strategy is to invest the large majority of future purchases in Treasury Inflation-Protected Securities (TIPS) using a long-term ladder approach. The ladder approach immunizes the investments against adverse changes in market yields while lessening the dependency on discrete, future dates. This strategy hedges almost all of the inflationary pressures while minimizing liquidity risks to the Fund. Timing issues and the inconsistency between the TIPS calculation of inflation (CPI-U) and the Fund’s crediting of inflation (CPI-W) to retiree and survivor benefits leave some residual inflationary risks.

For purposes of determining the unfunded liability, the assets of the Fund are valued using the amortized cost method. Under this method, the yield to maturity of a security valued at

any point in time is equal to the yield to maturity at the time of purchase. In the valuation of the military retirement system, the amortized cost value is referred to as the “actuarial value of assets.” The actuarial value of assets is determined by amortizing premium and discount over the life of the securities. The total investment return includes: the interest coupons received; the change in the amortized cost value during the year; and the inflation compensation accrued from the holdings of TIPS. The actuarial value of assets used in the determination of the unfunded liability includes the “accrued interest,” which is the amount of the next semiannual interest coupon payment that has accrued since the date of the last coupon payment. The amount of the “accrued interest” is determined by multiplying the coupon payment by the ratio of the time that has elapsed since the last coupon payment date to the total time between coupon payments. Table 3 presents a statement of the actuarial value of assets as of September 30, 2010; Table 4 presents a statement of changes in the actuarial value of assets.

In an open group projection of a retirement system where the total number of employees is held constant, the number of retirees and survivors on the rolls at year end, as well as the number withdrawing, retiring, dying, etc., each year, eventually levels out. When this occurs, the population is said to be “stationary.” In this report’s open group projection, DoD-projected endstrengths are used through the end of FY16 (as depicted in Table 9). Subsequently, the force size is held constant each year. However, the assumption of future mortality improvement results in a small increase in the retired population each year, so that the retired population is nearly, but not completely, stationary.

When a population becomes stationary, the fund disbursements increase each year at the same rate as total pay, which is 3.75 percent per year. If the method of funding the system is theoretically sound, the value of the assets in the Fund will also increase at this same rate, and thus will become a level percentage of pay. Otherwise, the fund would either increase indefinitely as a percent of pay, or decrease until it was zero. Practical considerations, including mortality improvement, cause the fund disbursements to grow at an ultimate rate slightly higher than 3.75 percent.

A portion of the investment income must be used to generate the 3.75 percent Fund increases and cannot be used to pay benefits. For example, in the year 2040 (on Table 9), the projected normal cost payment is \$67.7 billion, the investment income is \$206.0 billion, and Fund disbursements are \$133.1 billion. The beginning-of-year fund balance is \$3,609.2 billion. The two sources of Fund income will cover benefit payments plus 3.75 percent of the beginning-of-the-year fund balance. That is, \$67.7 billion plus \$206.0 billion exceeds \$133.1 billion plus \$135.3 billion ($\$3,609.2 \text{ billion} \times .0375$)—the amount that would be required for the fund to grow by 3.75 percent during the year. The lack of equality in the later years of the projection is due to (1) mortality improvement, which keeps the retired population from being stationary, and (2) the difference between the short-term economic assumptions and the ultimate economic assumptions (see Table 9 Footnote). Additionally, the projection uses unfunded liability amortization payments determined in the September 30, 2010, valuation.

Under generally accepted accounting principles (GAAP), private sector plans must also provide a “Statement of Net Assets Available for Benefits,” where the assets are valued at fair market value. This statement is included in Appendix L and is for descriptive purposes only.

TABLE 3
 DEPARTMENT OF DEFENSE
 MILITARY RETIREMENT FUND
 STATEMENT OF ACTUARIAL VALUE OF ASSETS
 (\$ in millions)

<u>Assets</u>	For the Plan Year Ended September 30:	
	<u>2010</u>	<u>2009</u>
1) Investments, at book value:		
U.S. Government securities ¹	\$318,565	\$275,476
2) Accounts receivable:		
a) Accrued interest ²	\$3,122	\$2,871
b) Due from military retirees or their survivors	\$37	\$32
c) Intragovernmental	\$0	\$0
3) Cash:	\$25	\$20
<u>Actuarial value of assets</u>	<u>\$321,749</u>	<u>\$278,399</u>

¹ Book value is determined by 1) amortizing premium and discount over the life of the securities using the effective interest method and 2) including additional inflation compensation from TIPS.

² Includes accrued interest receivable and interest purchased.

TABLE 4
DEPARTMENT OF DEFENSE
MILITARY RETIREMENT FUND
STATEMENT OF CHANGES IN ACTUARIAL VALUE OF ASSETS
(\$ in millions)

	For the Plan Year Ended September 30:	
	<u>2010</u>	<u>2009</u>
1) Actuarial value of assets at beginning of plan year:	\$278,399	\$253,089
2) Investment income:		
a) Interest/Inflation	\$12,251	\$4,714
b) Net appreciation (depreciation) in book value of investments ¹	\$(1,833)	\$(1,859)
3) Contributions:		
a) From Services	\$20,377	\$17,543
b) Appropriation to amortize the unfunded liability	\$58,619	\$51,125
c) Appropriation for Treasury Normal Cost Contribution	\$4,516	\$3,745
4) Total additions (2 + 3):	\$93,930	\$75,268
5) Change in Accounts Receivable	\$5	\$7
6) Benefits paid to participants:	<u>\$50,585</u>	<u>\$49,964</u>
Actuarial value of assets (1 + 4 + 5 - 6):	<u>\$321,749</u>	<u>\$278,399</u>

¹ Investments bought, sold and held during the plan year ended September 30 appreciated (depreciated) in value as follows:

	<u>2010</u>	<u>2009</u>
Amortized discount	\$53	\$41
Amortized premium	\$(1,886)	\$(1,900)
Gain (loss) on sale *	<u>\$0</u>	<u>\$0</u>
	\$(1,833)	\$(1,859)

* Gain (loss) on sale is only shown for informational purposes and is not included in the net appreciation (depreciation).

Normal Cost

The aggregate entry-age normal cost percentage (NCP) is the level percentage of basic pay that must be contributed over the entire active career of a typical group of new entrants to pay for all the future retirement and survivor benefits of that group. It is determined by using the new-entrant cohort as the starting population in a GORGO projection. Their basic pay and benefits are projected over the next 100 years, and then discounted back to the present (i.e. valuation date) to find the NCP. Mathematically, a NCP is calculated by dividing the present value of future benefits for the entire cohort by the present value of future basic pay.

As described in Appendix A, there are three distinct nondisability benefit formulas (relevant to three distinct populations) within the military retirement system. Retirement benefits are based on final basic pay (Final Pay) for military personnel who first became members of a uniformed service before September 8, 1980, and are based on the average of the highest 36 months (High-3) for those becoming members on or after this date. Additionally, active duty military personnel who first became members of a uniformed service on or after August 1, 1986, are High-3 unless they elect Career Status Bonus (CSB)/Redux, which provides them with a bonus in exchange for reduced (Redux) benefits.

Public Law 99-661, enacted in November 1986, mandated that two separate NCPs be used for the valuation of the military retirement system. One NCP is for active duty personnel and full-time reservists (full-time) and one is for part-time reservists (part-time). Full-time and part-time NCPs are calculated for each of the three separate benefit formulas. Only full-time personnel are under the CSB/Redux benefit formula, thus an analogous part-time NCP is not applicable (“N/A”). The FY11 NCPs are summarized below (with DoD NCPs in parentheses):

<u>Benefit Formula</u>	<u>Full-Time</u>	<u>Part-Time</u>
Final Pay	48.4% (38.5%)	29.4% (25.7%)
High-3	43.9% (34.9%)	27.9% (24.3%)
CSB/Redux ²	43.1% (34.3%)	-- N/A --

Public Law 108-136 required the Treasury to pay the normal cost arising from increased benefits due to Concurrent Receipt into the Fund at the beginning of each year. The NCPs shown above include both the Treasury and the DoD portion. Table 7 depicts the DoD and Treasury NCPs separately.

Table 5 shows the expected percentage of the total basic payroll that will be paid during the fiscal year to all active duty personnel who entered a uniformed service since the beginning of fiscal year t-k, where k can take any value from 0 to 29. For example, during FY11 (t =2011), 3 percent of the expected basic payroll will be paid to personnel entering service in that fiscal year (k = 0), and 100 percent of the expected basic payroll will be paid to persons entering service since the beginning of FY81 (k = 30), while 77 percent will be paid since the beginning of FY96 (k = 15). The data and methodology used to derive this table are described in Appendix E.

² This NCP represents a blend of NCPs for CSB/Redux and HI-3 benefit formulas based on the CSB/Redux Election Proportion (see Appendix F).

TABLE 5

PERCENTAGE OF TOTAL BASIC PAYROLL PAID DURING FISCAL YEAR 't' TO ALL ACTIVE
DUTY PERSONNEL ENTERING SERVICE DURING OR AFTER SPECIFIC YEAR OF ENTRY

<u>Year of Entry</u>	<u>Percentage</u>
t	3%
t-1 or later	10
t-2 or later	18
t-3 or later	26
t-4 or later	32
t-5 or later	38
t-6 or later	43
t-7 or later	47
t-8 or later	52
t-9 or later	56
t-10 or later	60
t-11 or later	63
t-12 or later	67
t-13 or later	70
t-14 or later	74
t-15 or later	77
t-16 or later	80
t-17 or later	83
t-18 or later	86
t-19 or later	89
t-20 or later	92
t-21 or later	94
t-22 or later	95
t-23 or later	96
t-24 or later	97
t-25 or later	98
t-26 or later	98
t-27 or later	99
t-28 or later	99
t-29 or later	100

*** Based on basic payroll data for Fiscal Years 1987 to 1991, as described in Appendix E.

Since 100 percent of the basic payroll for FY11 is expected to be paid to personnel entering service since the beginning of FY81, the normal cost for personnel whose retirement benefits are based on Final Pay³ receives no weight (it is shown for informational purposes). Of the post-FY80 new entrants, 97.2 percent is expected to be attributable to the CSB/Redux members (entering on or after August 1, 1986) and the remaining 2.8 percent to the High-3 members. The 97.2 percent was derived by interpolating between the factors for FY86 (k = 25) and FY87 (k = 24) years of entry. The FY11 weighted aggregate full- and part-time NCPs are obtained by weighting their respective NCPs for the CSB/Redux formula by 97.2 percent, and the NCPs for the High-3 formula by 2.8 percent. The resulting sum of the DoD and Treasury components of the weighted aggregate full-time NCP is 43.1 percent, and the weighted aggregate part-time NCP is 27.9 percent. Due to federal budget deadlines, the two NCPs used to determine the actual contributions to the Fund must be established in advance of implementation and may vary from those actually derived in a valuation.

Table 6 summarizes the components of the FY11 normal cost percentages.

TABLE 6				
NORMAL COST AS A PERCENT OF BASIC PAY (NCPs)				
(DoD Normal Cost Percentage in Parentheses)				
<u>FULL-TIME</u>	<u>FINAL PAY</u>	<u>HIGH-3</u>	<u>CSB/REDUX</u>	<u>FY11 Weighted</u>
Nondisability benefits	45.9 (36.4)	41.7 (33.1)	40.8 (32.5)	40.8 (32.5)
Disability benefits	0.9 (0.7)	0.8 (0.6)	0.8 (0.6)	0.8 (0.6)
Survivor benefits	<u>1.6 (1.3)</u>	<u>1.5 (1.2)</u>	<u>1.5 (1.2)</u>	<u>1.5 (1.2)</u>
Total	48.4 (38.5)	43.9 (34.9)	43.1 (34.3)	43.1 (34.3)
 <u>PART-TIME</u>				
Nondisability benefits	27.3 (23.8)	25.8 (22.6)	-- N/A --	25.8 (22.6)
Disability benefits	0.0 (0.0)	0.0 (0.0)	-- N/A --	0.0 (0.0)
Survivor benefits	<u>2.1 (1.8)</u>	<u>2.0 (1.7)</u>	<u>-- N/A --</u>	<u>2.0 (1.7)</u>
Total	29.4 (25.7)	27.9 (24.3)	-- N/A --	27.9 (24.3)
<p>- Note that columns may not add exactly due to rounding.</p> <p>- Disability benefits from part-time personnel are not currently modeled (in GORGO).</p> <p>- Only full-time personnel are under the CSB/Redux benefit formula, thus an analogous part-time NCP is not applicable ("N/A").</p>				

³ Personnel hired before September 8, 1980, have their retirement benefits based on Final Pay, but for purposes of determining the weights in the weighted NCP, we use personnel hired before October 1, 1980.

As can be determined from this table, about 95 percent of the full-time normal cost stems from nondisability retirement. Based on current decrement rates, 19 percent of a typical group of new entrants attains 20 years of active duty service and becomes eligible for nondisability retirement from active duty. Specifically, 49 percent of new officers and 17 percent of new enlistees attain 20 years of active duty service.⁴ It should be noted that some military personnel who begin their careers on active duty move to the reserves and retire from there. This is modeled through the allocation of a portion of the reserve benefit, in present values terms, to the full-time normal cost (see Appendix F).

Table 10 lists the past and projected weighted aggregate full-time and part-time NCPs under current law in the normal cost columns. The columns are separated into the DoD and Treasury NCPs due to Public Law 108-136. In 2012, both the full-time and part-time sum of the DoD and Treasury components of the weighted aggregate percentages are at the level of the CSB/Redux normal cost percentages [full-time 43.1 percent ($43.1 = 34.3 + 8.8$); part-time 27.9 percent ($27.9 = 24.3 + 3.6$)] since virtually all non-retired personnel have entered the uniformed service on or after August 1, 1986, (the above figures may not add due to rounding). The same also holds true for 2011, which are different due to advance federal budget deadlines.

Amortization of Unfunded Liability

Under Public Law 98-94, normal cost contributions began to be made by DoD on behalf of all military personnel on October 1, 1984. Since normal cost contributions had not been made for service prior to this date, there was an initial unfunded accrued liability, or “initial unfunded liability,” of \$528.7 billion as of September 30, 1984. If this amount had been deposited in the retirement fund on September 30, 1984, then it, together with the future normal cost payments to be made on behalf of all active duty personnel and drilling reservists over the balance of their active careers, plus investment earnings at the assumed rate, would have been sufficient to provide all expected retirement and survivor benefits for those in the system on that date.

⁴ As in past valuation reports, these percentages are stated from the perspective of a new entrant cohort still in active service surviving to its first fiscal-year boundary (i.e., September 30). If losses prior to the first fiscal-year boundary are taken into account, the percentages would be reduced by approximately 15 percent (19 percent would become 16%). The stated percentages also reflect the effect of reentrants, i.e., members who appear in the active duty population one year without having been there the year before, but are not new entrants. Without the effect of reentrants, the proportion of a typical group of new entrants who attain 20 years of active duty service is reduced from 19 percent to 15 percent. The paygrade transfer rates have no effect. A similar computation can be performed for the part-time normal cost. Based on current decrement rates, the percentage is higher for a typical group of new entrants (to the reserves) who become eligible for retirement benefits from the reserves.

The Board of Actuaries originally determined that the initial unfunded accrued liability of the system (\$528.7 billion) should be amortized with payments equal to 33 percent of the second preceding fiscal year's basic payroll. It was originally projected that this method would amortize the initial unfunded liability over 60 years. However, economic assumption changes extended the amortization period well beyond 60 years. As a result, the Board revised the amortization method of the original unfunded liability in such a way that the amortization would have been completed in 2043. In more recent years, it was determined that the Military Retirement Fund was projected to have a negative balance for several years before becoming positive again. The Board decided to shorten the amortization period to 50 years in 1996. The Board again shortened the amortization period in 2007 to 42 years in order for the payments to cover the interest on the unfunded liability each year. The initial unfunded liability is now expected to be fully amortized in 2025.

Changes in the unfunded liability can also arise because of modifications to benefit provisions, changes in actuarial assumptions, and deviations in actual experience from expected experience (gains and losses). The Board approved a method to amortize these changes over 30 years by payments that increase in absolute value at the same rate as the annual long-term basic pay scale assumption (currently 3.75 percent). A detailed description of the methods and computations used to calculate the payment streams for changes in unfunded liability can be found in Appendix M.

Unfunded Accrued Liability as of September 30, 2010

Table 7 summarizes the calculation of the unfunded accrued liability as of September 30, 2010. The present value of future benefits is obtained by projecting future benefits for the total covered population (closed group with no new entrants) as of September 30, 2010, and discounting these benefits back to the present (i.e. valuation date). The GORGO actuarial model projects benefits for the current active and retired populations over the duration of their lifetimes. Due to recent law changes, additional adjustments to the pay projections are made outside of the GORGO model. The initial retirement benefits for military personnel are based on their total projected service at retirement, the applicable benefit formula, and estimated basic pay increases. Subsequent retirement benefits include estimated cost-of-living adjustments and the age 62 adjustment for those retiring under the CSB/Redux formula.

The present value of future normal cost contributions is obtained by (1) using GORGO to project future yearly full-time and part-time basic pay for the September 30, 2010, covered population, (2) multiplying the pay by the total projected (DoD and Treasury) full-time and part-time weighted aggregate entry-age NCPs, and (3) discounting the resulting normal costs back to September 30, 2010. For this closed group, the relative percentages of basic pay subject to the three separate benefit formulas will change over time as fewer members are covered under the High-3 and Final Pay formulas. The *weighted* full- and part-time NCPs that are multiplied against the future full- or part-time pay in each year reflect expected changing percentages of pay going to members covered by the multiple benefit formulas. This weighted procedure is roughly equivalent in the aggregate to projecting separately the pay of each of the six groups of active duty and selected reserve members and multiplying it by the individual group's NCP.

The sum of the DoD and Treasury components of the weighted aggregate entry-age normal cost percentages for FY11 are 43.1 percent full-time and 27.9 percent part-time. Federal budget deadlines require the establishment of normal cost percentages in advance of the valuation. Consequently, the percentages actually implemented in a fiscal year may vary from those derived in the valuation. These differences, which are small unless major actuarial assumptions are changed, are reflected in the unfunded liability by using the implemented normal cost in the first year of the projection.

Deducting the present value of future normal costs and the actuarial asset value of the Fund from the present value of future benefits leaves an unfunded liability of \$903.5 billion as of September 30, 2010. This was 0.4 percent more than the expected unfunded liability of \$898.8 billion. The expected unfunded liability is what the unfunded liability would have been if all actuarial assumptions had been realized and all benefit formulas had remained unchanged. The fact that the actual unfunded liability is more than expected means that there was a total FY10 loss of \$4.7 billion (\$898.8 billion minus \$903.5 billion). The components of this loss are outlined in Table 8. The total experience loss is divided into four segments: (1) the loss due to the difference between the actual interest rate (3.2%) earned by the fund and the assumed interest rate (5.75%); (2) the gain due to the actual COLA (0.0%) increase being different from that assumed (3.0%); (3) the gain due to the actual salary (1.4%) increase being different from that assumed (3.75%); and (4) the loss due to the difference between the actual experience and all non-economic assumptions for the year. See the Summary of Changes for the September 30, 2010, Valuation for a more detailed discussion of the actuarial assumptions outlined in Table 8.

These changes in unfunded liability were used to calculate the October 1, 2011, unfunded liability payment. The total payment was determined to be \$64.751 billion. This total payment includes (1) a payment of \$75.757 billion to amortize the original unfunded liability, plus (2) an amount of \$0.171 billion to amortize changes in actuarial assumptions, plus (3) an amount of \$7.643 billion to amortize benefit changes, less (4) an amount of \$18.820 billion to amortize total combined experience gains and losses through FY10. The detailed calculations of these payment components are located in Appendix M. Tables 11 and 12 show the projection of the unfunded liability payments and unfunded liability balances. Tables 9 and 10 display all projected transactions to the Fund.

Starting in FY05, the total payment to be made by Treasury includes, in addition to the unfunded liability amortization amount, the amount required by Public Law 108-136 to pay for the increased normal cost due to Concurrent Receipt benefits. This amount is \$5.376 billion for FY12; thus, the total Treasury payment on October 1, 2011, is \$70.127 billion (\$64.751 billion + \$5.376 billion). Detailed calculations of the total Treasury payment are also located in Appendix M.

Other measures of a retirement system's liabilities (required for private sector plans under GAAP) are the "Accumulated Plan Benefits" and the "Market Value of Assets." In prior years, both these items and explanatory notes were included in Appendix L. Currently, only the "Market Value of Assets" is shown for informational purposes as well as other financial statement disclosures and comparisons.

TABLE 7

**MILITARY RETIREMENT SYSTEM
ACTUARIAL STATUS INFORMATION
(\$ in billions)**

		For the Plan Year Ended September 30:	
		<u>2010</u>	<u>2009</u>
1.	Present value of future benefits		
	a. Annuitants now on roll	\$768.0	\$751.8
	b. Nonretired reservists	\$173.6	\$168.7
	c. Active duty personnel ¹	<u>\$516.5</u>	<u>\$478.7</u>
	TOTAL	\$1,458.1	\$1,399.2
2.	Present value of future normal cost contributions	\$232.9	\$212.3
3.	Actuarial accrued liability	\$1,225.2	\$1,186.9
4.	Actuarial value of assets ²	\$321.7	\$278.4
5.	Unfunded accrued liability	\$903.5	\$908.5
6.	DoD normal cost percentage (NCP) ³ to be applied to basic pay in fiscal year	<u>FY 2012</u>	<u>FY 2011</u>
	a. Full-time	34.3%	32.7%
	b. Part-time	24.3%	24.4%
7.	Treasury normal cost percentage (NCP) ⁴ to be applied to basic pay in fiscal year	<u>FY 2012</u>	<u>FY 2011</u>
	a. Full-time	8.8%	8.2%
	b. Part-time	3.6%	3.2%

Basic pay is only a portion of active duty military compensation. See The Military Retirement System: Benefits (Appendix A) for details.

¹ The future benefits of active duty personnel expected to retire as reservists are counted on line 1.b.

² The actuarial value of assets is determined using the amortized cost method from Table 4.

³ Due to the need to establish the NCPs in advance of implementation (federal budget deadlines), the percentages actually used in a fiscal year may vary from the ones derived in the valuation.

⁴ Public Law 108-136 requires the Department of Treasury to pay the normal cost resulting from the increase in benefits due to Concurrent Receipt.

TABLE 8
 FY 2010 CHANGE IN UNFUNDED LIABILITY
 (\$ in billions)

	For the Plan Year Ended September 30, 2010	
1. Actual unfunded accrued liability (9/30/10)	\$903.5	
2. Expected unfunded accrued liability (9/30/10)	\$898.8	
3. Total gain/(loss)	(\$4.7)	0.4%
a. Total experience gain/(loss)	\$17.6	1.4%
Interest assumption	(\$8.2)	2.5%
COLA assumption	\$22.3	1.8%
Salary assumption	\$9.5	0.8%
Non-economic assumptions	(\$6.0)	0.5%
b. Total benefit change gain/(loss)	\$0.0	0.0%
c. Total assumption change gain/(loss)	(\$22.2)	1.8%
Active Duty Valuation Non-Death Rates/Factors	(\$2.1)	0.2%
Active Duty Valuation Death Rates	(\$0.1)	0.0%
Nondisabled Retiree Death and Non-Death Loss Rates	(\$20.0)	1.6%

(Percentages shown are ratios of absolute values of each gain or loss component to the accrued liability (Table 7, line 3), except the percentage given for the experience gain/(loss) due to the interest assumption: it is the ratio of the gain or loss to the actuarial value of assets (Table 7, line 4). In this table, negative values represent actuarial losses.)

TABLE 9
MILITARY RETIREMENT SYSTEM
PAST AND PROJECTED FLOW OF PLAN ASSETS ¹
(In Billions of Dollars and as a Proportion of Payroll)

Fiscal Year	Basic Payroll ²	Contributions Received										Fund Balance, End of Year ⁶	
		From DoD, for Normal Costs ³		From Treasury, for Normal Costs ³		From Treasury, for Amortization of Unfunded Liability ⁴		Investment Income		Fund Disbursements ⁵			
1985	\$33.5	\$17.0	(50.7%)	---	---	\$9.5	(28.4%)	\$1.1	(3.3%)	\$15.8	(47.2%)	\$11.8	(35.2%)
1986	35.4	17.4	(49.2)	---	---	10.5	(29.7)	2.5	(7.1)	17.6	(49.7)	24.6	(69.5)
1987	36.4	18.3	(50.3)	---	---	10.5	(28.8)	3.6	(9.9)	18.1	(49.7)	38.9	(106.9)
1988	37.3	18.4	(49.3)	---	---	10.3	(27.6)	5.0	(13.4)	17.5	(46.9)	53.4	(143.2)
1989	38.6	18.5	(47.9)	---	---	9.8	(25.4)	6.1	(15.8)	20.2	(52.3)	67.6	(175.1)
1990	39.8	16.3	(41.0)	---	---	10.6	(26.6)	7.3	(18.3)	21.5	(54.0)	80.4	(202.0)
1991	42.3	17.2	(40.7)	---	---	10.8	(25.5)	8.5	(20.1)	23.1	(54.6)	93.7	(221.5)
1992	41.1	16.3	(39.7)	---	---	11.2	(27.3)	9.4	(22.9)	24.5	(59.6)	106.1	(258.2)
1993	38.9	13.2	(33.9)	---	---	12.3	(31.6)	10.0	(25.7)	25.7	(66.1)	115.9	(297.9)
1994	38.3	12.8	(33.4)	---	---	11.9	(31.1)	10.3	(26.9)	26.7	(69.7)	124.2	(324.3)
1995	37.1	12.2	(32.9)	---	---	11.5	(31.0)	10.9	(29.4)	27.8	(74.9)	131.0	(353.1)
1996	36.7	11.2	(30.5)	---	---	10.7	(29.2)	11.3	(30.8)	28.8	(78.5)	135.3	(368.7)
1997	36.8	11.1	(30.2)	---	---	15.2	(41.3)	11.9	(32.3)	30.2	(82.1)	143.3	(389.4)
1998	37.1	10.4	(28.0)	---	---	15.1	(40.7)	12.2	(32.9)	31.1	(83.8)	149.9	(404.0)
1999	37.6	10.4	(27.7)	---	---	15.3	(40.7)	12.4	(33.0)	31.9	(84.8)	156.0	(414.9)
2000	39.0	11.4	(29.2)	---	---	15.3	(39.2)	12.7	(32.6)	32.8	(84.1)	162.7	(417.2)
2001	40.9	11.4	(27.9)	---	---	16.1	(39.4)	13.2	(32.3)	34.1	(83.4)	169.2	(413.7)
2002	44.7	12.9	(28.9)	---	---	17.0	(38.0)	12.4	(27.7)	35.1	(78.5)	176.5	(394.9)
2003	52.0	13.7	(26.3)	---	---	17.9	(34.4)	10.0	(19.2)	35.6	(68.5)	182.6	(351.2)
2004	53.6	14.1	(26.3)	---	---	18.2	(34.0)	10.1	(18.8)	37.0	(69.0)	188.0	(350.7)
2005	56.3	15.0	(26.6)	\$1.5	(2.7%)	21.4	(38.0)	10.9	(19.4)	39.0	(69.3)	197.9	(351.5)
2006	54.0	13.9	(25.7)	2.3	(4.3)	23.2	(43.0)	12.3	(22.8)	41.1	(76.1)	208.4	(385.9)
2007	56.4	14.5	(25.7)	2.5	(4.4)	26.0	(46.1)	10.3	(18.3)	43.5	(77.1)	218.2	(386.9)
2008	59.2	16.1	(27.2)	2.8	(4.7)	46.2	(78.0)	15.6	(26.4)	45.8	(77.4)	253.1	(427.5)
2009	63.0	17.5	(27.8)	3.7	(5.9)	51.1	(81.1)	2.9	(4.6)	50.0	(79.4)	278.4	(441.9)
2010	64.4	20.4	(31.7)	4.5	(7.0)	58.6	(91.0)	10.4	(16.1)	50.6	(78.6)	321.7	(499.5)

TABLE 9 (cont.)

**MILITARY RETIREMENT SYSTEM
PAST AND PROJECTED FLOW OF PLAN ASSETS¹
(In Billions of Dollars and as a Proportion of Payroll)**

Fiscal Year	Basic Payroll ²	Contributions Received											
		From DoD, for Normal Costs ³		From Treasury, for Normal Costs ³		From Treasury, for Amortization of Unfunded Liability ⁴		Investment Income		Fund Disbursements ⁵		Fund Balance, End of Year ⁶	
2011	\$61.9	\$19.8	(31.9%)	\$4.8	(7.7%)	\$61.4	(99.2%)	\$21.4	(34.6%)	\$50.8	(82.2%)	\$378.3	(611.4%)
2012	63.1	21.0	(33.4)	5.2	(8.3)	64.8	(102.7)	24.9	(39.5)	51.7	(81.9)	442.5	(701.8)
2013	64.8	21.6	(33.4)	5.4	(8.3)	67.2	(103.6)	28.7	(44.3)	53.1	(81.9)	512.3	(790.3)
2014	66.7	22.2	(33.4)	5.5	(8.3)	69.7	(104.5)	32.9	(49.3)	54.7	(82.0)	588.0	(881.8)
2015	68.6	22.9	(33.4)	5.7	(8.3)	72.3	(105.4)	37.3	(54.4)	56.2	(81.9)	670.0	(976.7)
2016	70.3	23.4	(33.3)	5.8	(8.3)	75.0	(106.8)	42.2	(60.0)	57.8	(82.2)	758.7	(1,079.9)
2017	72.2	24.0	(33.3)	6.0	(8.3)	77.8	(107.9)	47.4	(65.7)	59.4	(82.3)	854.6	(1,184.4)
2018	74.4	24.8	(33.3)	6.2	(8.3)	80.8	(108.6)	53.1	(71.4)	60.9	(81.8)	958.5	(1,288.4)
2019	76.7	25.6	(33.3)	6.4	(8.3)	83.8	(109.2)	59.2	(77.2)	62.6	(81.6)	1,070.8	(1,395.7)
2020	79.2	26.4	(33.3)	6.6	(8.3)	86.9	(109.8)	65.8	(83.2)	64.9	(81.9)	1,191.6	(1,505.1)
2021	82.0	27.3	(33.3)	6.8	(8.3)	90.2	(110.0)	72.9	(89.0)	67.3	(82.1)	1,321.6	(1,611.5)
2022	84.9	28.3	(33.3)	7.0	(8.3)	93.6	(110.2)	80.6	(94.9)	69.9	(82.3)	1,461.1	(1,720.5)
2023	87.9	29.3	(33.3)	7.3	(8.3)	97.1	(110.4)	88.8	(101.0)	72.6	(82.5)	1,611.0	(1,832.3)
2024	91.0	30.3	(33.3)	7.5	(8.3)	100.7	(110.7)	97.6	(107.2)	75.4	(82.8)	1,771.8	(1,947.3)
2025	94.2	31.4	(33.3)	7.8	(8.3)	104.5	(111.0)	107.0	(113.6)	78.2	(83.0)	1,944.2	(2,064.6)
2026	97.5	32.5	(33.3)	8.1	(8.3)	108.4	(111.2)	117.1	(120.1)	81.1	(83.2)	2,129.1	(2,183.9)
2027	100.9	33.6	(33.3)	8.3	(8.3)	-2.3	(-2.2)	121.3	(120.2)	84.2	(83.4)	2,205.9	(2,185.8)
2028	104.5	34.8	(33.3)	8.6	(8.3)	14.1	(13.5)	126.6	(121.1)	87.5	(83.7)	2,302.5	(2,202.8)
2029	108.4	36.1	(33.3)	9.0	(8.3)	14.6	(13.5)	132.2	(122.0)	90.9	(83.9)	2,403.4	(2,218.2)
2030	112.4	37.4	(33.3)	9.3	(8.3)	15.2	(13.5)	138.0	(122.8)	94.1	(83.8)	2,509.1	(2,232.6)
2031	116.5	38.8	(33.3)	\$9.6	(8.3)	15.7	(13.5)	144.0	(123.6)	97.5	(83.7)	2,619.8	(2,248.1)
2032	120.8	40.2	(33.3)	10.0	(8.3)	16.3	(13.5)	150.4	(124.5)	101.1	(83.7)	2,735.7	(2,264.8)
2033	125.3	41.7	(33.3)	10.4	(8.3)	16.9	(13.5)	157.1	(125.4)	104.7	(83.5)	2,857.1	(2,280.6)
2034	130.0	43.3	(33.3)	10.7	(8.3)	17.6	(13.5)	164.0	(126.2)	108.4	(83.4)	2,984.3	(2,295.9)
2035	134.9	44.9	(33.3)	11.1	(8.3)	1.5	(1.1)	170.4	(126.3)	112.2	(83.1)	3,100.2	(2,298.0)
2036	140.1	46.6	(33.3)	11.6	(8.3)	0.4	(0.3)	177.0	(126.3)	116.0	(82.8)	3,219.7	(2,297.9)
2037	145.5	48.4	(33.3)	12.0	(8.3)	0.4	(0.3)	183.8	(126.3)	120.0	(82.5)	3,344.4	(2,298.2)
2038	151.1	50.3	(33.3)	12.5	(8.3)	0.4	(0.3)	190.9	(126.4)	124.2	(82.2)	3,474.3	(2,299.9)
2039	156.8	52.2	(33.3)	13.0	(8.3)	0.0	(0.0)	198.3	(126.5)	128.6	(82.0)	3,609.2	(2,301.7)
2040	162.8	54.2	(33.3)	13.5	(8.3)	0.0	(0.0)	206.0	(126.6)	133.1	(81.8)	3,749.8	(2,303.6)
2041	169.0	56.3	(33.3)	14.0	(8.3)	0.0	(0.0)	214.1	(126.7)	137.8	(81.6)	3,896.3	(2,306.0)
2042	175.4	58.4	(33.3)	14.5	(8.3)	0.0	(0.0)	222.4	(126.9)	142.7	(81.4)	4,048.9	(2,309.0)
2043	182.0	60.6	(33.3)	15.0	(8.3)	0.0	(0.0)	231.2	(127.0)	147.8	(81.2)	4,208.0	(2,312.2)
2044	188.9	62.9	(33.3)	15.6	(8.3)	0.0	(0.0)	240.3	(127.2)	153.0	(81.0)	4,373.7	(2,315.7)
2045	196.0	65.3	(33.3)	16.2	(8.3)	0.0	(0.0)	249.7	(127.4)	158.5	(80.9)	4,546.4	(2,319.7)
2046	203.4	67.7	(33.3)	16.8	(8.3)	0.0	(0.0)	259.6	(127.7)	164.2	(80.8)	4,726.3	(2,324.1)
2047	211.0	70.2	(33.3)	17.4	(8.3)	0.0	(0.0)	269.9	(127.9)	170.2	(80.7)	4,913.7	(2,328.9)
2048	218.9	72.9	(33.3)	18.1	(8.3)	0.0	(0.0)	280.6	(128.2)	176.4	(80.6)	5,108.9	(2,334.2)
2049	227.1	75.6	(33.3)	18.8	(8.3)	0.0	(0.0)	291.8	(128.5)	182.8	(80.5)	5,312.1	(2,339.6)
2050	235.6	78.4	(33.3)	19.5	(8.3)	0.0	(0.0)	303.4	(128.8)	189.6	(80.5)	5,523.8	(2,345.1)
2051	244.4	81.4	(33.3)	20.2	(8.3)	0.0	(0.0)	315.5	(129.1)	196.6	(80.5)	5,744.2	(2,350.8)
2052	253.5	84.4	(33.3)	21.0	(8.3)	0.0	(0.0)	328.1	(129.4)	204.0	(80.5)	5,973.7	(2,356.8)
2053	262.9	87.5	(33.3)	21.7	(8.3)	0.0	(0.0)	341.2	(129.8)	211.7	(80.5)	6,212.4	(2,363.0)
2054	272.7	90.8	(33.3)	22.5	(8.3)	0.0	(0.0)	354.8	(130.1)	219.7	(80.6)	6,460.9	(2,369.1)
2055	282.9	94.2	(33.3)	23.4	(8.3)	0.0	(0.0)	369.0	(130.4)	228.0	(80.6)	6,719.5	(2,375.3)
2056	293.5	97.7	(33.3)	24.3	(8.3)	0.0	(0.0)	383.8	(130.8)	236.7	(80.7)	6,988.5	(2,381.2)
2057	304.5	101.4	(33.3)	25.2	(8.3)	0.0	(0.0)	399.1	(131.1)	245.8	(80.7)	7,268.4	(2,387.2)
2058	315.9	105.2	(33.3)	26.1	(8.3)	0.0	(0.0)	415.1	(131.4)	255.3	(80.8)	7,559.5	(2,393.2)
2059	327.7	109.1	(33.3)	27.1	(8.3)	0.0	(0.0)	431.7	(131.7)	265.1	(80.9)	7,862.3	(2,399.1)
2060	340.0	113.2	(33.3)	28.1	(8.3)	0.0	(0.0)	449.0	(132.1)	275.4	(81.0)	8,177.2	(2,405.0)

TABLE 9 (cont.)

MILITARY RETIREMENT SYSTEM
PAST AND PROJECTED FLOW OF PLAN ASSETS¹
(In Billions of Dollars and as a Proportion of Payroll)

Fiscal Year	Basic Payroll ²	Contributions Received							Fund Disbursements ⁵	Fund Balance, End of Year ⁶
		From DoD, for Normal Costs ³	From Treasury, for Normal Costs ³	From Treasury, for Amortization of Unfunded Liability ⁴		Investment Income				
2061	\$352.8	\$117.5 (33.3%)	\$29.2 (8.3%)	\$0.0 (0.0%)	\$467.0 (132.4%)	\$286.2 (81.1%)	\$8,504.6 (2,410.8%)			
2062	366.0	121.9 (33.3)	30.3 (8.3)	0.0 (0.0)	485.7 (132.7)	297.4 (81.3)	8,845.1 (2,416.6)			
2063	379.8	126.4 (33.3)	31.4 (8.3)	0.0 (0.0)	505.1 (133.0)	309.1 (81.4)	9,199.0 (2,422.4)			
2064	394.0	131.2 (33.3)	32.6 (8.3)	0.0 (0.0)	525.3 (133.3)	321.2 (81.5)	9,566.8 (2,428.0)			
2065	408.8	136.1 (33.3)	33.8 (8.3)	0.0 (0.0)	546.3 (133.6)	333.9 (81.7)	9,949.1 (2,433.6)			
2066	424.2	141.2 (33.3)	35.1 (8.3)	0.0 (0.0)	568.2 (133.9)	347.1 (81.8)	10,346.5 (2,439.1)			
2067	440.1	146.5 (33.3)	36.4 (8.3)	0.0 (0.0)	590.9 (134.2)	360.9 (82.0)	10,759.3 (2,444.6)			
2068	456.7	152.0 (33.3)	37.7 (8.3)	0.0 (0.0)	614.4 (134.5)	375.2 (82.2)	11,188.3 (2,450.1)			
2069	473.8	157.8 (33.3)	39.2 (8.3)	0.0 (0.0)	638.9 (134.8)	390.2 (82.3)	11,634.0 (2,455.5)			
2070	491.6	163.7 (33.3)	40.6 (8.3)	0.0 (0.0)	664.3 (135.1)	405.7 (82.5)	12,096.9 (2,460.8)			
2071	510.0	169.8 (33.3)	42.2 (8.3)	0.0 (0.0)	690.8 (135.4)	421.8 (82.7)	12,577.8 (2,466.0)			
2072	529.2	176.2 (33.3)	43.7 (8.3)	0.0 (0.0)	718.2 (135.7)	438.6 (82.9)	13,077.3 (2,471.2)			
2073	549.0	182.8 (33.3)	45.4 (8.3)	0.0 (0.0)	746.7 (136.0)	456.1 (83.1)	13,596.1 (2,476.4)			
2074	569.6	189.7 (33.3)	47.1 (8.3)	0.0 (0.0)	776.3 (136.3)	474.2 (83.3)	14,135.0 (2,481.5)			
2075	591.0	196.8 (33.3)	48.9 (8.3)	0.0 (0.0)	807.0 (136.6)	493.1 (83.4)	14,694.5 (2,486.5)			
2076	613.1	204.1 (33.3)	50.7 (8.3)	0.0 (0.0)	839.0 (136.8)	512.7 (83.6)	15,275.6 (2,491.4)			
2077	636.1	211.8 (33.3)	52.6 (8.3)	0.0 (0.0)	872.1 (137.1)	533.1 (83.8)	15,879.0 (2,496.3)			
2078	660.0	219.7 (33.3)	54.6 (8.3)	0.0 (0.0)	906.6 (137.4)	554.3 (84.0)	16,505.6 (2,501.0)			
2079	684.7	228.0 (33.3)	56.6 (8.3)	0.0 (0.0)	942.3 (137.6)	576.3 (84.2)	17,156.2 (2,505.7)			
2080	710.4	236.5 (33.3)	58.7 (8.3)	0.0 (0.0)	979.4 (137.9)	599.2 (84.3)	17,831.7 (2,510.2)			
2081	737.0	245.4 (33.3)	60.9 (8.3)	0.0 (0.0)	1,018.0 (138.1)	623.0 (84.5)	18,533.0 (2,514.7)			
2082	764.6	254.6 (33.3)	63.2 (8.3)	0.0 (0.0)	1,058.0 (138.4)	647.7 (84.7)	19,261.0 (2,519.1)			
2083	793.3	264.1 (33.3)	65.6 (8.3)	0.0 (0.0)	1,099.5 (138.6)	673.4 (84.9)	20,016.9 (2,523.3)			
2084	823.0	274.0 (33.3)	68.0 (8.3)	0.0 (0.0)	1,142.6 (138.8)	700.1 (85.1)	20,801.5 (2,527.5)			
2085	853.9	284.3 (33.3)	70.6 (8.3)	0.0 (0.0)	1,187.4 (139.1)	727.8 (85.2)	21,616.0 (2,531.5)			
2086	885.9	295.0 (33.3)	73.2 (8.3)	0.0 (0.0)	1,233.9 (139.3)	756.5 (85.4)	22,461.5 (2,535.4)			
2087	919.1	306.0 (33.3)	76.0 (8.3)	0.0 (0.0)	1,282.1 (139.5)	786.4 (85.6)	23,339.2 (2,539.2)			
2088	953.6	317.5 (33.3)	78.8 (8.3)	0.0 (0.0)	1,332.2 (139.7)	817.4 (85.7)	24,250.3 (2,543.0)			
2089	989.4	329.4 (33.3)	81.8 (8.3)	0.0 (0.0)	1,384.1 (139.9)	849.6 (85.9)	25,196.0 (2,546.6)			
2090	1,026.5	341.8 (33.3)	84.9 (8.3)	0.0 (0.0)	1,438.1 (140.1)	883.0 (86.0)	26,177.7 (2,550.2)			
2091	1,065.0	354.6 (33.3)	88.0 (8.3)	0.0 (0.0)	1,494.1 (140.3)	917.7 (86.2)	27,196.7 (2,553.7)			
2092	1,105.0	367.9 (33.3)	91.3 (8.3)	0.0 (0.0)	1,552.2 (140.5)	953.7 (86.3)	28,254.4 (2,557.0)			
2093	1,146.4	381.7 (33.3)	94.8 (8.3)	0.0 (0.0)	1,612.6 (140.7)	991.0 (86.4)	29,352.4 (2,560.4)			
2094	1,189.4	396.0 (33.3)	98.3 (8.3)	0.0 (0.0)	1,675.2 (140.8)	1,029.8 (86.6)	30,492.2 (2,563.6)			
2095	1,234.0	410.9 (33.3)	102.0 (8.3)	0.0 (0.0)	1,740.2 (141.0)	1,070.0 (86.7)	31,675.2 (2,566.8)			
2096	1,280.3	426.3 (33.3)	105.8 (8.3)	0.0 (0.0)	1,807.7 (141.2)	1,111.8 (86.8)	32,903.3 (2,569.9)			
2097	1,328.4	442.3 (33.3)	109.8 (8.3)	0.0 (0.0)	1,877.8 (141.4)	1,155.1 (87.0)	34,177.9 (2,573.0)			
2098	1,378.2	458.9 (33.3)	113.9 (8.3)	0.0 (0.0)	1,950.5 (141.5)	1,200.2 (87.1)	35,501.0 (2,575.9)			
2099	1,429.9	476.1 (33.3)	118.2 (8.3)	0.0 (0.0)	2,025.9 (141.7)	1,246.9 (87.2)	36,874.4 (2,578.9)			
2100	1,483.5	493.9 (33.3)	122.6 (8.3)	0.0 (0.0)	2,104.3 (141.8)	1,295.4 (87.3)	38,299.8 (2,581.7)			
2101	1,539.1	512.5 (33.3)	127.2 (8.3)	0.0 (0.0)	2,185.6 (142.0)	1,345.8 (87.4)	39,779.3 (2,584.5)			
2102	1,596.8	531.7 (33.3)	132.0 (8.3)	0.0 (0.0)	2,270.0 (142.2)	1,398.1 (87.6)	41,314.9 (2,587.3)			
2103	1,656.7	551.6 (33.3)	137.0 (8.3)	0.0 (0.0)	2,357.6 (142.3)	1,452.5 (87.7)	42,908.5 (2,589.9)			
2104	1,718.9	572.3 (33.3)	142.1 (8.3)	0.0 (0.0)	2,448.5 (142.4)	1,508.9 (87.8)	44,562.5 (2,592.6)			
2105	1,783.3	593.8 (33.3)	147.4 (8.3)	0.0 (0.0)	2,542.8 (142.6)	1,567.5 (87.9)	46,278.9 (2,595.1)			
2106	1,850.2	616.0 (33.3)	152.9 (8.3)	0.0 (0.0)	2,640.7 (142.7)	1,628.4 (88.0)	48,060.2 (2,597.6)			
2107	1,919.6	639.1 (33.3)	158.7 (8.3)	0.0 (0.0)	2,742.3 (142.9)	1,691.7 (88.1)	49,908.6 (2,600.0)			
2108	1,991.6	663.1 (33.3)	164.6 (8.3)	0.0 (0.0)	2,847.8 (143.0)	1,757.4 (88.2)	51,826.7 (2,602.3)			
2109	2,066.3	688.0 (33.3)	170.8 (8.3)	0.0 (0.0)	2,957.1 (143.1)	1,825.6 (88.4)	53,817.0 (2,604.6)			

TABLE 9 FOOTNOTES

NOTE REGARDING OPEN GROUP PROJECTIONS: The 100 year open group projection in this report presents results that reflect the expected path of the Military Retirement System based on the benefit provisions, data, methods and assumptions described herein. The values displayed in this projection are future-year dollars. While there is value to such results, at the same time they should be used and interpreted with caution. Uncertainty inherently increases with the length of the projection period. There is no reasonable expectation that events can be forecast with any degree of certainty or precision over a period as long as 100 years. To the extent the underlying assumptions are not realized, actual results will be different. Benefit changes, economic conditions, and other environmental factors are not perfectly predictable.

Additionally, it should be noted that the fundamental purpose of the Office of the Actuary's valuation is to produce actuarial liability and normal cost amounts, both of which are done on a closed group basis. In performing the valuation calculations, some assumptions represent long-run average expectations. This is appropriate for such liability and normal cost determinations. The open group projection uses many of the same long-run average assumptions as are used in the actuarial liability and normal cost calculations, but incorporates some adjustments for short-term expectations (e.g., the use of OMB short-term economic assumptions for basic pay and COLA increases).

- ¹ Public Law 98-94 established the Military Retirement Fund. Under the law, DoD is responsible for the normal cost payment and Treasury is responsible for the payments on the unfunded liability. Public Law 108-136 assigned Treasury the responsibility of funding the normal cost resulting from increased benefits due to Concurrent Receipt, starting in FY05. There are no employee contributions to the fund.
- ² DoD-projected endstrengths are used through the end of FY16 and constant force strengths thereafter. Basic pay is only a portion of military compensation. See The Military Retirement System: Benefits in Appendix A for details. The drop in Basic Payroll from FY10 to FY11 reflects the expectation of decreased reserve (part-time) mobilizations.
- ³ Due to federal budget deadlines, normal cost percentages are established in advance of implementation. The percentage actually used and displayed here may vary from the one derived in the valuation as of the end of the previous year. Starting in FY87, NCPs have been developed separately for the full-time and part-time basic payrolls.
- ⁴ Reflects amortization payments for FY12 and thereafter determined in the September 30, 2010, valuation. The FY27 payment depicts a negative value, implying the Fund will owe Treasury this amount. There is no mechanism that would allow for this to occur under current law. Amortization schedules will be reviewed and potentially modified in the September 30, 2011, valuation to address this situation.
- ⁵ Disbursements are on a cash basis. Beginning in December 1984, entitlements obligated for a month have been paid at the beginning of the following month. Prior to this date, entitlements were paid at the end of the month of obligation. Consequently, FY85 disbursements include only 11 months of payments. The FY11 National Defense Authorization Act allowed for retired pay to be paid on the previous business day if the first of the month falls on a weekend or holiday. This is not accounted for in the projected Fund Disbursements or Balances.
- ⁶ This fund balance (on a book value basis) reflects cash disbursements during the year. On September 30, 2010, assets in the fund totaled \$321.7 billion.

TABLE 9 FOOTNOTES (Continued)

OTHER NOTES: Mortality rates that are applied in the valuation to active duty members, nondisabled retirees, and survivors, are subject to improvement over time. See Appendix J for details. People and pay underlying the projection can be found in Appendix K. The table does not reflect future gains or losses due to experience being different than assumed. Consequently, only payments on the total unfunded liability as of September 30, 2010, are reflected.

ANNUAL ECONOMIC ASSUMPTIONS USED IN PROJECTIONS OF PLAN ASSETS

<u>Fiscal Year</u>	<u>Full COLA</u>	<u>Basic Pay</u>	<u>Interest</u>
2011	0.0%	1.4%	5.75%
2012	0.8	2.3	5.75
2013-14	1.9	3.4	5.75
2015	2.0	3.4	5.75
2016-19	2.1	3.4	5.75
2020	3.0	3.4	5.75
2021+	3.0	3.75	5.75

Full COLA is equal to full cost-of-living increases to retiree and survivor annuities. Basic Pay is equal to the non-promotion-and-merit increases. They are applied on an across-the-board basis and typically occur each January 1st. Interest assumptions pertain to annual, aggregate Fund yield on all cash flows. The above COLA and Basic Pay assumptions are from the Office of Management and Budget (OMB); the interest (fund yield) is the Board of Actuaries long-term interest assumption. Long-term annual economic assumptions (used throughout the projection in the normal cost and unfunded liability calculations) are 3.0% COLA, 3.75% basic pay and 5.75% interest.

TABLE 10
MILITARY RETIREMENT SYSTEM
PAST AND PROJECTED PAYROLL AND NORMAL COST PAYMENTS
(In Billions of Dollars and as a Proportion of Payroll)

Fiscal Year	Payroll			DoD Normal Cost Payments				Treasury Normal Cost Payments				Normal Cost Payments	
	Full-Time	Part-Time	Total	Full-Time		Part-Time		Full-Time		Part-Time		Total	
1985	\$30.6	\$2.9	\$33.5	\$15.5	(50.7%)	\$1.5	(50.7%)	\$0.0	---	\$0.0	---	\$17.0	(50.7%)
1986	32.3	3.1	35.4	16.4	(50.7)	1.6	(50.7)	0.0	---	0.0	---	17.9	(50.7)
1987	33.4	3.0	36.4	17.4	(52.2)	0.8	(26.4)	0.0	---	0.0	---	18.2	(50.1)
1988	34.0	3.3	37.3	17.4	(51.2)	0.9	(26.1)	0.0	---	0.0	---	18.3	(49.0)
1989	35.0	3.6	38.6	17.6	(50.2)	0.9	(25.7)	0.0	---	0.0	---	18.5	(47.9)
1990	36.0	3.7	39.7	15.8	(43.9)	0.5	(13.4)	0.0	---	0.0	---	16.3	(41.1)
1991	38.6	3.7	42.3	16.7	(43.2)	0.5	(13.3)	0.0	---	0.0	---	17.2	(40.6)
1992	36.9	4.1	41.0	15.8	(42.7)	0.5	(13.3)	0.0	---	0.0	---	16.3	(39.8)
1993	35.1	3.8	38.9	12.8	(36.4)	0.4	(10.6)	0.0	---	0.0	---	13.2	(33.9)
1994	34.5	3.8	38.3	12.4	(36.0)	0.4	(10.6)	0.0	---	0.0	---	12.8	(33.5)
1995	33.4	3.8	37.2	11.9	(35.5)	0.4	(10.5)	0.0	---	0.0	---	12.3	(32.9)
1996	33.1	3.7	36.8	10.9	(32.9)	0.4	(9.6)	0.0	---	0.0	---	11.2	(30.6)
1997	33.2	3.7	36.9	10.8	(32.6)	0.4	(9.6)	0.0	---	0.0	---	11.2	(30.3)
1998	33.4	3.7	37.1	10.2	(30.5)	0.3	(8.8)	0.0	---	0.0	---	10.5	(28.3)
1999	33.7	3.9	37.6	10.2	(30.2)	0.3	(8.7)	0.0	---	0.0	---	10.5	(28.0)
2000	35.1	4.0	39.1	11.2	(31.8)	0.4	(9.8)	0.0	---	0.0	---	11.6	(29.5)
2001	36.7	4.2	40.9	10.9	(29.6)	0.6	(14.1)	0.0	---	0.0	---	11.5	(28.0)
2002	40.8	3.9	44.7	12.4	(30.3)	0.6	(14.4)	0.0	---	0.0	---	12.9	(28.9)
2003	47.8	4.2	52.0	13.1	(27.4)	0.6	(14.6)	0.0	---	0.0	---	13.7	(26.4)
2004	49.4	4.2	53.6	13.4	(27.1)	0.7	(16.0)	0.0	---	0.0	---	14.1	(26.2)
2005	52.0	4.3	56.3	14.3	(27.5)	0.7	(16.7)	\$1.7	(3.3%)	\$0.0	(0.8%)	16.8	(29.8)
2006	49.7	4.3	54.0	13.2	(26.5)	0.7	(16.7)	2.4	(4.9)	0.1	(1.4)	16.4	(30.3)
2007	51.2	5.2	56.4	13.6	(26.5)	0.9	(17.5)	2.5	(4.9)	0.1	(1.5)	17.1	(30.3)
2008	53.5	5.7	59.2	15.5	(29.0)	1.1	(19.1)	2.7	(5.0)	0.1	(1.5)	19.4	(32.7)
2009	57.1	5.9	63.0	16.8	(29.4)	1.2	(21.1)	4.0	(7.0)	0.1	(2.3)	22.2	(35.2)
2010	58.3	6.1	64.4	18.9	(32.4)	1.5	(24.5)	4.7	(8.0)	0.2	(2.8)	25.2	(39.2)

TABLE 10 (cont.)

**MILITARY RETIREMENT SYSTEM
PAST AND PROJECTED PAYROLL AND NORMAL COST PAYMENTS
(In Billions of Dollars and as a Proportion of Payroll)**

Fiscal Year	Payroll			DoD Normal Cost Payments				Treasury Normal Cost Payments				Normal Cost Payments	
	Full-Time	Part-Time	Total	Full-Time		Part-Time		Full-Time		Part-Time		Total	
2011	\$56.1	\$5.8	\$61.9	\$18.3	(32.7%)	\$1.4	(24.4%)	\$4.6	(8.2%)	\$0.2	(3.2%)	\$24.5	(39.7%)
2012	57.1	5.9	63.1	19.6	(34.3)	1.4	(24.3)	5.0	(8.8)	0.2	(3.6)	26.3	(41.7)
2013	58.6	6.2	64.8	20.1	(34.3)	1.5	(24.3)	5.2	(8.8)	0.2	(3.6)	27.0	(41.7)
2014	60.3	6.4	66.7	20.7	(34.3)	1.6	(24.3)	5.3	(8.8)	0.2	(3.6)	27.8	(41.7)
2015	62.0	6.6	68.6	21.3	(34.3)	1.6	(24.3)	5.5	(8.8)	0.2	(3.6)	28.6	(41.7)
2016	63.4	6.9	70.3	21.8	(34.3)	1.7	(24.3)	5.6	(8.8)	0.2	(3.6)	29.2	(41.6)
2017	65.0	7.1	72.2	22.3	(34.3)	1.7	(24.3)	5.7	(8.8)	0.3	(3.6)	30.0	(41.6)
2018	67.0	7.4	74.4	23.0	(34.3)	1.8	(24.3)	5.9	(8.8)	0.3	(3.6)	31.0	(41.6)
2019	69.1	7.6	76.7	23.7	(34.3)	1.9	(24.3)	6.1	(8.8)	0.3	(3.6)	31.9	(41.6)
2020	71.3	7.9	79.2	24.5	(34.3)	1.9	(24.3)	6.3	(8.8)	0.3	(3.6)	32.9	(41.6)
2021	73.8	8.2	82.0	25.3	(34.3)	2.0	(24.3)	6.5	(8.8)	0.3	(3.6)	34.1	(41.6)
2022	76.4	8.5	84.9	26.2	(34.3)	2.1	(24.3)	6.7	(8.8)	0.3	(3.6)	35.3	(41.6)
2023	79.1	8.8	87.9	27.1	(34.3)	2.1	(24.3)	7.0	(8.8)	0.3	(3.6)	36.6	(41.6)
2024	81.8	9.2	91.0	28.1	(34.3)	2.2	(24.3)	7.2	(8.8)	0.3	(3.6)	37.8	(41.6)
2025	84.6	9.5	94.2	29.0	(34.3)	2.3	(24.3)	7.4	(8.8)	0.3	(3.6)	39.2	(41.6)
2026	87.6	9.9	97.5	30.1	(34.3)	2.4	(24.3)	7.7	(8.8)	0.4	(3.6)	40.5	(41.6)
2027	90.6	10.3	100.9	31.1	(34.3)	2.5	(24.3)	8.0	(8.8)	0.4	(3.6)	41.9	(41.6)
2028	93.9	10.7	104.5	32.2	(34.3)	2.6	(24.3)	8.3	(8.8)	0.4	(3.6)	43.4	(41.6)
2029	97.3	11.1	108.4	33.4	(34.3)	2.7	(24.3)	8.6	(8.8)	0.4	(3.6)	45.0	(41.6)
2030	100.9	11.5	112.4	34.6	(34.3)	2.8	(24.3)	8.9	(8.8)	0.4	(3.6)	46.7	(41.6)
2031	104.6	11.9	116.5	35.9	(34.3)	2.9	(24.3)	9.2	(8.8)	0.4	(3.6)	48.4	(41.6)
2032	108.4	12.4	120.8	37.2	(34.3)	3.0	(24.3)	9.5	(8.8)	0.4	(3.6)	50.2	(41.6)
2033	112.4	12.9	125.3	38.6	(34.3)	3.1	(24.3)	9.9	(8.8)	0.5	(3.6)	52.1	(41.6)
2034	116.6	13.4	130.0	40.0	(34.3)	3.2	(24.3)	10.3	(8.8)	0.5	(3.6)	54.0	(41.6)
2035	121.0	13.9	134.9	41.5	(34.3)	3.4	(24.3)	10.7	(8.8)	0.5	(3.6)	56.1	(41.6)
2036	125.7	14.4	140.1	43.1	(34.3)	3.5	(24.3)	11.1	(8.8)	0.5	(3.6)	58.2	(41.6)
2037	130.6	14.9	145.5	44.8	(34.3)	3.6	(24.3)	11.5	(8.8)	0.5	(3.6)	60.5	(41.6)
2038	135.6	15.5	151.1	46.5	(34.3)	3.8	(24.3)	11.9	(8.8)	0.6	(3.6)	62.8	(41.6)
2039	140.7	16.1	156.8	48.3	(34.3)	3.9	(24.3)	12.4	(8.8)	0.6	(3.6)	65.2	(41.6)
2040	146.1	16.7	162.8	50.1	(34.3)	4.0	(24.3)	12.9	(8.8)	0.6	(3.6)	67.7	(41.6)
2041	151.7	17.3	169.0	52.1	(34.3)	4.2	(24.3)	13.3	(8.8)	0.6	(3.6)	70.2	(41.6)
2042	157.4	17.9	175.4	54.0	(34.3)	4.4	(24.3)	13.9	(8.8)	0.6	(3.6)	72.9	(41.6)
2043	163.4	18.6	182.0	56.1	(34.3)	4.5	(24.3)	14.4	(8.8)	0.7	(3.6)	75.6	(41.6)
2044	169.6	19.3	188.9	58.2	(34.3)	4.7	(24.3)	14.9	(8.8)	0.7	(3.6)	78.5	(41.6)
2045	176.0	20.0	196.0	60.4	(34.3)	4.9	(24.3)	15.5	(8.8)	0.7	(3.6)	81.5	(41.6)
2046	182.6	20.8	203.4	62.7	(34.3)	5.0	(24.3)	16.1	(8.8)	0.7	(3.6)	84.5	(41.6)
2047	189.4	21.6	211.0	65.0	(34.3)	5.2	(24.3)	16.7	(8.8)	0.8	(3.6)	87.7	(41.6)
2048	196.5	22.4	218.9	67.4	(34.3)	5.4	(24.3)	17.3	(8.8)	0.8	(3.6)	91.0	(41.6)
2049	203.8	23.2	227.1	70.0	(34.3)	5.6	(24.3)	17.9	(8.8)	0.8	(3.6)	94.4	(41.6)
2050	211.5	24.1	235.6	72.6	(34.3)	5.8	(24.3)	18.6	(8.8)	0.9	(3.6)	97.9	(41.6)
2051	219.4	25.0	244.4	75.3	(34.3)	6.1	(24.3)	19.3	(8.8)	0.9	(3.6)	101.6	(41.6)
2052	227.5	25.9	253.5	78.1	(34.3)	6.3	(24.3)	20.0	(8.8)	0.9	(3.6)	105.3	(41.6)
2053	236.0	26.9	262.9	81.0	(34.3)	6.5	(24.3)	20.8	(8.8)	1.0	(3.6)	109.3	(41.6)
2054	244.8	27.9	272.7	84.0	(34.3)	6.8	(24.3)	21.5	(8.8)	1.0	(3.6)	113.3	(41.6)
2055	253.9	29.0	282.9	87.2	(34.3)	7.0	(24.3)	22.3	(8.8)	1.0	(3.6)	117.6	(41.6)
2056	263.4	30.0	293.5	90.4	(34.3)	7.3	(24.3)	23.2	(8.8)	1.1	(3.6)	122.0	(41.6)
2057	273.3	31.2	304.5	93.8	(34.3)	7.6	(24.3)	24.1	(8.8)	1.1	(3.6)	126.5	(41.6)
2058	283.5	32.3	315.9	97.3	(34.3)	7.9	(24.3)	25.0	(8.8)	1.2	(3.6)	131.3	(41.6)
2059	294.2	33.5	327.7	101.0	(34.3)	8.1	(24.3)	25.9	(8.8)	1.2	(3.6)	136.2	(41.6)
2060	305.2	34.8	340.0	104.7	(34.3)	8.5	(24.3)	26.9	(8.8)	1.2	(3.6)	141.3	(41.6)

TABLE 10 (cont.)

MILITARY RETIREMENT SYSTEM
PAST AND PROJECTED PAYROLL AND NORMAL COST PAYMENTS
(In Billions of Dollars and as a Proportion of Payroll)

Fiscal Year	Payroll			DoD Normal Cost Payments				Treasury Normal Cost Payments				Normal Cost Payments	
	Full-Time	Part-Time	Total	Full-Time		Part-Time		Full-Time		Part-Time		Total	
2061	\$316.7	\$36.1	\$352.8	\$108.7	(34.3%)	\$8.8	(24.3%)	\$27.9	(8.8%)	\$1.3	(3.6%)	\$146.6	(41.6%)
2062	328.5	37.5	366.0	112.8	(34.3)	9.1	(24.3)	28.9	(8.8)	1.3	(3.6)	152.1	(41.6)
2063	340.9	38.9	379.8	117.0	(34.3)	9.4	(24.3)	30.0	(8.8)	1.4	(3.6)	157.8	(41.6)
2064	353.7	40.3	394.0	121.4	(34.3)	9.8	(24.3)	31.1	(8.8)	1.4	(3.6)	163.8	(41.6)
2065	367.0	41.8	408.8	126.0	(34.3)	10.2	(24.3)	32.3	(8.8)	1.5	(3.6)	169.9	(41.6)
2066	380.8	43.4	424.2	130.7	(34.3)	10.5	(24.3)	33.5	(8.8)	1.6	(3.6)	176.3	(41.6)
2067	395.1	45.0	440.1	135.6	(34.3)	10.9	(24.3)	34.8	(8.8)	1.6	(3.6)	182.9	(41.6)
2068	409.9	46.7	456.7	140.7	(34.3)	11.3	(24.3)	36.1	(8.8)	1.7	(3.6)	189.8	(41.6)
2069	425.3	48.5	473.8	146.0	(34.3)	11.8	(24.3)	37.4	(8.8)	1.7	(3.6)	196.9	(41.6)
2070	441.3	50.3	491.6	151.5	(34.3)	12.2	(24.3)	38.8	(8.8)	1.8	(3.6)	204.3	(41.6)
2071	457.9	52.2	510.0	157.1	(34.3)	12.7	(24.3)	40.3	(8.8)	1.9	(3.6)	212.0	(41.6)
2072	475.0	54.1	529.2	163.0	(34.3)	13.1	(24.3)	41.8	(8.8)	1.9	(3.6)	219.9	(41.6)
2073	492.9	56.2	549.0	169.2	(34.3)	13.6	(24.3)	43.4	(8.8)	2.0	(3.6)	228.2	(41.6)
2074	511.3	58.3	569.6	175.5	(34.3)	14.2	(24.3)	45.0	(8.8)	2.1	(3.6)	236.7	(41.6)
2075	530.5	60.5	591.0	182.1	(34.3)	14.7	(24.3)	46.7	(8.8)	2.2	(3.6)	245.6	(41.6)
2076	550.4	62.7	613.1	188.9	(34.3)	15.2	(24.3)	48.4	(8.8)	2.2	(3.6)	254.8	(41.6)
2077	571.0	65.1	636.1	196.0	(34.3)	15.8	(24.3)	50.3	(8.8)	2.3	(3.6)	264.4	(41.6)
2078	592.4	67.5	660.0	203.3	(34.3)	16.4	(24.3)	52.1	(8.8)	2.4	(3.6)	274.3	(41.6)
2079	614.6	70.0	684.7	211.0	(34.3)	17.0	(24.3)	54.1	(8.8)	2.5	(3.6)	284.6	(41.6)
2080	637.7	72.7	710.4	218.9	(34.3)	17.7	(24.3)	56.1	(8.8)	2.6	(3.6)	295.2	(41.6)
2081	661.6	75.4	737.0	227.1	(34.3)	18.3	(24.3)	58.2	(8.8)	2.7	(3.6)	306.3	(41.6)
2082	686.4	78.2	764.6	235.6	(34.3)	19.0	(24.3)	60.4	(8.8)	2.8	(3.6)	317.8	(41.6)
2083	712.1	81.2	793.3	244.4	(34.3)	19.7	(24.3)	62.7	(8.8)	2.9	(3.6)	329.7	(41.6)
2084	738.8	84.2	823.0	253.6	(34.3)	20.5	(24.3)	65.0	(8.8)	3.0	(3.6)	342.1	(41.6)
2085	766.5	87.4	853.9	263.1	(34.3)	21.2	(24.3)	67.5	(8.8)	3.1	(3.6)	354.9	(41.6)
2086	795.3	90.6	885.9	272.9	(34.3)	22.0	(24.3)	70.0	(8.8)	3.2	(3.6)	368.2	(41.6)
2087	825.1	94.0	919.1	283.2	(34.3)	22.8	(24.3)	72.6	(8.8)	3.4	(3.6)	382.0	(41.6)
2088	856.1	97.6	953.6	293.8	(34.3)	23.7	(24.3)	75.3	(8.8)	3.5	(3.6)	396.3	(41.6)
2089	888.2	101.2	989.4	304.8	(34.3)	24.6	(24.3)	78.2	(8.8)	3.6	(3.6)	411.2	(41.6)
2090	921.5	105.0	1,026.5	316.3	(34.3)	25.5	(24.3)	81.1	(8.8)	3.8	(3.6)	426.6	(41.6)
2091	956.1	109.0	1,065.0	328.1	(34.3)	26.5	(24.3)	84.1	(8.8)	3.9	(3.6)	442.6	(41.6)
2092	991.9	113.0	1,105.0	340.4	(34.3)	27.5	(24.3)	87.3	(8.8)	4.0	(3.6)	459.2	(41.6)
2093	1,029.1	117.3	1,146.4	353.2	(34.3)	28.5	(24.3)	90.6	(8.8)	4.2	(3.6)	476.5	(41.6)
2094	1,067.7	121.7	1,189.4	366.5	(34.3)	29.6	(24.3)	94.0	(8.8)	4.4	(3.6)	494.3	(41.6)
2095	1,107.8	126.2	1,234.0	380.2	(34.3)	30.7	(24.3)	97.5	(8.8)	4.5	(3.6)	512.9	(41.6)
2096	1,149.3	131.0	1,280.3	394.5	(34.3)	31.8	(24.3)	101.2	(8.8)	4.7	(3.6)	532.1	(41.6)
2097	1,192.5	135.9	1,328.4	409.3	(34.3)	33.0	(24.3)	104.9	(8.8)	4.9	(3.6)	552.1	(41.6)
2098	1,237.2	141.0	1,378.2	424.6	(34.3)	34.2	(24.3)	108.9	(8.8)	5.0	(3.6)	572.8	(41.6)
2099	1,283.6	146.3	1,429.9	440.5	(34.3)	35.5	(24.3)	113.0	(8.8)	5.2	(3.6)	594.3	(41.6)
2100	1,331.7	151.8	1,483.5	457.1	(34.3)	36.9	(24.3)	117.2	(8.8)	5.4	(3.6)	616.6	(41.6)
2101	1,381.7	157.4	1,539.1	474.2	(34.3)	38.2	(24.3)	121.6	(8.8)	5.6	(3.6)	639.7	(41.6)
2102	1,433.5	163.4	1,596.8	492.0	(34.3)	39.7	(24.3)	126.2	(8.8)	5.8	(3.6)	663.7	(41.6)
2103	1,487.3	169.5	1,656.7	510.4	(34.3)	41.2	(24.3)	130.9	(8.8)	6.1	(3.6)	688.6	(41.6)
2104	1,543.0	175.8	1,718.9	529.6	(34.3)	42.7	(24.3)	135.8	(8.8)	6.3	(3.6)	714.4	(41.6)
2105	1,600.9	182.4	1,783.3	549.4	(34.3)	44.3	(24.3)	140.9	(8.8)	6.5	(3.6)	741.2	(41.6)
2106	1,660.9	189.3	1,850.2	570.0	(34.3)	46.0	(24.3)	146.2	(8.8)	6.8	(3.6)	769.0	(41.6)
2107	1,723.2	196.4	1,919.6	591.4	(34.3)	47.7	(24.3)	151.7	(8.8)	7.0	(3.6)	797.8	(41.6)
2108	1,787.8	203.7	1,991.6	613.6	(34.3)	49.5	(24.3)	157.3	(8.8)	7.3	(3.6)	827.7	(41.6)
2109	1,854.9	211.4	2,066.3	636.6	(34.3)	51.3	(24.3)	163.2	(8.8)	7.6	(3.6)	858.8	(41.6)

TABLE 11
PAST AND PROJECTED UNFUNDED LIABILITY PAYMENTS ON OCTOBER 1
 (\$ in billions)

Calendar Year	Original UFL	Assumption Changes	Benefit Changes	Actuarial Experience	Total
1984*	\$9.500	\$0.000	\$0.000	\$0.000	\$9.500
1985*	10.500	0.000	0.000	0.000	10.500
1986*	11.042	0.000	0.000	(0.518)	10.524
1987*	11.679	0.000	(0.113)	(1.281)	10.285
1988*	12.003	0.135	(0.112)	(2.244)	9.782
1989*	16.300	(2.116)	(0.132)	(3.456)	10.596
1990*	17.237	(2.237)	(0.140)	(4.078)	10.782
1991*	18.228	(2.366)	(0.148)	(4.508)	11.206
1992*	22.621	(4.625)	(0.171)	(5.552)	12.273
1993*	23.865	(4.880)	(0.180)	(6.897)	11.908
1994*	25.177	(5.148)	(0.189)	(8.370)	11.470
1995*	27.746	(6.619)	(0.079)	(10.349)	10.699
1996*	33.456	(6.917)	(0.042)	(11.346)	15.151
1997*	36.227	(8.529)	0.048	(12.627)	15.119
1998*	37.676	(8.870)	0.050	(13.606)	15.250
1999*	39.183	(9.201)	0.052	(14.732)	15.302
2000*	42.098	(9.984)	0.335	(16.360)	16.089
2001*	43.571	(9.862)	0.472	(17.134)	17.047
2002*	45.096	(10.059)	0.661	(17.770)	17.928
2003*	46.674	(10.741)	0.977	(18.721)	18.189
2004*	46.857	(10.959)	4.627	(19.167)	21.358
2005*	48.614	(11.337)	6.081	(20.178)	23.180
2006*	50.437	(11.238)	6.313	(19.464)	26.048
2007*	66.711	(7.642)	6.430	(19.312)	46.187
2008*	69.213	(5.076)	7.026	(20.038)	51.125
2009*	70.379	(1.241)	7.100	(17.619)	58.619
2010*	73.018	(1.012)	7.367	(17.969)	61.404
2011	75.757	0.171	7.643	(18.820)	64.751
2012	78.598	0.177	7.930	(19.526)	67.179
2013	81.545	0.184	8.227	(20.258)	69.698
2014	84.603	0.191	8.535	(21.018)	72.311
2015	87.775	0.198	8.855	(21.806)	75.022
2016	91.067	0.205	9.188	(22.623)	77.837
2017	94.482	0.213	9.532	(23.472)	80.755
2018	98.025	0.221	9.890	(24.352)	83.784
2019	101.701	0.229	10.260	(25.265)	86.925
2020	105.515	0.238	10.645	(26.212)	90.186
2021	109.472	0.247	11.044	(27.196)	93.567
2022	113.577	0.256	11.459	(28.215)	97.077
2023	117.836	0.265	11.888	(29.273)	100.716
2024	122.254	0.275	12.334	(30.371)	104.492
2025	126.839	0.286	12.796	(31.510)	108.411
2026	0.000	0.296	13.276	(15.828)	-2.256
2027	0.000	0.308	13.774	0.000	14.082
2028	0.000	0.319	14.291	0.000	14.610
2029	0.000	0.331	14.827	0.000	15.158
2030	0.000	0.343	15.383	0.000	15.726
2031	0.000	0.356	15.960	0.000	16.316
2032	0.000	0.370	16.558	0.000	16.928
2033	0.000	0.383	17.179	0.000	17.562
2034	0.000	0.398	1.141	0.000	1.539
2035	0.000	0.413	0.000	0.000	0.413
2036	0.000	0.428	0.000	0.000	0.428
2037	0.000	0.395	0.000	0.000	0.395
2038	0.000	0.000	0.000	0.000	0.000

*Actual data

TABLE 12

PAST AND PROJECTED UNFUNDED LIABILITY BALANCE ON SEPTEMBER 30 (Before Payment)
(\$ in billions)

Calendar Year	Original UFL	Assumption Changes	Benefit Changes	Actuarial Experience	Total
1984*	\$528.700	\$0.000	\$0.000	\$0.000	\$528.700
1985*	553.500	0.000	0.000	-13.800	539.700
1986*	578.800	0.000	-3.000	-34.200	541.600
1987*	605.200	3.600	-2.998	-59.500	546.302
1988*	632.700	-50.062	-3.076	-81.180	498.382
1989*	664.173	-53.711	-3.172	-94.562	512.728
1990*	693.224	-55.207	-3.253	-102.283	532.481
1991*	723.306	-97.578	-3.331	-111.879	510.518
1992*	757.959	-102.353	-3.421	-139.327	512.858
1993*	790.488	-105.057	-3.494	-167.942	513.995
1994*	824.120	-130.691	-0.968	-201.052	491.409
1995*	852.872	-134.017	-0.832	-217.255	500.768
1996*	880.822	-159.859	0.897	-231.424	490.436
1997*	902.444	-162.883	1.000	-244.673	495.888
1998*	922.521	-164.057	1.014	-259.976	499.503
1999*	942.360	-169.827	6.583	-277.940	501.176
2000*	959.626	-164.942	9.414	-284.168	519.931
2001*	974.873	-162.970	13.075	-285.393	539.585
2002*	989.509	-170.593	19.216	-293.105	545.027
2003*	1,003.439	-172.248	94.231	-297.115	628.308
2004*	1,016.562	-171.288	125.272	-304.415	666.132
2005*	1,030.312	-165.769	128.261	-290.020	702.784
2006*	1,043.054	-126.439	131.332	-282.660	765.287
2007*	1,052.174	-89.221	140.140	-279.068	824.025
2008*	1,044.591	-27.990	142.047	-254.441	904.207
2009*	1,031.462	-19.974	142.785	-245.726	908.548
2010*	1,016.346	2.415	143.487	-258.786	903.461
2011	997.569	3.624	143.947	-254.664	890.475
2012	974.816	3.652	144.141	-249.406	873.203
2013	947.751	3.674	144.043	-243.098	852.371
2014	916.012	3.691	143.626	-235.653	827.676
2015	879.215	3.701	142.858	-226.976	798.799
2016	836.948	3.705	141.709	-216.968	765.394
2017	788.769	3.701	140.141	-205.520	727.092
2018	734.209	3.689	138.119	-192.515	683.501
2019	672.765	3.667	135.602	-177.833	634.201
2020	603.900	3.636	132.549	-161.340	578.744
2021	527.042	3.593	128.913	-142.898	516.650
2022	441.580	3.539	124.647	-122.355	447.411
2023	346.863	3.471	119.696	-99.553	370.478
2024	242.196	3.391	114.007	-74.321	285.273
2025	126.839	3.295	107.519	-46.477	191.176
2026	0.000	3.182	100.170	-15.828	87.524
2027	0.000	3.052	91.890	0.000	94.942
2028	0.000	2.901	82.608	0.000	85.510
2029	0.000	2.731	72.245	0.000	74.976
2030	0.000	2.538	60.720	0.000	63.258
2031	0.000	2.321	47.944	0.000	50.265
2032	0.000	2.078	33.823	0.000	35.901
2033	0.000	1.806	18.258	0.000	20.064
2034	0.000	1.505	1.141	0.000	2.646
2035	0.000	1.171	0.000	0.000	1.171
2036	0.000	0.802	0.000	0.000	0.802
2037	0.000	0.395	0.000	0.000	0.395
2038	0.000	0.000	0.000	0.000	0.000

*Actual data

The Military Retirement Fund Transaction Process

The description of deficit, debt, and funding impact contained in this section are applicable under the current practices of the federal government regarding budget accounting and tax policy. These practices do not provide for increases in taxes to fund the military retirement system beyond what is required to pay benefits to retirees and survivors each year, but do result in increases in the national debt.

A trust fund was created inside the Unified Budget of the federal government for the monies of the military retirement system. This fund has three sources of income: (1) normal cost payments made by DoD, (2) unfunded liability and Concurrent Receipt normal cost payments made by Treasury, and (3) interest earnings on investments in government securities made by Treasury and the payment of the par values of these securities at maturity. All three of these items are intragovernmental transfers consisting of debits from one government account and credits to another.

The fund has two types of payouts: (1) payments to retirees and survivors of retirees and (2) purchases of U.S. Treasury securities. The purchase of a Treasury security is also an intragovernmental transfer, while a payment to a retiree or a survivor is not.

Figure 2 on the following page depicts this process. The only transactions in a particular year that directly affect the deficit of the Unified Budget are those that pass in or out of the government, such as tax collections (“in”) and retiree or survivor payments (“out”). The intragovernmental transfers are debits and credits within the federal budget, with no direct effect on the deficit. The following examples illustrate the process:

- If DoD debits \$25 billion in normal cost payments and the fund credits the \$25 billion, the net direct federal budget deficit effect is zero.
- If the fund purchases \$30 billion in securities (debit) and the Treasury sells \$30 billion in securities (credit), the net direct federal budget deficit effect is zero.
- If the Treasury pays \$20 billion interest (debit) and the fund earns \$20 billion interest (credit), the net direct federal budget deficit effect is zero.
- Disregarding all other government programs, if the government collects \$45 billion in tax revenues (credit) and pays \$50 billion to retirees (debit), the net direct federal budget deficit effect is \$5 billion.

UNIFIED BUDGET

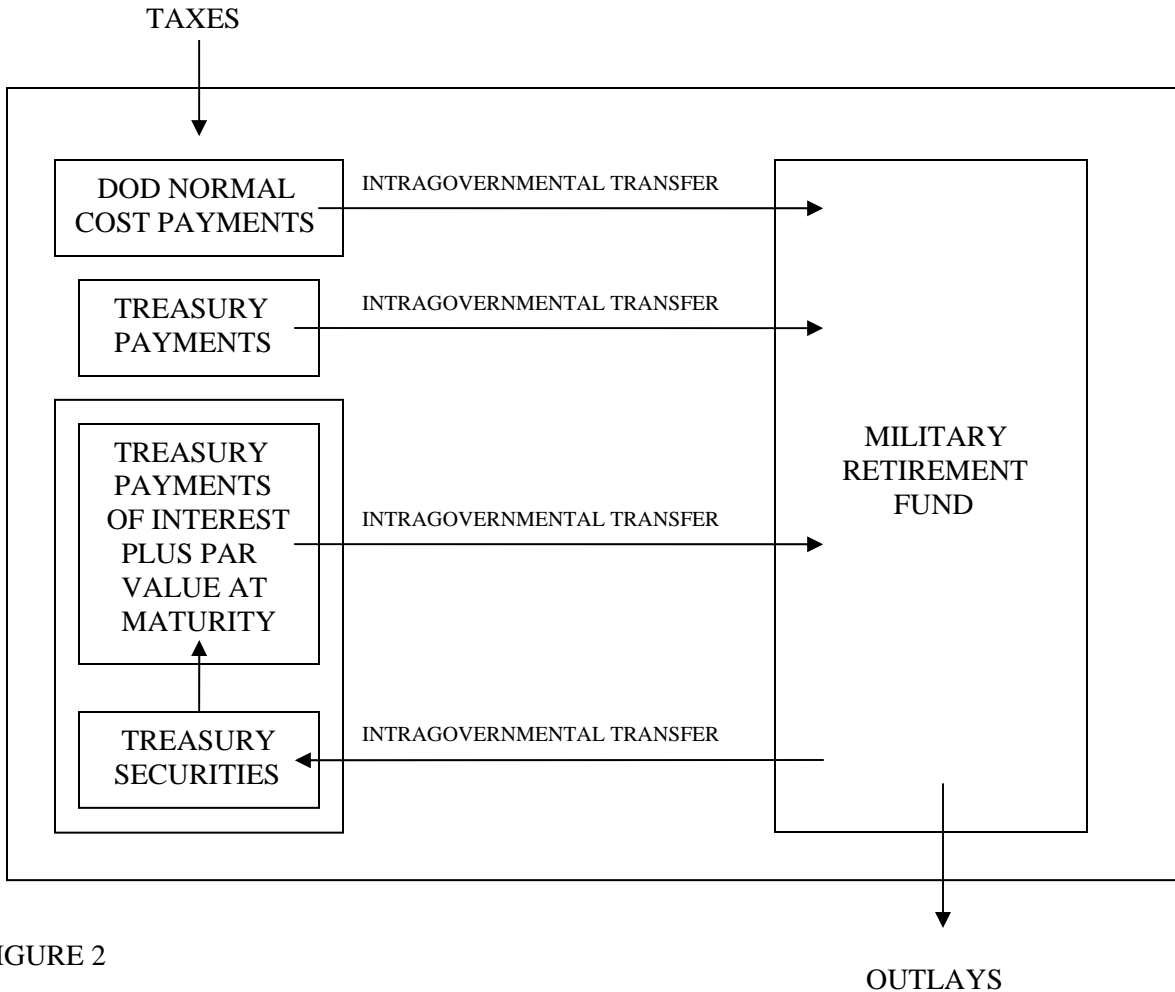


FIGURE 2

All of the intragovernmental transfers in Figure 2 will always generate both a credit and an associated equal debit within the Unified Budget. Consequently, under current federal budget accounting practices, contributions to the fund beyond what are required to pay benefits to retirees and survivors that year have no impact on the total federal deficit. Just as in the pay-as-you-go method, the only transactions that directly affect the deficit in the retirement system accounting process are payments to retirees and survivors (i.e. outlays).

On the other hand, the purchase of securities by the fund does increase the national debt, specifically the portion of the debt held by the government. The portion held by the public will not change. However, the total debt will increase and this requires an increase in the statutory borrowing authority (debt ceiling).

Suppose that in the year 2010 the amount needed to pay retirees was \$50 billion and the Military Retirement Fund had grown to \$320 billion. The following transactions would take place:

- Fund cashes in \$50 billion in securities (credit).
- Treasury pays \$50 billion to Fund (debit).
- Net federal surplus zero.

Since no budget surplus can be derived from using fund money, the government still has a need for \$50 billion to pay retirees—the same need it would have under the pay-as-you-go system. Accordingly, the fund cannot transfer liabilities from one tax year to another.

However, funding does have an effect on the DoD budget. With the normal cost payments (except for Concurrent Receipt) in the DoD budget, policymakers now consider the impact on future retirement costs when they make manpower decisions, and this could have a significant impact on future federal budgets. For example, if a decision were made today to double the size of the active duty and reserve forces, the DoD budget would automatically have an immediate increase in retirement obligations. Under the pay-as-you-go method, the retirement expenses would not necessarily be considered in the initial decision since they would not show up for 20 years.

The fact that costs are fully recognized in advance provides greater benefit security over the long term. Also, when there is a fund, the system is not as dependent on obtaining the necessary appropriation from Congress each year in order to pay benefits for that year. This can provide additional benefit security in the short run.

APPENDIX A

THE MILITARY RETIREMENT SYSTEM: BENEFITS

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THE MILITARY RETIREMENT SYSTEM: BENEFITS

As of September 30, 2010

Summary

The military retirement system applies to members of the Army, Navy, Marine Corps, and Air Force. However, most of the provisions also apply to retirement systems for members of the Coast Guard (administered by the Department of Homeland Security), officers of the Public Health Service (administered by the Department of Health and Human Services), and officers of the National Oceanic and Atmospheric Administration (administered by the Department of Commerce). Only those members in plans administered by the Department of Defense (DoD) are included in this report.

The system is a funded, noncontributory defined benefit plan that includes nondisability retired pay, disability retired pay, retired pay for reserve service, survivor annuity programs, and special compensation programs for certain disabled retirees. The Service Secretaries may approve immediate nondisability retired pay at any age with credit of at least 20 years of active duty service. Reserve retirees generally must be at least 60 years old and have at least 20 qualifying years of service before retired pay commences. Public Law 110-181 allows a 90-day reduction in the reserve retirement age from age 60 for every 3 months served within a contingency operation, for service after enactment. There is no vesting before retirement.

There are three distinct non-disability benefit formulas related to three populations within the military retirement system. (1) *Final Pay*: Military personnel who first became members of a uniformed service before September 8, 1980, have retired pay equal to final basic pay times a multiplier. The multiplier is equal to 2.5 percent times years of service. (2) *High-3 (HI-3)*: If the retiree first became a member of a uniformed service on or after September 8, 1980, the average of the highest 36 months of basic pay is used instead of final basic pay. (3) *Career Status Bonus (CSB)/Redux*: Members who first became a member of a uniformed service on or after August 1, 1986, may choose between a High-3 and CSB/Redux retirement. Those who elect CSB/Redux receive the Career Status Bonus outlined below, also have retired pay computed on a base of the average of their highest 36 months of basic pay, but are subject to a multiplier penalty if they retire with less than 30 years of service; however, at age 62, their retired pay is recomputed without the penalty. Members make their election during the fifteenth year of service and may receive the Career Status Bonus of \$30,000 in either a lump-sum or installments. Those who elect CSB/Redux generally must remain continuously on active duty until they complete 20 years of active duty service or forfeit a portion of the \$30,000 (exceptions include death and disability retirement).

Retired pay and survivor annuity benefits are automatically adjusted annually to protect the purchasing power of initial retired pay. The benefits associated with members first entering the armed services before August 1, 1986, or those entering on or after that date who do not take the CSB, have their benefits adjusted annually by the percentage increase in the average Consumer Price Index (CPI). Refer to the section "Cost-of-Living Increases" in this appendix for more information on the CPI. This is commonly referred to as full CPI protection. Benefits

associated with members entering on or after August 1, 1986, who elect the \$30,000 CSB bonus payment are annually increased by the percentage change in the CPI minus 1 percent (except when the change in the CPI is less than or equal to 1%), but at the military member's age 62, or when the member would have been age 62 for a survivor annuity, the benefits are restored to the amount that would have been payable had full CPI protection been in effect. This restoration is in combination with that described in the previous paragraph. However, after this restoration, partial indexing (CPI minus 1 percent) continues for future retired pay and survivor annuity payments.

The FY 2011 National Defense Authorization Act (NDAA) (Public Law 111-383) required "amounts of retired pay and retainer pay due a retired member of the uniformed services shall be paid on the first day of each month beginning after the month in which the right to such pay accrues." This means that when the first day of the month falls on a non-business day (weekend/holiday), the pay must be paid the preceding business day, e.g., with October 1, 2011 falling on a Saturday, the MRF distributed the October retired and retainer pay entitlements on September 30, 2011. This legislation did not apply to survivor pay. In certain fiscal years, this results in retirees receiving 13 payments in one and 11 payments in the next; however, the typical 12 monthly payments will be the most frequent occurrence. Note that annual fiscal year amounts shown throughout this report represent 12 monthly payments without regard to the 2011 NDAA.

Nondisability Retirement From Active Service

The current system allows voluntary retirement upon completion of at least 20 years of service at any age, subject to Service Secretary approval. The military retiree receives immediate retired pay calculated as (base pay) times (a multiplier). Base pay is equal to terminal basic pay if the retiree first became a member of a uniformed service before September 8, 1980. It is equal to the average of the highest 36 months of basic pay for all other members. The multiplier is equal to (2.5 percent) times (years of service, rounded down to the nearest month). Members first entering a uniformed service on or after August 1, 1986, who elect CSB/Redux and who retire with less than 30 years of service receive a temporary penalty until age 62. The penalty reduces the multiplier by one percentage point for each full year of service under 30. For example, the multiplier for a 20-year retiree would be 40 percent (50 percent minus 10 percent, where 50 percent equals 20 years times 2.5 percent). At age 62, the retired pay is recomputed with the penalty removed.

As of September 2010, 1.47 million nondisability retirees from active duty and full-time reserves were receiving an annualized retired pay entitlement totaling \$40.45 billion. Included in this number are a reported 20,280 nondisabled retirees who elected CSB/Redux.

Disability Retirement

A military member in an active component or on active duty for more than 30 days who is found unfit for duty is entitled to disability retired pay if the disability:

- (a) is incurred while entitled to basic pay;
- (b) is neither the result of the member's intentional misconduct nor willful neglect;
- (c) was not incurred during a period of unauthorized absence; and
- (d) either:
 - (1) the member has at least 20 years of service; or
 - (2) the disability is rated at least 30 percent under the Department of Veterans Affairs Schedule of Rating Disabilities (VASRD) and one of the following conditions is met:
 - (i) the disability was not noted at the time of the member's entrance on active duty (unless clear and unmistakable evidence demonstrates that the disability existed before the member's entrance on active duty and was not aggravated by active military service);
 - (ii) the disability is the proximate result of performing active duty;
 - (iii) the disability was incurred in the line of duty in time of war or national emergency;
 - or
 - (iv) the disability was incurred in the line of duty after September 14, 1978.

Under certain conditions generally similar to the above, members on active duty for 30 days or less or on inactive-duty training are also entitled to disability retired pay for disabilities incurred or aggravated in the line of duty.

In disability retirement, the member may elect to receive retired pay equal to either:

- (1) the accrued non-disability retirement benefit regardless of eligibility to retire; or
- (2) base pay multiplied by the rated percent of disability.

Except for members with more than 30 years of service, the benefit cannot be more than 75 percent of base pay. Only the excess of (1) over (2) is subject to federal income taxes if the member had service on or before September 24, 1975. If not a member of a uniformed service on September 24, 1975, disability retired pay is tax-exempt only for those disabilities that are combat or hazardous duty related. Base pay is equal to final basic pay if the retiree first became a member of a uniformed service before September 8, 1980; otherwise, base pay is equal to the average of the highest 36 months of basic pay.

Members whose disabilities may not be permanent are placed on a temporary-disability retired list and receive disability retirement pay just as if they were permanently disabled. However, they must be physically examined every 18 months for any change in disability. A final determination must be made within five years. The temporary disability pay is calculated like the permanent disability retired pay, except that it can be no less than 50 percent of base pay.

Members who elected the CSB/Redux retirement option, but who retire for disability, are not subject to the reduced CSB/Redux retired pay multiplier and are awarded retired pay based on the disability retired rules outlined above. However, such members continue to be subject to the reduced CPI (with age 62 restoral) as Career Status Bonus recipients.

As of September 2010, 93,000 disability retirees were receiving an annualized retired pay entitlement totaling \$1.37 billion. Included in this number are a reported 472 disability retirees who elected CSB/Redux.

Reserve Retirement

Members of the reserves may retire after 20 qualifying years of creditable service. However, reserve retired pay is not payable until age 60 unless the member performs certain types of active duty or active service subsequent to the enactment of Public Law 110-181. Retirement age is reduced below 60 by three months for every 90 days of active service with a limit of 10 years. (Eligibility for retiree health benefits remains at age 60 even if the eligibility age for retired pay is reduced.) Retired pay is computed as base pay times 2.5 percent times years of service. If the reservist was first a member of a uniformed service before September 8, 1980, base pay is defined as the active duty basic pay in effect for the retiree's grade and years of service at the time that retired pay begins. If the reservist first became a member of the armed services on or after September 8, 1980, base pay is the average basic pay for the member's grade in the highest 36 months computed as if he/she was on active duty for the entire period preceding age 60. The years of service are determined by using a point system, where 360 points convert to a year of service. Typically, one point is awarded for one day of active duty service (e.g. active duty training) or one inactive duty training (IDT) drill attendance. Reservists often perform two IDT periods in one day thereby receiving two retirement points per day. In addition, 15 points are awarded for completion of one year's membership in a reserve component. A creditable year of service is one in which the member earned at least 50 points. A member generally cannot retire with less than 20 creditable years, although points earned in non-creditable years are used in the retirement calculation. Beginning with years of service that include October 30, 2007, non-active duty points are limited in any year to no more than 130. Lesser limitations have applied in the past.

As of September 2010, 357,000 reserve retirees were receiving an annualized retired pay entitlement totaling \$4.99 billion.

Survivor Benefits

Legislation originating in 1953 provided optional survivor benefits. It was later referred to as the Retired Servicemen's Family Protection Plan (RSFPP). The plan proved to be expensive to the participants and inadequate since the survivor annuities were never adjusted for inflation and could not be more than 50 percent of retired pay. RSFPP was designed to be self-supporting in the sense that the present value of the reductions to retired pay equaled the present value of the survivor annuities.

On September 21, 1972, RSFPP was replaced by the Survivor Benefit Plan (SBP) for new retirees. RSFPP still covers those servicemen retired before 1972 who did not convert to the new plan or who retained RSFPP in conjunction with SBP. RSFPP continues to pay survivor annuities.

Retired pay is reduced, before taxes, for the member's cost of SBP. Total SBP costs are shared by the government and the retiree, so the reductions in retired pay are only a portion of the total cost of the SBP program.

The SBP survivor annuity is 55 percent of the member's base amount. The base amount is elected by the member, but cannot be less than \$300 or more than the member's full gross monthly retired pay, with one exception. If the member elects CSB/Redux and is subject to a penalty for service under 30 years in the calculation of retired pay, the maximum base amount is equal to the full retired pay without the penalty. However, the annuity for a survivor of a CSB/Redux retiree is subject to the reduced CPI.

When the plan started in 1972, benefits for those 62 and older were reduced by the constructed amount of Social Security for which the survivor would be eligible based on the member's military pay. In 1985, that reduction formula was changed so all annuitants 62 and over received a reduced flat rate of 35 percent of the member's base. Beginning October 1, 2005, the age 62 reduced rate was phased out in 5 percent increments. On April 1, 2008, the survivor benefit reduction at age 62 was fully eliminated and the rate of 55 percent of the member's elected base became standard for all survivors, regardless of age.

During FY 1987, the SBP program's treatment of survivor remarriages changed. Prior to the change, a surviving spouse remarrying before age 60 had the survivor annuity suspended. The change lowered the age to 55. If the remarriage ends in divorce or death, the annuity is reinstated.

An active or reserve member who died in the line of duty on or after September 10, 2001, is generally assumed to have retired with full disability on the day they died and to have elected full SBP coverage for spouses, former spouses, and/or children. (If the death does not occur in the line of duty, and while performing inactive duty for reservists, the SBP benefit is based on the member's years of service, rather than assuming a full disability retirement.) Insurable interest elections may be applicable in some cases.

As with retired pay, SBP annuities and premiums are annually increased with cost-of-living adjustments (COLAs). These COLAs are either full or partial CPI increases, depending on the benefit formula covering the member. If a member who elected the CSB/Redux retirement option dies before age 62, the survivor is subject to partial COLAs and his/her annuity is increased on what would have been the member's 62nd birthday to the amount that would have been payable had full COLAs been in effect. Partial COLAs continue annually thereafter.

For reserve retirees, the retired pay reductions applicable under SBP apply for survivor coverage after a reservist turns 60 (or earlier if they have certain active service) and begins to receive retired pay. Reserve Component Survivor Benefit Program (RCSBP) provides annuities to survivors of reservists who die before age 60 (or earlier if they have certain active service), provided they attained 20 years of qualified service and elected to participate in the program (or were within their 90-day election window after receiving their "20-year letter"). However, if the death occurs either on active or inactive duty as described above, the survivor receives an annuity under SBP. The added cost of RCSBP coverage is borne completely by reservists through deductions from future retired pay.

Beginning October 1, 2008, a paid-up provision eliminated the reduction in retired pay for premiums for SBP and RSFPP coverage for participants age 70 or older whose retired pay has been reduced for at least 360 months.

As of September 2010, 295,000 survivors of military members were receiving an annualized annuity entitlement totaling \$3.62 billion.

Temporary Early Retirement Authority (TERA)

Public Law 102-484 granted temporary authority for the military services to offer early retirements to members with more than 15 but less than 20 years of service. The retired pay was calculated in the usual way except that there was a reduction of 1 percent for every year below 20 years of service. Part or all of this reduction can be restored at age 62 if the retired member works in a qualified public service job during the period from the date of retirement to the date on which the retiree would have completed 20 years of service. Unlike members who leave military service before 20 years with voluntary separation incentives or special separation benefits, these early retirees are generally treated like regular military retirees for the purposes of other retirement benefits. This authority expired on September 1, 2002.

The FY 2012 National Defense Authorization Act (NDAA) (Public Law 112-81) reinstated TERA through December 2018, but without the qualified public service provision.

As of September 2010, 57,000 TERA retirees were receiving an annualized retired pay entitlement totaling \$904 million.

Cost-of-Living Increases

All nondisability retirement, disability retirement, and most survivor annuities are adjusted annually for inflation. Cost-of-living adjustments (COLAs) are automatically scheduled to occur every 12 months, on December 1st, to be reflected in checks issued at the beginning of January.

The “full” COLA effective December 1 is computed by calculating the percentage increase in the average CPI of the third quarter of the prior calendar year to the third quarter of the current calendar year. The increase is based on the Urban Wage Earner and Clerical Worker Consumer Price Index (CPI-W) and is rounded to the nearest tenth of one percent.

The benefits of retirees (and most survivors) are increased annually with the full COLA, except for those first entering a uniformed service on or after August 1, 1986, who elect CSB/Redux. Their benefits are increased annually with a partial COLA equal to the full COLA minus 1 percent (except if the full COLA is less than or equal to 1%). A one-time restoral is given to a partial COLA recipient on the first day of the month after the retiree’s 62nd birthday. At this time, retired pay (or the survivor benefit if the retiree is deceased) is increased to the amount that would have been payable had full COLAs been in effect. Annual partial COLAs continue after this restoral.

Relationship with Veterans Administration Benefits

The Department of Veterans Affairs (VA) provides compensation for Service-connected and certain non-Service-connected disabilities. These VA benefits can be in place of or in combination with DoD retired pay, but through December 31, 2003, were not fully additive. Since VA benefits are exempt from federal income taxes, it is often to the advantage of a member to elect them. Through 2003, retired pay earned from DoD for military service was offset by any payment received from VA for a VA-rated disability. Beginning with the National Defense Authorization Act for FY 2004 (Public Law 108-136), a series of legislation has been enacted that increasingly reduces or eliminates the offset to military retired pay due to receipt of VA disability compensation. Members with a combined VA disability rating of 50% or greater who have at least 20 years of service will have their offset eliminated under the Concurrent Retirement and Disability Pay (CRDP) program. The CRDP program has a ten-year phase-in schedule that began in 2004; however, the offset is already fully eliminated for members whose disabilities are rated total or make the individual unemployable. Members whose disability meets certain combat-related criteria can elect to receive payments against the offset under the Combat Related Special Compensation (CRSC) program. Under CRSC, members are not subject to a phase-in schedule, are not required to have at least 20 years of service (per Public Law 110-181), and are not required to have at least a 50% VA disability rating. Although CRSC amounts are calculated based on retired pay lost due to offset and are paid from the Military Retirement Fund, CRSC is not technically considered retired pay. CRSC payments are tax exempt. A member may not participate in both the CRDP and CRSC programs simultaneously, but may change from one to the other during an annual "open season."

VA benefits also overlap survivor benefits through the Dependency and Indemnity Compensation (DIC) program. DIC is payable to survivors of veterans who die from Service-connected causes. Although SBP annuities are generally reduced by the amount of any DIC benefit, all SBP premiums relating to the reduction in benefits are returned to the survivor. The 2008 National Defense Authorization Act enacted, and the Family Smoking Prevention and Tobacco Control Act of 2009 (Public Law 111-31) revised, a temporary Special Survivor Indemnity Allowance (SSIA) that pays a monthly amount (\$50 in FY 2009 grading up to \$310 in FY 2017) to survivors with a DIC offset; the authority for the allowance ends in 2017. Because of the "Sharp Case" ruling, the SBP benefit of survivors with entitlement to both DIC and SBP who remarry after age 57 is not reduced by DIC benefits received.

As of September 2010, there were 290,000 CRDP members and 74,000 CRSC members. These members were paid an additional monthly amount of \$389 million and \$70 million, respectively. As of September 2010, there were 56,000 survivors receiving annualized SSIA benefits of \$40.6 million.

Interrelationship with Other Federal Service

For retirement purposes, no credit is given for other federal service, except where cross-service transferability is allowed. Military service is generally creditable toward the federal civilian retirement systems if military retired pay is waived. However, a deposit (equal to a percentage of post-1956 basic pay) must be made to the Civil Service Retirement Fund in order to receive credit. Military service is not generally creditable under both systems (but is for reservists and certain disability retirees).

Relationship of Retired Pay to Military Compensation

Basic pay is the only element of military compensation upon which non-disability retired pay is based and entitlement is determined. Basic pay is the principal element of military compensation that all members receive, but it is not representative of salary levels in the public and private sectors for comparative purposes. Reasonable comparisons can be made to regular military compensation (RMC). RMC is the sum of (1) basic pay, (2) the housing allowance, which varies by grade, location, and dependency status, (3) the subsistence allowance and, (4) the tax advantages accruing to allowances because they are not subject to federal income tax. Basic pay represents approximately 69 percent of RMC for all retirement eligible members. For the 20-year retiree, basic pay is approximately 68 percent of RMC. Consequently, a member retired with 20-years of service and entitled to 50 percent of basic pay, only receives 34 percent of RMC. For a 30-year retiree, basic pay is approximately 73 percent of RMC and such member would be entitled to 75 percent of basic pay or 55 percent of RMC. Public Law 109-364 allows certain members, retired since January 1, 2007, with greater than 30 years of service to retire with entitlements exceeding 75 percent of basic pay. These relationships should be considered when military retired pay is compared to compensation under other retirement systems.

Social Security Benefits

Many military members and their families receive monthly benefits indexed to the CPI from Social Security. As full participants in the Social Security system, military personnel are in general entitled to the same benefits and are subject to the same eligibility criteria and rules as other employees. Details concerning the benefits are covered in other publications.

Beginning in 1946, Congress enacted a series of amendments to the Social Security Act that extended some benefits to military personnel and their survivors. These “gratuitous” benefits were reimbursed out of the general fund of the U.S. Treasury. The Servicemen’s and Veterans’ Survivor Benefits Act brought members of the military into the contributory Social Security system effective January 1, 1957.

For the Old Age, Survivors, and Disability Insurance (OASDI) program, military members must contribute the employee portion of the OASDI payroll tax, with the federal government contributing the matching employer contribution. Only the basic pay of a military member constitutes wages for Social Security purposes. One feature of OASDI unique to military personnel grants a noncontributory wage credit of (i) \$300 for each quarter between

1956 and 1978 in which such personnel received military wages and (ii) up to \$1,200 per year after 1977 (\$100 of credit for each \$300 of wages up to a maximum credit of \$1,200). The purpose of this credit is to take into account elements of compensation such as quarters and subsistence not included in wages for Social Security benefit calculation purposes. Under the 1983 Social Security amendments, the cost of the additional benefits resulting from the noncontributory wage credits for past service was met by a lump sum payment from general revenues, while the cost for future service will be met by payment of combined employer-employee tax on such credits as the service occurs. Payments for these wage credits ended in 2002.

Members of the military are also required to pay the Hospital Insurance (HI) payroll tax, with the federal government contributing the matching employer contribution. Medicare eligibility occurs at age 65, or earlier if the employee is disabled.

Performance Measures

During FY 2010, the Fund made monthly disbursements to approximately 2.2 million retirees and survivors.

There are many ways to measure the funding progress and performance of a pension plan. Table A-1 depicts a few common measures, specifically 1) Percent Funded, 2) Asset-to-Annuitant Liability Ratio, and 3) Effective Fund Yield. The table footnotes show the associated derivation of each performance measure.

TABLE A-1
MILITARY RETIREMENT FUND PERFORMANCE MEASURES
(\$ in billions)

End of Fiscal Year	Accrued Liability (1)	Assets (2)	Annuitant Liability On Roll (3)	Unfunded Accrued Liability (4)	Percent Funded (5)	Asset-to-Annuitant Liability Ratio (6)	Fund Effective Yield (7)
1984	\$528.7	\$0	\$310.0	\$528.7	0.0%	---	---
1985	551.5	11.8	322.7	539.7	2.1	3.7%	14.3%
1986	566.2	24.6	321.4	541.6	4.3	7.7	11.8
1987	585.2	38.9	326.3	546.3	6.6	11.9	11.0
1988	551.8	53.4	329.4	498.4	9.7	16.2	10.5
1989	580.3	67.6	345.8	512.7	11.6	19.5	10.1
1990	612.9	80.4	367.5	532.5	13.1	21.9	9.9
1991	604.2	93.7	372.9	510.5	15.5	25.1	9.8
1992	619.0	106.1	392.7	512.9	17.1	27.0	9.5
1993	629.9	115.9	409.3	514.0	18.4	28.3	9.1
1994	615.6	124.2	409.9	491.4	20.2	30.3	8.7
1995	631.8	131.0	431.3	500.8	20.7	30.4	8.6
1996	625.8	135.3	432.2	490.5	21.6	31.3	8.6
1997	639.2	143.3	444.9	495.9	22.4	32.2	8.5
1998	649.4	149.9	452.9	499.5	23.1	33.1	8.4
1999	657.2	156.0	442.7	501.2	23.7	35.2	8.1
2000	682.6	162.7	459.8	519.9	23.8	35.4	8.0
2001	708.8	169.2	487.3	539.6	23.9	34.7	8.0
2002	721.6	176.5	467.2	545.1	24.5	37.8	7.2
2003	810.9	182.6	519.8	628.3	22.5	35.1	5.5
2004	854.1	188.0	556.3	666.1	22.0	33.8	5.4
2005	900.6	197.9	592.2	702.7	22.0	33.4	5.5
2006	973.7	208.4	636.3	765.3	21.4	32.8	5.9
2007	1,042.3	218.2	677.3	824.1	20.9	32.2	4.7
2008	1,157.3	253.1	750.6	904.2	21.9	33.7	6.2
2009	1,186.9	278.4	751.8	908.5	23.5	37.0	1.0
2010	1,225.2	321.7	768.0	903.5	26.3	41.9	3.2

NOTES:

- (1) From Table 7, Item 3 in main text.
- (2) From Table 7, Item 4 in main text.
- (3) From Table 7, Item 1.a in main text.
- (4) = (1) - (2)
- (5) = (2) / (1) x 100
- (6) = (2) / (3) x 100
- (7) Discussed in Appendix D.

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APPENDIX B

THE MILITARY RETIREMENT SYSTEM: HISTORY

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THE MILITARY RETIREMENT SYSTEM: HISTORY¹

The history of the Uniformed Service Military Retirement System in the United States extends back to the early days of the country. The extensive legislative history has been an interplay of the separate retired pay plan motivations. When available, the Public Law (P.L.) reference is provided. Over the course of its history, the Military Retirement System has been scrutinized by numerous committees, commissions, and groups. Since the end of World War II, a number of military compensation studies have been conducted under the general sponsorship of the Department of Defense, the President, and Congress, including: Hook, Strauss, Cordiner, Gorham/Randall, Quadrennial Review of Military Compensation, Gates, etc. However, a similar conclusion is reached by each study – the costs of the proposed system are reasonable. It should be noted that while there may be superficial resemblance between the Military Retirement System and other retirement systems, there exists substantial differences, including that of the Federal civil servants. Primarily, retired members are subject to active duty recall.

History of Retired Pay – Active Duty and Disability

The legislative history of the nondisability (regular service) and disability retired pay have been a collaborative effort of lawmakers. The two programs are highly correlated given the possible end states of a regular service career. Before discussing the regular service retired pay history, below are the motivations driving the two distinct retirement types:

- 1) The principal motivations guiding the nondisability retired pay evolution of the military retirement system have been to ensure that (1) continued service in the armed forces is competitive with the alternatives; (2) promotion opportunities are kept open for young and able members; (3) some measure of economic security is made available to members after retirement from a military career; (4) a pool of experienced personnel is available for recall in times of war or national emergency. Much of the history to be discussed focuses on officers. The legislative history for enlisted personnel is much shorter. The objectives can be achieved for the enlisted force by an administrative policy of “judicious non-acceptance of reenlistments.”
- 2) The guiding motivation behind disability retired pay is to authorize continuing payments to members separated from active service due to physical disability causes in service for their country. Members should not be left to cope with the effects of these disabilities on their own. A measure of economic security will be provided for duties

¹ Much of the information in this appendix can be found in *Military Compensation Background Papers*, Sixth Edition (May 2005), Department of Defense – Under Secretary of Defense for Personnel and Readiness. For a more in-depth discussion of the early history of military pensions, refer to *History of Military Pension Legislation in the United States*, William H. Glasson, New York, N.Y. 1900, Digitized by Google.

exposing members to wartime hazards and career military service. Early reports showed rationale for separation other than physical disability as well: “An officer may possess a strong mind and a robust frame, yet, if his moral perception of right or wrong be so blunted and debased as to render him unreliable, he could hardly be ranked as the capable officer.”

Provisions for the maintenance of disabled military members date to colonial days. Not surprisingly, the English pension law is a precursor to the American colonial pension legislation. The pilgrims at Plymouth provided in 1636 that any man sent forth as a soldier and returned maimed should be maintained by the colony during his life. In order to obtain enlistments in military expeditions against the Indians the colonies promised to care for those who were disabled and had no means of earning a livelihood as well as providing aid for the indigent families of those fallen in conflict. Some of these precedents were continued in the first national pension law of August 26, 1776, which promised half pay for life, or during disability, to the disabled. After the Revolutionary War, a full disability pension for a noncommissioned officer or private soldier was fixed at five dollars per month, with commissioned officers being paid at one-half of their monthly pay. Initially, the States administered disability pensions. However, in 1790, the Secretary of War became the principal pension administrator. In 1805, disability pensions were extended to those who received wounds in military service who subsequently became disabled.

Pensions based on service by itself were more controversial. Payments of half pay for life had been promised in 1780 by Congress for officers who served to the end of the War. However, the resulting claims were initially settled for less than full value and with a considerable amount of controversy. With the number of veterans declining and the treasury increasing, Congress became more generous. In 1818, an act was passed providing relief to Revolutionary War veterans in need. By 1832, it became full pay for life, regardless of need. In 1836, widows were included. This same pattern was followed for Service pensions for subsequent wars. However, each war was treated separately.

In 1849, the Bureau of Pensions was transferred to the newly established Department of the Interior, where it was to remain until the Veterans Administration was created in 1930. In 1855, authorization was given for involuntary separation with partial pay of Navy officers adjudged incapable, but not necessarily disabled. The outbreak of the Civil War brought further changes when it became necessary to retire older officers no longer fit for field duty. The vehicle was the act of August 3, 1861, the first major nondisability retirement act, which provided for the voluntary retirement of regular officers of all branches of Service after 40 years of duty, at the discretion of the President. Subsequent acts in 1861 and 1862 provided for involuntary retirements for age or years of service.

The 1861 act also established a military disability retirement system that covered the regular officers of all branches of Service. Army and Marine Corps officers were to be paid an amount equal to their “pay proper” plus four rations. Navy officers were paid slightly more. The act of March 2, 1867, authorized disability retirement for enlisted personnel of the Navy and Marine Corps.

Congress established two enduring retirement principles while reducing forces to a peacetime basis in 1870. The first permitted voluntary retirement of officers after 30 years of service upon approval by the President, and the second eliminated the ration commutation by fixing retired pay at 75 percent of the officer's pay. The 75 percent applied to Army and Marine Corps officers, both disabled and nondisabled, and was extended to the Navy in 1873.

In 1885, the first nondisability retirement law for Army and Marine Corps enlistees was enacted. Paralleling the officer retirement laws, it provided for voluntary retirement at 30 years of service with 75 percent of pay of the grade in which retired, plus an allowance in lieu of quarters, fuel, and light. The law was extended to the Navy in 1899.

By the middle of World War I, the limit on the number of officers who could be placed on the retired list was causing stagnating promotion in the Navy. To alleviate the problem, Congress established selection boards for promotion to Rear Admiral, Captain, and Commanders on the basis of age-in-grade in 1916 (P.L. 64-241). Service-in-grade replaced age-in-grade in 1926 (P.L. 69-413). Those officers not selected for promotion were retired at 2 ½ percent of pay per year of service, not to exceed 75 percent of pay. This was the first recognition of length of service as well as grade in the computation of retired pay.

The act of 1916 (P.L. 64-241) also created the Fleet Naval Reserve, to provide a pool of experienced personnel who could be recalled to active duty in an emergency. While technically different than retirement, the practical effect was that it was possible for enlistees of the Navy and Marine Corps to "retire" with as little as 16 years of service (raised to 20 in 1925) and become entitled to "retainer pay."

By 1938 (P.L. 75-706), the Navy was again experiencing stagnating promotion caused by the large influx of officers throughout World War I. Almost all of these officers were in the same age and years of service groups. To remedy the situation, Congress extended the selection board process to all grades above Lieutenant (junior grade); set limits on years of service for Lieutenant Commanders through Captains; and provided for voluntary retirement at 20 years of service at the discretion of the President.

Following World War II, allegations of unfairness, inequity, and inefficiency in the existing disability retirement system became extensive. A new system for disability retirement was created by the Career Compensation Act of 1949 (P.L. 81-351). Under this system, all disabilities had to be rated under the standard schedule of rating disabilities in use by the Veterans Administration, and the resultant ratings became a factor in disability retired pay entitlement and taxability. The new system covered officer and enlisted personnel of both the regular and reserve components, and it authorized temporary as well as permanent disability retirements. The disability retirement system remains basically unchanged from the way it was enacted in 1949. Much legislation has been passed recently, as well as additional process improvements, in an attempt to modernize the disability system.

Meanwhile, the Officer Personnel Act of 1947 (P.L. 80-381) brought the Army and Air Force under a selection process similar to the Navy system. It also provided that those officers

who failed promotion and were not eligible to retire would receive severance pay of two months per year of service, but not exceeding two years' pay.

Standardized nondisability retirement laws for all Services were brought about by the Army and Air Force Vitalization and Retirement Equalization Act of 1948 (P.L. 80-810). The act established 20 years as the minimum requirement for voluntary retirement, thereby placing the Army and Air Force on a par with the Navy. It also provided for the removal of substandard officers with severance pay equal to one month's pay per year of service, but not exceeding one year's pay. This law resulted, for the first time in history, in uniform voluntary retirement authority among the officers of all branches of service.

P.L. 96-513 changed the retired pay formula for persons who first became a service member after September 7, 1980. For this group, the 2 ½ percent times years of service is multiplied by the average of the highest 36 months of pay, rather than by final pay. This is sometimes referred to as the High-3 (HI-3) formula, where the highest 36 months of pay generally occurs within the highest 3 years of average annual pay. This first major change to retired pay computation since 1948 was endorsed in findings by various committees and commissions.

P.L. 99-348, enacted July 1, 1986, made extensive changes in retired pay formula for persons entering service after July 31, 1986. These persons are credited with 2 percent for each of the first twenty years of service, 3 ½ percent for each of the next 10 years, and 2 ½ percent thereafter. At the member's age 62, the annuity is recomputed to equal the annuity that would have been in effect if a level 2 ½ percent had been used for each year of service. In addition, the cost-of-living adjustment for this group no longer keeps up with inflation, as described later. This is referred to as the Redux benefit formula.

P.L. 106-65, enacted October 1, 1999, enhanced benefits for military members previously covered by the Redux benefit formula (those who entered service on or after August 1, 1986) by converting these members to the HI-3 formula. At the 15 year-of-service mark, these (full-time) members now have the choice of: (1) remaining in HI-3, or (2) electing the Career Status Bonus, which is not paid out of the Military Retirement Fund, and converting to the Redux benefit formula. Those who elect the bonus must commit to remaining continuously in service until completing 20 years or forfeit a portion of the \$30,000. Part-time reservists previously covered by Redux do not have the option of electing the bonus, and so remain under the HI-3 benefit formula. This is referred to as the Career Status Bonus (CSB)/Redux benefit formula. The three different retirement systems currently in effect for members of the uniformed services are conveniently summarized in Table B-1.

P.L. 108-136, enacted November 23, 2003, provides a phase-out of the offset to military retired pay due to receipt of Veterans Affairs (VA) disability compensation for members whose combined disability rating is 50% or greater, effective January 1, 2004. Members retired under disability provisions must have at least 20 years of service. P.L. 108-136 also expands eligibility under the Combat Related Special Compensation program to include qualified retirees at any combined percentage rating for certain combat-related disabilities compensated by the VA.

Through 2003, retired pay earned from DoD for military service was offset by any payment received from Veterans Affairs for a VA-rated disability. These VA benefits were in place of or in combination with DoD retired pay but were not fully additive. Thus the law is commonly referred to as Concurrent Receipt.

Subsequent to P.L. 108-136, a series of legislation has been enacted that increasingly reduces or eliminates the offset to military retired pay due to receipt of VA disability compensation. This is described further in Appendix A.

P.L. 109-364, enacted October 17, 2006, eliminated the 75 percent multiplier cap for retirements exceeding 30 years of service for members retiring on nondisability after January 1, 2007. A member can now retire with a retired pay multiplier greater than 100 percent if their years of service exceed 40 years. The various percentage multipliers by year of service and benefit system are shown in Table B-2.

History of Retired Pay – Reserve Duty

The motivation behind the reserve duty retirement (non-regular service) is to establish a nondisability retirement system to authorize retired pay for service in the reserve components. This provides an incentive for qualified personnel to retain membership and continue training in these components, providing a pool of skilled, trained, and readily available manpower to assist active duty forces in times of national emergency.

Title III of the Army and Air Force Vitalization and Retirement Equalization Act of 1948 (P.L. 80-810) created a nondisability retirement program for reserve personnel. The above motivation was explained as part of the House Report accompanying the legislation. The reserve retirement system remained basically unchanged from the original 1948 legislation until 1993. Those modifications made over that time were more corrective than substantive.

The National Defense Authorization Act for Fiscal Year 1993 (P.L. 102-484) adopted two provisions intended to induce Selected Reserves members to apply for transfer to the retired reserve through temporary special retirement mechanisms. Subsequent legislations authorizes further downsizing of the military during the mid-1990's, which were extended until October 1, 2001.

P.L. 107-314 permanently reduced the required reserve service eligibility year for retired pay from eight years to six years. This law also authorized a 10 percent increase in reserve retired pay, not to exceed 75 percent, for enlisted members credited with extraordinary heroism in the line of duty.

P.L. 110-181, enacted January 28, 2008, reduces the retirement age for a reserve retirement below age 60 by three months for every 90 days of certain active service with a limit of 10 years. Eligibility for retiree health benefits remains at age 60 even if the eligibility age for retired pay is reduced.

Adjustments – Cost-of-Living

Cost-of-living adjustments provide a mechanism for adjusting retired pay entitlements to compensate for the effects of inflation. The ideal system is one that protects the initial value of pay to insure that members who retire from the military do not have the purchasing power of their pay eroded by inflation.

Prior to 1958, retired pay was generally increased in direct proportion to changes in active duty pay. The practice was discontinued with the act of May 1958 (P.L. 85-422), when it was realized that a single 6 percent cost-of-living increase would cost only \$35 million, as opposed to \$65 million for linking the retired pay to active duty pay. The 6 percent approximated the increase in the cost of living since 1955 when retired pay was last increased. In 1963, a permanent system of increasing retired pay (P.L. 88-132) was based on a formula geared to increases in the cost-of-living, was adopted. In 1965, the adjustment mechanism was modified slightly (P.L. 89-132). This system granted cost-of-living increases whenever the Consumer Price Index (CPI) went up at least 3 percent and remained up for three months. The benefit increase was equal to the percentage rise in the CPI. In 1969 (P.L. 91-179), an additional 1 percent was added to compensate for the fact that five months elapsed between the time that the index increased 3 percent and the time that benefits increased.

Effective March 1977, cost-of-living adjustments (COLAs) were scheduled to occur every six months, on March 1 and September 1. This would be reflected in checks issued those months and the additional 1 percent was eliminated (P.L. 94-440). The cost-of-living increase, effective March 1, was computed by calculating the percentage increase (adjusted to the nearest tenth of a percent) in the CPI from the previous June to the previous December. Similarly, the cost-of-living increase effective September 1 was obtained by calculating the percentage increase in the June CPI over the CPI from the previous December.

In August 1981 (P.L. 97-35), once-a-year cost-of-living increases were implemented by eliminating the September increase. Full annual cost-of-living increases were given in March of each year based on the percentage increase in the CPI between the two previous Decembers.

In August 1982, P.L. 97-253 created a temporary deviation to the calculation and timing of the cost-of-living increase. Consequently, in Fiscal Year (FY) 1983, the increase was delayed until April and the full increase of 3.9 percent was given only to survivors, disabled persons and nondisabled persons over age 61. Nondisabled retirees under age 62 received 3.3 percent instead of 3.9 percent.

P.L. 98-270, enacted in April 1984, eliminated the FY 1984 increase and modified the permanent law. Under the modified system, the COLA equals the percentage increase in the average of the CPIs for July, August, and September over the averaged indexes for the same three months of the prior year. These increases become effective for entitlements earned in December. P.L. 98-369 directed that entitlements for a particular month should be paid at the beginning of the subsequent month rather than at the end of the month of entitlement and became effective with the December 1984 adjustment. P.L. 111-383 required amounts of retired and

retainer pay (excluding survivor annuitant pay) due a retired member of the uniformed services shall be paid on the first day of each month beginning after the month in which the right to such pay accrues, unless the first falls on a non-business day, then the payment is made on the preceding business day.

P.L. 99-348, enacted July 1, 1986, changed the cost-of-living increase for members entering the service after July 31, 1986. Their retiree and survivor benefits are increased annually by the full cost-of-living adjustment minus 1 percent (except if the full adjustment is less than or equal to 1 percent). A one-time catch-up is given on the first day of the month after the *retiree's* 62nd birthday. At this time, the retiree benefit (or survivor benefit if the retiree is deceased) is increased to the amount that would have been payable had full adjustments been made. Annual partial increases continue after this catch-up. For persons entering the service prior to August 1, 1986, full COLAs are still applied to the retiree and survivor benefits. P.L. 106-65 called for full COLAs to be applied to the retiree and survivor benefits of post-July 31, 1986, entrants who decline the CSB/Redux and retire under the HI-3 benefit formula. Retired pay cost-of-living increases from 1958 to the present time are shown in Table B-1. Additional discussion regarding cost-of-living increases can be found in Appendix D.

Adjustments – Basic Pay

Basic pay scale increases are analogous to retired pay cost-of-living increases for the current active duty and drilling reserve population. These increases are typically credited and paid at the beginning of the calendar year. The annual basic pay scale increases are designed to establish a crude comparability with the private sector and American economy in general.

The Act of 1790 provided funds for “militia employed in the service of the United States” payable to “the troops of the United States.” Although the components of the pay system, basic pay plus allowances, have changed throughout its history, the system itself has been remarkably enduring. However, the proliferation of special allowances has caused confusion and complexity surrounding compensation.

The Career Compensation Act of 1949 (P.L. 81-351) revamped the military compensation structure to provide pay that was equitable to personnel yet responsive to the needs of the United States in attracting and retaining the necessary personnel following World War II. The Uniformed Services Pay Act of 1958 (P.L. 85-422) was the beginning of regular basic pay adjustments intended to make personnel pay more competitive.

In the Act of 1967 (P.L. 90-207) Congress adopted new basic pay rate adjustment mechanisms. The adjustments were to be a “comparable increase” to the general schedule compensation for federal classified employees (Civil Service employees). This legislation resulted in a more systematic procedure for increasing basic pay rates as opposed to the prior methods which were solely dependent on Congressional discretion. The military-civilian pay adjustment direct linkage remained in effect until 2000.

The Department of Defense Authorization Act of 1981 (P.L. 96-342) granted personnel substantial basic pay adjustments with the intent of further convergence between military and civilian wages. The legislation also allowed the President greater flexibility in adjusting military compensation by allocating greater increases to “career” members. In the years that followed, Congress expressed dissatisfaction with the pay adjustment mechanisms shown in the military-civilian link. The Senate proposed linking military pay to the Employment Cost Index (ECI) as a method to correct the military-civilian pay inequity. This discussion continued for some years.

Beginning in 2000 (P.L. 106-65), legislative change responded to the military-civilian pay inequity by tying basic pay increases to the ECI plus an additional 0.5 percent for the five years that follow (through FY 2006). After FY 2006, the increases are tied directly to ECI; however, covenants are embedded within the law which gives the President the authority to propose an alternate adjustment. Subsequent legislation used targeted basic pay scale increases to be granted for specific pay grades and ranks in order to meet the necessary retention and recruitment needs. Basic pay scale increases from 1958 to the present time are shown in Table B-2. Additional discussion regarding basic pay scale increases can be found in Appendix D.

Funding of Retirement Benefits

Prior to 1935, the Navy had a pension fund which provided for payments to persons retired for disability whenever there was a sufficient amount in the fund. The income to the fund consisted of the government’s share of the proceeds from the sale of enemy or pirate ships captured by the Navy, and from interest received on fund investments. This fund was abolished in 1935, and the military retirement system moved to an unfunded or “pay-as-you-go” basis. P.L. 98-94 (currently Chapter 74 of Title 10, U.S.C.), signed in September 1983, established a Military Retirement Fund starting October 1, 1984. Under this accrual accounting system, funds are allocated for the individual services via the Department of Defense annually by Congress. These funds are transferred to the Military Retirement Fund in an amount sufficient to cover the expected retirement costs associated with the current active duty force. This system helps to apprise all stakeholders of the total costs of manpower decisions made each year.

As explained by Congress (House Report No. 98-107 – Committee on Armed Services – p. 225), the reasons for adoption of the Department of Defense Military Retirement Plan were as follows:

“Most retirement plans in the private sector are funded, either partially or fully, and the trend--as a result of the Employee Retirement and Income Security Act (ERISA)--is toward full funding. Security of a retirement plan, *i.e.*, the probability that promised benefits will be paid, is generally related to the method of funding. Full funding provides greater security than partial funding.

Of course, the security of payments from the Federal government is not generally related to the method of funding. From the Federal government’s perspective, the issue of funding is primarily a matter of timing. Should funds be raised by taxing and borrowing when the obligation becomes due, or should funds be set aside through taxing and borrowing when the obligation is incurred?”

This funding law stated that DoD will make normal cost payments into the Fund and the Treasury Department will make payments from general revenues to amortize the unfunded liability. P.L. 99-661, enacted in November 1986, mandated that two separate normal cost percentages (NCPs) be used to compute the normal cost payment of the military retirement system. One NCP is for active-duty personnel and reservists (full-time) and the second NCP is for drilling reservists (part-time). These normal cost payments are designed to be sufficient to pay for the future retirement benefits for a cohort of new entrants. The unfunded liability exists primarily because such payments were not made in the past.

P.L. 108-136, enacted November 2003, required the Department of Treasury to pay the normal cost arising from the increased benefits due to Concurrent Receipt at the beginning of each fiscal year. Beginning with FY 2005, Treasury includes the annual normal cost payment along with the unfunded liability payment in the October 1st contribution.

The original funding law also established an independent three-member DoD Retirement Board of Actuaries, appointed by the President (changed to the Secretary of Defense as part of the 2008 National Defense Authorization Act (P.L. 110-181)). House Report No. 98-107 – Committee on Armed Services – p. 227, states:

“Care must be exercised to minimize the ability to manipulate the interest rate. The committee recommends that an independent Board of Actuaries be established and that they, alone, be charged with the responsibility for determining the interest rate and other actuarial assumptions in accordance with generally accepted actuarial principles and practices.”

The Board is required to approve methods and assumptions for determining the normal cost and unfunded liability; to review valuations of the military retirement system; to determine the method of amortizing unfunded liabilities; to annually report to the Secretary of Defense; and to report to the President and Congress on the status of the Fund not less than every four years. P.L. 110-181 renamed the Board the “DoD Board of Actuaries,” and added oversight of other funds deemed to be necessary by the Secretary of Defense.

TABLE B-1

MILITARY RETIREMENT SYSTEM PROPERTIES
(FOR NONDISABILITY RETIREMENT FROM ACTIVE DUTY)

Benefit System	Final Pay	High-3 (HI-3)	Career Status Bonus (CSB)/Redux
Applies to	First became member of a uniformed service <u>before September 8, 1980</u>	First became member of a uniformed service <u>on or after September 8, 1980 and prior to July 31, 1986</u> , and members joining <u>after July 31, 1986</u> who elect not to accept the Career Status Bonus (CSB) at the 15-year anniversary	First became member of a uniformed service <u>on or after August 1, 1986</u> and elect to accept the Career Status Bonus (CSB) with additional 5-year service obligation
Retired Pay Computation Basis	Final basic pay rate	Highest 36 months of basic pay rate	Highest 36 months of basic pay rate
Multiplier	2.5% per year of service	2.5% per year of service	2.5% per year of service less 1% for each year of service less than 30 (restored at age 62)
Cost-of-Living Adjustment Mechanism	Full CPI-W	Full CPI-W	Full CPI-W minus 1% (one-time catch-up at age 62)
Additional Benefit	---	---	\$30,000 Career Status Bonus (CSB) payable at 15-year anniversary upon assumption of 5-year obligation to remain on continuous active duty

TABLE B-2

MILITARY RETIREMENT SYSTEM MULTIPLIERS
(FOR NONDISABILITY RETIREMENT FROM ACTIVE DUTY)

Years of Service	Final Pay/HI-3 Multiplier	CSB/Redux Multiplier	
		Before Age 62	After Age 62
20	50.0 %	40.0 %	50.0 %
21	52.5	43.5	52.5
22	55.0	47.0	55.0
23	57.5	50.5	57.5
24	60.0	54.0	60.0
25	62.5	57.5	62.5
26	65.0	61.0	65.0
27	67.5	64.5	67.5
28	70.0	68.0	70.0
29	72.5	71.5	72.5
30	75.0	75.0	75.0
31	77.5	77.5	77.5
32	80.0	80.0	80.0
33	82.5	82.5	82.5
34	85.0	85.0	85.0
35	87.5	87.5	87.5
36	90.0	90.0	90.0
37	92.5	92.5	92.5
38	95.0	95.0	95.0
39	97.5	97.5	97.5
40	100.0	100.0	100.0
41	102.5	102.5	102.5
42	105.0	105.0	105.0
:	:	:	:

TABLE B-3

**MILITARY RETIRED PAY COST-OF-LIVING INCREASES
(JUNE 1958 TO PRESENT)**

<u>Date of Increase</u>	<u>Percentage Increase</u>	<u>Cumulative % From Date of Increase</u>
6/1/58	6.0%	717.0%
10/1/63	5.0%	670.8%
9/1/65	4.4%	634.1%
12/1/66	3.7%	603.2%
4/1/68	3.9%	578.1%
2/1/69	4.0%	552.6%
11/1/69	5.3%	527.5%
<hr/>		
8/1/70	5.6%	495.9%
6/1/71	4.5%	464.3%
7/1/72	4.8%	440.0%
7/1/73	6.1%	415.3%
1/1/74	5.5%	385.7%
7/1/74	6.3%	360.3%
1/1/75	7.3%	333.1%
8/1/75	5.1%	303.6%
3/1/76	5.4%	284.0%
<hr/>		
3/1/77	4.8%	264.3%
9/1/77	4.3%	247.7%
3/1/78	2.4%	233.3%
9/1/78	4.9%	225.5%
3/1/79	3.9%	210.3%
9/1/79	6.9%	198.7%
3/1/80	6.0%	179.4%
9/1/80	7.7%	163.6%
<hr/>		
3/1/81	4.4%	144.7%
3/1/82	8.7%	134.4%
4/1/83	3.9% (1)	115.6%
<hr/>		
12/1/84	3.5% (2)	107.6%
12/1/85	0.0% (3)	100.5%
12/1/86	1.3%	100.5%
12/1/87	4.2%	98.0%
12/1/88	4.0%	90.0%
12/1/89	4.7%	82.7%
12/1/90	5.4%	74.5%
12/1/91	3.7%	65.5%
12/1/92	3.0%	59.6%
3/1/94	2.6% (4)	55.0%
3/1/95	2.8% (5)	51.1%
3/1/96	2.6% (6)	46.9%
12/1/96	2.9%	43.2%
12/1/97	2.1%	39.2%
12/1/98	1.3%	36.3%
12/1/99	2.4%	34.6%
12/1/00	3.5%	31.4%
12/1/01	2.6%	27.0%
12/1/02	1.4%	23.8%
12/1/03	2.1%	22.0%
12/1/04	2.7%	19.5%
12/1/05	4.1%	16.4%
12/1/06	3.3%	11.8%
12/1/07	2.3%	8.2%
12/1/08	5.8%	5.8%
12/1/09	0.0%	0.0%
12/1/10	0.0%	0.0%

- (1) Nondisabled retirees under age 62 received 3.3%.
(2) Starting December 1984, entitlements earned in a particular month are paid at the beginning of the next month.
(3) A cost-of-living adjustment of 3.1%, scheduled for 12/1/85, was suspended as a consequence of P.L. 99-177.
(4) Disabled retirees and survivors received 2.6% on 12/1/93.
(5) Disabled retirees and survivors received 2.8% on 12/1/94.
(6) Disabled retirees and survivors received 2.6% on 12/1/95.

TABLE B-4
MILITARY BASIC PAY SCALE INCREASES
(JUNE 1958 TO PRESENT)

<u>Date of Increase</u>	<u>Percentage Increase</u>	<u>Cumulative % From Date of Increase</u>
6/1/58	8.3%	1235.6%
10/1/63	14.2%	1133.3%
9/1/64	2.3%	979.9%
9/1/65	10.4%	955.7%
7/1/66	3.2%	856.2%
10/1/67	5.6%	826.6%
7/1/68	6.9%	777.4%
7/1/69	12.6%	720.8%
1/1/70	8.1%	628.9%
1/1/71	7.9%	574.3%
11/14/71	11.6%	525.0%
1/1/72	7.2%	460.0%
10/1/72	6.7%	422.4%
10/1/73	6.2%	389.6%
10/1/74	5.5%	361.0%
10/1/75	5.0%	337.0%
10/1/76	3.6%	316.2%
10/1/77	6.2%	301.7%
10/1/78	5.5%	278.2%
10/1/79	7.0%	258.5%
10/1/80	11.7%	235.1%
10/1/81	14.3% (1)	200.0%
10/1/82	4.0% (2)	162.4%
1/1/84	4.0% (2)	152.3%
1/1/85	4.0%	142.6%
10/1/85	3.0%	133.3%
1/1/87	3.0%	126.5%
1/1/88	2.0%	119.9%
1/1/89	4.1%	115.6%
1/1/90	3.6%	107.1%
1/1/91	4.1%	99.9%
1/1/92	4.2%	92.0%
1/1/93	3.7%	84.3%
1/1/94	2.2%	77.7%
1/1/95	2.6%	73.9%
1/1/96	2.4%	69.5%
1/1/97	3.0%	65.5%
1/1/98	2.8%	60.7%
1/1/99	3.6%	56.3%
1/1/00	4.8% (3)	50.9%
1/1/01	3.7% (3)	44.0%
1/1/02	4.6% (3)	38.8%
1/1/03	4.1% (3)	32.7%
1/1/04	3.7% (3)	27.5%
1/1/05	3.5%	23.0%
1/1/06	3.1%	18.8%
1/1/07	2.2% (3)	15.2%
1/1/08	3.5%	12.7%
1/1/09	3.9%	8.9%
1/1/10	3.4%	4.8%
1/1/11	1.4%	1.4%

(1) Basic pay increases for enlisted personnel ranged from 10% for E-1; 10.7% for E-2, E-3; 13% for E-4; 16.5% for E-5, E-6; and 17% for E-7, E-8, E-9. For officers, the increase was 14.3%.

(2) Except for E-1 with less than 4 months service.

(3) The increases do not include additional targeted pay increases.

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APPENDIX C

VALUATION POPULATION DATA

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DoD Officers Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY2010 Valuation

Table with columns for Age (0 to 60+) and Years of Active Service (0 to 30+), showing Average Monthly Active Duty Basic Pay values. The table includes an 'Avg' row at the bottom of the data columns.

Notes: Basic pay figures reflect January, 2011, increase of 1.4%. Numbers have been adjusted to budget. Age is age nearest birthday as of the end of the fiscal year.

DoD Officers Selected Reserve Personnel by Years of Service and Age for FY2010 Valuation

Age	Completed Years Of Active Duty Service																				Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
21	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
22	334	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	346
23	805	78	31	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	923
24	1,199	133	32	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,380
25	1,195	254	102	30	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,599
26	1,124	366	192	89	60	20	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1,860
27	1,073	550	342	221	229	38	19	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2,478
28	1,016	553	439	273	385	188	39	16	10	0	0	0	0	0	0	0	0	0	0	0	0	2,919
29	994	515	448	385	396	282	111	38	19	15	4	1	0	0	0	0	0	0	0	0	0	3,208
30	856	468	410	374	495	316	234	120	39	29	1	3	0	0	0	0	0	0	0	0	0	3,345
31	718	383	372	337	436	317	282	185	99	49	18	9	0	0	0	0	0	0	0	0	0	3,205
32	630	289	369	320	400	304	305	247	164	100	33	16	4	2	1	0	0	0	0	0	0	3,184
33	593	288	274	306	395	320	336	232	208	164	87	33	7	8	1	0	0	0	0	0	0	3,253
34	549	299	248	272	366	304	286	262	206	205	172	73	31	5	3	3	0	0	0	0	0	3,284
35	552	314	266	290	334	308	246	209	193	208	193	139	58	18	5	3	2	1	0	0	0	3,339
36	601	319	270	271	319	302	284	230	207	214	222	186	103	46	16	8	2	0	0	0	0	3,600
37	537	310	288	269	325	267	272	237	195	219	209	202	128	76	38	10	3	0	0	0	0	3,585
38	574	396	303	313	328	283	273	245	233	221	189	168	140	80	53	23	11	3	2	1	1	3,810
39	661	395	350	337	346	294	286	281	233	223	210	205	157	110	67	40	16	3	2	0	0	4,216
40	723	456	458	414	370	394	325	300	270	236	213	232	161	131	78	42	24	10	5	2	3	4,847
41	681	432	425	418	425	326	320	269	260	262	230	216	179	158	114	55	36	21	11	1	3	4,842
42	587	457	435	403	435	300	281	255	223	201	216	212	210	161	96	69	44	23	9	4	5	4,628
43	556	404	376	389	410	346	286	258	198	226	243	213	209	164	106	72	52	28	17	10	9	4,572
44	508	369	391	359	398	355	310	246	245	207	221	245	191	145	145	78	69	37	22	9	14	4,639
45	457	355	353	367	342	368	298	263	238	205	197	208	206	153	129	74	70	35	33	14	18	4,383
46	421	321	344	374	316	325	255	231	192	186	122	122	113	92	88	67	54	43	24	19	25	4,254
47	379	367	314	300	325	324	279	270	258	215	204	169	168	175	123	95	90	46	36	20	31	4,188
48	356	263	225	283	265	254	264	208	221	218	168	170	164	125	117	81	70	32	27	11	35	3,557
49	305	285	203	248	252	215	217	202	189	186	185	161	169	162	123	82	65	34	24	16	20	3,343
50	253	241	168	200	183	171	184	206	161	159	161	133	114	147	79	59	55	46	24	14	26	2,784
51	287	197	138	175	157	168	172	159	158	119	122	122	113	92	88	67	50	38	20	16	27	2,385
52	207	167	127	121	153	140	130	113	128	81	83	97	103	75	76	53	32	27	8	5	25	1,951
53	163	170	135	124	138	142	115	109	92	78	79	67	67	67	50	42	32	23	10	8	18	1,729
54	147	138	134	117	130	115	115	100	88	56	59	64	40	58	44	23	33	19	3	5	19	1,507
55	124	173	113	100	84	105	91	89	70	69	60	41	44	41	35	26	23	25	15	7	9	1,344
56	99	147	95	87	102	103	75	71	58	41	44	31	35	27	26	30	24	15	9	8	7	1,134
57	110	125	131	85	68	69	73	69	40	43	40	32	32	24	22	15	13	13	5	2	8	1,019
58	79	107	90	71	80	59	68	55	63	29	30	29	23	19	19	17	12	7	6	4	5	872
59	72	94	92	70	73	61	57	38	27	26	20	16	20	11	13	13	6	5	2	3	2	721
60	44	75	70	63	60	37	33	32	31	11	13	11	6	6	4	4	4	6	1	1	0	508
61	28	33	34	29	22	15	15	6	13	11	3	3	6	5	2	1	1	0	2	0	1	230
62	16	32	28	11	10	15	13	3	9	8	6	6	1	1	3	0	0	1	0	0	0	163
63+	20	49	28	19	18	16	12	9	5	3	3	6	5	3	2	1	2	1	0	0	0	202
Total	20,670	11,379	9,643	8,932	9,649	7,972	7,046	5,896	5,052	4,529	4,123	3,724	3,136	2,486	1,792	1,202	898	537	317	179	311	109,473

Notes: Numbers have been adjusted to budget. Average Age: 40.3 Average Years of Active Service: 4.9 Age is age nearest birthday as of the end of the fiscal year.

DoD Enlisted Selected Reserve Personnel by Years of Service and Age for FY2010 Valuation

Age	Completed Years Of Active Duty Service																				Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	694	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	8,921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	22,982	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	33,532	1,098	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	35,475	3,357	238	44	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	33,446	5,557	730	399	223	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	28,800	7,049	1,334	1,127	1,006	115	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	22,663	6,958	2,057	1,830	2,257	514	78	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	18,278	6,554	2,702	2,319	3,279	1,171	420	55	7	0	0	0	0	0	0	0	0	0	0	0	0	0
26	14,710	5,837	2,856	2,638	3,827	1,650	1,043	230	38	0	0	0	0	0	0	0	0	0	0	0	0	0
27	12,130	5,070	3,023	2,790	3,802	1,680	1,321	513	208	25	2	0	0	0	0	0	0	0	0	0	0	0
28	9,992	4,623	3,061	2,782	3,709	1,704	1,510	711	444	121	21	0	0	0	0	0	0	0	0	0	0	0
29	8,119	3,642	2,700	2,478	3,252	1,713	1,392	735	610	275	83	11	4	0	0	0	0	0	0	0	0	0
30	6,811	3,010	2,167	2,145	2,764	1,476	1,343	799	700	380	203	60	15	1	0	0	0	0	0	0	0	0
31	5,675	2,476	2,031	1,755	2,408	1,333	1,197	675	664	445	305	140	39	12	1	0	0	0	0	0	0	0
32	4,783	2,086	1,709	1,520	2,085	1,208	1,000	651	579	483	336	196	69	37	5	0	0	0	0	0	0	0
33	4,124	1,835	1,450	1,300	1,806	1,188	902	588	553	428	322	191	110	67	4	3	0	0	0	0	0	0
34	3,636	1,649	1,273	1,241	1,695	1,052	901	577	480	404	333	201	121	76	72	13	1	0	0	0	0	0
35	3,353	1,482	1,276	1,161	1,575	989	773	540	496	392	299	202	136	110	73	31	5	2	0	0	0	0
36	3,174	1,478	1,266	1,083	1,443	938	765	553	455	410	321	201	171	117	86	48	15	12	3	1	0	0
37	2,924	1,486	1,223	1,100	1,292	898	701	548	464	395	314	231	174	119	96	32	17	10	2	0	0	0
38	2,940	1,520	1,347	1,168	1,342	865	762	606	522	396	367	288	183	128	87	52	30	14	7	6	1	0
39	2,997	1,471	1,410	1,281	1,510	970	866	649	537	483	391	337	203	140	103	64	43	33	7	5	5	13,505
40	2,893	1,564	1,411	1,413	1,605	1,088	874	700	581	494	466	363	249	142	108	69	47	44	16	9	6	14,142
41	2,594	1,445	1,295	1,248	1,460	1,071	878	681	547	458	445	312	237	161	121	79	53	31	10	10	7	13,143
42	2,200	1,309	1,178	1,133	1,296	956	877	689	566	441	411	289	207	170	111	106	35	46	26	10	12	12,048
43	1,935	1,120	1,031	1,041	1,166	940	778	643	540	378	407	338	133	110	80	43	29	21	21	15	10,971	15
44	1,715	1,080	967	976	1,062	923	793	601	502	419	357	288	237	149	103	83	48	45	17	9	19	10,393
45	1,464	983	973	924	956	842	734	596	508	398	368	284	204	171	127	86	64	50	26	13	21	9,792
46	1,276	830	897	918	836	705	572	455	396	361	315	253	183	137	87	89	83	48	26	16	21	9,307
47	1,118	792	811	856	778	647	564	465	392	366	332	255	196	150	116	116	61	46	23	20	29	8,876
48	972	735	750	768	795	718	605	538	424	369	386	289	252	195	122	102	74	65	29	17	25	8,230
49	877	626	647	723	703	601	537	456	337	304	314	259	187	201	159	106	78	56	22	19	31	7,243
50	713	518	576	654	617	558	495	423	309	259	261	218	203	175	160	123	74	44	17	9	24	6,430
51	502	417	467	494	451	495	422	367	277	253	187	195	155	133	108	80	65	51	18	12	19	5,168
52	442	364	438	475	423	428	371	315	231	201	186	127	112	117	83	77	34	22	10	22	10	4,545
53	383	324	376	411	405	383	354	256	215	154	139	135	104	77	71	61	40	41	17	12	13	3,971
54	322	255	310	374	358	316	288	240	192	135	126	110	87	54	59	61	29	30	11	4	12	3,373
55	238	237	280	332	320	304	265	186	167	130	103	97	80	56	47	42	29	28	13	7	10	2,971
56	191	190	237	265	233	235	238	150	126	109	94	62	60	48	32	24	26	19	12	7	13	2,371
57	159	164	209	240	228	191	173	134	100	91	70	53	41	38	23	20	12	9	4	4	3	1,966
58	184	155	212	225	171	157	158	104	94	77	51	35	36	21	20	15	9	13	6	3	4	1,750
59	123	132	210	220	178	155	132	98	79	66	50	39	23	21	18	9	5	6	6	2	3	1,575
60	73	71	115	120	97	73	55	54	27	22	22	23	12	10	8	7	4	3	1	1	3	801
61	13	15	8	9	9	6	5	5	3	0	1	2	1	1	0	1	0	2	0	0	2	83
62	6	3	4	4	5	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	30
63+	0	1	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6
Total	310,552	81,734	47,265	44,097	53,598	31,505	25,360	16,788	13,502	10,183	8,468	6,143	4,458	3,259	2,440	1,680	1,060	811	362	227	321	663,813

Notes: Numbers have been adjusted to budget. Average Age: 30.8 Average Years of Active Service: 2.3

Age is age nearest birthday as of the end of the fiscal year.

All DoD Selected Reserve Personnel by Years of Service and Age for FY2010 Valuation

Age	Completed Years Of Active Duty Service																				Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	694	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	8,921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	22,982	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	33,563	1,098	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	35,581	3,357	238	44	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	33,780	5,569	730	399	223	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	29,605	7,127	1,365	1,136	1,006	115	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	23,862	7,091	2,089	1,839	2,264	514	78	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	19,473	6,808	2,349	3,291	1,177	420	55	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	15,834	6,203	3,048	2,727	3,887	1,670	1,049	233	38	0	0	0	0	0	0	0	0	0	0	0	0	0
27	13,203	5,620	3,365	3,011	4,031	1,718	1,340	519	208	25	2	0	0	0	0	0	0	0	0	0	0	0
28	11,008	5,176	3,500	3,055	4,094	1,892	1,549	727	454	121	21	0	0	0	0	0	0	0	0	0	0	0
29	9,113	4,157	3,148	2,863	3,648	1,995	1,503	773	629	290	87	12	4	0	0	0	0	0	0	0	0	0
30	7,667	3,478	2,577	2,519	3,259	1,792	1,577	919	739	409	204	63	15	1	0	0	0	0	0	0	0	0
31	6,393	2,859	2,403	2,092	2,844	1,650	1,479	860	763	494	323	149	39	12	1	0	0	0	0	0	0	0
32	5,413	2,385	2,078	1,840	2,485	1,512	1,305	898	743	583	369	212	73	39	6	0	0	0	0	0	0	0
33	4,717	2,123	1,724	1,736	2,201	1,508	1,238	820	761	592	409	224	117	75	41	4	0	0	0	0	0	0
34	4,185	1,948	1,521	1,513	2,061	1,356	1,187	839	686	609	505	274	152	81	75	16	1	0	0	0	0	0
35	3,905	1,796	1,542	1,451	1,909	1,277	1,019	749	689	600	492	341	194	128	78	34	7	3	0	0	0	0
36	3,775	1,797	1,536	1,354	1,762	1,240	1,049	783	662	624	543	387	274	163	102	56	17	12	3	1	0	0
37	3,461	1,796	1,511	1,369	1,617	1,165	973	785	659	614	523	433	302	195	134	42	20	10	2	0	0	0
38	3,514	1,916	1,650	1,481	1,670	1,148	1,035	851	725	556	404	323	208	140	75	41	17	9	5	0	0	0
39	3,658	1,866	1,760	1,618	1,856	1,264	1,152	930	770	706	601	542	360	250	170	104	59	36	9	5	5	5
40	3,616	2,020	1,869	1,827	1,975	1,482	1,199	1,000	851	730	679	595	410	273	186	111	71	54	21	11	9	15,989
41	3,275	1,877	1,720	1,666	1,885	1,397	1,198	950	807	720	675	528	416	319	235	134	89	52	21	11	10	17,985
42	2,767	1,766	1,613	1,536	1,731	1,256	1,158	924	789	642	627	501	417	331	209	175	79	69	35	14	17	16,676
43	2,491	1,524	1,407	1,430	1,576	1,286	1,059	901	738	604	650	520	447	297	216	152	95	57	38	31	24	15,543
44	2,223	1,449	1,358	1,335	1,460	1,278	1,103	847	747	626	577	509	482	340	248	161	117	82	39	18	33	15,032
45	1,921	1,338	1,326	1,291	1,298	1,210	1,032	859	746	603	565	492	410	324	256	160	134	85	59	27	39	14,175
46	1,697	1,151	1,234	1,271	1,234	1,161	1,039	827	686	588	547	444	411	328	249	205	137	91	50	35	46	13,561
47	1,497	1,159	1,125	1,156	1,184	1,102	926	834	723	607	570	501	423	371	273	211	151	92	59	40	60	13,064
48	1,328	998	975	1,051	1,060	972	869	746	645	587	554	459	416	320	239	183	144	97	56	28	60	11,787
49	1,182	911	850	971	955	816	754	658	526	490	489	420	356	363	282	188	143	90	46	35	51	10,586
50	966	759	744	854	800	729	679	629	470	418	422	351	317	322	239	182	129	90	41	23	50	9,214
51	689	614	605	669	608	663	594	526	435	372	309	317	268	225	196	147	115	89	38	28	46	7,553
52	649	531	565	596	576	568	501	428	359	282	269	224	215	192	159	130	99	61	30	15	47	6,496
53	546	494	511	535	543	525	469	365	307	232	218	202	171	144	121	103	72	64	27	20	31	5,700
54	469	393	444	491	488	431	403	340	280	191	185	174	127	112	103	84	62	49	14	9	31	4,880
55	362	410	393	432	404	409	356	275	237	199	163	138	124	97	82	68	52	53	28	14	19	4,315
56	290	337	332	352	335	338	313	221	184	150	138	93	95	75	58	54	50	34	21	15	20	3,505
57	269	289	340	325	296	260	246	203	140	134	110	85	73	62	45	35	25	22	9	6	11	2,985
58	263	262	302	296	251	216	226	159	157	106	81	64	59	40	39	32	21	20	12	7	9	2,622
59	195	226	302	290	251	216	189	136	106	92	70	55	43	32	31	22	11	11	8	5	5	2,296
60	117	146	185	183	157	110	88	86	58	33	35	34	18	16	12	11	10	4	2	1	3	1,309
61	41	48	42	38	31	21	20	11	16	11	4	5	7	6	2	2	1	2	2	0	3	313
62	22	35	32	15	15	16	15	5	9	8	6	8	1	1	3	0	0	0	1	0	0	1
63+	20	50	30	19	18	16	14	9	5	3	3	7	5	3	2	1	2	1	2	1	0	0
Total	331,222	93,113	56,908	53,029	63,247	39,477	32,406	22,684	18,554	14,712	12,591	9,867	7,594	5,745	4,232	2,882	1,958	1,348	679	406	632	773,286

Notes: Numbers have been adjusted to budget.
 Age is age nearest birthday as of the end of the fiscal year.
 Average Age: 32.1
 Average Years of Active Service: 2.6

DoD Officers Non-Selected Reserve Personnel With 20 Good Years for FY2010 Valuation

Age	Completed Years Of Active Duty Service																				Total		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20+	
36	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	
37	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
38	5	0	2	0	2	5	2	0	3	2	0	2	0	0	0	0	0	0	0	2	0	27	
39	2	13	21	16	3	5	0	6	0	6	3	0	3	2	5	0	3	2	0	0	2	92	
40	11	24	23	27	11	8	12	5	12	6	5	8	9	8	5	3	2	3	0	3	0	185	
41	21	39	42	28	28	31	33	18	10	13	10	13	7	13	1	7	4	0	1	0	0	319	
42	40	68	46	53	40	43	24	15	25	35	47	35	25	21	17	7	4	8	0	1	0	554	
43	38	69	85	68	54	56	58	33	37	72	59	81	52	47	20	14	12	1	1	4	1	862	
44	50	68	106	78	65	80	62	57	66	80	104	111	87	57	49	16	14	9	4	2	1	1,166	
45	50	89	121	82	118	82	92	73	87	101	94	107	108	54	75	26	23	7	2	2	2	1,395	
46	40	146	127	107	131	130	107	110	143	112	126	136	91	90	90	54	35	5	6	4	7	1,838	
47	73	141	153	144	142	171	174	159	181	176	152	150	126	106	113	65	36	24	12	1	3	2,302	
48	48	127	125	110	173	179	204	201	230	177	135	173	125	106	123	64	38	28	6	8	9	2,390	
49	70	149	115	102	152	220	217	272	204	167	170	192	112	105	84	44	44	33	7	5	9	2,632	
50	52	150	119	101	161	259	248	246	297	239	227	200	171	136	108	66	51	34	9	3	8	2,885	
51	78	154	120	114	202	268	241	278	315	272	221	222	164	143	93	81	61	38	15	7	6	3,093	
52	65	155	114	128	242	284	267	294	351	277	245	228	212	163	120	100	63	39	15	3	11	3,376	
53	74	178	110	137	262	325	325	350	323	285	255	260	171	135	119	83	45	45	8	3	8	3,706	
54	58	174	138	178	281	365	325	395	343	296	283	278	254	176	170	125	87	33	13	3	7	3,982	
55	71	195	158	186	292	371	329	377	364	283	280	321	239	241	180	114	89	56	17	7	6	4,166	
56	92	223	169	180	304	381	366	354	350	288	265	269	233	189	181	114	69	46	18	6	5	4,102	
57	89	227	183	227	328	409	413	385	327	255	286	272	265	198	171	94	64	41	22	6	1	4,263	
58	110	347	254	264	402	504	469	398	347	276	233	241	257	192	149	120	61	46	22	9	2	4,703	
59	107	412	291	319	457	492	428	382	291	271	252	240	241	192	105	83	74	40	23	5	1	4,706	
60	78	290	172	184	273	248	223	213	153	140	145	91	91	89	65	54	37	23	10	9	1	2,889	
61	4	11	5	15	9	6	13	7	5	5	9	5	1	4	2	0	0	0	0	0	0	1	102
62	1	2	2	7	4	4	6	6	2	1	1	5	1	1	0	0	0	0	0	0	4	0	47
63+	11	7	25	42	47	25	14	6	6	10	7	8	1	1	1	3	1	7	1	0	0	0	223
Total	1,340	3,458	2,828	2,898	4,174	4,953	4,661	4,582	4,508	3,913	3,597	3,616	3,250	2,513	2,083	1,413	955	568	214	97	92	55,713	

Notes: Data taken from the actuarial valuation file created by the DoD Office of the Actuary. Average Age: 53.1 Average Years of Active Service: 7.6

DoD Enlisted Non-Selected Reserve Personnel With 20 Good Years for FY2010 Valuation

Age	Completed Years Of Active Duty Service																				Total		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20+	
36	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	
37	1	3	9	1	3	1	5	0	0	4	1	3	3	0	0	0	0	0	0	0	0	1	
38	4	26	32	19	9	9	11	4	5	12	7	7	2	7	2	7	2	0	2	0	0	4	
39	32	62	55	58	55	27	26	19	29	32	48	38	19	10	14	9	2	2	2	0	2	0	
40	56	128	150	99	122	83	63	81	77	66	81	69	54	41	27	8	5	3	3	0	2	0	
41	70	215	221	239	212	178	140	85	93	90	99	113	90	65	32	23	17	3	3	2	5	0	
42	115	353	327	266	333	321	210	178	147	147	177	160	115	97	60	43	24	6	6	4	3	0	
43	174	423	417	381	364	449	315	232	186	198	211	181	135	133	102	67	52	16	13	6	4	0	
44	186	573	461	434	477	519	408	317	279	236	282	232	173	133	90	79	54	24	13	3	6	0	
45	192	599	538	487	678	540	454	322	337	305	352	274	172	185	115	105	72	47	16	3	6	0	
46	242	756	558	531	795	808	555	445	402	400	447	374	259	217	156	135	100	42	25	15	6	0	
47	212	857	626	615	878	806	665	469	549	439	537	475	338	283	181	156	110	42	19	10	14	0	
48	226	964	666	593	943	984	720	558	507	479	551	476	417	263	211	162	124	51	27	9	12	0	
49	230	1,001	597	652	1,030	984	800	561	575	550	552	473	413	410	270	185	113	49	19	9	18	0	
50	250	981	591	639	1,057	1,061	776	566	646	538	546	418	408	416	331	218	120	59	37	8	20	0	
51	225	961	584	741	1,178	1,086	791	594	523	461	472	398	338	357	294	220	133	87	51	10	17	0	
52	231	977	508	756	1,221	1,042	848	551	508	494	406	381	292	287	283	223	110	96	27	13	25	0	
53	234	1,053	612	783	1,463	1,120	785	563	515	450	469	383	294	271	278	204	156	96	40	10	16	0	
54	253	1,246	638	913	1,532	1,094	841	651	448	419	364	301	280	262	203	164	142	94	41	21	25	0	
55	260	1,146	703	1,005	1,429	1,115	798	625	476	419	395	298	267	222	160	122	91	88	41	12	20	0	
56	270	1,111	689	1,037	1,448	1,049	741	612	523	413	366	280	280	144	134	105	103	57	31	14	23	0	
57	310	1,194	828	1,070	1,414	1,061	785	612	594	495	370	229	252	196	129	110	84	61	33	14	15	0	
58	323	1,918	1,300	1,439	1,634	1,006	863	580	663	518	393	275	214	178	116	83	78	67	24	20	15	0	
59	325	2,088	1,407	1,489	1,676	985	780	595	629	495	473	274	198	178	103	56	47	31	15	16	19	0	
60	186	1,140	1,009	887	949	542	391	287	292	220	196	145	124	73	55	42	25	25	14	2	18	0	
61	8	31	48	36	48	23	17	6	9	9	8	8	3	5	3	0	0	0	0	0	0	0	0
62	1	10	44	8	41	17	16	8	6	3	8	1	1	4	0	0	3	0	0	0	0	0	0
63+	17	46	130	98	138	73	27	23	13	17	10	11	10	6	6	4	0	8	2	0	0	0	0
Total	4,633	19,862	13,749	15,276	21,129	16,983	12,833	9,544	9,032	7,903	7,826	6,277	5,156	4,438	3,360	2,525	1,765	1,056	500	203	284	164,344	

Notes: Data taken from the actuarial valuation file created by the DoD Office of the Actuary.
 Age is age nearest birthday as of the end of the fiscal year.

Average Age: 51.9

Average Years of Active Service: 5.9

All DoD Non-Selected Reserve Personnel With 20 Good Years for FY2010 Valuation

Age	Completed Years Of Active Duty Service																				Total		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20+	
36	0	0	1	0	2	1	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	10
37	2	3	10	2	4	1	5	0	0	4	1	3	3	0	0	0	0	0	0	0	0	1	39
38	9	26	34	19	11	14	13	4	8	7	12	9	7	2	7	2	0	0	2	2	2	4	194
39	34	75	76	74	58	32	26	25	29	38	51	38	22	12	19	9	5	4	0	2	2	2	631
40	67	152	173	126	133	91	75	86	89	72	86	77	63	49	32	11	7	6	3	3	2	2	1,403
41	91	254	263	287	240	209	173	103	103	103	109	126	97	78	33	30	21	3	4	2	5	2,314	
42	155	421	373	319	373	364	234	193	172	182	224	195	140	118	77	50	28	14	6	5	3	3,646	
43	212	492	502	449	418	505	373	285	223	270	270	262	187	180	122	81	64	17	14	10	5	4,921	
44	236	641	567	512	542	599	470	374	345	316	386	343	260	190	139	95	68	33	17	5	7	6,145	
45	242	688	660	569	796	622	546	395	424	406	446	381	280	239	190	131	95	54	18	5	8	7,195	
46	282	902	685	638	926	939	685	552	512	543	559	500	395	308	246	189	135	47	31	19	13	9,106	
47	285	998	779	759	1,020	977	839	628	730	615	689	625	464	389	294	221	146	66	31	11	17	10,583	
48	275	1,091	791	703	1,116	1,163	924	759	737	656	686	649	542	369	334	226	162	79	33	17	21	11,333	
49	300	1,150	712	754	1,182	1,204	1,003	778	847	754	719	643	605	522	375	269	157	82	26	14	27	12,123	
50	302	1,131	710	740	1,218	1,320	1,024	812	943	777	773	618	579	552	439	284	171	93	46	11	28	12,571	
51	303	1,115	704	855	1,380	1,354	1,032	872	838	733	693	620	502	500	387	301	194	125	66	17	23	12,614	
52	296	1,132	622	884	1,463	1,326	1,115	845	859	771	651	609	504	450	403	323	173	135	42	16	36	12,655	
53	308	1,231	722	920	1,725	1,445	1,110	913	838	735	724	643	544	442	413	323	239	141	48	13	24	13,501	
54	311	1,420	776	1,091	1,813	1,459	1,166	1,046	791	715	647	579	534	438	373	289	229	127	54	24	32	13,914	
55	331	1,341	861	1,191	1,711	1,486	1,127	1,002	840	702	675	619	506	463	340	236	180	144	58	19	26	13,858	
56	362	1,334	858	1,217	1,752	1,430	1,107	966	873	701	631	549	513	333	315	219	172	103	49	20	28	13,532	
57	389	1,421	1,011	1,297	1,742	1,470	1,198	997	921	750	656	501	517	394	300	204	148	102	55	20	16	14,119	
58	433	2,265	1,554	1,703	2,036	1,510	1,332	978	1,010	794	626	516	471	370	265	203	139	113	46	29	17	16,410	
59	432	2,500	1,698	1,808	2,133	1,477	1,208	977	920	766	725	514	439	370	208	139	121	71	38	21	20	16,585	
60	264	1,430	1,181	1,071	1,222	790	614	500	445	360	341	236	215	162	120	96	62	48	24	11	19	9,211	
61	12	42	53	51	57	29	30	13	14	14	17	13	4	9	5	0	0	0	0	0	0	1	364
62	2	12	46	15	45	21	22	14	8	4	9	6	2	5	0	0	3	0	0	4	0	0	218
63+	28	53	155	140	185	98	41	29	19	27	17	19	11	7	7	7	1	15	3	0	0	0	862
Total	5,973	23,320	16,577	18,174	25,303	21,936	17,494	14,126	13,540	11,816	11,423	9,893	8,406	6,951	5,443	3,938	2,720	1,624	714	300	386	220,057	

Notes: Data taken from the actuarial valuation file created by the DoD Office of the Actuary. Average Age: 52.2 Average Years of Active Service: 6.3 Age is age nearest birthday as of the end of the fiscal year.

DoD Retired Military Valuation Data as of Year-End FY2010

All Officers

Age	Non-Disabled			Perm Disabled			Temp Disabled			Reserve Retired			Strength			TERA			TERA			TERA			TERA			TERA		
	Age	Non-Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	Non-Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	Non-Dis	Res Ret	CSB Non-Dis	CSB Dis	Non-Dis	Res Ret	CSB Non-Dis	CSB Dis	Non-Dis	Res Ret	CSB Non-Dis	CSB Dis	Non-Dis	Res Ret	CSB Non-Dis	CSB Dis			
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DoD Retired Military Valuation Data as of Year-End FY2010

All Officers

Age	Non Disabled			Perm Disabled			Temp Disabled			Reserve Retired			Average Annual Net Retired Pay			TERRA		CSB	
	Age	Non Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	TERRA Non-Dis	TERRA Res Ret	TERRA Non-Dis	CSB Non-Dis	CSB Dis	Total	Reserve Retired	TERRA Non-Dis	TERRA Res Ret	CSB Non-Dis	CSB Dis		
71	8,815	308	0	4,367	13,490	13	35	0	0	0	\$20,825	\$37,899	\$44,084	\$14,115	\$0	\$0	\$0		
72	8,440	295	0	4,370	13,105	9	41	0	0	0	\$20,007	\$37,309	\$44,919	\$13,814	\$0	\$0	\$0		
73	8,043	277	0	4,247	12,567	11	35	0	0	0	\$19,459	\$37,902	\$41,739	\$13,894	\$0	\$0	\$0		
74	7,669	263	0	4,036	11,968	10	18	0	0	0	\$19,338	\$38,014	\$35,556	\$12,800	\$0	\$0	\$0		
75	7,355	266	0	3,629	11,630	17	18	0	0	0	\$18,963	\$36,428	\$37,721	\$13,217	\$0	\$0	\$0		
76	7,852	256	0	3,934	12,042	7	17	0	0	0	\$18,837	\$38,746	\$38,746	\$11,303	\$0	\$0	\$0		
77	7,494	239	0	3,621	11,354	6	10	0	0	0	\$19,214	\$40,027	\$45,206	\$11,888	\$0	\$0	\$0		
78	7,538	262	0	3,691	11,491	8	7	0	0	0	\$18,789	\$41,876	\$41,876	\$16,515	\$0	\$0	\$0		
79	7,081	312	0	3,842	11,235	5	6	0	0	0	\$17,973	\$39,872	\$44,806	\$15,463	\$0	\$0	\$0		
80	7,019	278	0	4,030	11,327	1	1	0	0	0	\$17,604	\$39,857	\$26,472	\$23,949	\$0	\$0	\$0		
81	6,281	308	0	3,796	10,385	1	5	0	0	0	\$17,223	\$39,743	\$41,028	\$15,418	\$0	\$0	\$0		
82	5,048	268	0	3,289	8,605	1	4	0	0	0	\$17,118	\$40,138	\$34,104	\$17,583	\$0	\$0	\$0		
83	3,604	199	0	2,285	6,088	1	1	0	0	0	\$17,113	\$41,657	\$24,840	\$18,180	\$0	\$0	\$0		
84	2,885	191	0	2,115	5,191	2	1	0	0	0	\$17,442	\$41,027	\$49,607	\$23,892	\$0	\$0	\$0		
85	3,055	195	0	2,398	5,648	0	0	0	0	0	\$16,669	\$40,672	\$0	\$0	\$0	\$0	\$0		
86	3,310	294	0	2,890	6,494	0	1	0	0	0	\$16,567	\$39,269	\$0	\$11,351	\$0	\$0	\$0		
87	3,284	413	0	2,909	6,606	0	0	0	0	0	\$15,752	\$38,137	\$0	\$0	\$0	\$0	\$0		
88	3,158	457	0	2,934	6,549	0	0	0	0	0	\$15,783	\$37,141	\$0	\$0	\$0	\$0	\$0		
89	3,373	520	0	2,867	6,760	0	0	0	0	0	\$15,803	\$37,579	\$0	\$0	\$0	\$0	\$0		
90	2,925	536	0	2,584	6,045	0	0	0	0	0	\$16,696	\$36,480	\$0	\$0	\$0	\$0	\$0		
91	2,404	470	0	2,042	4,916	0	0	0	0	0	\$18,060	\$37,611	\$0	\$0	\$0	\$0	\$0		
92	1,848	347	0	1,689	3,884	0	0	0	0	0	\$18,733	\$36,788	\$0	\$0	\$0	\$0	\$0		
93	1,286	290	0	1,234	2,810	0	0	0	0	0	\$18,951	\$35,688	\$0	\$0	\$0	\$0	\$0		
94	846	184	0	848	1,878	0	0	0	0	0	\$19,650	\$36,953	\$0	\$0	\$0	\$0	\$0		
95	608	129	0	571	1,308	0	0	0	0	0	\$20,463	\$35,762	\$0	\$0	\$0	\$0	\$0		
96	340	70	0	383	793	0	0	0	0	0	\$21,544	\$36,381	\$0	\$0	\$0	\$0	\$0		
97	196	56	0	215	467	0	0	0	0	0	\$21,622	\$35,161	\$0	\$0	\$0	\$0	\$0		
98	92	36	0	128	296	0	0	0	0	0	\$21,569	\$34,269	\$0	\$0	\$0	\$0	\$0		
99	77	11	0	79	167	0	0	0	0	0	\$21,679	\$33,968	\$0	\$0	\$0	\$0	\$0		
100	37	10	0	63	110	0	0	0	0	0	\$20,216	\$31,054	\$0	\$0	\$0	\$0	\$0		
101	14	5	0	40	59	0	0	0	0	0	\$18,809	\$24,756	\$0	\$0	\$0	\$0	\$0		
102	13	2	0	17	32	0	0	0	0	0	\$16,899	\$30,471	\$0	\$0	\$0	\$0	\$0		
103	9	2	0	5	16	0	0	0	0	0	\$13,997	\$39,561	\$0	\$0	\$0	\$0	\$0		
104	2	1	0	1	4	0	0	0	0	0	\$12,612	\$38,802	\$0	\$0	\$0	\$0	\$0		
105	1	1	0	3	5	0	0	0	0	0	\$15,163	\$16,022	\$0	\$0	\$0	\$0	\$0		
106	0	0	0	1	1	0	0	0	0	0	\$49,224	\$49,224	\$0	\$0	\$0	\$0	\$0		
107	0	0	0	2	2	0	0	0	0	0	\$12,576	\$12,576	\$0	\$0	\$0	\$0	\$0		
108	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
109	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
110	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Total	360,350	17,294	823	147,031	525,498	11,783	911	633	42	\$47,089	\$30,642	\$23,173	\$20,103	\$38,960	\$15,764	\$26,020	\$26,235		
60+	239,998	12,631	12	147,003	399,644	2,046	911	3	0	\$48,863	\$34,344	\$39,280	\$20,099	\$37,824	\$15,764	\$41,781	\$0		
62+	218,122	11,936	5	138,051	368,114	1,250	739	2	0	\$49,177	\$34,663	\$42,269	\$19,939	\$37,741	\$15,079	\$47,565	\$0		
65+	178,983	10,379	0	111,694	301,056	493	447	0	0	\$49,923	\$35,691	\$0	\$19,418	\$38,115	\$14,341	\$36,110	\$0		

Notes: Age is retiree's current age nearest birthday at end of fiscal year.
 60+ is total for ages 60 and over.
 62+ is total for ages 62 and over.
 65+ is total for ages 65 and over.
 Includes only retirees receiving payment from DoD.
 Temporary Early Retirement Act (TERA) retirees and payments are shown for informational purposes only.
 Career Status Bonus (CSB) retirees and payments are shown for informational purposes only.
 TERA and CSB numbers and payments are included in the appropriate categories.
 Pay amounts do not include the 12/1/10 cost of living increase of 0.0%.

DoD Retired Military Valuation Data as of Year-End FY2010

All Enlisted

Age	Non Disabled			Strength Total	Reserve Retired			Temp Disabled	Perm Disabled			Non Disabled	CSB			Temp Disabled	Average Annual Net Retired Pay			CSB Dis
	Dis	Non-Dis	CSB Dis		Res Ret	Non-Dis	CSB Dis		CSB Non-Dis	Res Ret	Non-Dis		Total	Reserve Retired	TERA Non-Dis		TERA Res Ret	CSB Non-Dis	CSB Dis	
71	21,552	806	7,209	29,567	20	111	0	0	0	\$21,639	\$15,719	\$0	\$9,058	\$18,410	\$20,481	\$5,627	\$0	\$0		
72	22,558	831	7,164	30,553	30	129	0	0	0	\$21,783	\$16,095	\$0	\$8,892	\$18,606	\$19,541	\$5,681	\$0	\$0		
73	24,194	832	7,065	32,091	13	148	0	0	0	\$21,975	\$16,302	\$0	\$8,871	\$18,918	\$16,782	\$5,020	\$0	\$0		
74	23,685	750	6,701	31,136	9	118	0	0	0	\$22,346	\$16,450	\$0	\$8,918	\$19,314	\$19,523	\$4,982	\$0	\$0		
75	23,152	752	6,373	30,277	3	131	0	0	0	\$22,410	\$16,183	\$0	\$8,935	\$19,419	\$20,931	\$5,884	\$0	\$0		
76	21,487	805	5,546	27,838	0	75	0	0	0	\$22,480	\$16,480	\$0	\$9,179	\$19,656	\$0	\$5,413	\$0	\$0		
77	19,684	830	4,617	25,131	1	65	0	0	0	\$22,755	\$16,062	\$0	\$9,533	\$20,105	\$13,680	\$5,580	\$0	\$0		
78	19,221	962	4,438	24,621	0	16	0	0	0	\$22,926	\$15,711	\$0	\$9,445	\$20,214	\$0	\$5,483	\$0	\$0		
79	18,218	1,059	4,429	23,706	0	3	0	0	0	\$23,019	\$14,892	\$0	\$9,254	\$20,084	\$0	\$8,675	\$0	\$0		
80	18,406	1,119	4,178	23,703	0	1	0	0	0	\$22,777	\$15,465	\$0	\$9,174	\$20,034	\$0	\$4,642	\$0	\$0		
81	16,337	1,084	3,346	20,767	0	0	0	0	0	\$22,667	\$15,970	\$0	\$9,293	\$20,163	\$0	\$0	\$0	\$0		
82	12,718	842	2,648	16,208	0	0	0	0	0	\$22,654	\$16,612	\$0	\$9,411	\$20,176	\$0	\$0	\$0	\$0		
83	10,081	644	1,834	12,559	0	1	0	0	0	\$22,325	\$17,371	\$0	\$9,597	\$20,213	\$0	\$5,724	\$0	\$0		
84	7,270	424	1,576	9,270	0	0	0	0	0	\$22,016	\$18,261	\$0	\$9,584	\$19,730	\$0	\$0	\$0	\$0		
85	6,034	382	1,386	7,802	0	0	0	0	0	\$21,651	\$18,093	\$0	\$9,713	\$19,356	\$0	\$0	\$0	\$0		
86	5,272	322	1,285	6,879	0	0	0	0	0	\$21,699	\$20,040	\$0	\$9,600	\$19,361	\$0	\$0	\$0	\$0		
87	4,443	279	1,049	5,771	0	0	0	0	0	\$21,581	\$19,539	\$0	\$9,576	\$19,300	\$0	\$0	\$0	\$0		
88	3,621	221	852	4,694	0	0	0	0	0	\$21,489	\$22,147	\$0	\$9,519	\$19,347	\$0	\$0	\$0	\$0		
89	3,129	159	795	4,083	0	0	0	0	0	\$22,199	\$22,147	\$0	\$9,583	\$19,021	\$0	\$0	\$0	\$0		
90	2,405	127	580	3,112	0	0	0	0	0	\$21,759	\$22,474	\$0	\$10,010	\$19,598	\$0	\$0	\$0	\$0		
91	1,950	106	437	2,493	0	0	0	0	0	\$21,356	\$24,501	\$0	\$10,512	\$19,589	\$0	\$0	\$0	\$0		
92	1,228	75	298	1,601	0	0	0	0	0	\$21,238	\$26,014	\$0	\$10,716	\$19,503	\$0	\$0	\$0	\$0		
93	851	39	224	1,114	0	0	0	0	0	\$20,830	\$27,193	\$0	\$10,486	\$18,973	\$0	\$0	\$0	\$0		
94	499	31	121	651	0	0	0	0	0	\$20,470	\$23,858	\$0	\$10,594	\$18,796	\$0	\$0	\$0	\$0		
95	322	19	79	420	0	0	0	0	0	\$20,171	\$21,631	\$0	\$11,370	\$18,582	\$0	\$0	\$0	\$0		
96	212	14	68	294	0	0	0	0	0	\$20,700	\$20,475	\$0	\$11,465	\$18,553	\$0	\$0	\$0	\$0		
97	101	1	33	135	0	0	0	0	0	\$18,454	\$27,724	\$0	\$11,706	\$16,688	\$0	\$0	\$0	\$0		
98	59	1	24	84	0	0	0	0	0	\$24,084	\$24,084	\$0	\$12,621	\$19,280	\$0	\$0	\$0	\$0		
99	33	2	10	45	0	0	0	0	0	\$18,658	\$29,148	\$0	\$9,194	\$17,021	\$0	\$0	\$0	\$0		
100	11	2	3	16	0	0	0	0	0	\$14,760	\$26,988	\$0	\$6,012	\$14,648	\$0	\$0	\$0	\$0		
101	10	1	4	15	0	0	0	0	0	\$18,328	\$17,832	\$0	\$6,807	\$15,223	\$0	\$0	\$0	\$0		
102	8	1	2	11	0	0	0	0	0	\$18,263	\$744	\$0	\$14,359	\$15,960	\$0	\$0	\$0	\$0		
103	4	1	1	6	0	0	0	0	0	\$16,665	\$5,112	\$0	\$5,976	\$12,958	\$0	\$0	\$0	\$0		
104	3	0	0	3	0	0	0	0	0	\$25,188	\$0	\$0	\$0	\$25,188	\$0	\$0	\$0	\$0		
105	7	0	0	7	0	0	0	0	0	\$18,533	\$0	\$0	\$0	\$18,533	\$0	\$0	\$0	\$0		
106	2	0	0	2	0	0	0	0	0	\$18,420	\$0	\$0	\$0	\$18,420	\$0	\$0	\$0	\$0		
107	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
108	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
109	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
110	0	1	1	2	0	0	0	0	0	\$2,988	\$0	\$0	\$10,632	\$6,810	\$0	\$0	\$0	\$0		
Total	1,107,588	64,503	10,184	1,391,845	40,618	3,642	19,647	430	0	\$21,201	\$11,238	\$9,582	\$9,667	\$18,920	\$13,159	\$6,314	\$15,056	\$15,382		
60+	562,210	33,304	31	209,535	3,125	3,642	0	0	0	\$22,089	\$13,395	\$24,028	\$9,685	\$18,501	\$15,578	\$6,314	\$0	\$0		
62+	505,811	28,999	13	188,552	723,375	1,881	3,175	0	0	\$22,187	\$13,848	\$25,752	\$9,621	\$18,578	\$16,231	\$6,261	\$0	\$0		
65+	419,626	21,026	0	136,070	576,722	707	1,932	0	0	\$22,227	\$15,523	\$0	\$9,421	\$18,961	\$17,462	\$6,102	\$0	\$0		

Notes: Age is retiree's current age nearest birthday at end of fiscal year.

60+ is total for ages 60 and over.

62+ is total for ages 62 and over.

65+ is total for ages 65 and over.

Includes only retirees receiving payment from DoD.

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Pay amounts do not include the 12/1/10 cost of living increase of 0.0%.

DoD Retired Military Valuation Data as of Year-End FY2010

All DoD

Age	Strength				Average Annual Net Retired Pay				TERRA		CSB		
	Non Disabled	Perm Disabled	Temp Disabled	Reserve Retired	Total	TERRA Non-Dis	TERRA Res Ret	CSB Non-Dis	CSB Dis	Total	TERRA Res Ret	CSB Non-Dis	CSB Dis
16	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
17	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
19	0	1	12	13	0	0	0	0	0	\$8,951	\$0	\$0	\$0
20	0	11	77	88	0	0	0	0	0	\$8,074	\$0	\$0	\$0
21	0	38	174	212	0	0	0	0	0	\$7,590	\$0	\$0	\$0
22	0	86	292	378	0	0	0	0	0	\$7,630	\$0	\$0	\$0
23	0	243	473	624	0	0	0	0	0	\$7,606	\$0	\$0	\$0
24	0	217	630	847	0	0	0	0	0	\$7,199	\$0	\$0	\$0
25	1	357	774	1,132	0	0	0	0	0	\$6,979	\$0	\$0	\$0
26	1	426	809	1,236	0	0	0	0	0	\$7,114	\$0	\$0	\$0
27	0	500	747	1,247	0	0	0	0	0	\$6,927	\$0	\$0	\$0
28	0	508	663	1,171	0	0	0	0	0	\$7,031	\$0	\$0	\$0
29	0	482	671	1,153	0	0	0	0	0	\$7,602	\$0	\$0	\$15,483
30	0	549	576	1,125	0	0	0	0	0	\$7,419	\$0	\$0	\$0
31	0	513	555	1,068	0	0	0	0	0	\$7,635	\$0	\$0	\$0
32	0	541	428	969	0	0	0	0	0	\$7,666	\$0	\$0	\$0
33	0	508	371	879	0	0	0	0	0	\$7,501	\$0	\$0	\$0
34	0	532	351	883	0	0	0	0	0	\$7,876	\$0	\$0	\$5,232
35	0	506	284	790	0	0	0	0	0	\$8,071	\$0	\$0	\$465
36	0	542	289	831	0	0	0	0	0	\$8,085	\$0	\$0	\$15,240
37	2	534	241	777	0	0	0	0	0	\$8,299	\$0	\$15,423	\$14,193
38	541	606	243	1,390	0	0	0	0	0	\$12,465	\$0	\$15,952	\$14,336
39	3,003	658	257	3,918	0	0	0	0	0	\$16,259	\$0	\$15,327	\$12,545
40	6,219	750	244	7,213	0	0	0	0	0	\$16,996	\$0	\$15,284	\$15,409
41	9,270	802	195	10,267	0	0	0	0	0	\$17,635	\$0	\$15,389	\$17,469
42	12,586	823	205	13,614	2	0	0	0	0	\$18,959	\$0	\$15,373	\$16,013
43	16,928	881	175	17,884	17	0	0	0	0	\$20,342	\$0	\$15,450	\$18,319
44	21,484	976	163	22,623	37	0	0	0	0	\$21,370	\$0	\$15,501	\$19,824
45	25,974	1,110	151	27,235	154	0	0	0	0	\$22,172	\$0	\$15,433	\$16,699
46	30,867	1,241	134	32,242	379	0	0	0	0	\$22,586	\$0	\$15,410	\$19,382
47	34,630	1,294	127	36,051	868	0	0	0	0	\$22,734	\$0	\$15,669	\$16,948
48	37,888	1,451	102	39,441	1,691	0	0	0	0	\$23,066	\$0	\$15,485	\$14,031
49	40,884	1,423	90	42,397	3,003	0	0	0	0	\$23,542	\$0	\$15,600	\$15,577
50	42,966	1,445	87	44,498	4,214	0	0	0	0	\$23,648	\$0	\$15,236	\$15,663
51	43,519	1,491	71	45,081	5,063	0	0	0	0	\$24,028	\$0	\$15,885	\$17,824
52	42,594	1,469	54	44,117	5,682	0	0	0	0	\$24,348	\$0	\$14,672	\$18,430
53	43,771	1,565	57	45,413	5,924	0	0	0	0	\$24,743	\$0	\$14,666	\$13,728
54	42,893	1,611	42	44,546	5,432	0	0	0	0	\$25,520	\$0	\$16,865	\$16,407
55	42,702	1,665	42	44,409	4,540	0	0	0	0	\$25,360	\$0	\$15,156	\$16,955
56	42,690	1,784	32	44,506	3,706	0	0	0	0	\$25,641	\$0	\$14,123	\$23,316
57	42,023	1,891	25	43,939	2,823	0	0	0	0	\$25,983	\$0	\$15,306	\$0
58	42,048	1,966	27	44,049	2,091	0	0	0	0	\$26,183	\$0	\$14,580	\$0
59	39,346	1,938	24	41,363	1,614	0	0	0	0	\$26,494	\$0	\$19,412	\$0
60	38,558	2,258	19	40,835	1,153	159	0	0	0	\$24,996	\$9,653	\$30,212	\$0
61	39,117	2,742	6	41,865	887	480	0	0	0	\$22,655	\$9,998	\$19,424	\$0
62	40,835	3,094	10	43,939	725	522	2	0	0	\$22,661	\$8,741	\$20,712	\$0
63	41,938	3,342	7	45,287	657	519	0	0	0	\$22,945	\$8,169	\$21,357	\$0
64	42,551	3,094	1	45,646	549	494	0	0	0	\$23,441	\$8,143	\$22,756	\$0
65	29,674	2,081	0	31,755	322	330	0	0	0	\$23,625	\$8,054	\$24,079	\$0
66	30,284	1,907	0	32,191	228	275	0	0	0	\$24,025	\$8,054	\$23,439	\$0
67	32,172	1,706	0	33,878	194	236	0	0	0	\$24,133	\$8,479	\$24,089	\$0
68	33,912	1,686	0	35,598	148	220	0	0	0	\$23,945	\$8,163	\$25,549	\$0
69	31,123	1,425	0	32,548	95	181	0	0	0	\$23,885	\$7,054	\$25,942	\$0
70	30,495	1,325	0	31,820	54	139	0	0	0	\$23,034	\$8,239	\$24,407	\$0

DoD Retired Military Valuation Data as of Year-End FY2010

All DoD

Age	Non Disabled			Perm Disabled			Temp Disabled			Reserve Retired			Average Annual Net Retired Pay			CSB		
	Age	Dis	Total	Dis	Total	Dis	Total	Dis	Total	Dis	Total	Dis	Total	Res Ret	Non-Dis	Dis		
71	30,367	1,114	43,057	0	11,576	33	146	0	0	0	\$28,841	\$21,123	\$0	\$13,497	\$24,516	\$29,779	\$7,662	\$0
72	30,998	1,126	43,658	0	11,534	39	170	0	0	0	\$28,477	\$20,910	\$0	\$13,103	\$24,220	\$25,398	\$7,643	\$0
73	32,237	1,109	44,658	0	11,312	24	183	0	0	0	\$28,377	\$21,719	\$0	\$12,777	\$24,260	\$28,221	\$6,717	\$0
74	31,354	1,013	43,104	0	10,737	19	136	0	0	0	\$28,589	\$21,824	\$0	\$12,855	\$24,506	\$27,961	\$6,016	\$0
75	30,687	1,018	41,907	0	10,202	11	149	0	0	0	\$28,785	\$21,622	\$0	\$12,689	\$24,695	\$33,142	\$6,744	\$0
76	29,339	1,061	39,880	0	9,480	7	92	0	0	0	\$28,147	\$21,841	\$0	\$13,187	\$38,746	\$36,502	\$6,502	\$0
77	27,178	1,069	36,485	0	8,238	7	73	0	0	0	\$30,286	\$21,542	\$0	\$13,788	\$26,305	\$40,702	\$6,421	\$0
78	26,759	1,224	36,112	0	8,129	8	25	0	0	0	\$30,794	\$21,201	\$0	\$13,688	\$26,618	\$41,876	\$8,841	\$0
79	25,299	1,371	34,941	0	8,271	5	9	0	0	0	\$31,038	\$21,022	\$0	\$13,304	\$26,447	\$44,806	\$13,200	\$0
80	25,425	1,397	35,030	0	8,208	1	2	0	0	0	\$30,998	\$20,714	\$0	\$13,313	\$26,444	\$26,472	\$14,296	\$0
81	22,618	1,392	31,152	0	7,142	1	5	0	0	0	\$31,166	\$21,612	\$0	\$13,508	\$26,690	\$41,028	\$15,418	\$0
82	17,766	1,110	24,813	0	5,937	1	4	0	0	0	\$31,825	\$23,226	\$0	\$13,681	\$27,099	\$34,104	\$17,583	\$0
83	13,685	843	18,647	0	4,119	1	2	0	0	0	\$31,367	\$23,871	\$0	\$14,100	\$27,214	\$24,840	\$11,952	\$0
84	10,155	615	14,461	0	3,691	2	1	0	0	0	\$32,242	\$26,755	\$0	\$14,087	\$27,375	\$49,607	\$23,892	\$0
85	9,089	577	13,450	0	3,784	0	0	0	0	0	\$34,269	\$27,434	\$0	\$14,121	\$28,307	\$0	\$0	\$0
86	8,582	616	13,373	0	4,175	0	1	0	0	0	\$36,107	\$29,405	\$0	\$14,423	\$29,029	\$0	\$11,351	\$0
87	7,727	692	12,377	0	3,958	0	0	0	0	0	\$37,147	\$29,493	\$0	\$14,115	\$29,354	\$0	\$0	\$0
88	6,779	678	11,243	0	3,786	0	0	0	0	0	\$38,165	\$30,849	\$0	\$14,373	\$29,712	\$0	\$0	\$0
89	6,502	679	10,843	0	3,662	0	0	0	0	0	\$39,545	\$31,889	\$0	\$14,452	\$30,591	\$0	\$0	\$0
90	5,330	663	9,157	0	3,164	0	0	0	0	0	\$39,756	\$31,177	\$0	\$15,470	\$30,743	\$0	\$0	\$0
91	4,354	576	7,409	0	2,479	0	0	0	0	0	\$39,587	\$34,540	\$0	\$16,729	\$31,547	\$0	\$0	\$0
92	3,076	422	5,485	0	1,987	0	0	0	0	0	\$40,560	\$34,388	\$0	\$17,531	\$31,743	\$0	\$0	\$0
93	2,137	329	3,924	0	1,458	0	0	0	0	0	\$39,448	\$34,604	\$0	\$18,519	\$32,279	\$0	\$0	\$0
94	1,345	215	2,529	0	969	0	0	0	0	0	\$41,447	\$36,948	\$0	\$18,519	\$32,279	\$0	\$0	\$0
95	930	148	1,728	0	650	0	0	0	0	0	\$39,725	\$34,151	\$0	\$19,358	\$31,586	\$0	\$0	\$0
96	552	84	1,087	0	451	0	0	0	0	0	\$40,377	\$35,542	\$0	\$20,025	\$31,559	\$0	\$0	\$0
97	297	57	602	0	248	0	0	0	0	0	\$39,170	\$35,325	\$0	\$20,303	\$31,094	\$0	\$0	\$0
98	151	37	340	0	152	0	0	0	0	0	\$37,657	\$44,255	\$0	\$20,156	\$30,566	\$0	\$0	\$0
99	110	13	212	0	89	0	0	0	0	0	\$39,112	\$25,524	\$0	\$20,276	\$30,371	\$0	\$0	\$0
100	48	12	126	0	66	0	0	0	0	0	\$41,262	\$31,504	\$0	\$19,570	\$28,971	\$0	\$0	\$0
101	24	6	74	0	44	0	0	0	0	0	\$32,629	\$21,048	\$0	\$17,718	\$22,824	\$0	\$0	\$0
102	21	3	43	0	19	0	0	0	0	0	\$36,108	\$25,460	\$0	\$16,631	\$26,759	\$0	\$0	\$0
103	13	3	22	0	6	0	0	0	0	0	\$37,830	\$47,655	\$0	\$12,660	\$32,306	\$0	\$0	\$0
104	5	1	7	0	1	0	0	0	0	0	\$40,426	\$16,032	\$0	\$12,612	\$32,967	\$0	\$0	\$0
105	8	1	12	0	3	0	0	0	0	0	\$19,838	\$5,592	\$0	\$15,183	\$17,487	\$0	\$0	\$0
106	2	0	3	0	1	0	0	0	0	0	\$18,420	\$0	\$0	\$49,224	\$28,688	\$0	\$0	\$0
107	0	0	2	0	2	0	0	0	0	0	\$0	\$0	\$0	\$12,576	\$12,576	\$0	\$0	\$0
108	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
109	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
110	0	1	2	0	1	0	0	0	0	0	\$0	\$2,988	\$0	\$10,632	\$6,810	\$0	\$0	\$0
Total	1,467,938	81,797	1,917,343	11,007	356,601	52,401	4,553	20,280	472	\$27,556	\$15,340	\$10,598	\$13,982	\$24,413	\$16,530	\$8,205	\$15,398	\$16,348
60+	802,208	45,935	1,204,724	43	356,538	5,171	4,553	3	0	\$30,099	\$19,155	\$28,284	\$13,979	\$24,911	\$22,190	\$8,205	\$41,781	\$0
62+	723,933	40,935	1,091,489	18	326,603	3,131	3,914	2	0	\$30,319	\$19,917	\$30,340	\$13,982	\$25,041	\$23,219	\$7,926	\$47,565	\$0
65+	598,609	31,405	877,778	0	247,764	1,200	2,379	0	0	\$30,508	\$22,188	\$0	\$13,928	\$25,530	\$7,650	\$0	\$0	\$0

Notes: Age is retiree's current age nearest birthday at end of fiscal year.

60+ is total for ages 60 and over.

62+ is total for ages 62 and over.

65+ is total for ages 65 and over.

Includes only retirees receiving payment from DoD.

Temporary Early Retirement Act (TERA) retirees and payments are shown for informational purposes only.

Career Status Bonus (CSB) retirees and payments are shown for informational purposes only.

TERA and CSB numbers and payments are included in the appropriate categories.

Pay amounts do not include the 12/1/10 cost of living increase of 0.0%.

DoD Survivor Valuation Data as of Year-End FY2010

Age	Strength				Average Annual Net Survivor Pay				Total	
	SBP	RCSBP	Minimum Income	Death on Active Duty	SBP	RCSBP	Minimum Income	Death on Active Duty		RSFPP
0	0	0	0	14	\$0	\$0	\$0	\$6,026	\$0	\$6,026
1	0	0	0	76	\$0	\$0	\$0	\$7,078	\$0	\$7,078
2	0	0	0	119	\$0	\$0	\$0	\$7,105	\$0	\$7,105
3	0	0	0	188	\$0	\$4,992	\$6,944	\$6,934	\$0	\$6,934
4	5	0	0	276	\$5,454	\$0	\$6,923	\$0	\$0	\$6,897
5	10	0	0	274	\$5,882	\$0	\$7,018	\$0	\$0	\$6,978
6	19	3	348	371	\$7,404	\$8,782	\$6,854	\$0	\$3,122	\$6,888
7	19	2	356	377	\$6,604	\$5,508	\$6,604	\$0	\$0	\$6,836
8	34	0	367	401	\$7,633	\$0	\$7,136	\$0	\$0	\$7,178
9	41	0	360	401	\$6,759	\$0	\$6,604	\$0	\$0	\$6,620
10	59	2	359	420	\$8,990	\$3,674	\$6,746	\$0	\$0	\$7,046
11	65	1	297	363	\$6,357	\$19,980	\$6,811	\$0	\$0	\$6,766
12	71	6	275	352	\$7,516	\$3,433	\$6,950	\$0	\$0	\$7,004
13	110	3	231	344	\$7,049	\$4,170	\$7,046	\$0	\$0	\$7,022
14	94	9	220	323	\$6,755	\$5,960	\$6,741	\$0	\$0	\$6,724
15	112	27	210	349	\$7,988	\$3,999	\$7,832	\$0	\$0	\$7,586
16	151	14	187	352	\$8,199	\$4,304	\$7,047	\$0	\$0	\$7,432
17	166	26	167	359	\$8,393	\$4,570	\$7,820	\$0	\$0	\$7,849
18	141	16	123	280	\$9,693	\$3,399	\$7,945	\$0	\$0	\$8,565
19	100	12	36	148	\$12,041	\$5,304	\$9,293	\$0	\$0	\$10,826
20	98	16	27	141	\$12,074	\$6,497	\$11,858	\$0	\$0	\$11,400
21	103	13	31	147	\$10,791	\$3,941	\$9,522	\$0	\$0	\$9,918
22	69	6	10	85	\$11,677	\$12,814	\$11,196	\$0	\$0	\$11,818
23	25	3	3	31	\$10,401	\$2,508	\$9,120	\$0	\$0	\$9,513
24	30	2	4	38	\$11,709	\$4,035	\$7,464	\$9,457	\$0	\$10,740
25	20	3	2	25	\$10,269	\$3,484	\$9,144	\$0	\$0	\$9,365
26	24	4	8	36	\$12,222	\$8,652	\$4,532	\$0	\$0	\$10,116
27	25	3	7	35	\$12,714	\$2,488	\$7,281	\$0	\$0	\$10,750
28	21	2	8	31	\$11,852	\$1,860	\$4,514	\$0	\$0	\$9,314
29	34	3	17	57	\$12,546	\$10,500	\$8,219	\$2,372	\$0	\$10,612
30	25	11	31	67	\$9,774	\$4,229	\$6,237	\$0	\$0	\$7,227
31	25	4	31	60	\$10,967	\$7,746	\$5,687	\$0	\$0	\$8,024
32	38	4	39	82	\$10,962	\$3,420	\$7,322	\$10,644	\$0	\$8,859
33	25	5	29	60	\$12,172	\$3,074	\$6,480	\$8,628	\$0	\$8,604
34	34	11	90	136	\$9,395	\$4,775	\$6,532	\$2,088	\$0	\$7,073
35	38	4	57	103	\$9,051	\$5,649	\$6,280	\$1,742	\$0	\$7,102
36	47	10	59	118	\$11,988	\$7,726	\$6,717	\$3,497	\$0	\$8,847
37	53	8	82	148	\$11,332	\$8,007	\$6,915	\$1,733	\$0	\$8,381
38	53	19	73	152	\$11,242	\$5,949	\$6,332	\$1,700	\$0	\$7,783
39	60	20	57	137	\$11,068	\$4,626	\$6,571	\$0	\$0	\$8,256
40	95	26	105	234	\$12,872	\$5,667	\$7,970	\$3,297	\$0	\$9,544
41	99	29	73	211	\$12,528	\$5,853	\$7,585	\$5,088	\$0	\$9,548
42	87	33	77	202	\$11,693	\$6,152	\$8,461	\$2,108	\$0	\$9,318
43	145	33	123	309	\$12,595	\$6,281	\$8,876	\$2,197	\$0	\$10,171
44	154	39	90	286	\$11,393	\$6,418	\$9,353	\$4,564	\$0	\$9,858
45	206	50	85	352	\$11,059	\$6,261	\$8,462	\$2,788	\$0	\$9,492
46	262	70	129	471	\$11,557	\$6,273	\$8,766	\$3,453	\$0	\$9,835
47	270	102	71	456	\$11,417	\$6,312	\$10,301	\$1,661	\$0	\$9,823
48	295	109	63	481	\$10,711	\$6,767	\$12,164	\$4,035	\$0	\$9,813
49	407	134	84	648	\$11,536	\$6,155	\$11,857	\$3,461	\$0	\$10,179
50	512	170	70	781	\$11,620	\$6,398	\$12,218	\$3,235	\$0	\$10,226
51	508	177	45	746	\$11,155	\$6,394	\$13,603	\$3,436	\$0	\$10,008
52	580	202	55	869	\$11,383	\$6,959	\$13,164	\$3,355	\$0	\$10,172
53	710	267	53	1,063	\$11,703	\$6,423	\$11,571	\$2,947	\$0	\$10,098
54	717	328	67	1,134	\$11,696	\$6,982	\$12,289	\$3,741	\$0	\$10,213
55	867	318	56	1,250	\$11,817	\$6,511	\$16,285	\$3,323	\$0	\$10,613
56	1,002	414	51	1,473	\$11,741	\$6,790	\$13,040	\$5,266	\$0	\$10,368
57	1,126	436	52	1,635	\$11,901	\$6,942	\$13,704	\$3,162	\$0	\$10,523
58	1,246	561	48	1,869	\$11,549	\$6,429	\$13,829	\$4,272	\$0	\$10,017
59	1,351	713	47	2,120	\$11,581	\$6,493	\$12,489	\$2,202	\$0	\$9,850

DoD Survivor Valuation Data as of Year-End FY2010

Age	Strength			Average Annual Net Survivor Pay								
	SBP	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Total	SBP	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Total
60	1,557	769	1	55	7	2,389	\$12,089	\$6,761	\$7,933	\$12,781	\$3,052	\$10,362
61	1,747	880	0	47	13	2,687	\$12,986	\$6,498	\$0	\$14,542	\$3,271	\$10,328
62	2,005	1,100	1	33	16	3,155	\$11,992	\$6,800	\$7,106	\$13,807	\$3,433	\$10,156
63	2,336	1,279	0	51	13	3,679	\$12,213	\$6,819	\$2,785	\$12,358	\$2,785	\$10,307
64	2,746	1,440	1	47	6	4,240	\$12,347	\$6,929	\$7,933	\$12,535	\$1,857	\$10,493
65	2,438	1,132	0	34	9	3,613	\$12,427	\$6,868	\$0	\$9,755	\$4,512	\$10,640
66	2,887	1,337	1	40	14	4,279	\$12,498	\$7,017	\$5,759	\$10,574	\$2,132	\$10,732
67	3,452	1,477	1	39	12	4,980	\$12,530	\$6,918	\$0	\$9,455	\$1,738	\$10,816
68	3,898	1,698	0	55	23	5,674	\$12,435	\$7,027	\$0	\$11,873	\$2,245	\$10,769
69	4,146	1,671	0	44	16	5,877	\$12,378	\$6,895	\$0	\$8,568	\$2,500	\$10,763
70	4,394	1,743	1	49	34	6,221	\$12,464	\$6,995	\$7,933	\$8,502	\$2,142	\$10,844
71	4,957	1,883	1	51	43	6,935	\$12,753	\$6,897	\$7,933	\$9,229	\$1,571	\$11,067
72	5,422	2,049	4	46	45	7,566	\$13,024	\$6,971	\$7,752	\$9,271	\$1,805	\$11,292
73	6,022	2,068	3	49	64	8,206	\$13,001	\$7,019	\$7,458	\$12,566	\$2,348	\$11,406
74	6,298	2,166	4	70	125	8,663	\$13,095	\$7,014	\$7,301	\$10,471	\$2,231	\$11,394
75	6,983	2,446	7	52	125	9,613	\$13,357	\$7,081	\$6,808	\$10,447	\$2,019	\$11,592
76	7,328	2,497	3	67	204	10,099	\$13,369	\$7,133	\$7,473	\$11,796	\$2,272	\$11,590
77	7,212	2,458	3	79	262	10,014	\$13,761	\$7,225	\$6,653	\$11,668	\$2,080	\$11,832
78	7,677	2,619	2	72	355	10,725	\$14,118	\$7,320	\$6,388	\$11,617	\$2,051	\$12,041
79	7,674	2,858	2	68	327	10,929	\$14,654	\$7,513	\$5,930	\$11,712	\$2,485	\$12,403
80	7,674	2,719	1	66	426	10,886	\$14,819	\$7,712	\$7,933	\$12,167	\$2,460	\$12,543
81	7,423	2,810	3	49	421	10,706	\$14,901	\$7,633	\$6,909	\$12,136	\$2,345	\$12,485
82	7,340	2,998	6	43	466	10,853	\$15,263	\$7,761	\$7,092	\$16,709	\$2,482	\$12,643
83	7,302	3,039	8	41	499	10,889	\$15,487	\$8,111	\$7,532	\$11,779	\$2,443	\$12,811
84	7,439	3,278	6	41	554	11,318	\$16,244	\$8,263	\$8,363	\$13,604	\$2,635	\$13,252
85	7,606	3,329	5	44	577	11,561	\$16,835	\$8,372	\$7,933	\$16,038	\$2,945	\$13,698
86	7,659	3,532	4	46	633	11,874	\$17,164	\$8,618	\$5,099	\$13,479	\$3,133	\$13,856
87	7,543	3,545	6	36	658	11,788	\$17,929	\$8,678	\$7,167	\$15,630	\$3,247	\$14,315
88	6,691	3,365	3	27	664	10,770	\$18,279	\$8,968	\$4,688	\$10,900	\$3,038	\$14,390
89	6,162	3,246	9	31	610	10,058	\$18,528	\$9,278	\$4,698	\$14,479	\$3,272	\$14,634
90	4,822	2,658	5	27	557	8,069	\$18,917	\$9,560	\$7,035	\$16,030	\$3,520	\$14,754
91	3,685	2,180	7	10	423	6,305	\$19,068	\$9,580	\$6,774	\$11,110	\$3,570	\$14,721
92	2,691	1,651	4	10	305	4,663	\$18,985	\$9,980	\$6,052	\$13,567	\$3,236	\$14,740
93	1,926	1,301	6	5	223	3,461	\$18,943	\$10,157	\$7,827	\$12,792	\$2,807	\$14,572
94	1,358	893	2	3	169	2,425	\$19,317	\$10,133	\$7,093	\$12,712	\$3,185	\$14,793
95	963	641	3	3	137	1,747	\$19,318	\$10,259	\$7,392	\$9,744	\$3,656	\$14,729
96	674	459	1	3	94	1,231	\$18,750	\$10,739	\$7,933	\$20,236	\$3,071	\$14,561
97	499	315	1	2	72	889	\$18,363	\$10,423	\$7,933	\$18,882	\$2,771	\$14,277
98	324	218	5	2	67	616	\$19,946	\$10,651	\$7,868	\$11,088	\$3,268	\$14,716
99	198	132	1	0	34	365	\$17,925	\$10,432	\$5,433	\$0	\$2,577	\$13,751
100	117	93	1	0	29	240	\$19,854	\$9,776	\$0	\$0	\$2,182	\$13,764
101	66	60	4	1	25	156	\$18,093	\$10,590	\$8,773	\$14,376	\$3,835	\$12,660
102	47	44	1	0	11	103	\$18,322	\$10,233	\$7,316	\$0	\$1,470	\$12,960
103	16	14	2	0	5	37	\$20,666	\$9,293	\$7,933	\$0	\$3,814	\$13,397
104	14	10	0	0	7	31	\$19,154	\$9,275	\$0	\$0	\$2,777	\$12,269
105	4	12	2	0	2	20	\$10,698	\$8,562	\$7,933	\$0	\$3,426	\$8,413
106	4	3	0	0	1	8	\$14,202	\$8,392	\$0	\$0	\$1,188	\$10,397
107	1	1	0	0	1	3	\$10,176	\$4,488	\$0	\$0	\$8,568	\$7,744
108	2	1	0	0	1	4	\$15,006	\$10,536	\$0	\$0	\$5,280	\$11,457
109	2	1	2	0	0	5	\$18,264	\$8,268	\$7,933	\$0	\$0	\$12,132
Total	194,114	82,624	132	8,130	9,707	294,707	\$14,798	\$7,898	\$7,232	\$8,626	\$2,857	\$12,297
60+	181,431	78,140	132	1,538	9,384	270,625	\$15,044	\$7,979	\$7,232	\$12,028	\$2,841	\$12,560
62+	178,127	76,491	131	1,436	9,364	265,549	\$15,098	\$8,009	\$7,227	\$11,917	\$2,840	\$12,602
65+	171,040	72,672	129	1,305	9,329	254,475	\$15,218	\$8,069	\$7,222	\$11,830	\$2,840	\$12,701

Notes: Age is survivor's current age nearest birthday at end of fiscal year.
 60+ is total for ages 60 and over.
 62+ is total for ages 62 and over.
 65+ is total for ages 65 and over.
 Includes only survivors receiving payment from DoD.
 Survivors receiving payment under SBP and RSFPP are counted twice.
 Two-life survivors are given by the age of the adult survivor.
 Children of the same deceased member receiving separate benefit payments are counted individually.
 RCSBP includes all reserve survivors, whether or not the reserve retiree elected RCSBP.
 Pay amounts do not include the 12/1/10 cost of living increase of 0.0%.
 Amounts do not include increased survivor benefits as part of Special Survivor Indemnity Allowance (NSAA 2008 and Public Law 111-31).
 The liability calculated in this valuation, however, reflects the increased benefits.

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APPENDIX D

ECONOMIC ASSUMPTIONS

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ECONOMIC ASSUMPTIONS

In July, 2010, the DoD Board of Actuaries adopted the following economic assumptions for use in the valuation as of September 30, 2010: the rate of inflation (CPI) is assumed to be 3.00 percent per year; the investment return is 5.75 percent per year; and the basic pay scale increases are 3.75 percent per year. As background for determining the economic assumptions, the Board receives presentations by economists and actuaries and is provided with extensive historical data on inflation, interest rates, and wage growth. The Board also considers what other federal retirement systems are assuming. Table D-1 shows the DoD Board of Actuaries' long-term economic assumptions by valuation year since the Fund's inception (1984).

The comparisons to Civil Service and Social Security in this appendix are not meant to imply an expectation that all three systems should use the same assumptions. They are different in terms of the trust funds themselves and the programs financed by the trust funds.

Inflation

The CPI-W, one of the consumer price indexes published by the Bureau of Labor Statistics, is emphasized as an inflation measure since it is used in calculating military retired pay cost-of-living increases. The CPI-W measures the average price change for Urban Wage Earners and Clerical Workers and covers approximately 32 percent of the U.S population. (The CPI-W is a subset of the broader CPI-U measure which computes the average price change for All Urban Consumers and covers approximately 87 percent of the U.S. population). The CPI-W is the common index used to make cost-of-living adjustments for labor contracts.

Table D-2 shows the average annual CPI-W changes over various periods of time since 1930. Different periods experienced different rates of change. The average annual CPI change during successive 30-year periods since World War II has risen from 3.79 percent for the period ending in 1975 to 5.20 percent for the period ending in 1995. This reflects the high inflation during the 1970s. The average annual CPI change during the current 30-year period ending in 2010 is 2.99 percent.

The DoD assumption for CPI is reasonably consistent with what is used in other parts of the government. In its 2010 report, the Civil Service Retirement System (CSRS) assumes a 3.00 percent CPI increase. The Trustees of the Social Security Administration (SSA) in their 2010 Annual Report made projections under three alternative sets of assumptions. Their intermediate assumption for CPI was 2.8 percent (other assumptions: low cost – 1.8 percent; high cost – 3.8 percent). The Board has noted that in certain respects, the effect of the CPI on the valuation is relatively minor in a system where retirement benefits are fully indexed and expressed as a percentage of payroll.

Interest Rate

The Board analyzes Tables D-3 and D-4, as well as other material presented at the DoD Board of Actuaries annual meeting, when setting the interest assumption. The Board focuses on real interest rates. To simplify discussion, the real interest rate is defined as the difference between the nominal interest rate and the CPI. Other things being equal, a lower element of risk in an investment will give a lower real interest rate. Because the Military Retirement Fund must be invested in obligations of the U.S. Government, a highly secure investment, the real interest rates are expected to be relatively low. As noted in the “Assets” section in the main text, the Fund is currently heavily investing in Treasury Inflation-Protected Securities (TIPS). TIPS allow the investor/institution to lock in the real interest rate for the given period of time.

The Board examines past real interest rates that would have been earned by the types of public debt securities in which the Fund is invested. The Board recognizes the importance of selecting a real interest rate that would prevail on average over a long period of time and that would not unduly weight recent experience or expected results during the near-term future.

Table D-3 depicts the average real yield rates on new purchases of the Fund. Because the Fund was established in 1984, the DoD Office of the Actuary compiled a Composite Series to simulate what new purchases would have yielded in the past.

Table D-4 shows the average real Military Retirement Fund effective yield. The effective yield calculation uses a “dollar-weighted yield,” which is computed by dividing the investment income by the average amount of principal invested throughout the year. Since the Fund’s inception, the average annual real yield is 5.10 percent.

After analyzing past trends of government trust fund earnings, 2.75 percent was adopted as the assumed rate of real interest. Since 3.00 percent had been adopted as the inflation rate, the assumed nominal rate of interest is 5.75 percent.

It is relevant to note the real interest rates being assumed by the other two major public benefit systems. The SSA Trustees used an intermediate ultimate real interest rate assumption of 2.9 percent in their 2010 report (other assumptions: low cost – 3.6 percent; high cost – 2.1 percent). The Board of Actuaries of the CSRS used a 2.75 percent real interest rate assumption in its 2010 valuation.

Wage Growth

For the salary increase assumption, recent historical data is used as well as forecasts for the population at large. The Career Compensation Act of 1949 revamped the military compensation structure to provide an equitable pay and allowance system. Associated with this change was a large basic pay increase designed to establish rough comparability with the private sector. Additionally, the Army and Air Force Vitalization and Retirement Equalization Act of 1948 established for the first time a uniform voluntary retirement system authority among all

branches of Service. The reserve retirement program was also established at this time. These two Acts provided the start of the modern-day compensation structure designed to attract and retain the number of Service members needed. In the analysis of basic pay scale increases, the Board looked at all data from this point forward.

The Military Pay Comparability Act of 2003 ensures that military pay increases are comparable to private sector pay growth, as measured by the Employment Cost Index (ECI) – Wages and Salaries index on a 15-month lag. Covenants are embedded within the act which give the President the authority to propose an alternate basic pay adjustment. This Act specifically referenced fiscal years through 2006. However, Congress has continued to use the basic framework of the Act in the subsequent fiscal years.

Table D-5 displays real military basic pay increases over various periods of time during the post-World War II era. From the early 1950s to the early 1970s, the average annual real military pay increase was approximately 1.79 percent. From the early 1950s to the present, the increase has averaged approximately 1.01 percent a year. Since the Vietnam War (~1970), annual real pay increases have averaged only 0.63 percent. (There was negative real pay growth in the late 1970s and late 1980s as well as numerous years since 2005.)

In making its recommendation for the real rate of the annual basic pay scale increase, the Board assumed that future general pay increases in the military would not deviate much from pay increases in the private sector. In this light, the Board adopted a real basic pay growth assumption of 0.75 percent, leading to a nominal growth of 3.75 percent. The Board of Actuaries of the CSRS assumed 0.75 percent real wage growth for its 2010 valuation. The Social Security Trustees' 2010 report had an intermediate ultimate assumption for real wage growth of 1.2 percent (other assumptions: low cost – 1.8 percent; high cost – 0.6 percent). (For the Military Retirement System and CSRS, wage increase relates to “across-the-board salary increase,” whereas for Social Security, wage increase generally relates to “total wage increase.”)

TABLE D-1

DOD BOARD OF ACTUARIES' LONG-TERM ECONOMIC ASSUMPTIONS

Fiscal Year	Inflation (1)	Interest (2)	Salary Growth (3)	Real Interest (4)	Real Salary (5)
1984	5.00%	6.60%	6.20%	1.60%	1.20%
1985	5.00	6.60	6.20	1.60	1.20
1986	5.00	6.60	6.20	1.60	1.20
1987	5.00	6.60	6.20	1.60	1.20
1988	5.00	7.00	5.75	2.00	0.75
1989	5.00	7.00	5.75	2.00	0.75
1990	5.00	7.00	5.75	2.00	0.75
1991	5.00	7.50	5.50	2.50	0.50
1992	5.00	7.50	5.50	2.50	0.50
1993	5.00	7.50	5.50	2.50	0.50
1994	4.00	6.75	4.50	2.75	0.50
1995	4.00	6.75	4.50	2.75	0.50
1996	3.50	6.50	4.00	3.00	0.50
1997	3.50	6.50	4.00	3.00	0.50
1998	3.50	6.50	4.00	3.00	0.50
1999	3.00	6.25	3.50	3.25	0.50
2000	3.00	6.25	3.50	3.25	0.50
2001	3.00	6.25	3.50	3.25	0.50
2002	3.00	6.25	3.50	3.25	0.50
2003	3.00	6.25	3.75	3.25	0.75
2004	3.00	6.25	3.75	3.25	0.75
2005	3.00	6.25	3.75	3.25	0.75
2006	3.00	6.00	3.75	3.00	0.75
2007	3.00	6.00	3.75	3.00	0.75
2008	3.00	5.75	3.75	2.75	0.75
2009	3.00	5.75	3.75	2.75	0.75
2010	3.00	5.75	3.75	2.75	0.75

NOTES:

- (1) Board Assumption
- (2) Board Assumption
- (3) Board Assumption
- (4) = (2) - (1)
- (5) = (3) - (1)

TABLE D-2

AVERAGE CONSUMER PRICE INDEX (CPI-W) INCREASES

FROM PERIOD CORRESPONDING TO END OF:	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
TO END OF:																								
1935	-3.04																							
1940	-1.34	0.38																						
1945	0.81	2.79	5.25																					
1950	2.22	4.03	5.91	6.57																				
1955	2.06	3.37	4.39	3.96	1.43																			
1960	2.07	3.12	3.82	3.35	1.77	2.12																		
1965	1.96	2.82	3.32	2.84	1.63	1.33	1.33																	
1970	2.28	3.07	3.52	3.18	2.35	2.65	2.92	4.54																
1975	2.79	3.54	4.00	3.79	3.24	3.70	4.23	5.71	6.90															
1980	3.41	4.16	4.64	4.55	4.22	4.79	5.46	6.88	8.07	9.24														
1985	3.45	4.12	4.55	4.46	4.16	4.62	5.13	6.10	6.63	6.50	3.82													
1990	3.49	4.10	4.48	4.40	4.13	4.52	4.93	5.66	5.95	5.63	3.87	3.91												
1995	3.45	4.01	4.34	4.25	4.00	4.32	4.64	5.20	5.34	4.95	3.56	3.42	2.94											
2000	3.37	3.88	4.18	4.08	3.84	4.11	4.36	4.80	4.85	4.44	3.28	3.09	2.69	2.44										
2001	3.36	3.86	4.16	4.06	3.82	4.08	4.32	4.74	4.77	4.37	3.24	3.06	2.68	2.46	2.60									
2002	3.34	3.83	4.11	4.01	3.77	4.02	4.25	4.65	4.67	4.26	3.16	2.96	2.57	2.31	2.00	1.40								
2003	3.32	3.80	4.08	3.98	3.74	3.98	4.20	4.58	4.59	4.18	3.11	2.92	2.54	2.29	2.03	1.75	2.10							
2004	3.31	3.79	4.06	3.96	3.72	3.95	4.16	4.53	4.53	4.13	3.10	2.90	2.55	2.33	2.20	2.07	2.40	2.70						
2005	3.32	3.79	4.06	3.96	3.72	3.96	4.16	4.52	4.52	4.13	3.14	2.96	2.65	2.51	2.58	2.57	2.96	3.40	4.10					
2006	3.32	3.78	4.05	3.95	3.72	3.94	4.14	4.49	4.49	4.10	3.14	2.98	2.69	2.58	2.70	2.72	3.05	3.37	3.70	3.30				
2007	3.31	3.76	4.02	3.92	3.69	3.91	4.10	4.44	4.43	4.04	3.11	2.95	2.67	2.56	2.64	2.65	2.90	3.10	3.23	2.80	2.30			
2008	3.34	3.79	4.05	3.95	3.73	3.95	4.14	4.47	4.46	4.10	3.20	3.07	2.84	2.80	3.03	3.09	3.38	3.63	3.87	3.79	4.04	5.80		
2009	3.30	3.74	3.99	3.89	3.66	3.87	4.05	4.37	4.35	3.97	3.09	2.94	2.69	2.60	2.69	2.70	2.89	3.02	3.08	2.83	2.67	2.86	0.00	
2010	3.25	3.69	3.93	3.83	3.60	3.80	3.97	4.27	4.23	3.86	2.99	2.82	2.55	2.42	2.42	2.40	2.52	2.58	2.56	2.26	2.00	1.90	0.00	0.00

All figures are average annual percentage increases.

Source of CPI-W indices: Bureau of Labor Statistics.

*** CPI-W SERIES: DECEMBER TO DECEMBER INCREASES FROM 1930 TO 1984;
ACTUAL COST-OF-LIVING ADJUSTMENTS GIVEN TO MILITARY RETIREES BEGINNING FISCAL YEAR 1985.
- MRF COLAS ARE CALCULATED AS THE INCREASE FROM 3RD QUARTER TO 3RD QUARTER.

TABLE D-3

AVERAGE REAL YIELD RATES ON NEW PURCHASES***

	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
FROM DECEMBER 31 OF:																									
TO DECEMBER 31 OF:																									
1935	6.51																								
1940	4.31	2.17																							
1945	1.72	-0.59	-3.28																						
1950	0.15	-1.88	-3.85	-4.41																					
1955	0.32	-1.17	-2.25	-1.73	1.02																				
1960	0.52	-0.64	-1.33	-0.67	1.25	1.48																			
1965	0.82	-0.10	-0.55	0.15	1.71	2.06	2.64																		
1970	0.88	0.10	-0.24	0.38	1.62	1.82	1.99	1.34																	
1975	0.77	0.08	-0.22	0.30	1.27	1.34	1.29	0.62	-0.10																
1980	0.64	0.01	-0.25	0.19	0.97	0.96	0.83	0.24	-0.30	-0.51															
1985	1.32	0.81	0.66	1.17	1.99	2.15	2.29	2.20	2.49	3.81	8.31														
1990	1.62	1.19	1.09	1.59	2.37	2.56	2.74	2.77	3.13	4.22	6.67	5.06													
1995	1.72	1.33	1.26	1.73	2.43	2.61	2.77	2.79	3.09	3.90	5.41	3.99	2.93												
2000	1.84	1.49	1.43	1.87	2.52	2.69	2.84	2.87	3.12	3.78	4.88	3.76	3.12	3.31											
2001	1.82	1.47	1.41	1.84	2.48	2.64	2.78	2.80	3.04	3.65	4.67	3.56	2.88	2.85	0.55										
2002	1.82	1.47	1.42	1.84	2.46	2.62	2.75	2.77	2.99	3.58	4.53	3.44	2.78	2.67	1.08	1.61									
2003	1.81	1.47	1.42	1.83	2.44	2.59	2.72	2.73	2.94	3.50	4.39	3.32	2.66	2.50	1.16	1.47	1.32								
2004	1.80	1.47	1.41	1.82	2.42	2.56	2.69	2.69	2.90	3.42	4.26	3.22	2.57	2.37	1.20	1.42	1.33	1.33							
2005	1.80	1.47	1.42	1.82	2.41	2.55	2.67	2.67	2.86	3.37	4.16	3.15	2.52	2.31	1.32	1.52	1.48	1.57	1.80						
2006	1.81	1.49	1.43	1.83	2.41	2.54	2.66	2.66	2.85	3.33	4.09	3.10	2.50	2.31	1.48	1.67	1.68	1.80	2.04	2.27					
2007	1.81	1.50	1.45	1.84	2.40	2.54	2.65	2.65	2.83	3.30	4.02	3.06	2.48	2.30	1.58	1.79	1.90	1.90	2.09	2.24	2.20				
2008	1.81	1.50	1.45	1.84	2.40	2.53	2.64	2.63	2.81	3.25	3.94	3.01	2.45	2.27	1.63	1.78	1.81	1.91	2.05	2.14	2.07	1.94			
2009	1.82	1.51	1.46	1.84	2.39	2.52	2.62	2.62	2.79	3.22	3.87	2.97	2.43	2.25	1.67	1.81	1.84	1.93	2.05	2.11	2.05	1.98	2.01		
2010	1.81	1.50	1.46	1.83	2.37	2.49	2.60	2.59	2.75	3.16	3.79	2.90	2.37	2.19	1.63	1.75	1.77	1.83	1.91	1.94	1.85	1.74	1.64	1.26	

All figures are average annual percentages.

Source: Office of the Actuary, Office of Personnel Management; Office of the Actuary, Department of Defense

***Real yields for non-TIPS securities are computed as the nominal yield at purchase offset by inflation in the year of purchase. For TIPS securities, the real yield is known and constant throughout the life of the security.

*** COMPOSITE SERIES: TREASURY LONG TERM SECURITIES WITH REMAINING MATURITIES OF 10 OR MORE YEARS FROM 1931 TO 1941; AVERAGE OF TREASURY LONG TERM AND TREASURY 3-5 YEARS REMAINING MATURITY FROM 1941 TO 1961; SPECIAL TREASURY CERTIFICATES (CSRS) FROM 1962 TO 1984; MILITARY RETIREMENT SYSTEM TRUST FUND NEW INVESTMENTS BEGINNING WITH 1985

TABLE D-4

AVERAGE REAL MILITARY RETIREMENT FUND EFFECTIVE YIELD ***

FROM PERIOD CORRESPONDING TO END OF FISCAL YEAR:	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
TO END OF FISCAL YEAR:	1985	14.27																									
	1986	12.32	10.41																								
	1987	10.35	8.45	6.52																							
	1988	9.31	7.71	6.38	6.24																						
	1989	8.47	7.06	5.97	5.70	5.15																					
	1990	7.76	6.50	5.55	5.22	4.72	4.29																				
	1991	7.49	6.40	5.62	5.39	5.11	5.09	5.90																			
	1992	7.34	6.38	5.73	5.57	5.40	5.48	6.08	6.27																		
	1993	7.22	6.37	5.81	5.69	5.58	5.69	6.16	6.29	6.32																	
	1994	7.07	6.30	5.80	5.70	5.61	5.70	6.05	6.10	6.02	5.72																
	1995	6.96	6.26	5.81	5.72	5.64	5.73	6.02	6.05	5.97	5.80	5.87															
	1996	6.84	6.19	5.78	5.70	5.63	5.70	5.94	5.94	5.86	5.71	5.71	5.54														
	1997	6.80	6.20	5.83	5.76	5.70	5.77	5.99	6.00	5.95	5.85	5.90	5.91	6.29													
	1998	6.81	6.26	5.82	5.87	5.83	5.90	6.11	6.14	6.12	6.08	6.17	6.26	6.63	6.97												
	1999	6.73	6.21	5.89	5.84	5.80	5.87	6.05	6.07	6.04	5.99	6.04	6.09	6.27	6.26	5.56											
	2000	6.58	6.09	5.78	5.73	5.68	5.73	5.88	5.83	5.76	5.76	5.74	5.79	5.63	4.96	4.37											
	2001	6.50	6.03	5.75	5.69	5.65	5.69	5.82	5.81	5.76	5.69	5.69	5.66	5.68	5.53	5.05	4.80	5.23									
	2002	6.45	6.01	5.74	5.69	5.65	5.69	5.81	5.80	5.75	5.69	5.69	5.66	5.68	5.56	5.21	5.09	5.45	5.68								
	2003	6.29	5.86	5.60	5.54	5.50	5.52	5.62	5.59	5.53	5.45	5.42	5.37	5.34	5.19	4.83	4.65	4.74	4.50	3.34							
	2004	6.10	5.69	5.43	5.37	5.31	5.33	5.40	5.36	5.29	5.19	5.14	5.06	5.00	4.82	4.46	4.25	4.21	3.88	2.99	2.64						
	2005	5.87	5.47	5.22	5.14	5.08	5.07	5.13	5.07	4.98	4.87	4.79	4.69	4.59	4.38	4.02	3.76	3.64	3.25	2.45	2.01	1.39					
	2006	5.72	5.33	5.08	5.01	4.94	4.92	4.96	4.90	4.81	4.69	4.60	4.49	4.39	4.18	3.83	3.59	3.46	3.11	2.48	2.19	1.97	2.55				
	2007	5.57	5.19	4.95	4.87	4.80	4.78	4.81	4.74	4.64	4.52	4.43	4.31	4.20	3.99	3.67	3.43	3.30	2.98	2.45	2.23	2.09	2.45	2.34			
	2008	5.35	4.98	4.74	4.65	4.57	4.54	4.56	4.48	4.37	4.24	4.14	4.00	3.86	3.66	3.34	3.09	2.93	2.61	2.11	1.86	1.67	1.76	1.37	0.40		
	2009	5.17	4.81	4.57	4.48	4.40	4.36	4.37	4.28	4.17	4.03	3.92	3.79	3.65	3.44	3.12	2.88	2.71	2.40	1.95	1.71	1.53	1.57	1.24	0.70	0.99	
	2010	5.10	4.74	4.52	4.43	4.35	4.31	4.23	4.11	3.99	3.88	3.75	3.62	3.42	3.13	2.91	2.76	2.49	2.10	1.93	1.81	1.90	1.73	1.53	2.10	3.22	

All figures are average annual percentages.

Source: Office of the Actuary, Department of Defense

*** THE EFFECTIVE YIELD CALCULATION USES A "DOLLAR-WEIGHTED YIELD". "DOLLAR-WEIGHTED YIELDS" ARE COMPUTED BY TAKING THE INVESTMENT INCOME OVER THE AVERAGE AMOUNT OF PRINCIPAL INVESTED THROUGHOUT THE YEAR.

TABLE D-5
AVERAGE REAL MILITARY PERSONNEL BASIC PAY INCREASES

	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
FROM DECEMBER 31 OF:																									
1935	N/A																								
1940	N/A																								
1945	N/A																								
1950	N/A			-2.21																					
1955	N/A			-0.48	1.28																				
1960	N/A			-0.49	0.39	-0.50																			
1965	N/A			0.58	1.52	1.65	3.84																		
1970	N/A			0.97	1.79	1.96	3.21	2.58																	
1975	N/A			1.31	2.03	2.22	3.14	2.80	3.02																
1980	N/A			0.79	1.30	1.31	1.76	1.08	0.34	-2.26															
1985	N/A			0.93	1.39	1.40	1.79	1.28	0.85	-0.21	1.89														
1990	N/A			0.77	1.14	1.12	1.40	0.92	0.51	-0.32	0.67	-0.53													
1995	N/A			0.70	1.03	0.99	1.21	0.78	0.42	-0.22	0.47	-0.23	0.08												
2000	N/A			0.73	1.03	1.01	1.20	0.82	0.54	0.05	0.63	0.22	0.59	1.11											
2001	N/A			0.76	1.05	1.03	1.21	0.86	0.58	0.12	0.69	0.32	0.72	1.25	1.95										
2002	N/A			0.79	1.08	1.06	1.25	0.90	0.64	0.21	0.78	0.46	0.88	1.45	2.31	2.66									
2003	N/A			0.80	1.09	1.07	1.26	0.92	0.67	0.26	0.82	0.52	0.93	1.47	2.06	2.11	1.57								
2004	N/A			0.80	1.09	1.07	1.25	0.92	0.68	0.28	0.81	0.53	0.92	1.39	1.74	1.67	1.17	0.78							
2005	N/A			0.77	1.05	1.02	1.20	0.87	0.63	0.24	0.74	0.46	0.79	1.15	1.19	1.00	0.46	-0.09	-0.96						
2006	N/A			0.74	1.01	0.98	1.15	0.82	0.58	0.19	0.67	0.39	0.68	0.95	0.81	0.59	0.07	-0.42	-1.01	-1.07					
2007	N/A			0.75	1.01	0.99	1.15	0.83	0.60	0.22	0.69	0.42	0.70	0.97	0.68	0.68	0.29	-0.02	-0.29	0.05	1.17				
2008	N/A			0.71	0.96	0.93	1.08	0.77	0.53	0.16	0.60	0.32	0.56	0.75	0.53	0.33	-0.06	-0.38	-0.57	-0.32	-1.80				
2009	N/A			0.75	1.00	0.98	1.13	0.83	0.61	0.26	0.70	0.45	0.71	0.94	0.84	0.70	0.43	0.24	0.13	0.41	0.90	0.77	3.40		
2010	N/A			0.76	1.01	0.99	1.14	0.84	0.63	0.29	0.72	0.49	0.75	0.97	0.90	0.78	0.55	0.40	0.34	0.61	1.03	0.98	2.40	1.40	

All figures are average annual percentage increases.
Excludes annual targeted increases.

Source: House Armed Services Committee publication, Title 37, United States Code (Pay and Allowances of the Uniformed Services.)

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APPENDIX E

NORMAL COST WEIGHTING FACTORS

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NORMAL COST WEIGHTING FACTORS

There are three different retirement benefit formulas that apply to three populations within the military retirement system. (See Appendix A for a discussion of *Final Pay*, *High-3*, and *CSB/Redux* benefit formulas.) A single normal cost percentage (NCP) for the entire population is obtained by weighting the NCP for each retirement group by its expected percentage of payroll in the relevant year.

In order to continue to budget for NCPs well in advance of the valuation date, the DoD Board of Actuaries decided to create a set of projected weighting factors. The relative stability of past experience indicates that this method gives reasonably accurate results.

Since the composite NCP developed at year-end is implemented each month during the next fiscal year, the weighting factors reflect mid-year experience. For example, when determining the percentage of the payroll during year t allocated to people who entered in year $t-1$ or later, linear interpolation between 6 percent and 14 percent is used to obtain 10 percent at mid-year (see the far right column of Table E-1). These mid-year interpolated percentages of payroll are shown in Table 5 of the main text.

Current rates were created using 1987 through 1991 data. Table E-1 displays the active duty basic payroll percentage distribution by completed years of service at the end of each of these fiscal years, as well as average distributions for the two periods, 1982-1987 and 1987-1991. The 1982-1987 period is shown for comparability.

While the rates were developed based on the active duty basic payroll distribution, they are also applied in the same manner when computing the reserve duty (part-time) NCP.

TABLE E-1

**ACTIVE DUTY BASIC PAYROLL PERCENTAGE DISTRIBUTION
BY COMPLETED YEARS OF SERVICE**

Completed Years of Service	Percentage of Payroll on:					Average Percent 1982-1987	Average Percent 1987-1991
	9/30/87	9/30/88	9/30/89	9/30/90	9/30/91		
0	7%	7%	7%	6%	5%	8%	6%
1 or less	15	15	14	13	11	17	14
2 or less	24	23	22	21	19	25	22
3 or less	32	31	30	28	27	33	29
4 or less	37	36	35	34	32	39	35
5 or less	43	42	41	39	37	44	40
6 or less	47	46	45	44	42	49	45
7 or less	52	51	50	48	47	53	50
8 or less	56	55	54	53	51	57	54
9 or less	60	59	58	57	55	61	58
10 or less	64	63	62	60	59	64	62
11 or less	67	66	66	64	63	67	65
12 or less	70	70	69	68	66	72	69
13 or less	73	73	72	72	70	73	72
14 or less	76	76	75	75	74	76	75
15 or less	79	79	78	78	77	79	78
16 or less	82	82	82	81	81	82	81
17 or less	85	85	85	84	84	85	85
18 or less	88	88	88	88	87	88	88
19 or less	91	91	91	91	90	91	91
20 or less	93	93	93	93	93	93	93
21 or less	94	94	94	94	94	94	94
22 or less	96	96	96	96	95	95	96
23 or less	96	96	97	97	97	96	97
24 or less	97	97	97	98	98	97	97
25 or less	98	98	98	98	98	98	98
26 or less	99	99	99	99	99	99	99
27 or less	99	99	99	99	99	99	99
28 or less	99	99	99	99	99	99	99
29 or less	100	100	100	100	100	100	100
TOTAL FORCE	100	100	100	100	100	100	100

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APPENDIX F

VALUATION PROGRAM PARAMETERS DESCRIPTION

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VALUATION PROGRAM PARAMETERS

GORGO is the computer program used to compute the aggregate entry-age normal cost percentage and the unfunded liability. In addition to being affected by the external rates, GORGO has a number of internal parameters which affect its results. These parameters are generally summaries of recent experience. Examples include the rates of election of the Survivor Benefit Plan and member-spouse age differences.

Public Law (P.L.) 108-136 (“Concurrent Receipt”) requires additional breakouts of some parameters in order to calculate the DoD and Treasury normal cost components. Subsequent legislation required further breakouts.

A description of the various valuation program parameters by population is given in Table F-1. Numerical values are also shown for selected items.

TABLE F-1

DESCRIPTION OF THE MAJOR VALUATION PROGRAM PARAMETERS

Economic Factors

<u>Item</u>	<u>Description/Value</u>
1) Salary Increase	A parameter for each of the next ten fiscal years specifies the annual percentage increase in basic pay for the active duty and reserve members. An 11th parameter specifies the percentage increase for all subsequent years. The value for the valuation is 3.75%.
2) CPI (Inflation)	A parameter for each of the next nine fiscal years specifies the annual inflation (Consumer Price Index - CPI) rate for that year. A tenth parameter specifies the inflation rate for all subsequent years. The value for the valuation is 3%.
3) Interest Rate	A parameter for each of the next nine fiscal years specifies the annual interest rate for that year. A tenth parameter specifies the interest rate for all subsequent years. The value for the valuation is 5.75%.

Active Duty

<u>Item</u>	<u>Description/Value</u>
1) Member Election of Spouse or Spouse/Child SBP Coverage	This gives the percentage of members by age and officer/enlisted status who have elected spouse or spouse/child coverage under the Survivor Benefit Plan (SBP).

TABLE F-1 (continued)

<u>Item</u>	<u>Description/Value</u>
2) Full Offsets	A member who is disabled may waive all or part of his or her retired pay to receive benefits from the Veterans Administration (VA). Furthermore, a member who decides to convert his or her military service to receive a federal civilian retirement also waives his or her right to a military pension. These amounts are not included when computing normal costs or unfunded liabilities. The percent of retired pay of new retirees that is fully offset is given by officer/enlisted status, and type of retirement (disability/nondisability). Disability status is given further by those with over and under 20 years of service.
3) Partial VA Offsets	It is possible to have part of DoD retired pay offset by VA compensation. The parameter is defined as the percent of retired pay out of the total paid new retirees. They are given by officer/enlisted status, and disability/nondisability status. Disability status is given further by those with over and under 20 years of service.
4) Disability Factor	When an active duty member is disabled and receives DoD disability retirement, his retired pay is based on a minimum (30%), a maximum (given by the conditions discussed in Appendix A regarding Disability Retirement), and a disability rating. These are combined into a single officer/enlisted factor, expressed as a percentage of Final, or High-3, pay and given by length of service and temporary disability or permanent disability retirement.

TABLE F-1 (continued)

<u>Item</u>	<u>Description/Value</u>
5) Percent Active Duty with Beneficiary	When a member dies from a Service-connected disability or on active duty, any surviving spouse is eligible for Dependency and Indemnity Compensation (DIC) from the Veterans Administration. In addition, if the member dies in the line of duty or after completing 20 years of service, the surviving spouse is eligible for an SBP annuity from DoD which would bring the total amount of the benefit up to 55% of the member's retired pay. The excess of the SBP annuity over DIC comes from the Military Retirement Fund. If no spouse is present, the benefit passes on to an eligible child. If both spouse and eligible child are present then, under certain tax provisions, it is advantageous for the spouse to pass the benefits to the child. Thus, it is necessary to estimate the percent of active duty members with beneficiaries. The percentages are given by officer/enlisted status, and further allocated by spouse/child.
6) Reduction Factors for SBP	Premium amounts, as a percent of retired pay, by age and officer/enlisted status.
7) Rounding Assumptions for Partially Completed Years of Service	When retired pay is computed, years of service are rounded down to the nearest completed month. An assumption must be made for the computation. The value for the valuation is 0.017.
8) CSB/Redux election proportion	The proportion of members who elect CSB/Redux. For the unfunded liability and open group valuations, the proportion varies by entry year and officer/enlisted status. For the normal cost (new entrant) valuation, the proportion is 15%. This value is essentially a representative rate needed to approximate the floating proportions (of CSB/Redux electors) used in the unfunded liability and open group valuations.

TABLE F-1 (continued)

<u>Item</u>	<u>Description/Value</u>
9) Initial Annual Pay of 16-year-old Active Duty Officer	This value is used to allocate a portion of part-time benefits to full-time in normal cost valuations, thus linking the radices and pay of full- and part-time members. The value for the valuation is \$33,196.
10) Accumulated Value of Partial Pay And Disability Retirements in the First Year of Service	This amount is used to properly align the decrement rates with the assumption, in a normal cost run, of a new entrant cohort starting with zero years of service.

Reserve

<u>Item</u>	<u>Description/Value</u>
1) Blow-Up Factors for the Selected Reserve Transferring to Inactive Duty With 20 Good Years	Ratio of Individual Ready Reserve (IRR), Inactive National Guard (ING), and Standby Reserve to every Selected Reserve transferring to inactive duty with 20 good years. This is given by officer/enlisted status, age, and years of active service.
2) Blow-Up Factors for Reserves Transferring to Retired Pay Status	Ratio of IRR, ING, Standby Reserve, and other Reserve to every known Reserve transferring to retired pay status. This is given by officer/enlisted status, age, and years of active service.
3) Adjustment to Blow-Up Factors For Reserves	An additional adjustment to Item 2 (above) is made to the person blow-up factors to align the total number of retirees due to P.L. 110-181. This is given by officer/enlisted status. The adjustment is 1.5% for officers and 2.5% for enlisted.
4) Ratio of Net to Gross Retired Pay For Reserves	This is the ratio of reserve net retired pay to gross retired pay. This is given by officer/enlisted status, age, and years of active service.

TABLE F-1 (continued)

<u>Item</u>	<u>Description/Value</u>
5) Proportion of Points Based on Active Service	This amount is used to prorate the part of the reserve normal cost that should be paid for as a part of the active duty normal cost. This is given by officer/enlisted status, and years of active service.
6) Mean Age of Reservists Age 63	This value is used to model the average of a small percentage of retirement-eligible reservists who retire after age 63. It is given by officer/enlisted status. The values for the valuation are 65.8 for officer and 64.4 for enlisted.
7) Reserve Radix	Used in normal cost valuations. The number who enter the military for the first time as a member of the Selected Reserve. See also discussion in Appendix H. The value is 21,913.
8) Reserve Points Earned	<p><u>Selected Reserve:</u> Average annual points earned for pay are given by officer/enlisted status, age, and years of active service.</p> <p><u>Non-Selected Reserve with 20 or more Good Years:</u> Average career total points for retirement are given by officer/enlisted status, age, and years of active service.</p>
9) Reserve Points Adjustment	A small adjustment is made to Reserve Points Earned to reflect the increase in the Inactive Duty Training (IDT) points from 90 to 130 as enacted in P.L. 110-181. The adjustment used in the valuation is 1.00225.
10) Initial Annual Pay of 25-year-old Selected Reserve member	This value is used to set an initial pay for a part-time member in a normal cost run. The value for the valuation is \$43,204.

TABLE F-1 (continued)

<u>Item</u>	<u>Description/Value</u>
11) Reserve Retirement Age FYs	An assumption is made to reflect the number of years, on average, reservists retire early due to performing certain active service, per P.L. 110-181. An average reduction of two years (age 58) was assumed. Fiscal years are needed to phase into this earlier retirement over time. The transition to an average retirement age of 59 is assumed to occur in 2013, and the transition to age 58 is assumed to occur in 2028. See also the 'Retiree Gain Statement' in Appendix K.

Retiree

<u>Item</u>	<u>Description/Value</u>
1) Retired Pay Adjustment Factors	Retired pay of current retirees is adjusted for VA compensation, SBP offset changes, and other effects during the year. They are given by officer/enlisted status, disability/nondisability, and whether or not the member has elected SBP spouse or spouse/child coverage.
2) Retired Pay Adjustment to Members With SBP Spouse Coverage	These factors capture the observation that mortality is generally lower for those spouses attached to living retirees as opposed to survivors of deceased retirees. Rather than develop an additional set of mortality rates, the survivor death rates (Appendix I) are adjusted with these factors. This impacts retirees with SBP spouse coverage. The factors are given by active/reserve, and officer/enlisted status.

TABLE F-1 (continued)

Survivor

<u>Item</u>	<u>Description/Value</u>
1) Member-Survivor Age Difference	When a member dies, a survivor is assumed to be a certain number of years younger (or older) than the member. This is given by active/reserve, age, officer/enlisted status, type of retirement (i.e., nondisability, temporary disability, permanent disability), and type of survivor (i.e., spouse, child, insurable interest).
2) Ratio of SBP Base Amount to Net Retired Pay	Under SBP the retiree may elect an amount less than his or her gross retired pay as a base in computing the survivor annuity. Base amounts can also exceed net retired pay because of factors that reduce gross retired pay to net. This is expressed as a percentage of net retired pay and is given by age, officer/enlisted status, and type of retirement (disability/nondisability/reserve). Additional adjustments are made to the factors as part of Concurrent Receipt.
3) Ratio of RSFPP Survivor Benefit To Net Retired Pay	For RSFPP (Retired Servicemen's Family Protection Plan), this gives the ratio of the survivor payment to the net amount of retired pay.
4) Reservists' Election of RCSBP	Proportion of reservists who have elected the Reserve Component Survivor Benefit Plan (RCSBP) by immediate and deferred annuity, age, and officer/enlisted status.
5) Partial DIC Offsets	The percent of survivor pay of new survivors whose pay is partially offset by DIC. They are given by the member's active/reserve status.
6) Full DIC Offsets	The percent of survivor pay of new survivors whose pay is fully offset by DIC. They are given by the member's active/reserve status.

TABLE F-1 (continued)

<u>Item</u>	<u>Description/Value</u>
7) Rates for Electing SBP Options	Given that a member elects SBP, there is still a choice of options: spouse only, child only, spouse and child, or insurable interest (some other designated beneficiary in the absence of a spouse or child). These are expressed as ratios to those electing spouse only or spouse/child coverage, and are given by age, officer/enlisted status, and type of retirement (disability/nondisability/reserve).
8) Rates for Election of RSFPP Options	Given that a member elected an RSFPP option, there was a choice of options: spouse only, child only, or spouse and child. These are expressed as ratios to those electing spouse only or spouse/child coverage, and are given by age and officer/enlisted status.
9) Survivor Pay Adjustment Factors	Survivor pay of current survivors is adjusted for changes in DIC and other effects during the year.
10) DIC Base Amount	Monthly amount by which DoD annuitant pay is offset by DIC. Future values are indexed to CPI. The first-year value for the valuation is \$1,154.

APPENDIX G

ACTIVE DUTY RATES

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ACTIVE DUTY RATE DESCRIPTION

The active duty rates consist principally of decrement rates related to the probabilities of a member leaving a category of Military Service for a specific cause. In addition, they include a new entrant distribution, a set of reentrant ratios, and ratios for promotion and merit pay increases.

The active duty decrement rates are used to project active duty deaths, temporary and permanent disability retirements, nondisability retirements, and withdrawals (i.e., other active duty losses). In addition, the active duty decrements include rates of transfer between officer and enlisted status. The death rates are given by age nearest birthday for officers and enlistees separately. The remaining decrement rates are given by completed years of active service for officers and enlistees separately. The formulas used to derive the active duty rates are given on the following page. The fiscal years on which various rates are based are given on the subsequent page. The experience period was selected such that the sum of the active force size changes for the included periods was near zero. Full-time reservist experience is included in the data used to develop the rates.

Generally, the decrement rates were graduated (smoothed) using Whittaker-Henderson graduations. The typical active duty career has inherent discontinuities at select points (reenlistment, promotions, retirements, etc). Rates were separated into ranges where assumptions of continuity were reasonable. When real discontinuities were present, the rates were not smoothed.

A reentrant is defined as someone who is on active duty at year end, who was not on active duty a year earlier, and who is not a new entrant. The reentrant ratios give the expected number of reentrants per year, per active member, in each cell. The cells are defined by length of active service and by officer/enlisted status.

The new entrant distribution gives the percentages of new entrants to the military by age and by officer/enlisted status. This distribution is only used in the normal cost (new entrant) valuation and the open-group projection.

The promotion and merit increase scales (PAMS) give the expected annual percentage increase in pay regardless of whether or not there are across-the-board increases in the active duty pay table. The PAMS do not include adjustments for inflation or productivity increases. They are defined by length of service, by entry age, and by officer/enlisted status. The PAMS were created by first arraying the average pay for each entry along a dimension of increasing years of service. The PAMS were then computed by dividing the average pay at the next year of service by the average pay at the current year of service.

ACTIVE DUTY RATE FORMULAS

ACTIVE DEATH (by age nearest birthday)

$$\frac{\text{Deaths during year}}{\text{[Number at beginning of year - } \frac{1}{2} \text{ (withdrawals + nondisability retirements during year)]}}$$

NONDISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{New retirees during year}}{\text{Number at beginning of year}}$$

TEMPORARY DISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{New temporary disabilities during year}}{\text{[Number at beginning of year - } \frac{1}{2} \text{ (withdrawals + nondisability retirements during year)]}}$$

PERMANENT DISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{New permanent disabilities during year}}{\text{[Number at beginning of year - } \frac{1}{2} \text{ (withdrawals + nondisability retirements during year)]}}$$

WITHDRAWAL (by completed years of service)

$$\frac{\text{Withdrawals during year}}{\text{Number at beginning of year}}$$

REENTRANT RATIOS (by completed years of service)

$$\frac{\text{Number reentering during year}}{\text{Number at beginning of year}}$$

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS (by age nearest birthday)

$$\frac{\text{New entrants during year}}{\text{Total new entrants}}$$

PAYGRADE TRANSFER (by completed years of service)

$$\frac{\text{Transfers to category during year}}{\text{[Number at beginning of year - } \frac{1}{2} \text{ (withdrawals + nondisability retirements during year)]}}$$

PROMOTION AND MERIT SCALES (by entry age and completed years of service)

$$\frac{\text{Average basic pay at next year of service}}{\text{Average basic pay at current year of service}}$$

SUMMARY OF YEARS ON WHICH ACTIVE DUTY RATES ARE BASED

By Fiscal Year

<u>RATE</u>	<u>1982-1989</u>	<u>1997-1999</u>	<u>2000-2008</u>	<u>2009</u>
Death			X	X
Nondisability Retirement	X	X	X	
Temporary Disability Retirement	X	X	X	
Permanent Disability Retirement	X	X	X	
Withdrawal (other losses)	X	X	X	
Reentrant Ratios	X	X	X	
New Entrant Distribution	X	X	X	
Paygrade Transfer	X	X	X	
Promotion and Merit Scales (PAMS)	X	X	X	

DEATH RATES FOR NONRETIRED MILITARY

(AGE NEAREST BIRTHDAY)

Age	Officer	Enlisted
16	0.00045	0.00075
17	0.00052	0.00086
18	0.00060	0.00099
19	0.00065	0.00106
20	0.00065	0.00107
21	0.00063	0.00104
22	0.00062	0.00098
23	0.00061	0.00092
24	0.00059	0.00085
25	0.00058	0.00079
26	0.00057	0.00075
27	0.00055	0.00071
28	0.00053	0.00067
29	0.00051	0.00063
30	0.00049	0.00061
31	0.00048	0.00058
32	0.00046	0.00056
33	0.00045	0.00054
34	0.00043	0.00052
35	0.00042	0.00050
36	0.00041	0.00049
37	0.00041	0.00049
38	0.00040	0.00049
39	0.00040	0.00048
40	0.00040	0.00049
41	0.00039	0.00050
42	0.00039	0.00051
43	0.00040	0.00053
44	0.00041	0.00055
45	0.00042	0.00058
46	0.00044	0.00062
47	0.00045	0.00066
48	0.00047	0.00072
49	0.00049	0.00078
50	0.00052	0.00085
51	0.00055	0.00093
52	0.00058	0.00102
53	0.00062	0.00112
54	0.00067	0.00123
55	0.00072	0.00136
56	0.00077	0.00150
57	0.00082	0.00164
58	0.00089	0.00180
59	0.00095	0.00193
60	0.00101	0.00208

Note: These death rates should not be compared to other published rates or used for other purposes without examining the exposure formula used in the derivation.

**NONDISABILITY, TEMPORARY DISABILITY &
PERMANENT DISABILITY RETIREMENT RATES**

OFFICERS (BY COMPLETED YEARS OF SERVICE)

<u>Years of Service</u>	<u>Non-disability</u>	<u>Temporary Disability ***</u>	<u>Permanent Disability ***</u>
0	0.00000	0.00043	0.00007
1	0.00000	0.00085	0.00009
2	0.00000	0.00113	0.00017
3	0.00000	0.00124	0.00019
4	0.00000	0.00146	0.00020
5	0.00000	0.00126	0.00021
6	0.00000	0.00143	0.00033
7	0.00000	0.00153	0.00026
8	0.00000	0.00144	0.00034
9	0.00000	0.00144	0.00036
10	0.00000	0.00142	0.00033
11	0.00000	0.00133	0.00033
12	0.00000	0.00128	0.00032
13	0.00000	0.00112	0.00036
14	0.00000	0.00119	0.00037
15	0.00000	0.00104	0.00037
16	0.00000	0.00093	0.00044
17	0.00000	0.00082	0.00048
18	0.00000	0.00073	0.00059
19	0.24556	0.00192	0.00141
20	0.20352	0.00231	0.00198
21	0.16113	0.00169	0.00178
22	0.14428	0.00204	0.00150
23	0.14541	0.00222	0.00187
24	0.14305	0.00209	0.00176
25	0.18396	0.00214	0.00140
26	0.19135	0.00361	0.00210
27	0.22470	0.00322	0.00166
28	0.20692	0.00367	0.00262
29	0.49853	0.00505	0.00341
30	0.37879	0.00692	0.00435
31	0.28016	0.00534	0.00334
32	0.25438	0.00534	0.00334
33	0.26999	0.00534	0.00334
34	1.00000	0.00534	0.00334

*** The increase in disability rates shown between 18 and 19 years of service may be due to the removal of the 30% disability rating minimum for members with 20 years of service. The tax advantages accorded disability retired pay described in Appendix A may result in members choosing disability over nondisability retirements. Disabilities were increased by 35% to reflect recent trends.

Example: Nine completed years of service could include anything from 9.0 to 9.999 years of service. The associated rate applied to the number of people at the beginning of the year in the category will produce the expected number of occurrences during the following year.

**NONDISABILITY, TEMPORARY DISABILITY &
PERMANENT DISABILITY RETIREMENT RATES**

ENLISTED (BY COMPLETED YEARS OF SERVICE)

<u>Years of Service</u>	<u>Non-disability</u>	<u>Temporary Disability ***</u>	<u>Permanent Disability ***</u>
0	0.00000	0.00170	0.00007
1	0.00000	0.00294	0.00025
2	0.00000	0.00376	0.00042
3	0.00000	0.00438	0.00058
4	0.00000	0.00420	0.00059
5	0.00000	0.00429	0.00063
6	0.00000	0.00421	0.00071
7	0.00000	0.00440	0.00073
8	0.00000	0.00443	0.00085
9	0.00000	0.00437	0.00090
10	0.00000	0.00423	0.00099
11	0.00000	0.00416	0.00109
12	0.00000	0.00396	0.00104
13	0.00000	0.00369	0.00108
14	0.00000	0.00346	0.00101
15	0.00000	0.00319	0.00126
16	0.00000	0.00299	0.00141
17	0.00000	0.00260	0.00160
18	0.00000	0.00198	0.00163
19	0.42256	0.00541	0.00551
20	0.30241	0.00521	0.00634
21	0.26793	0.00422	0.00482
22	0.23110	0.00433	0.00508
23	0.29343	0.00417	0.00419
24	0.18735	0.00362	0.00359
25	0.33712	0.00437	0.00322
26	0.24102	0.00511	0.00333
27	0.24118	0.00523	0.00343
28	0.19147	0.00545	0.00466
29	0.77601	0.00999	0.00586
30	0.64842	0.01644	0.00795
31	0.42640	0.01399	0.00340
32	0.50641	0.01399	0.00340
33	0.40749	0.01399	0.00340
34	1.00000	0.01399	0.00340

*** The increase in disability rates shown between 18 and 19 years of service may be due to the removal of the 30% disability rating minimum for members with 20 years of service. The tax advantages accorded disability retired pay described in Appendix A may result in members choosing disability over nondisability retirements. Disabilities were increased by 35% to reflect recent trends.

Example: Nine completed years of service could include anything from 9.0 to 9.999 years of service. The associated rate applied to the number of people at the beginning of the year in the category will produce the expected number of occurrences during the following year.

**WITHDRAWAL, REENTRANT, AND NET LOSS RATES
FOR ACTIVE DUTY PERSONNEL**

OFFICERS (BY COMPLETED YEARS OF SERVICE)

<u>Years of Service</u>	<u>Withdrawal</u>	<u>Reentrant ***</u>	<u>Net Loss</u>
0	0.01815	0.11937	-0.10122
1	0.02192	0.03298	-0.01106
2	0.07042	0.02574	0.04468
3	0.12192	0.02898	0.09294
4	0.10839	0.01964	0.08875
5	0.09306	0.01703	0.07603
6	0.09686	0.01444	0.08242
7	0.08447	0.01400	0.07047
8	0.07687	0.01200	0.06487
9	0.06825	0.01155	0.05670
10	0.06616	0.00872	0.05744
11	0.05337	0.00798	0.04539
12	0.03556	0.00656	0.02900
13	0.02481	0.00557	0.01924
14	0.01650	0.00467	0.01183
15	0.01042	0.00368	0.00674
16	0.00761	0.00291	0.00470
17	0.00479	0.00252	0.00227
18	0.00236	0.00246	-0.00010
19	0.00000	0.00223	-0.00223
20	0.00000	0.00247	-0.00247
21	0.00000	0.00259	-0.00259
22	0.00000	0.00230	-0.00230
23	0.00000	0.00237	-0.00237
24	0.00000	0.00229	-0.00229
25	0.00000	0.00268	-0.00268
26	0.00000	0.00276	-0.00276
27	0.00000	0.00284	-0.00284
28	0.00000	0.00329	-0.00329
29	0.00000	0.00419	-0.00419
30	0.00000	0.00912	-0.00912
31	0.00000	0.00803	-0.00803
32	0.00000	0.01145	-0.01145
33	0.00000	0.01084	-0.01084
34	0.00000	0.00000	0.00000

*** The reentrant (and all other) rates are developed for valuation purposes to be consistent with the data sources used in the valuation. For example, high reentrant rates for members with zero completed years of service at the beginning of the year reflect members showing up on the valuation data files with one completed year of service at year end, who were not on the data files at the beginning of the year, and who were not new entrants. To the extent the valuation data files exclude these members from the zero-completed-years-of-service cell, use of this reentrant rate is appropriate for the valuation projection. However, this "valuation focus" of the rates should be considered if using them for other purposes, e.g., to estimate the probability a given individual will remain on active duty from zero to one or more completed years of service.

Example: Nine completed years of service could include anything from 9.0 to 9.999 years of service. The associated rate applied to the number of people at the beginning of the year in the category will produce the expected number of occurrences during the following year.

**WITHDRAWAL, REENTRANT, AND NET LOSS RATES
FOR ACTIVE DUTY PERSONNEL**

ENLISTED (BY COMPLETED YEARS OF SERVICE)

<u>Years of Service</u>	<u>Withdrawal</u>	<u>Reentrant ***</u>	<u>Net Loss</u>
0	0.10458	0.03043	0.07415
1	0.10267	0.00769	0.09498
2	0.18351	0.01394	0.16957
3	0.35545	0.02745	0.32800
4	0.15999	0.01394	0.14605
5	0.15789	0.01128	0.14661
6	0.11543	0.00966	0.10577
7	0.12660	0.00918	0.11742
8	0.09560	0.00761	0.08799
9	0.09098	0.00682	0.08416
10	0.05673	0.00540	0.05133
11	0.04738	0.00453	0.04285
12	0.03728	0.00347	0.03381
13	0.02534	0.00282	0.02252
14	0.02207	0.00223	0.01984
15	0.01296	0.00188	0.01108
16	0.00827	0.00154	0.00673
17	0.00514	0.00145	0.00369
18	0.00227	0.00139	0.00088
19	0.00000	0.00126	-0.00126
20	0.00000	0.00157	-0.00157
21	0.00000	0.00148	-0.00148
22	0.00000	0.00167	-0.00167
23	0.00000	0.00156	-0.00156
24	0.00000	0.00212	-0.00212
25	0.00000	0.00169	-0.00169
26	0.00000	0.00247	-0.00247
27	0.00000	0.00180	-0.00180
28	0.00000	0.00212	-0.00212
29	0.00000	0.00168	-0.00168
30	0.00000	0.01403	-0.01403
31	0.00000	0.03693	-0.03693
32	0.00000	0.04974	-0.04974
33	0.00000	0.09762	-0.09762
34	0.00000	0.00000	0.00000

*** The reentrant (and all other) rates are developed for valuation purposes to be consistent with the data sources used in the valuation. For example, high reentrant rates for members with zero completed years of service at the beginning of the year reflect members showing up on the valuation data files with one completed year of service at year end, who were not on the data files at the beginning of the year, and who were not new entrants. To the extent the valuation data files exclude these members from the zero-completed-years-of-service cell, use of this reentrant rate is appropriate for the valuation projection. However, this "valuation focus" of the rates should be considered if using them for other purposes, e.g., to estimate the probability a given individual will remain on active duty from zero to one or more completed years of service.

Example: Nine completed years of service could include anything from 9.0 to 9.999 years of service. The associated rate applied to the number of people at the beginning of the year in the category will produce the expected number of occurrences during the following year.

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS

(AGE NEAREST BIRTHDAY)

<u>Age</u>	<u>Officers</u>	<u>Enlisted</u>	<u>Total</u>
16	0.00000	0.00000	0.00000
17	0.00000	0.00142	0.00142
18	0.00000	0.12146	0.12146
19	0.00001	0.25484	0.25485
20	0.00008	0.19288	0.19296
21	0.00045	0.11431	0.11476
22	0.01188	0.07357	0.08545
23	0.01920	0.05093	0.07013
24	0.01025	0.03619	0.04644
25	0.00470	0.02550	0.03020
26	0.00386	0.01783	0.02169
27	0.00327	0.01252	0.01579
28	0.00216	0.00929	0.01145
29	0.00163	0.00663	0.00826
30	0.00127	0.00475	0.00602
31	0.00097	0.00358	0.00455
32	0.00075	0.00285	0.00360
33	0.00058	0.00226	0.00284
34	0.00046	0.00187	0.00233
35	0.00038	0.00165	0.00203
36	0.00028	0.00063	0.00091
37	0.00020	0.00030	0.00050
38	0.00017	0.00024	0.00041
39	0.00015	0.00020	0.00035
40	0.00013	0.00018	0.00031
41	0.00010	0.00014	0.00024
42	0.00008	0.00014	0.00022
43	0.00007	0.00007	0.00014
44	0.00006	0.00004	0.00010
45	0.00005	0.00004	0.00009
46	0.00005	0.00003	0.00008
47	0.00004	0.00003	0.00007
48	0.00004	0.00003	0.00007
49	0.00003	0.00002	0.00005
50	0.00003	0.00002	0.00005
51	0.00002	0.00001	0.00003
52	0.00002	0.00001	0.00003
53	0.00002	0.00001	0.00003
54	0.00002	0.00001	0.00003
55	0.00002	0.00001	0.00003
56	0.00001	0.00000	0.00001
57	0.00001	0.00000	0.00001
58	0.00001	0.00000	0.00001
59	0.00001	0.00000	0.00001
60	0.00000	0.00000	
Total	0.06352	0.93648	1.00000

PAYGRADE TRANSFER RATES

STATUS (BY COMPLETED YEARS OF SERVICE)

<u>Years of Service</u>	<u>Officer to Enlisted</u>	<u>Enlisted to Officer</u>
0	0.00042	0.00304
1	0.00010	0.00096
2	0.00006	0.00112
3	0.00013	0.00145
4	0.00013	0.00227
5	0.00008	0.00282
6	0.00014	0.00393
7	0.00014	0.00515
8	0.00013	0.00718
9	0.00013	0.00874
10	0.00012	0.00968
11	0.00039	0.00969
12	0.00058	0.00907
13	0.00047	0.00778
14	0.00077	0.00613
15	0.00094	0.00472
16	0.00112	0.00306
17	0.00055	0.00179
18	0.00014	0.00137
19	0.00017	0.00096
20	0.00010	0.00115
21	0.00005	0.00105
22	0.00006	0.00093
23	0.00002	0.00088
24	0.00000	0.00044
25	0.00000	0.00005
26	0.00000	0.00002
27	0.00000	0.00007
28	0.00000	0.00000
29	0.00000	0.00000
30	0.00000	0.00000
31	0.00000	0.00000
32	0.00000	0.00000
33	0.00000	0.00000
34	0.00000	0.00000

Example: Nine completed years of service could include anything from 9.0 to 9.999 years of service. The associated rate applied to the number of people at the beginning of the year in the category will produce the expected number of occurrences during the following year.

PROMOTION AND MERIT BASIC PAY INCREASE SCALES

OFFICERS (BY ENTRY AGE)

Years of Service	Entry Age										
	16	17	18	19	20	21	22	23	24	25	26
1	1.01406	1.01406	1.01406	1.01406	1.01406	1.01406	1.01406	1.03788	1.06850	1.06863	1.03084
2	1.26101	1.26101	1.26101	1.26101	1.26101	1.26101	1.26101	1.26733	1.24639	1.22059	1.12813
3	1.16436	1.16436	1.16436	1.16436	1.16436	1.16436	1.16436	1.15592	1.14107	1.13118	1.08444
4	1.12838	1.12838	1.12838	1.12838	1.12838	1.12838	1.12838	1.12854	1.10999	1.09523	1.06425
5	1.01427	1.01427	1.01427	1.01427	1.01427	1.01427	1.01427	1.02410	1.02904	1.03108	1.02871
6	1.03943	1.03943	1.03943	1.03943	1.03943	1.03943	1.03943	1.04289	1.04497	1.04497	1.05461
7	0.99489	0.99489	0.99489	0.99489	0.99489	0.99489	0.99489	1.01191	1.02020	1.02535	1.02334
8	1.03290	1.03290	1.03290	1.03290	1.03290	1.03290	1.03290	1.04169	1.03766	1.04233	1.04014
9	0.99442	0.99442	0.99442	0.99442	0.99442	0.99442	0.99442	1.01394	1.02086	1.02143	1.02062
10	1.03956	1.03956	1.03956	1.03956	1.03956	1.03956	1.03956	1.05820	1.05017	1.04618	1.03943
11	1.01571	1.01571	1.01571	1.01571	1.01571	1.01571	1.01571	1.04944	1.05558	1.04535	1.02645
12	1.05143	1.05143	1.05143	1.05143	1.05143	1.05143	1.05143	1.05911	1.04767	1.04470	1.03802
13	1.00603	1.00603	1.00603	1.00603	1.00603	1.00603	1.00603	1.01511	1.01989	1.02090	1.01887
14	1.03458	1.03458	1.03458	1.03458	1.03458	1.03458	1.03458	1.02798	1.02367	1.02606	1.02729
15	1.01346	1.01346	1.01346	1.01346	1.01346	1.01346	1.01346	1.01512	1.02064	1.02177	1.01984
16	1.03810	1.03810	1.03810	1.03810	1.03810	1.03810	1.03810	1.04225	1.03899	1.03557	1.03369
17	1.02706	1.02706	1.02706	1.02706	1.02706	1.02706	1.02706	1.03034	1.02876	1.02850	1.02258
18	1.03826	1.03826	1.03826	1.03826	1.03826	1.03826	1.03826	1.02671	1.02287	1.02382	1.02758
19	1.01543	1.01543	1.01543	1.01543	1.01543	1.01543	1.01543	1.01051	1.01301	1.01426	1.01488
20	1.03350	1.03350	1.03350	1.03350	1.03350	1.03350	1.03350	1.03628	1.03721	1.03951	1.04114
21	1.02310	1.02310	1.02310	1.02310	1.02310	1.02310	1.02310	1.03595	1.03778	1.03563	1.02747
22	1.04475	1.04475	1.04475	1.04475	1.04475	1.04475	1.04475	1.06061	1.05316	1.04753	1.03385
23	1.02847	1.02847	1.02847	1.02847	1.02847	1.02847	1.02847	1.03169	1.03022	1.03020	1.02115
24	1.03200	1.03200	1.03200	1.03200	1.03200	1.03200	1.03200	1.02880	1.02749	1.02601	1.01918
25	1.02086	1.02086	1.02086	1.02086	1.02086	1.02086	1.02086	1.02065	1.02561	1.02340	1.01420
26	1.03961	1.03961	1.03961	1.03961	1.03961	1.03961	1.03961	1.03981	1.03084	1.02729	1.02475
27	1.01440	1.01440	1.01440	1.01440	1.01440	1.01440	1.01440	1.01278	1.00986	1.01164	1.00971
28	1.01850	1.01850	1.01850	1.01850	1.01850	1.01850	1.01850	1.02795	1.02738	1.02510	1.01871
29	1.01886	1.01886	1.01886	1.01886	1.01886	1.01886	1.01886	1.02296	1.01666	1.01419	1.00772
30	1.04665	1.04665	1.04665	1.04665	1.04665	1.04665	1.04665	1.06930	1.05109	1.04079	1.02158
31	1.03553	1.03553	1.03553	1.03553	1.03553	1.03553	1.03553	1.07120	1.05099	1.05582	1.01283
32	1.02979	1.02979	1.02979	1.02979	1.02979	1.02979	1.02979	1.04555	1.04030	1.04734	1.02783
33	1.02118	1.02118	1.02118	1.02118	1.02118	1.02118	1.02118	1.02422	1.02166	1.03341	1.02317
34	0.98796	0.98796	0.98796	0.98796	0.98796	0.98796	0.98796	0.94853	0.99750	1.00271	1.03332

Note: The number that appears, for example, in the column marked '20' and the row marked '2' is the ratio of basic pay at two years of service to basic pay at one year of service for a member who entered at age 20.

PROMOTION AND MERIT BASIC PAY INCREASE SCALES

ENLISTED (BY ENTRY AGE)

Years of Service	Entry Age										
	16	17	18	19	20	21	22	23	24	25	26
1	1.14463	1.14463	1.15192	1.13066	1.10499	1.09967	1.09485	1.08803	1.08174	1.07784	1.04388
2	1.11460	1.11460	1.11454	1.11191	1.11084	1.11190	1.11330	1.11410	1.11451	1.11391	1.10682
3	1.10585	1.10585	1.10336	1.10136	1.09840	1.09751	1.09578	1.09395	1.09251	1.09236	1.09052
4	1.09187	1.09187	1.08458	1.07787	1.07474	1.07408	1.07363	1.07388	1.07381	1.07393	1.07417
5	1.03813	1.03813	1.03342	1.03272	1.03777	1.03740	1.03826	1.03842	1.03976	1.04040	1.03887
6	1.08603	1.08603	1.08305	1.07612	1.07386	1.07369	1.07362	1.07384	1.07273	1.07226	1.06800
7	1.02569	1.02569	1.02685	1.03172	1.03395	1.03440	1.03456	1.03495	1.03490	1.03383	1.03581
8	1.08945	1.08945	1.08981	1.08241	1.07796	1.07646	1.07554	1.07405	1.07357	1.07271	1.06366
9	1.02372	1.02372	1.02136	1.02525	1.02709	1.02798	1.02772	1.02775	1.02740	1.02875	1.03084
10	1.05618	1.05618	1.06018	1.05735	1.05554	1.05409	1.05344	1.05256	1.05125	1.05021	1.04647
11	1.02443	1.02443	1.01796	1.02035	1.02207	1.02316	1.02245	1.02319	1.02343	1.02383	1.02399
12	1.06395	1.06395	1.06126	1.05530	1.05231	1.04959	1.04767	1.04687	1.04545	1.04561	1.03990
13	1.02883	1.02883	1.02147	1.02384	1.02456	1.02460	1.02476	1.02412	1.02438	1.02418	1.02288
14	1.03612	1.03612	1.04314	1.04047	1.03940	1.03772	1.03657	1.03541	1.03583	1.03424	1.03081
15	1.01461	1.01461	1.02312	1.02476	1.02479	1.02538	1.02514	1.02551	1.02446	1.02450	1.02351
16	1.03567	1.03567	1.03907	1.03689	1.03592	1.03480	1.03388	1.03283	1.03144	1.03022	1.02680
17	1.01696	1.01696	1.02141	1.02410	1.02454	1.02478	1.02413	1.02380	1.02323	1.02202	1.01908
18	1.04477	1.04477	1.04392	1.04034	1.03856	1.03586	1.03521	1.03422	1.03362	1.03169	1.02626
19	1.01797	1.01797	1.01812	1.01892	1.01876	1.01881	1.01845	1.01842	1.01786	1.01906	1.01495
20	1.04784	1.04784	1.05683	1.05989	1.06321	1.06664	1.06815	1.06936	1.07225	1.07401	1.08248
21	1.04156	1.04156	1.03878	1.04043	1.03946	1.03837	1.03962	1.04139	1.03968	1.04195	1.04150
22	1.06034	1.06034	1.06287	1.05641	1.05425	1.05316	1.05374	1.05449	1.05673	1.05100	1.04776
23	1.02863	1.02863	1.02731	1.03243	1.03388	1.03447	1.03473	1.03259	1.03274	1.03491	1.02869
24	1.05285	1.05285	1.06189	1.05931	1.05994	1.06183	1.06077	1.06046	1.06050	1.06188	1.05705
25	1.02562	1.02562	1.02998	1.03604	1.03767	1.03327	1.03183	1.03066	1.03112	1.03306	1.03074
26	1.08867	1.08867	1.09105	1.08810	1.08584	1.08542	1.08566	1.08473	1.07945	1.07139	1.05590
27	1.02419	1.02419	1.02080	1.02143	1.02065	1.02253	1.02540	1.02172	1.02343	1.02752	1.02455
28	0.99741	0.99741	1.01810	1.01911	1.02082	1.02168	1.02324	1.02113	1.02044	1.02451	1.02800
29	1.00414	1.00414	1.00950	1.01334	1.01506	1.01463	1.01298	1.01340	1.01243	1.01383	1.01924
30	1.02632	1.02632	1.05110	1.04098	1.03000	1.03513	1.02915	1.02501	1.02043	1.01257	1.00996
31	1.00002	1.00002	0.99460	0.98261	0.98840	1.00386	1.00729	1.00439	0.99995	0.99713	1.01452
32	0.99875	0.99875	1.00633	1.00144	1.00387	0.99960	1.02260	0.99998	1.00059	0.98624	0.99341
33	0.99973	0.99973	1.00337	0.99297	1.00241	1.01097	1.01385	0.99310	0.99612	0.97424	0.98173
34	0.99950	0.99950	1.02324	1.02368	1.00965	1.00437	1.01341	0.98561	0.99206	0.95993	0.98570

Note: The number that appears, for example, in the column marked '20' and the row marked '2' is the ratio of basic pay at two years of service to basic pay at one year of service for a member who entered at age 20.

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APPENDIX H

RESERVE RATES

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RESERVE RATES DESCRIPTION

The explicit projection of the reserves is a difficult task due to the complexity of the reserve career, evolving changes in how the reserves are used, and vagaries of the reserve data which is comprised of input from multiple reserve components. Reserves may have numerous breaks in service of varying lengths prior to attaining retirement eligibility. Also, Selected Reserves usually transfer to the Non-Selected Reserves before the retirement benefit is received. Below is a description of the rates used in the reserve valuation process.

The reserve rates consist of (1) separation rates (retirement, transfer, etc), (2) column-transfer rates, (3) the distribution of new entrants or reenrants into the Selected Reserve, (4) a table that shows the timing of when new entrants or reenrants enter, and (5) ratios for promotion and merit pay.

The data for the rates were taken from the Reserve Component Common Personnel Data System (RCCPDS) files as of September 30 for the years 1997 through 2001. A summary of the years on which various rates are based is given on a subsequent page. Other appendices in this report show the rate derivations via formulas. This is not the case for the reserve rates, but can be furnished upon request if needed. A qualitative description is provided in the following text. The general formula derivation is similar to those of the Active Duty rates (Appendix G) and Retired/Survivor rates (Appendix I).

The separation rates (1) give the probability that a member in a given status at the beginning of the fiscal year leaves the status during the fiscal year. Separation rates from the Selected Reserve include standard losses, transfers to active duty, discharge, and death. A transfer of a Selected Reservist from officer to enlisted status or vice versa is treated as a separation combined with an instantaneous reenrante. They do not include transfers to non-Selected Reserves with 20 good years, or retirement. Separation rates from the non-Selected Reserve with 20 good years, include transfer to Selected Reserve, death, discharge, and file corrections and timing delays. They do not include transfer to retirement status. The separation rates are given by age of reservist, number of years of active duty service, and whether the reservist is an officer or enlistee.

Due to Public Law 110-181 (see Appendix A), the set of separation rates shown apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

Column-transfer rates (2) give the rate at which a member will accrue enough active service to move from one completed years of total active federal military service column to the next as a result of active duty for special work, mobilizations, summer camp, and initial active duty for training.

In most cases the separation rates are not smoothed (graduated). However, cells with numerators of fewer than 20 cases were combined with other cells or smoothed by fitting equations to the data using weighted-least-squares regression. The column-transfer rates are smoothed over all ages and years of active service using weighted-least-squares regression.

The distribution of new entrants and reentrants into the Selected Reserve (3) is used for both open group and closed group projections. This distribution gives the proportion of entrants by officer/enlisted status, age nearest birthday, and completed years of active duty service. The cell count for the complete table, including both officers and enlisted, is 100,000. For this purpose, a new entrant or reentrant is defined as someone who was actively on the RCCPDS file at the end of a fiscal year, but not at the beginning.

The timing table (4) has the same dimensions as the entrant/reentrant distribution and operates in concordance with it. Every cell of the timing table has an integer representing the year in which persons in that cell enter the military. Application of the table depends on the type of projection (Open Group, Normal Cost, or Closed Group). A detailed explanation is described further below.

The promotion and merit increase scales (PAMS) (5) give the expected annual percentage increase in pay independent of the across-the-board increases in the active duty pay scale. The PAMS do not include adjustments for inflation or productivity increases. The current PAMS are based on cross-sectional data. They are defined by length of active service, by age, and by officer/enlisted status. The PAMS were computed by dividing the average pay at age (x+1) by the average pay at the age (x) for a given year of active service. Cells based on few observations were combined with other cells.

The following is a detailed explanation of the timing table application in open group, normal cost, and closed group projections.

Open Group

In an open group projection, new entrants and reentrants are used to bring the part-time Selected Reserve up to DoD Comptroller-provided projected strengths in future years. For an open group run, all cells of the entrant/reentrant distribution are treated equally. For example, if the needed number of new entrants and reentrants equals 150,000 for some future year, the number brought in corresponding to each cell of the entrant/reentrant distribution would be $(n_{ij} / 100,000) \times 150,000$, where n_{ij} is the cell count for row i and column j of the entrant/reentrant distribution. In this example, we would bring in 333 (1.5×222) officers aged 29 with under a year of service.

Normal Cost

For normal cost runs, part of an entering cohort first goes to active duty or an ROTC program, but later shows up as a new entrant to the part-time Selected Reserves. In addition, some leave the part-time Selected Reserves and later show up as a reentrant.

This process is simulated in the normal cost run by having the new or reentrant Reservists corresponding to each cell of the timing table show up only when appropriate. In a normal cost run, all cells of the entrant/reentrant distribution will enter only once. Some cells enter the first year. Some cells enter the second year, and so on. Every cell enters, but no cell enters more than once.

The timing table is used to determine when various cells enter in a normal cost run. For example, 23-year-old officers with less than a year of active service are expected to enter the fourth year of the projection. Similarly, 56-year-old officers with 5 years of active service enter in the thirty-first year of the projection. The latter would most likely be reentrants, and the former, new entrants.

The new entrant/reentrant distribution does not distinguish between new entrants and reentrants. They represent people who are in the part-time Selected Reserves at the end of the fiscal year who were not there at the beginning. This is also true for the timing table. The one exception is that cases with a value of 1 are always new entrants. However, there are new entrants that have spent some time on active duty who show up in the same cells which also include reentrants.

The multiplier (or radix) for a normal cost run in one sense does not matter, because the present value of benefits and the present value of salary change proportionately with it. However, part of the Reserve retirements are paid for with the active duty normal cost, since part of the Reserve retirement is attributable to active duty service. For this reason the radix for part-time and full-time normal costs must be calibrated, so that in the steady state the part-time population is the proper size relative to the active duty force. The present value of Reserve retirement attributable to active duty service may then simply be added to the present value of retirement benefits attributable to active duty service. For the current valuation, this calibration results in 77,051 new entrants/reentrants to the Selected Reserves each year for every 100,000 new entrants to active duty. The portion of the 77,051 that are new entrants to the military is 21,913; this then is the Reserve normal cost radix. This radix is determined by allocating 77,051 according to the entrant/reentrant distribution and choosing the cells for which the value of the timing table equals 1. Thus, throughout the course of the normal cost projection, a total of 77,051 enter (or reenter) the Selected Reserve, 21,913 of whom enter the military for the first time as Selected Reservists.

Closed Group

Closed-group runs form the basis for the calculation of the actuarial liability and exclude anyone who enters the military for the first time after the valuation date. For closed group runs, no new entrants or reentrants are brought in for cells with a value of 1 in the timing table. Doing so would effectively bring in a cohort whose first military service began after the date of the valuation. For cells whose value is 2, no new entrants or reentrants are brought in after the end of the first year, for the same reason. For cells whose value is 3, no new entrants or reentrants are brought in after the end of the second year, and so on. For closed group runs the value for a cell is one larger than the number of future cohorts to be brought in.

In addition to the above timing logic, a “multiplier” is needed to determine the number of entrants/reentrants to the Selected Reserve each year. None of these entrants/reentrants represent people entering the military for the first time; rather, they represent people transferring from active duty or people (veterans) reentering the Selected Reserves after a break in service, including members who were in the census at the beginning of the projection. The multiplier for closed group runs is set equal to the projected first year losses from the Selected Reserve. The assumption is that if new entrants to the military were included, roughly a constant population is maintained. The entrants are brought in to the Selected Reserve according to the entrant/reentrant distribution. For example, if the multiplier were 150,000, the number brought in to a Selected Reserve cell in a given year of the projection is $(n_{ij} / 100,000) \times 150,000$, where n_{ij} is the cell count for row i and column j of the entrant/reentrant distribution. Again, however, note that bringing in the entrants/reentrants is subject to the aforementioned timing table value restrictions in order to be consistent with closed-group requirements. For example, if the first-year losses were 150,000, the end-of-first-year entrants/reentrants would be approximately 109,000, determined using the $(n_{ij} / 100,000) \times 150,000$ formula for every cell that has a value greater than 1 in the timing table. For each future year in the projection, the number of entrants/reentrants would get progressively smaller, as fewer cells would qualify, based upon the corresponding value of the timing table.

The timing table is based on a data element in the Reserve file called DIEUS, date of initial entry to uniformed services. The values represented in the timing table cells are the average number of fiscal years (or partial fiscal years) between the DIEUS date and the date of the end of the fiscal year in which they entered (or reentered). For example, if the timing table were based on one fiscal year of data and all the cases in a cell had a DIEUS date that fell in the fiscal year being studied, the timing table value for that cell would be 1. If all the cases entered (according to DIEUS) in the fiscal year that preceded the fiscal year being studied, the timing table value for that cell would be 2. In reality, some of the people in a timing table cell may have entered in different fiscal years. However, for simulation purposes, we assume everyone in a particular cell of the timing table enters in the same fiscal year.

SUMMARY OF YEARS ON WHICH RESERVE RATES ARE BASED

By Fiscal Year

<u>RATE</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>
Separation	X	X	X	X	
Column-Transfer		X	X	X	X
New Entrant/Reentrant Distribution	X	X	X	X	
Timing Table	X	X	X	X	
Promotion and Merit Scales (PAMS)	X	X	X	X	

Officer Selected Reserve Transfer to Non-Selected Reserve Rates *

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
37	0.000	0.003	0.005	0.005	0.004	0.006	0.006	0.003	0.012	0.006	0.011	0.009	0.017	0.036	0.010	0.090	0.105	0.098	0.107	0.082	0.100
38	0.001	0.003	0.005	0.005	0.004	0.006	0.006	0.013	0.013	0.006	0.011	0.009	0.017	0.036	0.010	0.090	0.105	0.098	0.107	0.082	0.100
39	0.002	0.011	0.005	0.005	0.017	0.020	0.006	0.010	0.019	0.006	0.011	0.009	0.017	0.036	0.010	0.090	0.105	0.098	0.107	0.082	0.100
40	0.006	0.017	0.007	0.005	0.019	0.018	0.006	0.019	0.020	0.021	0.011	0.009	0.017	0.036	0.010	0.090	0.105	0.098	0.107	0.082	0.100
41	0.004	0.018	0.027	0.016	0.022	0.029	0.016	0.033	0.026	0.027	0.020	0.027	0.034	0.036	0.010	0.090	0.105	0.098	0.107	0.082	0.100
42	0.005	0.017	0.031	0.029	0.026	0.042	0.030	0.035	0.049	0.043	0.031	0.027	0.041	0.039	0.035	0.090	0.105	0.098	0.107	0.082	0.100
43	0.004	0.025	0.047	0.032	0.044	0.060	0.067	0.065	0.064	0.079	0.065	0.056	0.050	0.057	0.057	0.090	0.105	0.098	0.107	0.082	0.100
44	0.007	0.037	0.046	0.037	0.043	0.059	0.073	0.086	0.088	0.093	0.080	0.060	0.066	0.072	0.068	0.090	0.105	0.098	0.107	0.082	0.100
45	0.009	0.033	0.045	0.036	0.051	0.058	0.083	0.084	0.095	0.097	0.086	0.098	0.103	0.084	0.115	0.090	0.105	0.098	0.107	0.082	0.100
46	0.012	0.049	0.048	0.052	0.060	0.069	0.075	0.098	0.067	0.074	0.096	0.083	0.093	0.091	0.109	0.090	0.105	0.098	0.107	0.082	0.100
47	0.012	0.059	0.061	0.044	0.061	0.060	0.070	0.089	0.096	0.062	0.072	0.105	0.088	0.066	0.097	0.090	0.105	0.098	0.107	0.082	0.100
48	0.019	0.074	0.061	0.056	0.071	0.076	0.079	0.093	0.087	0.095	0.107	0.091	0.074	0.107	0.097	0.090	0.105	0.098	0.107	0.082	0.100
49	0.019	0.107	0.085	0.096	0.101	0.115	0.119	0.130	0.144	0.117	0.138	0.088	0.126	0.151	0.125	0.090	0.105	0.098	0.107	0.082	0.100
50	0.027	0.116	0.120	0.101	0.127	0.137	0.135	0.154	0.140	0.137	0.190	0.159	0.145	0.168	0.150	0.090	0.105	0.098	0.107	0.082	0.100
51	0.017	0.110	0.117	0.113	0.128	0.153	0.163	0.142	0.172	0.137	0.151	0.184	0.191	0.182	0.188	0.090	0.105	0.098	0.107	0.082	0.100
52	0.027	0.100	0.123	0.097	0.156	0.142	0.173	0.189	0.185	0.133	0.194	0.205	0.205	0.207	0.231	0.090	0.105	0.098	0.107	0.082	0.100
53	0.026	0.096	0.105	0.113	0.156	0.153	0.164	0.181	0.180	0.170	0.182	0.187	0.184	0.196	0.098	0.090	0.105	0.098	0.107	0.082	0.100
54	0.018	0.083	0.109	0.109	0.141	0.150	0.169	0.204	0.133	0.206	0.222	0.255	0.238	0.255	0.200	0.090	0.105	0.098	0.107	0.082	0.100
55	0.036	0.102	0.116	0.106	0.112	0.176	0.143	0.232	0.181	0.234	0.207	0.215	0.239	0.385	0.082	0.090	0.105	0.098	0.107	0.082	0.100
56	0.028	0.069	0.102	0.109	0.123	0.112	0.149	0.139	0.146	0.064	0.064	0.064	0.064	0.064	0.082	0.090	0.105	0.098	0.107	0.082	0.100
57	0.027	0.089	0.101	0.080	0.085	0.151	0.143	0.108	0.137	0.064	0.064	0.064	0.064	0.064	0.082	0.090	0.105	0.098	0.107	0.082	0.100
58	0.028	0.066	0.097	0.083	0.085	0.120	0.167	0.149	0.140	0.064	0.064	0.064	0.064	0.064	0.082	0.090	0.105	0.098	0.107	0.082	0.100
59	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.064	0.064	0.064	0.064	0.082	0.090	0.105	0.098	0.107	0.082	0.100
60	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
61	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
62	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
>62	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

* Includes separations to non-Selected Reserves with 20 or more good years.

Enlisted Selected Reserve Transfer to Non-Selected Reserve Rates *

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
37	0.001	0.007	0.005	0.002	0.004	0.005	0.004	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
38	0.005	0.023	0.011	0.011	0.014	0.013	0.018	0.011	0.020	0.020	0.021	0.018	0.022	0.016	0.009	0.009	0.009	0.009	0.009	0.009	0.009
39	0.009	0.033	0.032	0.024	0.023	0.037	0.032	0.030	0.036	0.037	0.036	0.033	0.039	0.043	0.022	0.018	0.018	0.018	0.018	0.018	0.018
40	0.010	0.041	0.034	0.033	0.032	0.045	0.047	0.039	0.049	0.049	0.050	0.047	0.043	0.042	0.052	0.035	0.041	0.018	0.018	0.018	0.018
41	0.014	0.044	0.048	0.042	0.043	0.050	0.042	0.056	0.051	0.052	0.062	0.059	0.052	0.059	0.055	0.060	0.049	0.023	0.023	0.023	0.023
42	0.010	0.043	0.042	0.052	0.052	0.047	0.045	0.048	0.056	0.065	0.055	0.053	0.058	0.070	0.073	0.068	0.047	0.047	0.047	0.047	0.047
43	0.015	0.045	0.048	0.052	0.052	0.061	0.056	0.054	0.074	0.074	0.082	0.072	0.062	0.071	0.063	0.060	0.054	0.054	0.054	0.054	0.054
44	0.019	0.054	0.056	0.055	0.059	0.066	0.066	0.068	0.079	0.085	0.102	0.074	0.083	0.069	0.097	0.069	0.069	0.069	0.069	0.069	0.069
45	0.022	0.057	0.058	0.064	0.064	0.066	0.061	0.067	0.082	0.076	0.097	0.094	0.076	0.078	0.075	0.075	0.075	0.075	0.075	0.075	0.075
46	0.025	0.063	0.068	0.069	0.068	0.075	0.077	0.075	0.079	0.101	0.109	0.112	0.085	0.073	0.078	0.078	0.078	0.078	0.078	0.078	0.078
47	0.024	0.065	0.072	0.074	0.072	0.073	0.067	0.070	0.089	0.119	0.081	0.090	0.096	0.101	0.093	0.093	0.093	0.093	0.093	0.093	0.093
48	0.023	0.070	0.070	0.071	0.077	0.085	0.073	0.076	0.096	0.098	0.118	0.095	0.117	0.133	0.112	0.112	0.112	0.112	0.112	0.112	0.112
49	0.032	0.076	0.074	0.081	0.085	0.073	0.070	0.083	0.091	0.104	0.084	0.093	0.124	0.104	0.105	0.105	0.105	0.105	0.105	0.105	0.105
50	0.035	0.079	0.076	0.081	0.080	0.075	0.070	0.084	0.099	0.096	0.116	0.116	0.123	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109
51	0.036	0.079	0.082	0.082	0.089	0.080	0.079	0.083	0.087	0.107	0.092	0.097	0.106	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
52	0.039	0.085	0.080	0.088	0.096	0.102	0.091	0.106	0.119	0.107	0.112	0.132	0.149	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096
53	0.036	0.080	0.082	0.089	0.095	0.097	0.115	0.104	0.102	0.134	0.092	0.162	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113
54	0.050	0.097	0.107	0.094	0.102	0.122	0.114	0.134	0.141	0.172	0.119	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151
55	0.058	0.107	0.121	0.115	0.112	0.179	0.185	0.154	0.170	0.169	0.169	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
56	0.063	0.109	0.113	0.109	0.126	0.139	0.111	0.129	0.153	0.170	0.135	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176
57	0.055	0.114	0.134	0.107	0.126	0.152	0.116	0.131	0.149	0.149	0.122	0.199	0.199	0.199	0.199	0.199	0.199	0.199	0.199	0.199	0.199
58	0.082	0.113	0.130	0.119	0.134	0.157	0.135	0.122	0.174	0.185	0.236	0.160	0.160	0.160	0.160	0.160	0.160	0.160	0.160	0.160	0.160
59	0.033	0.082	0.067	0.085	0.092	0.119	0.119	0.086	0.133	0.094	0.107	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102
60	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
61	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
62	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
>62	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

* Includes separations to non-Selected Reserves with 20 or more good years.

Officer Non-Selected Reserve with 20 Good Years Non-Retirement Separation Rates *

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
37	0.318	0.206	0.164	0.153	0.143	0.063	0.043	0.026	0.022	0.104	0.071	0.051	0.084	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
38	0.318	0.206	0.164	0.153	0.143	0.063	0.043	0.026	0.022	0.104	0.071	0.051	0.084	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
39	0.318	0.206	0.164	0.153	0.143	0.063	0.043	0.026	0.022	0.104	0.071	0.051	0.084	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
40	0.318	0.106	0.164	0.153	0.136	0.063	0.043	0.026	0.022	0.104	0.071	0.051	0.084	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
41	0.220	0.069	0.164	0.097	0.105	0.063	0.077	0.026	0.022	0.085	0.119	0.051	0.084	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
42	0.127	0.105	0.095	0.096	0.073	0.046	0.061	0.046	0.032	0.044	0.096	0.051	0.084	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
43	0.127	0.063	0.066	0.087	0.048	0.045	0.044	0.040	0.043	0.041	0.072	0.053	0.048	0.078	0.049	0.047	0.025	0.180	0.032	0.043	0.028
44	0.154	0.078	0.029	0.048	0.064	0.033	0.046	0.035	0.049	0.044	0.021	0.035	0.047	0.062	0.104	0.047	0.025	0.180	0.032	0.043	0.028
45	0.061	0.051	0.077	0.076	0.058	0.040	0.035	0.035	0.040	0.049	0.028	0.028	0.028	0.051	0.084	0.047	0.025	0.180	0.032	0.043	0.028
46	0.141	0.052	0.046	0.041	0.048	0.032	0.041	0.017	0.032	0.032	0.036	0.040	0.029	0.041	0.064	0.047	0.025	0.151	0.032	0.043	0.028
47	0.097	0.045	0.049	0.058	0.040	0.029	0.032	0.033	0.031	0.019	0.018	0.021	0.039	0.036	0.056	0.056	0.025	0.027	0.032	0.043	0.028
48	0.072	0.035	0.059	0.042	0.034	0.022	0.022	0.015	0.015	0.020	0.014	0.034	0.049	0.026	0.047	0.053	0.025	0.027	0.032	0.043	0.028
49	0.069	0.031	0.036	0.034	0.025	0.027	0.021	0.012	0.029	0.014	0.010	0.020	0.016	0.021	0.043	0.014	0.025	0.027	0.032	0.043	0.028
50	0.047	0.024	0.027	0.030	0.026	0.016	0.023	0.016	0.021	0.014	0.011	0.011	0.015	0.021	0.039	0.014	0.025	0.027	0.032	0.043	0.028
51	0.055	0.021	0.031	0.028	0.024	0.019	0.013	0.012	0.012	0.014	0.012	0.010	0.013	0.009	0.011	0.014	0.025	0.027	0.032	0.043	0.028
52	0.047	0.014	0.021	0.015	0.021	0.012	0.010	0.008	0.018	0.012	0.008	0.011	0.012	0.009	0.011	0.014	0.025	0.027	0.032	0.043	0.028
53	0.038	0.023	0.020	0.016	0.012	0.013	0.011	0.011	0.010	0.013	0.008	0.010	0.005	0.009	0.011	0.014	0.025	0.027	0.032	0.043	0.028
54	0.032	0.026	0.014	0.011	0.010	0.008	0.008	0.008	0.010	0.012	0.009	0.008	0.005	0.009	0.011	0.014	0.025	0.027	0.032	0.043	0.028
55	0.044	0.024	0.020	0.012	0.013	0.011	0.007	0.009	0.007	0.012	0.011	0.007	0.005	0.009	0.011	0.014	0.025	0.027	0.032	0.043	0.028
56	0.020	0.023	0.014	0.009	0.006	0.011	0.007	0.009	0.007	0.017	0.011	0.006	0.005	0.009	0.011	0.014	0.025	0.027	0.032	0.043	0.028
57	0.029	0.014	0.011	0.012	0.006	0.008	0.009	0.010	0.007	0.011	0.012	0.006	0.005	0.009	0.011	0.024	0.025	0.027	0.032	0.043	0.028
58	0.031	0.018	0.014	0.007	0.008	0.010	0.007	0.008	0.010	0.011	0.048	0.006	0.005	0.009	0.023	0.021	0.025	0.027	0.032	0.043	0.028
59	0.157	0.108	0.124	0.110	0.090	0.091	0.083	0.077	0.074	0.088	0.084	0.081	0.114	0.099	0.105	0.098	0.064	0.080	0.174	0.043	0.028
60	0.077	0.083	0.045	0.036	0.016	0.019	0.161	0.023	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
61	0.266	0.338	0.347	0.296	0.191	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239
62	0.266	0.477	0.327	0.376	0.205	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216
>62	0.455	0.460	0.470	0.318	0.219	0.267	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241	0.241

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

* Includes separations from non-Selected Reserves with 20 or more good years, except for paid retirement.

Enlisted Non-Selected Reserve with 20 Good Years Non-Retirement Separation Rates *

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
37	0.165	0.174	0.144	0.274	0.172	0.057	0.112	0.066	0.039	0.086	0.031	0.072	0.044	0.069	0.062	0.194	0.052	0.069	0.122	0.185	0.130
38	0.175	0.123	0.144	0.246	0.113	0.057	0.168	0.066	0.039	0.086	0.031	0.072	0.044	0.069	0.062	0.194	0.052	0.069	0.122	0.185	0.130
39	0.182	0.104	0.103	0.090	0.055	0.057	0.110	0.111	0.082	0.086	0.031	0.072	0.044	0.069	0.062	0.194	0.052	0.069	0.122	0.185	0.130
40	0.175	0.072	0.050	0.095	0.071	0.049	0.052	0.068	0.054	0.050	0.031	0.072	0.044	0.069	0.062	0.215	0.052	0.069	0.122	0.185	0.130
41	0.103	0.070	0.047	0.094	0.051	0.044	0.031	0.034	0.027	0.043	0.033	0.041	0.044	0.062	0.062	0.174	0.052	0.069	0.122	0.185	0.130
42	0.099	0.062	0.044	0.066	0.042	0.038	0.034	0.030	0.037	0.046	0.036	0.036	0.044	0.054	0.062	0.038	0.052	0.069	0.122	0.185	0.130
43	0.101	0.051	0.034	0.056	0.036	0.023	0.029	0.040	0.035	0.030	0.020	0.036	0.043	0.050	0.062	0.038	0.052	0.069	0.122	0.185	0.130
44	0.078	0.040	0.033	0.047	0.031	0.024	0.032	0.047	0.036	0.029	0.020	0.032	0.033	0.042	0.064	0.038	0.052	0.069	0.122	0.185	0.130
45	0.054	0.032	0.037	0.045	0.024	0.027	0.036	0.024	0.028	0.026	0.019	0.026	0.026	0.043	0.064	0.038	0.052	0.069	0.122	0.185	0.130
46	0.047	0.025	0.027	0.043	0.021	0.016	0.023	0.027	0.014	0.014	0.026	0.034	0.022	0.053	0.065	0.080	0.052	0.069	0.122	0.185	0.130
47	0.049	0.023	0.035	0.037	0.025	0.026	0.024	0.024	0.013	0.022	0.010	0.035	0.019	0.029	0.057	0.028	0.052	0.069	0.122	0.185	0.130
48	0.048	0.020	0.034	0.038	0.019	0.019	0.028	0.014	0.010	0.017	0.012	0.017	0.020	0.062	0.047	0.028	0.052	0.069	0.122	0.185	0.130
49	0.053	0.016	0.031	0.033	0.021	0.015	0.028	0.021	0.018	0.014	0.017	0.018	0.024	0.045	0.040	0.028	0.052	0.069	0.122	0.185	0.130
50	0.033	0.016	0.031	0.028	0.016	0.015	0.020	0.018	0.018	0.016	0.020	0.019	0.020	0.045	0.034	0.028	0.052	0.069	0.122	0.185	0.130
51	0.038	0.021	0.025	0.029	0.019	0.016	0.024	0.022	0.019	0.014	0.023	0.020	0.014	0.027	0.016	0.028	0.052	0.069	0.122	0.185	0.130
52	0.044	0.017	0.027	0.030	0.018	0.014	0.017	0.020	0.010	0.010	0.012	0.017	0.020	0.031	0.016	0.052	0.052	0.069	0.122	0.185	0.130
53	0.042	0.022	0.025	0.027	0.012	0.011	0.023	0.020	0.015	0.022	0.021	0.014	0.013	0.034	0.016	0.022	0.052	0.069	0.122	0.185	0.130
54	0.048	0.019	0.021	0.032	0.017	0.012	0.014	0.016	0.014	0.013	0.020	0.019	0.016	0.023	0.016	0.022	0.052	0.069	0.122	0.185	0.130
55	0.046	0.024	0.022	0.027	0.016	0.014	0.015	0.022	0.010	0.019	0.023	0.021	0.027	0.022	0.016	0.022	0.052	0.069	0.122	0.185	0.130
56	0.044	0.024	0.023	0.030	0.016	0.009	0.013	0.019	0.014	0.012	0.023	0.025	0.025	0.029	0.016	0.022	0.052	0.069	0.122	0.185	0.130
57	0.033	0.026	0.022	0.024	0.015	0.012	0.014	0.022	0.007	0.022	0.026	0.019	0.024	0.027	0.029	0.038	0.052	0.069	0.122	0.185	0.130
58	0.030	0.035	0.028	0.027	0.018	0.010	0.013	0.018	0.012	0.015	0.031	0.013	0.026	0.026	0.066	0.091	0.052	0.069	0.122	0.185	0.130
59	0.145	0.133	0.120	0.120	0.096	0.083	0.099	0.098	0.107	0.093	0.076	0.130	0.093	0.143	0.102	0.143	0.109	0.069	0.122	0.185	0.130
60	0.077	0.065	0.059	0.048	0.022	0.021	0.039	0.034	0.029	0.030	0.025	0.028	0.035	0.046	0.233	0.074	0.100	0.100	0.100	0.100	0.100
61	0.314	0.358	0.209	0.263	0.184	0.176	0.352	0.415	0.456	0.365	0.365	0.365	0.365	0.365	0.365	0.365	0.365	0.365	0.365	0.365	0.365
62	0.396	0.392	0.415	0.349	0.242	0.215	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355
>62	0.437	0.521	0.419	0.477	0.221	0.121	0.253	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

* Includes separations from non-Selected Reserves with 20 or more good years, except for paid retirement.

Officer Selected Reserve Retirement Rates

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
59	0.203	0.220	0.243	0.264	0.281	0.296	0.308	0.317	0.323	0.327	0.328	0.326	0.321	0.313	0.303	0.289	0.273	0.254	0.233	0.208	0.181
60	0.473	0.570	0.605	0.631	0.653	0.672	0.690	0.706	0.721	0.735	0.749	0.762	0.774	0.785	0.797	0.807	0.818	0.828	0.838	0.848	0.857
61	0.139	0.159	0.202	0.226	0.240	0.249	0.252	0.253	0.250	0.246	0.239	0.231	0.222	0.211	0.200	0.187	0.174	0.160	0.145	0.130	0.114
62	0.081	0.126	0.178	0.217	0.251	0.281	0.308	0.332	0.355	0.377	0.397	0.416	0.435	0.453	0.470	0.486	0.502	0.518	0.533	0.547	0.561
>62	0.108	0.116	0.163	0.200	0.231	0.258	0.283	0.306	0.327	0.347	0.365	0.383	0.400	0.417	0.432	0.447	0.462	0.476	0.490	0.504	0.517

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

Enlisted Selected Reserve Retirement Rates

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
59	0.251	0.276	0.282	0.288	0.294	0.300	0.306	0.312	0.319	0.325	0.331	0.337	0.343	0.349	0.355	0.361	0.367	0.373	0.379	0.385	0.391
60	0.758	0.837	0.852	0.863	0.873	0.881	0.889	0.896	0.902	0.908	0.914	0.919	0.924	0.929	0.934	0.939	1.000	1.000	1.000	1.000	1.000
61	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443	0.443
62	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522	0.522
>62	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209	0.209

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

Officer Non-Selected Reserve with 20 Good Years Retirement Rates

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
59	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378
60	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935	0.935
61	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294
62	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192
>62	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

Enlisted Non-Selected Reserve with 20 Good Years Retirement Rates

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
59	0.364	0.375	0.379	0.383	0.385	0.388	0.390	0.396	0.398	0.400	0.401	0.403	0.404	0.406	0.410	0.411	0.412	0.409	0.410	0.411	0.412	0.412
60	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921
61	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275
62	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133
>62	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084

Note: Due to Public Law 110-181 (see Appendix A) the rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

Officer Selected Reserve New Entrant/Reentrant Rates *

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	27	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	63	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	75	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	122	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	162	12	12	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	153	20	42	11	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	156	23	52	42	21	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	179	29	45	53	69	23	5	1	1	1	0	0	0	0	0	0	0	0	0	0	0
28	203	43	41	56	97	53	12	5	2	2	1	0	0	0	0	0	0	0	0	0	0
29	222	39	35	54	83	73	52	15	5	2	3	1	1	0	0	0	0	0	0	0	0
30	213	47	33	56	81	64	66	54	15	5	5	3	1	0	0	0	0	0	0	0	0
31	177	50	33	54	77	43	48	70	52	36	7	3	3	1	1	0	0	0	0	0	0
32	153	55	26	56	77	43	42	50	81	115	26	3	3	3	2	0	0	0	0	0	0
33	134	46	24	52	72	41	35	42	61	142	87	20	5	3	1	1	2	0	0	0	0
34	136	48	28	52	68	35	39	34	47	89	60	14	5	5	5	1	1	1	0	0	0
35	123	50	25	42	57	39	37	37	43	65	66	79	51	9	6	2	0	1	0	0	0
36	95	37	16	32	43	33	33	33	39	53	46	65	56	27	16	2	1	1	1	1	0
37	84	30	17	21	32	23	25	25	32	35	44	44	37	29	44	7	2	1	0	0	0
38	57	26	10	20	26	16	21	20	23	24	30	42	32	18	37	15	5	2	1	0	0
39	54	18	8	23	27	17	18	17	21	20	26	34	26	17	21	14	9	3	0	0	0
40	52	16	3	18	20	17	18	16	15	16	20	28	21	14	10	11	5	2	0	0	1
41	34	19	7	17	23	15	16	17	17	16	21	25	18	15	12	6	2	3	1	1	0
42	35	11	7	11	24	17	11	15	14	14	14	18	14	12	8	8	3	1	1	1	1
43	27	8	8	14	15	16	11	10	11	11	11	15	15	9	10	3	2	2	1	1	1
44	21	10	6	15	15	10	11	11	9	8	11	14	9	7	9	5	1	1	0	0	1
45	25	10	6	11	15	8	7	7	10	10	7	10	9	7	7	3	3	1	0	1	1
46	20	8	5	10	14	8	10	7	8	6	7	6	8	7	3	3	2	1	1	0	0
47	19	8	8	8	11	7	6	6	3	5	5	6	3	2	5	2	1	0	1	0	0
48	16	7	5	9	8	6	5	6	5	3	1	5	3	2	3	1	1	0	1	1	1
49	16	8	6	9	7	5	2	2	3	5	5	3	5	2	1	1	2	1	0	0	1
50	14	6	5	7	7	3	3	5	5	3	3	3	2	3	1	2	0	1	1	0	0
51	10	5	5	6	6	5	2	2	3	2	1	2	2	2	1	2	1	0	1	0	1
52	9	5	5	5	3	3	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0
53	8	3	5	3	5	2	2	3	1	1	1	2	1	0	1	1	0	0	1	1	0
54	7	2	1	2	2	2	2	1	1	1	1	1	0	1	1	0	0	0	0	0	0
55	6	2	0	2	1	1	1	1	2	0	0	0	0	0	1	0	0	0	0	0	0
56	3	1	1	2	1	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0
57	2	1	0	1	1	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0
58	5	1	1	2	1	1	1	1	0	0	1	0	1	1	0	0	0	0	0	0	0

* Rates per 100,000 reservists in the new entrant/reentrant distribution.

Enlisted Selected Reserve New Entrant/Reentrant Rates *

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	1,346	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	10,929	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	9,492	21	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	5,812	55	32	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	3,291	115	520	489	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	1,840	145	688	1,270	484	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	1,353	159	454	1,403	1,608	69	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	1,074	153	389	1,100	1,976	300	56	2	0	0	0	0	0	0	0	0	0	0	0	0	0
25	1,007	169	355	832	1,517	434	314	28	3	0	0	0	0	0	0	0	0	0	0	0	0
26	951	172	316	683	1,177	375	476	239	26	1	0	0	0	0	0	0	0	0	0	0	0
27	841	173	265	571	984	301	417	406	178	22	1	0	0	0	0	0	0	0	0	0	0
28	759	154	212	509	783	233	318	328	265	138	45	3	0	0	0	0	0	0	0	0	0
29	697	151	174	406	645	201	248	260	206	188	16	2	0	0	0	0	0	0	0	0	0
30	585	126	150	322	521	173	193	197	158	190	260	73	10	1	0	0	0	0	0	0	0
31	502	99	112	291	412	146	171	155	135	151	215	108	53	11	2	0	0	0	0	0	0
32	433	99	105	239	354	130	136	135	110	116	159	86	74	49	9	2	0	0	0	0	0
33	400	89	94	213	286	106	117	111	95	93	141	67	72	61	37	22	2	0	0	0	0
34	369	76	88	191	242	90	107	98	94	98	111	67	60	57	47	68	4	1	0	0	0
35	362	75	71	183	220	76	94	92	83	86	111	65	60	46	50	78	12	2	1	0	0
36	309	66	62	156	185	72	72	72	67	69	98	63	55	44	44	56	12	5	1	0	0
37	240	61	55	141	169	56	70	64	53	60	79	45	52	40	35	40	11	5	2	1	0
38	197	61	40	125	126	46	57	46	48	43	58	45	34	37	33	30	12	6	0	0	0
39	165	39	33	101	105	41	39	37	35	30	42	33	35	30	26	27	7	4	3	0	0
40	131	35	27	85	91	37	38	26	31	26	32	24	24	26	24	27	12	5	3	2	1
41	115	34	25	71	78	24	31	23	24	24	29	22	19	18	20	18	7	6	2	1	2
42	93	28	25	61	64	23	27	24	20	17	21	14	13	15	12	14	6	4	2	1	1
43	81	23	22	55	53	21	23	19	15	14	18	12	14	12	8	10	6	4	1	3	1
44	57	21	23	40	42	17	18	14	13	14	13	10	9	6	8	8	6	3	1	1	2
45	46	21	21	37	35	13	15	11	10	7	12	11	9	7	8	8	7	4	3	1	0
46	35	16	17	27	28	11	12	8	8	7	6	6	6	4	5	5	3	3	0	0	2
47	33	15	16	19	20	6	9	5	7	6	6	6	6	4	3	6	3	2	2	1	0
48	27	14	15	16	20	7	7	7	5	5	4	3	5	3	2	2	2	1	1	0	0
49	22	13	16	13	12	7	6	4	5	5	3	4	4	4	3	3	2	2	1	1	0
50	18	11	14	16	14	6	4	5	6	4	3	2	6	2	1	4	1	1	1	0	1
51	12	11	12	17	11	5	3	3	4	2	3	2	2	1	2	1	1	1	0	0	0
52	9	9	11	12	11	5	4	3	2	1	2	2	2	2	1	0	1	0	1	1	1
53	6	6	9	9	9	3	2	2	2	1	3	1	2	1	1	1	0	2	0	0	0
54	9	3	7	8	5	2	1	1	1	1	2	1	1	1	1	1	0	0	0	0	0
55	3	2	5	7	4	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0
56	4	2	3	3	3	1	1	1	1	1	1	0	0	1	1	0	0	1	0	0	1
57	3	1	1	3	3	2	1	0	1	0	0	1	1	0	0	0	0	1	0	0	0
58	5	2	5	5	5	1	2	1	0	0	0	1	0	0	1	2	0	1	1	0	0

* Rates per 100,000 reservists in the new entrant/reentrant distribution.

Officer Selected Reserve Timing Table

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	3	4	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	4	4	4	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	4	4	5	6	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	5	6	5	7	7	7	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	6	6	5	6	6	7	7	8	9	0	0	0	0	0	0	0	0	0	0	0	0
26	7	7	6	7	7	7	8	8	9	10	0	0	0	0	0	0	0	0	0	0	0
27	8	8	7	8	8	8	9	9	10	11	0	0	0	0	0	0	0	0	0	0	0
28	9	9	8	9	9	9	10	10	11	12	0	0	0	0	0	0	0	0	0	0	0
29	10	10	9	10	10	10	11	11	12	13	0	0	0	0	0	0	0	0	0	0	0
30	11	11	10	11	11	11	12	12	13	14	0	0	0	0	0	0	0	0	0	0	0
31	12	12	11	12	12	12	13	13	14	15	0	0	0	0	0	0	0	0	0	0	0
32	13	13	12	13	13	13	14	14	15	16	0	0	0	0	0	0	0	0	0	0	0
33	14	14	13	14	14	14	15	15	16	17	0	0	0	0	0	0	0	0	0	0	0
34	15	15	14	15	15	15	16	16	17	18	0	0	0	0	0	0	0	0	0	0	0
35	16	16	15	16	16	16	17	17	18	19	0	0	0	0	0	0	0	0	0	0	0
36	17	17	16	17	17	17	18	18	19	20	0	0	0	0	0	0	0	0	0	0	0
37	18	18	17	18	18	18	19	19	20	21	0	0	0	0	0	0	0	0	0	0	0
38	19	19	18	19	19	19	20	20	21	22	0	0	0	0	0	0	0	0	0	0	0
39	20	20	19	20	20	20	21	21	22	23	0	0	0	0	0	0	0	0	0	0	0
40	21	21	20	21	21	21	22	22	23	24	0	0	0	0	0	0	0	0	0	0	0
41	22	22	21	22	22	22	23	23	24	25	0	0	0	0	0	0	0	0	0	0	0
42	23	23	22	23	23	23	24	24	25	26	0	0	0	0	0	0	0	0	0	0	0
43	24	24	23	24	24	24	25	25	26	27	0	0	0	0	0	0	0	0	0	0	0
44	25	25	24	25	25	25	26	26	27	28	0	0	0	0	0	0	0	0	0	0	0
45	26	26	25	26	26	26	27	27	28	29	0	0	0	0	0	0	0	0	0	0	0
46	27	27	26	27	27	27	28	28	29	30	0	0	0	0	0	0	0	0	0	0	0
47	28	28	27	28	28	28	29	29	30	31	0	0	0	0	0	0	0	0	0	0	0
48	29	29	28	29	29	29	30	30	31	32	0	0	0	0	0	0	0	0	0	0	0
49	30	30	29	30	30	30	31	31	32	33	0	0	0	0	0	0	0	0	0	0	0
50	31	31	30	31	31	31	32	32	33	34	0	0	0	0	0	0	0	0	0	0	0
51	32	32	31	32	32	32	33	33	34	35	0	0	0	0	0	0	0	0	0	0	0
52	33	33	32	33	33	33	34	34	35	36	0	0	0	0	0	0	0	0	0	0	0
53	34	34	33	34	34	34	35	35	36	37	0	0	0	0	0	0	0	0	0	0	0
54	35	35	34	35	35	35	36	36	37	38	0	0	0	0	0	0	0	0	0	0	0
55	36	36	35	36	36	36	37	37	38	39	0	0	0	0	0	0	0	0	0	0	0
56	37	37	36	37	37	37	38	38	39	40	0	0	0	0	0	0	0	0	0	0	0
57	38	38	37	38	38	38	39	39	40	41	0	0	0	0	0	0	0	0	0	0	0
58	39	39	38	39	39	39	40	40	41	42	0	0	0	0	0	0	0	0	0	0	0

Enlisted Selected Reserve Timing Table

Completed Years Of Total Active Federal Military Service

Age	Under 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	1	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	2	3	4	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	2	4	4	5	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	3	5	4	5	6	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	4	5	5	6	7	7	8	7	8	0	0	0	0	0	0	0	0	0	0	0	0
25	5	6	6	6	6	7	8	8	9	0	0	0	0	0	0	0	0	0	0	0	0
26	6	7	7	6	7	7	8	9	9	10	0	0	0	0	0	0	0	0	0	0	0
27	6	8	7	8	8	8	9	9	10	10	11	0	0	0	0	0	0	0	0	0	0
28	7	8	8	8	9	9	9	10	10	11	11	12	0	0	0	0	0	0	0	0	0
29	8	10	9	9	10	10	10	10	11	11	12	12	13	0	0	0	0	0	0	0	0
30	9	10	10	10	10	10	10	11	11	11	12	13	13	14	0	0	0	0	0	0	0
31	10	11	11	11	11	11	11	11	12	12	12	13	14	14	15	0	0	0	0	0	0
32	10	12	12	12	12	12	12	12	12	12	13	13	14	15	15	16	0	0	0	0	0
33	11	13	13	13	13	13	13	13	13	13	14	14	15	15	16	16	17	0	0	0	0
34	12	14	14	14	14	14	14	14	14	14	14	15	15	15	16	17	17	18	0	0	0
35	13	15	14	15	14	14	14	15	15	15	15	16	16	16	17	17	18	18	19	0	0
36	14	16	15	16	15	15	15	15	16	16	16	16	17	17	17	17	18	18	19	20	0
37	15	16	16	17	17	16	16	17	17	17	17	17	17	18	18	18	19	19	20	20	21
38	16	17	16	17	17	17	17	17	17	17	16	18	18	18	18	18	19	20	20	20	21
39	17	18	18	19	18	18	18	18	18	18	17	18	19	19	19	18	20	20	21	21	21
40	17	18	19	20	19	19	19	19	19	19	18	19	20	20	20	20	21	21	21	21	21
41	18	20	21	21	20	20	20	20	19	19	19	20	20	20	20	20	21	21	21	21	21
42	18	21	21	21	21	21	20	20	21	22	20	19	20	21	21	21	22	22	22	22	22
43	19	21	23	23	22	22	23	21	21	21	20	20	21	21	22	21	23	24	23	23	23
44	20	22	24	24	24	23	24	24	22	23	21	22	22	22	22	23	24	24	24	24	24
45	21	23	24	25	24	24	24	24	24	24	21	23	21	23	22	22	23	24	25	25	25
46	21	23	26	25	26	25	25	24	25	24	24	24	21	24	21	23	24	25	26	26	26
47	22	24	27	26	26	25	25	28	26	26	24	25	24	23	26	24	26	27	27	27	27
48	23	25	28	27	27	25	26	28	27	27	27	26	26	25	25	25	26	27	28	28	28
49	24	27	29	29	29	27	28	27	28	28	28	29	28	26	26	26	26	28	29	29	29
50	25	28	29	30	29	28	26	30	30	30	30	30	30	27	27	27	27	29	30	30	30
51	25	27	30	31	31	30	31	31	31	31	31	31	31	29	29	29	29	30	31	31	31
52	27	29	31	31	32	31	32	31	31	31	31	31	31	30	30	30	30	31	31	31	31
53	26	30	32	33	33	33	33	32	32	32	32	32	32	31	31	31	31	32	33	33	33
54	26	30	31	33	34	34	34	33	33	33	33	33	33	33	33	33	33	33	34	34	34
55	22	28	34	35	35	35	35	34	34	34	34	34	34	34	34	34	34	34	35	35	35
56	27	32	34	33	36	36	36	35	35	35	35	35	35	35	35	35	35	36	36	36	36
57	29	33	35	37	37	37	37	36	36	36	36	36	36	36	36	36	36	37	37	37	37
58	27	33	36	34	38	38	38	37	37	37	37	37	37	37	37	37	37	38	38	38	38

APPENDIX I

RETIREE AND SURVIVOR RATES

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RETIREE AND SURVIVOR RATES DESCRIPTION

The military retiree decrement rates are used to estimate death, “other” losses from retired pay status, and rates of transfer from temporary disability to permanent disability. The “other” losses consist primarily of returns to active duty and full waiver of retired pay to receive a higher annuity from the Veterans Affairs or Civil Service. In order to compute the normal cost contributions with and without regard to Concurrent Receipt benefits (Public Law 108-136), DoD- and Treasury-specific “other” loss rates, among others, are used to calculate the appropriate amounts. These rates were developed by age nearest birthday for officers and enlistees separately, and were further subdivided by three types of retirement: nondisability, temporary disability, and permanent disability. For temporary disability retirees, select rates were created for each of the first five years of retirement. After five years, those who are still in the temporary disability status are transferred to a permanent disability status.

The data for the rates were taken from the Defense Manpower Data Center Retiree and Survivor Files as of September 30 for the years 2000 through 2009. These files were created by the Finance Centers of the military services (now consolidated under the Defense Finance and Accounting Service), which have responsibility for sending monthly retired pay checks to military retirees. A military retiree can be in “paid status” or “nonpaid status.” Nonpaid status indicates that a retiree has an entitlement to an annuity, but the annuity is fully reduced by offsets. Retirees who terminate from paid status during a fiscal year are on the retiree file at the end of that fiscal year with a termination code indicating the type of termination.

The rate development process begins by matching two consecutive fiscal year-end files by Social Security number. Cases no longer in paid status are categorized by type of loss. Cases returned to paid status (from non-paid status at the start of the year) are subtracted from a given type of loss. After following the above procedures, crude rates are created using the formulas given on the following pages. These rates are smoothed using a Whittaker-Henderson type B (“Method B”) graduation, or by fitting a polynomial to the crude rates. Where there is reason to suspect valid discontinuities in the underlying rates, those segments are not smoothed. A summary of the years on which various rates are based is given on the subsequent page.

RETIREE AND SURVIVOR DECREMENT RATE FORMULAS

NONDISABILITY RETIRED DEATH (by age nearest birthday and retired from active/reserve duty)

Nondisability deaths
[Number at beginning of year - $\frac{1}{2}$ (Nondisability deaths + other losses)]

PERMANENT DISABILITY RETIRED DEATH (by age nearest birthday)

Permanent disability deaths
[Number at beginning of year - $\frac{1}{2}$ (Permanent disability deaths + other losses)]

TEMPORARY DISABILITY RETIRED DEATH (by age nearest birthday and years retired)

Temporary disability deaths in category¹
[Number at beginning of year - $\frac{1}{2}$ (Deaths + transfers + other losses)]

OTHER LOSSES FROM NONDISABILITY (by age nearest birthday and retired from active/reserve duty)

Losses other than death
Number at beginning of year

OTHER AND NON-TRANSFER LOSSES FROM TEMPORARY DISABILITY (by age nearest birthday and years retired)

Losses other than death or transfers to permanent
Number at beginning of year

TRANSFER FROM TEMPORARY TO PERMANENT DISABILITY (by age nearest birthday and years retired)

Transfers to permanent
Number at beginning of year

OTHER LOSSES FROM PERMANENT DISABILITY (by age nearest birthday)

Losses other than death
Number at beginning of year

¹ Includes deaths of members who were temporarily disabled at the beginning of the year, then transferred to permanent disability, and later died before the end of the year.

**RETIREE AND SURVIVOR DECREMENT RATE FORMULAS
(cont.)**

RETIREE DIVORCE (weighted by coverage amount, by age nearest birthday)

Net retiree divorces
Number at beginning of year

SURVIVING SPOUSE REMARRIAGE (by age nearest birthday)

Surviving spouse remarriages
Number at beginning of year

SURVIVING CHILD TERMINATION (by age nearest birthday)

Child terminations
Number at beginning of year

SURVIVING SPOUSE DEATH (by age nearest birthday)

Survivor deaths
Number at beginning of year

SURVIVING SPOUSE OTHER LOSS (by age nearest birthday)

Survivor losses other than deaths
Number at beginning of year

SUMMARY OF YEARS ON WHICH RETIREE AND SURVIVOR RATES ARE BASED

By Fiscal Year

<u>DEATH RATES</u>	<u>2000-2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
ND Officers						X	X
ND Enlistees						X	X
PD Officers				X	X	X	
PD Enlistees				X	X	X	
TD Officers	X	X	X				
TD Enlistees	X	X	X				
 <u>OTHER LOSS RATES</u>							
ND Officers						X	X
ND Enlistees						X	X
PD Officers				X	X	X	
PD Enlistees				X	X	X	
TD Officers	X	X	X				
TD Enlistees	X	X	X				
 <u>TRANSFER RATES</u>							
<u>FROM TD TO PD</u>							
Officers	X	X	X				
Enlistees	X	X	X				
 <u>RETIREE DIVORCE</u>							
	X	X					
 <u>SURVIVOR RATES</u>							
Remarriage		X	X	X			
Child Termination		X	X	X			
Survivor Death		X	X	X			
Survivor Other Loss		X	X	X			

Key: ND = Nondisabled
 PD = Permanently Disabled
 TD = Temporarily Disabled

OFFICER RETIRED DEATH RATES

(Age Nearest Birthday)

Age	Non-Disability		Permanent Disability	Temporary Disability				
	Active	Reserve		Year of Retirement				
				One	Two	Three	Four	Five
16	0.00036	0.00036	0.00533	0.02302	0.01162	0.00595	0.00232	0.00234
17	0.00036	0.00036	0.00533	0.02145	0.01083	0.00554	0.00216	0.00218
18	0.00036	0.00036	0.00533	0.01999	0.01009	0.00516	0.00201	0.00203
19	0.00036	0.00036	0.00533	0.01863	0.00940	0.00481	0.00187	0.00189
20	0.00036	0.00036	0.00533	0.01735	0.00876	0.00448	0.00175	0.00176
21	0.00036	0.00036	0.00533	0.01621	0.00818	0.00419	0.00163	0.00165
22	0.00036	0.00036	0.00533	0.01521	0.00768	0.00393	0.00153	0.00154
23	0.00036	0.00036	0.00533	0.01434	0.00724	0.00370	0.00144	0.00146
24	0.00036	0.00036	0.00533	0.01360	0.00687	0.00351	0.00137	0.00138
25	0.00036	0.00036	0.00533	0.01302	0.00657	0.00336	0.00131	0.00132
26	0.00036	0.00036	0.00533	0.01258	0.00635	0.00325	0.00127	0.00128
27	0.00036	0.00036	0.00533	0.01230	0.00621	0.00318	0.00124	0.00125
28	0.00036	0.00036	0.00533	0.01218	0.00615	0.00315	0.00123	0.00124
29	0.00036	0.00036	0.00533	0.01223	0.00617	0.00316	0.00123	0.00124
30	0.00035	0.00035	0.00533	0.01245	0.00628	0.00322	0.00125	0.00126
31	0.00035	0.00035	0.00533	0.01285	0.00648	0.00332	0.00129	0.00130
32	0.00035	0.00035	0.00533	0.01343	0.00678	0.00347	0.00135	0.00136
33	0.00035	0.00035	0.00533	0.01420	0.00717	0.00367	0.00143	0.00144
34	0.00035	0.00035	0.00533	0.01517	0.00766	0.00392	0.00153	0.00154
35	0.00035	0.00035	0.00533	0.01635	0.00825	0.00422	0.00164	0.00166
36	0.00035	0.00035	0.00533	0.01774	0.00895	0.00458	0.00178	0.00180
37	0.00035	0.00035	0.00533	0.01935	0.00977	0.00500	0.00195	0.00197
38	0.00035	0.00035	0.00533	0.02119	0.01070	0.00547	0.00213	0.00215
39	0.00035	0.00035	0.00533	0.02327	0.01174	0.00601	0.00234	0.00236
40	0.00046	0.00046	0.00533	0.02559	0.01291	0.00661	0.00257	0.00260
41	0.00056	0.00056	0.00533	0.02816	0.01421	0.00727	0.00283	0.00286
42	0.00067	0.00067	0.00533	0.03099	0.01564	0.00800	0.00312	0.00315
43	0.00068	0.00068	0.00533	0.03409	0.01721	0.00881	0.00343	0.00346
44	0.00071	0.00071	0.00533	0.03747	0.01891	0.00968	0.00377	0.00381
45	0.00075	0.00075	0.00533	0.04113	0.02076	0.01062	0.00414	0.00418
46	0.00079	0.00079	0.00533	0.04509	0.02276	0.01165	0.00453	0.00458
47	0.00086	0.00086	0.00533	0.04935	0.02491	0.01275	0.00496	0.00501
48	0.00094	0.00094	0.00533	0.05392	0.02722	0.01393	0.00542	0.00548
49	0.00103	0.00103	0.00533	0.05882	0.02969	0.01519	0.00592	0.00597
50	0.00114	0.00114	0.00574	0.06405	0.03233	0.01655	0.00644	0.00651
51	0.00127	0.00127	0.00596	0.06962	0.03514	0.01798	0.00700	0.00707
52	0.00141	0.00140	0.00620	0.07554	0.03813	0.01951	0.00760	0.00767
53	0.00158	0.00158	0.00647	0.08182	0.04130	0.02114	0.00823	0.00831
54	0.00177	0.00177	0.00677	0.08847	0.04465	0.02285	0.00890	0.00899
55	0.00202	0.00201	0.00710	0.09550	0.04820	0.02467	0.00961	0.00970
56	0.00229	0.00228	0.00747	0.10292	0.05195	0.02659	0.01035	0.01045
57	0.00261	0.00261	0.00791	0.11074	0.05590	0.02861	0.01114	0.01125
58	0.00299	0.00299	0.00843	0.11897	0.06005	0.03073	0.01197	0.01208
59	0.00341	0.00340	0.00905	0.12762	0.06442	0.03297	0.01284	0.01296
60	0.00390	0.00376	0.00981	0.13670	0.06900	0.03531	0.01375	0.01388
61	0.00446	0.00381	0.01072	0.14623	0.07381	0.03777	0.01471	0.01485

OFFICER RETIRED DEATH RATES (continued)

(Age Nearest Birthday)

Age	Non-Disability		Permanent Disability	Temporary Disability				
	Active	Reserve		Year of Retirement				
				One	Two	Three	Four	Five
62	0.00509	0.00402	0.01180	0.15642	0.07895	0.04041	0.01573	0.01589
63	0.00582	0.00447	0.01307	0.16731	0.08445	0.04322	0.01683	0.01699
64	0.00661	0.00518	0.01455	0.17897	0.09033	0.04623	0.01800	0.01818
65	0.00749	0.00602	0.01626	0.19144	0.09663	0.04945	0.01925	0.01944
66	0.00849	0.00676	0.01820					
67	0.00958	0.00750	0.02036					
68	0.01076	0.00842	0.02272					
69	0.01212	0.00960	0.02526					
70	0.01363	0.01107	0.02799					
71	0.01536	0.01288	0.03089					
72	0.01733	0.01506	0.03397					
73	0.01959	0.01754	0.03723					
74	0.02216	0.02007	0.04069					
75	0.02515	0.02270	0.04440					
76	0.02848	0.02567	0.04839					
77	0.03237	0.02957	0.05272					
78	0.03678	0.03430	0.05746					
79	0.04182	0.03953	0.06273					
80	0.04757	0.04499	0.06866					
81	0.05424	0.05095	0.07538					
82	0.06170	0.05783	0.08299					
83	0.06999	0.06501	0.09158					
84	0.07955	0.07289	0.10114					
85	0.09010	0.08191	0.11163					
86	0.10191	0.09325	0.12303					
87	0.11535	0.10731	0.13536					
88	0.13060	0.12368	0.14869					
89	0.14678	0.14038	0.16318					
90	0.16489	0.15856	0.17906					
91	0.18423	0.17775	0.19663					
92	0.20570	0.19975	0.21622					
93	0.22833	0.22447	0.23813					
94	0.25261	0.25227	0.26260					
95	0.27922	0.28315	0.28982					
96	0.30687	0.31476	0.31992					
97	0.33699	0.34660	0.35296					
98	0.36892	0.37971	0.38897					
99	0.40165	0.40978	0.42795					
100	0.43603	0.43779	0.45779					
101	0.47324	0.46424	0.48763					
102	0.51101	0.48643	0.51747					
103	0.55042	0.50531	0.54731					
104	0.59149	0.52083	0.57715					
105	0.62858	0.55349	0.60699					
106	0.66461	0.58521	0.63683					
107	0.66667	0.61404	0.66667					
108	0.66667	0.64218	0.66667					
109	0.66667	0.66667	0.66667					
110	0.66667	0.66667	0.66667					

ENLISTED RETIRED DEATH RATES

(Age Nearest Birthday)

Age	Non-Disability		Permanent Disability	Temporary Disability				
	Active	Reserve		Year of Retirement				
				One	Two	Three	Four	Five
16	0.00044	0.00044	0.00290	0.01100	0.00566	0.00407	0.00594	0.00516
17	0.00044	0.00044	0.00290	0.01025	0.00528	0.00380	0.00554	0.00481
18	0.00044	0.00044	0.00290	0.00955	0.00492	0.00354	0.00516	0.00448
19	0.00044	0.00044	0.00290	0.00890	0.00458	0.00330	0.00481	0.00418
20	0.00044	0.00044	0.00290	0.00829	0.00427	0.00307	0.00448	0.00389
21	0.00044	0.00044	0.00290	0.00775	0.00399	0.00287	0.00418	0.00363
22	0.00044	0.00044	0.00290	0.00727	0.00374	0.00269	0.00392	0.00341
23	0.00044	0.00044	0.00290	0.00685	0.00353	0.00254	0.00370	0.00321
24	0.00044	0.00044	0.00290	0.00650	0.00335	0.00241	0.00351	0.00305
25	0.00044	0.00044	0.00290	0.00622	0.00320	0.00230	0.00336	0.00292
26	0.00044	0.00044	0.00290	0.00601	0.00310	0.00223	0.00325	0.00282
27	0.00044	0.00044	0.00290	0.00588	0.00303	0.00218	0.00318	0.00276
28	0.00044	0.00044	0.00290	0.00582	0.00300	0.00216	0.00314	0.00273
29	0.00044	0.00044	0.00290	0.00585	0.00301	0.00216	0.00316	0.00274
30	0.00043	0.00043	0.00290	0.00595	0.00306	0.00220	0.00321	0.00279
31	0.00043	0.00043	0.00290	0.00614	0.00316	0.00227	0.00331	0.00288
32	0.00043	0.00043	0.00290	0.00642	0.00330	0.00238	0.00347	0.00301
33	0.00043	0.00043	0.00290	0.00679	0.00349	0.00251	0.00366	0.00318
34	0.00043	0.00043	0.00290	0.00725	0.00373	0.00268	0.00392	0.00340
35	0.00043	0.00043	0.00290	0.00781	0.00402	0.00289	0.00422	0.00367
36	0.00043	0.00043	0.00290	0.00848	0.00436	0.00314	0.00458	0.00398
37	0.00043	0.00043	0.00290	0.00925	0.00476	0.00342	0.00499	0.00434
38	0.00043	0.00043	0.00290	0.01013	0.00521	0.00375	0.00547	0.00475
39	0.00043	0.00043	0.00351	0.01112	0.00572	0.00412	0.00600	0.00522
40	0.00057	0.00057	0.00369	0.01223	0.00629	0.00453	0.00660	0.00574
41	0.00069	0.00069	0.00393	0.01346	0.00693	0.00498	0.00727	0.00631
42	0.00082	0.00082	0.00421	0.01481	0.00762	0.00548	0.00800	0.00695
43	0.00095	0.00095	0.00455	0.01629	0.00839	0.00603	0.00880	0.00764
44	0.00109	0.00109	0.00493	0.01791	0.00922	0.00663	0.00967	0.00840
45	0.00124	0.00124	0.00534	0.01966	0.01012	0.00728	0.01061	0.00922
46	0.00139	0.00139	0.00580	0.02155	0.01109	0.00798	0.01164	0.01011
47	0.00156	0.00156	0.00629	0.02359	0.01214	0.00873	0.01274	0.01106
48	0.00175	0.00175	0.00680	0.02577	0.01327	0.00954	0.01392	0.01209
49	0.00196	0.00196	0.00734	0.02811	0.01447	0.01041	0.01518	0.01319
50	0.00222	0.00222	0.00790	0.03061	0.01576	0.01133	0.01653	0.01436
51	0.00251	0.00251	0.00848	0.03328	0.01713	0.01232	0.01797	0.01561
52	0.00286	0.00285	0.00910	0.03610	0.01858	0.01337	0.01949	0.01694
53	0.00327	0.00326	0.00975	0.03911	0.02013	0.01448	0.02112	0.01834
54	0.00376	0.00375	0.01047	0.04229	0.02176	0.01566	0.02283	0.01983
55	0.00433	0.00432	0.01127	0.04565	0.02349	0.01690	0.02465	0.02141
56	0.00499	0.00498	0.01217	0.04919	0.02532	0.01821	0.02656	0.02307
57	0.00574	0.00573	0.01320	0.05293	0.02724	0.01960	0.02858	0.02483
58	0.00660	0.00658	0.01438	0.05686	0.02927	0.02105	0.03070	0.02667
59	0.00753	0.00666	0.01571	0.06100	0.03139	0.02258	0.03294	0.02861
60	0.00855	0.00672	0.01719	0.06534	0.03363	0.02419	0.03528	0.03065
61	0.00969	0.00706	0.01884	0.06989	0.03597	0.02588	0.03774	0.03278

ENLISTED RETIRED DEATH RATES (continued)

(Age Nearest Birthday)

Age	Non-Disability		Permanent Disability	Temporary Disability				
	Active	Reserve		Year of Retirement				
				One	Two	Three	Four	Five
62	0.01091	0.00759	0.02065	0.07476	0.03848	0.02768	0.04037	0.03507
63	0.01225	0.00837	0.02262	0.07997	0.04116	0.02961	0.04318	0.03751
64	0.01367	0.00934	0.02476	0.08554	0.04403	0.03167	0.04619	0.04012
65	0.01519	0.01051	0.02706	0.09150	0.04709	0.03388	0.04940	0.04292
66	0.01685	0.01191	0.02953					
67	0.01862	0.01347	0.03219					
68	0.02050	0.01517	0.03506					
69	0.02261	0.01706	0.03815					
70	0.02489	0.01908	0.04149					
71	0.02747	0.02135	0.04511					
72	0.03035	0.02387	0.04902					
73	0.03358	0.02673	0.05327					
74	0.03719	0.02997	0.05789					
75	0.04133	0.03372	0.06292					
76	0.04585	0.03790	0.06842					
77	0.05102	0.04273	0.07442					
78	0.05679	0.04818	0.08100					
79	0.06304	0.05433	0.08819					
80	0.07015	0.06120	0.09606					
81	0.07803	0.06889	0.10466					
82	0.08672	0.07739	0.11403					
83	0.09605	0.08655	0.12422					
84	0.10652	0.09681	0.13526					
85	0.11769	0.10775	0.14718					
86	0.12981	0.11961	0.16000					
87	0.14331	0.13278	0.17374					
88	0.15791	0.14705	0.18843					
89	0.17323	0.16204	0.20407					
90	0.19010	0.17860	0.22067					
91	0.20764	0.19593	0.23826					
92	0.22686	0.21499	0.25683					
93	0.24667	0.23479	0.27638					
94	0.26760	0.25587	0.29693					
95	0.29038	0.27895	0.31846					
96	0.31362	0.30271	0.34098					
97	0.33797	0.32782	0.36604					
98	0.36437	0.35515	0.39109					
99	0.39104	0.38302	0.41614					
100	0.41884	0.41224	0.44119					
101	0.44890	0.44392	0.46625					
102	0.47903	0.47114	0.49130					
103	0.50955	0.50117	0.51635					
104	0.54268	0.53375	0.54140					
105	0.57671	0.56722	0.56646					
106	0.60977	0.59973	0.59151					
107	0.63981	0.62928	0.61656					
108	0.66667	0.65812	0.64161					
109	0.66667	0.66667	0.66667					
110	0.66667	0.66667	0.66667					

ACTIVE DUTY OTHER LOSSES FROM NONDISABILITY

(Age Nearest Birthday)

Age	DoD		Treasury		Age	DoD		Treasury	
	Officer	Enlisted	Officer	Enlisted		Officer	Enlisted	Officer	Enlisted
16	0.0000	0.0000	0.0000	0.0000	56	0.0005	0.0047	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000	57	0.0010	0.0051	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000	58	0.0013	0.0059	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000	59	0.0012	0.0069	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	60	0.0010	0.0077	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000	61	0.0007	0.0077	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000	62	0.0007	0.0081	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	63	0.0011	0.0087	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000	64	0.0016	0.0088	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	65	0.0019	0.0088	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000	66	0.0019	0.0084	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000	67	0.0018	0.0082	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000	68	0.0017	0.0084	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000	69	0.0018	0.0080	0.0000	0.0000
30	0.0163	0.0700	0.0000	0.0000	70	0.0018	0.0072	0.0000	0.0000
31	0.0163	0.0700	0.0000	0.0000	71	0.0017	0.0068	0.0000	0.0000
32	0.0163	0.0700	0.0000	0.0000	72	0.0014	0.0069	0.0000	0.0000
33	0.0163	0.0700	0.0000	0.0000	73	0.0010	0.0071	0.0000	0.0000
34	0.0163	0.0700	0.0000	0.0000	74	0.0009	0.0073	0.0000	0.0000
35	0.0163	0.0700	0.0000	0.0000	75	0.0008	0.0073	0.0000	0.0000
36	0.0163	0.0700	0.0000	0.0000	76	0.0008	0.0067	0.0000	0.0000
37	0.0163	0.0700	0.0000	0.0000	77	0.0000	0.0058	0.0000	0.0000
38	0.0163	0.0700	0.0000	0.0000	78	0.0000	0.0051	0.0000	0.0000
39	0.0163	0.0404	0.0000	0.0000	79	0.0000	0.0049	0.0000	0.0000
40	0.0096	0.0234	0.0000	0.0000	80	0.0000	0.0048	0.0000	0.0000
41	0.0055	0.0154	0.0000	0.0000	81	0.0000	0.0045	0.0000	0.0000
42	0.0034	0.0111	0.0000	0.0000	82	0.0000	0.0041	0.0000	0.0000
43	0.0022	0.0084	0.0000	0.0000	83	0.0000	0.0034	0.0000	0.0000
44	0.0015	0.0063	0.0000	0.0000	84	0.0000	0.0028	0.0000	0.0000
45	0.0011	0.0054	0.0000	0.0000	85	0.0000	0.0024	0.0000	0.0000
46	0.0007	0.0049	0.0000	0.0000	86	0.0000	0.0022	0.0000	0.0000
47	0.0005	0.0044	0.0000	0.0000	87	0.0000	0.0022	0.0000	0.0000
48	0.0004	0.0041	0.0000	0.0000	88	0.0000	0.0025	0.0000	0.0000
49	0.0007	0.0039	0.0000	0.0000	89	0.0000	0.0029	0.0000	0.0000
50	0.0012	0.0037	0.0000	0.0000	90	0.0000	0.0033	0.0000	0.0000
51	0.0011	0.0038	0.0000	0.0000	91	0.0000	0.0034	0.0000	0.0000
52	0.0006	0.0041	0.0000	0.0000	92	0.0000	0.0028	0.0000	0.0000
53	0.0002	0.0040	0.0000	0.0000	93	0.0000	0.0017	0.0000	0.0000
54	0.0001	0.0039	0.0000	0.0000	94	0.0000	0.0010	0.0000	0.0000
55	0.0002	0.0043	0.0000	0.0000	95	0.0000	0.0006	0.0000	0.0000

*** The above DoD/Treasury distinction is needed for Public Law 108-136 calculations.

RESERVE DUTY OTHER LOSSES FROM NONDISABILITY

(Age Nearest Birthday)

Age	DoD		Treasury		Age	DoD		Treasury	
	Officer	Enlisted	Officer	Enlisted		Officer	Enlisted	Officer	Enlisted
16	0.0000	0.0000	0.0000	0.0000	56	0.0000	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000	57	0.0000	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000	58	0.0000	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000	59	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	60	0.0060	0.0277	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000	61	0.0042	0.0241	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000	62	0.0012	0.0108	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	63	0.0012	0.0064	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000	64	0.0021	0.0054	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	65	0.0024	0.0048	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000	66	0.0020	0.0036	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000	67	0.0022	0.0032	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000	68	0.0019	0.0029	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000	69	0.0016	0.0029	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	70	0.0013	0.0019	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000	71	0.0009	0.0017	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000	72	0.0009	0.0024	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000	73	0.0011	0.0026	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000	74	0.0008	0.0021	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	75	0.0008	0.0016	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000	76	0.0011	0.0019	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000	77	0.0010	0.0021	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000	78	0.0009	0.0023	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000	79	0.0013	0.0024	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000	80	0.0013	0.0023	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000	81	0.0009	0.0024	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000	82	0.0007	0.0033	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000	83	0.0014	0.0033	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000	84	0.0020	0.0030	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000	85	0.0026	0.0028	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000	86	0.0023	0.0029	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000	87	0.0016	0.0033	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000	88	0.0018	0.0037	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000	89	0.0020	0.0039	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000	90	0.0015	0.0042	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000	91	0.0010	0.0041	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000	92	0.0008	0.0041	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000	93	0.0006	0.0041	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000	94	0.0005	0.0040	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000	95	0.0004	0.0040	0.0000	0.0000

*** The above DoD/Treasury distinction is needed for Public Law 108-136 calculations.

OTHER LOSS AND NONTRANSFER LOSSES FROM TEMPORARY DISABILITY ***

(Age Nearest Birthday)

Age	Officers					Enlisted				
	Year of Retirement					Year of Retirement				
	One	Two	Three	Four	Five	One	Two	Three	Four	Five
16	0.08718	0.10547	0.07069	0.07101	0.36874	0.19125	0.17225	0.11551	0.12636	0.40196
17	0.08953	0.10832	0.07260	0.07292	0.37870	0.20190	0.18184	0.12195	0.13340	0.42436
18	0.09195	0.11125	0.07456	0.07490	0.38894	0.21315	0.19197	0.12874	0.14083	0.44799
19	0.09444	0.11426	0.07658	0.07692	0.39945	0.22502	0.20267	0.13591	0.14868	0.47295
20	0.09699	0.11734	0.07865	0.07900	0.41025	0.23756	0.21395	0.14348	0.15696	0.49930
21	0.09961	0.12052	0.08077	0.08113	0.42134	0.24800	0.22336	0.14979	0.16386	0.52125
22	0.10231	0.12377	0.08296	0.08333	0.43273	0.25649	0.23100	0.15492	0.16947	0.53908
23	0.10507	0.12712	0.08520	0.08558	0.44443	0.26313	0.23699	0.15893	0.17386	0.55305
24	0.10791	0.13056	0.08750	0.08789	0.45644	0.26806	0.24143	0.16190	0.17712	0.56341
25	0.11034	0.13349	0.08947	0.08987	0.46670	0.27138	0.24442	0.16391	0.17931	0.57039
26	0.11233	0.13591	0.09109	0.09150	0.47515	0.27321	0.24606	0.16502	0.18052	0.57423
27	0.11389	0.13779	0.09235	0.09277	0.48174	0.27366	0.24647	0.16529	0.18081	0.57517
28	0.11500	0.13914	0.09325	0.09367	0.48644	0.27283	0.24573	0.16479	0.18027	0.57344
29	0.11566	0.13993	0.09379	0.09421	0.48923	0.27084	0.24394	0.16359	0.17896	0.56926
30	0.11587	0.14018	0.09395	0.09437	0.49009	0.26780	0.24119	0.16175	0.17695	0.56286
31	0.11562	0.13988	0.09376	0.09417	0.48905	0.26380	0.23759	0.15934	0.17431	0.55446
32	0.11493	0.13905	0.09319	0.09361	0.48613	0.25896	0.23323	0.15641	0.17111	0.54429
33	0.11380	0.13768	0.09228	0.09269	0.48136	0.25338	0.22821	0.15304	0.16742	0.53256
34	0.11225	0.13581	0.09102	0.09143	0.47481	0.24716	0.22261	0.14928	0.16331	0.51949
35	0.11030	0.13344	0.08944	0.08984	0.46654	0.24041	0.21653	0.14521	0.15885	0.50530
36	0.10796	0.13061	0.08754	0.08793	0.45665	0.23324	0.21007	0.14087	0.15411	0.49022
37	0.10526	0.12735	0.08535	0.08574	0.44523	0.22574	0.20331	0.13635	0.14916	0.47447
38	0.10223	0.12369	0.08290	0.08327	0.43243	0.21803	0.19637	0.13169	0.14406	0.45825
39	0.09891	0.11967	0.08021	0.08056	0.41837	0.21020	0.18931	0.12696	0.13889	0.44180
40	0.09533	0.11533	0.07730	0.07765	0.40322	0.20236	0.18226	0.12222	0.13371	0.42532
41	0.09153	0.11074	0.07422	0.07455	0.38716	0.19462	0.17528	0.11755	0.12859	0.40905
42	0.08757	0.10594	0.07101	0.07132	0.37039	0.18708	0.16849	0.11300	0.12361	0.39321
43	0.08348	0.10100	0.06769	0.06800	0.35311	0.17985	0.16198	0.10863	0.11883	0.37801
44	0.07934	0.09599	0.06433	0.06462	0.33558	0.17303	0.15584	0.10451	0.11433	0.36368
45	0.07519	0.09097	0.06097	0.06124	0.31805	0.16673	0.15016	0.10070	0.11016	0.35043
46	0.07111	0.08603	0.05766	0.05792	0.30079	0.16105	0.14505	0.09728	0.10641	0.33850
47	0.06717	0.08126	0.05446	0.05471	0.28410	0.15611	0.14060	0.09429	0.10315	0.32811
48	0.06343	0.07674	0.05144	0.05167	0.26831	0.15200	0.13690	0.09181	0.10043	0.31948
49	0.05999	0.07258	0.04865	0.04886	0.25375	0.14884	0.13406	0.08990	0.09835	0.31284
50	0.05693	0.06887	0.04616	0.04637	0.24078	0.14674	0.13216	0.08863	0.09696	0.30841
51	0.05433	0.06573	0.04405	0.04425	0.22979	0.14579	0.13131	0.08806	0.09633	0.30643
52	0.05229	0.06327	0.04240	0.04259	0.22119	0.14612	0.13160	0.08825	0.09655	0.30711
53	0.05093	0.06161	0.04129	0.04148	0.21540	0.14782	0.13314	0.08928	0.09767	0.31069
54	0.05033	0.06089	0.04081	0.04099	0.21288	0.15101	0.13601	0.09121	0.09978	0.31740
55	0.05062	0.06124	0.04105	0.04123	0.21411	0.15580	0.14033	0.09410	0.10295	0.32747
56	0.05191	0.06280	0.04209	0.04228	0.21957	0.16230	0.14618	0.09803	0.10724	0.34113
57	0.05433	0.06573	0.04405	0.04425	0.22980	0.17062	0.15367	0.10305	0.11273	0.35860
58	0.05800	0.07017	0.04703	0.04724	0.24533	0.18086	0.16289	0.10924	0.11950	0.38013
59	0.06307	0.07630	0.05114	0.05137	0.26675	0.19314	0.17395	0.11666	0.12762	0.40594
60	0.06966	0.08428	0.05649	0.05674	0.29465	0.20757	0.18695	0.12537	0.13715	0.43628
61	0.07793	0.09429	0.06320	0.06348	0.32964	0.22308	0.20092	0.13474	0.14740	0.46888
62	0.08804	0.10651	0.07139	0.07171	0.37238	0.23976	0.21594	0.14481	0.15842	0.50392
63	0.09945	0.12032	0.08064	0.08100	0.42066	0.25767	0.23207	0.15563	0.17025	0.54158
64	0.11235	0.13592	0.09110	0.09151	0.47520	0.27693	0.24941	0.16726	0.18298	0.58205
65	0.12691	0.15355	0.10291	0.10337	0.53681	0.29762	0.26805	0.17976	0.19665	0.62554

*** The above Other/Nontransfer Loss rates are used to calculate both the DoD and Treasury NCPs (Public Law 108-136 distinction).

TRANSFER RATES FROM TEMPORARY DISABILITY TO PERMANENT DISABILITY

(Age Nearest Birthday)

Age	Officers				Enlisted			
	Year of Retirement				Year of Retirement			
	One	Two	Three	Four	One	Two	Three	Four
16	0.04007	0.08302	0.06475	0.10203	0.01107	0.02434	0.01957	0.02861
17	0.04172	0.08644	0.06742	0.10624	0.01279	0.02812	0.02260	0.03305
18	0.04345	0.09001	0.07020	0.11062	0.01477	0.03247	0.02610	0.03817
19	0.04524	0.09372	0.07310	0.11518	0.01706	0.03750	0.03015	0.04408
20	0.04711	0.09759	0.07612	0.11994	0.01970	0.04331	0.03482	0.05092
21	0.04905	0.10162	0.07926	0.12488	0.02275	0.05003	0.04022	0.05881
22	0.05107	0.10581	0.08253	0.13004	0.02582	0.05677	0.04564	0.06673
23	0.05318	0.11017	0.08593	0.13540	0.02890	0.06353	0.05107	0.07468
24	0.05537	0.11472	0.08948	0.14099	0.03197	0.07029	0.05651	0.08263
25	0.05766	0.11945	0.09317	0.14681	0.03504	0.07705	0.06194	0.09057
26	0.06004	0.12438	0.09701	0.15286	0.03811	0.08378	0.06735	0.09848
27	0.06242	0.12931	0.10086	0.15892	0.04116	0.09049	0.07274	0.10636
28	0.06480	0.13424	0.10470	0.16498	0.04419	0.09714	0.07809	0.11419
29	0.06718	0.13917	0.10855	0.17104	0.04719	0.10375	0.08340	0.12195
30	0.06955	0.14410	0.11239	0.17709	0.05016	0.11029	0.08866	0.12964
31	0.07193	0.14902	0.11623	0.18315	0.05310	0.11675	0.09385	0.13723
32	0.07431	0.15395	0.12008	0.18921	0.05600	0.12312	0.09897	0.14472
33	0.07669	0.15888	0.12392	0.19526	0.05885	0.12939	0.10402	0.15209
34	0.07907	0.16381	0.12777	0.20132	0.06165	0.13555	0.10897	0.15934
35	0.08145	0.16874	0.13161	0.20738	0.06440	0.14159	0.11382	0.16644
36	0.08383	0.17367	0.13546	0.21344	0.06709	0.14750	0.11857	0.17338
37	0.08621	0.17860	0.13930	0.21949	0.06971	0.15327	0.12321	0.18016
38	0.08859	0.18353	0.14314	0.22555	0.07226	0.15888	0.12772	0.18676
39	0.09097	0.18845	0.14699	0.23161	0.07474	0.16433	0.13210	0.19316
40	0.09335	0.19338	0.15083	0.23767	0.07714	0.16961	0.13635	0.19937
41	0.09572	0.19831	0.15468	0.24372	0.07946	0.17470	0.14044	0.20536
42	0.09810	0.20324	0.15852	0.24978	0.08169	0.17960	0.14438	0.21112
43	0.10048	0.20817	0.16237	0.25584	0.08383	0.18430	0.14816	0.21664
44	0.10286	0.21310	0.16621	0.26189	0.08587	0.18878	0.15176	0.22191
45	0.10524	0.21803	0.17005	0.26795	0.08780	0.19304	0.15519	0.22692
46	0.10762	0.22295	0.17390	0.27401	0.08964	0.19707	0.15842	0.23165
47	0.11000	0.22788	0.17774	0.28007	0.09136	0.20086	0.16147	0.23610
48	0.11238	0.23281	0.18159	0.28612	0.09296	0.20439	0.16431	0.24025
49	0.11476	0.23774	0.18543	0.29218	0.09445	0.20766	0.16694	0.24410
50	0.11714	0.24267	0.18927	0.29824	0.09582	0.21066	0.16935	0.24762
51	0.11951	0.24760	0.19312	0.30430	0.09705	0.21337	0.17153	0.25082
52	0.12189	0.25253	0.19696	0.31035	0.09815	0.21580	0.17348	0.25367
53	0.12427	0.25746	0.20081	0.31641	0.09912	0.21792	0.17519	0.25616
54	0.12665	0.26238	0.20465	0.32247	0.09995	0.21974	0.17665	0.25830
55	0.12903	0.26731	0.20850	0.32852	0.10063	0.22123	0.17785	0.26005
56	0.13141	0.27224	0.21234	0.33458	0.10116	0.22240	0.17878	0.26142
57	0.13379	0.27717	0.21618	0.34064	0.10153	0.22323	0.17945	0.26240
58	0.13617	0.28210	0.22003	0.34670	0.10175	0.22371	0.17984	0.26296
59	0.13855	0.28703	0.22387	0.35275	0.10181	0.22383	0.17993	0.26310
60	0.14093	0.29196	0.22772	0.35881	0.10170	0.22358	0.17974	0.26282
61	0.14331	0.29688	0.23156	0.36487	0.10141	0.22296	0.17924	0.26209
62	0.14568	0.30181	0.23541	0.37093	0.10113	0.22235	0.17874	0.26136
63	0.14806	0.30674	0.23925	0.37698	0.10085	0.22173	0.17825	0.26064
64	0.15048	0.31175	0.24316	0.38314	0.10057	0.22112	0.17775	0.25992
65	0.15294	0.31684	0.24713	0.38940	0.10029	0.22050	0.17726	0.25919

OTHER LOSSES FROM PERMANENT DISABILITY

(Age Nearest Birthday)

Age	DoD		Treasury		Age	DoD		Treasury	
	Officer	Enlisted	Officer	Enlisted		Officer	Enlisted	Officer	Enlisted
16	0.0703	0.4892	0.0294	0.4046	54	0.0110	0.0309	0.0070	0.0182
17	0.0703	0.4892	0.0294	0.4046	55	0.0106	0.0339	0.0066	0.0203
18	0.0703	0.4892	0.0294	0.4046	56	0.0101	0.0363	0.0062	0.0218
19	0.0703	0.4892	0.0294	0.4046	57	0.0098	0.0381	0.0058	0.0229
20	0.0703	0.4892	0.0294	0.4046	58	0.0095	0.0391	0.0055	0.0236
21	0.0703	0.4222	0.0294	0.4046	59	0.0092	0.0394	0.0052	0.0233
22	0.0703	0.3595	0.0294	0.4046	60	0.0090	0.0384	0.0050	0.0212
23	0.0703	0.3012	0.0294	0.3165	61	0.0089	0.0373	0.0048	0.0193
24	0.0703	0.2484	0.0294	0.2460	62	0.0087	0.0379	0.0046	0.0184
25	0.0703	0.2024	0.0294	0.1924	63	0.0086	0.0391	0.0044	0.0174
26	0.0703	0.1646	0.0294	0.1536	64	0.0085	0.0396	0.0043	0.0151
27	0.0703	0.1349	0.0294	0.1263	65	0.0085	0.0390	0.0041	0.0123
28	0.0703	0.1127	0.0294	0.1071	66	0.0084	0.0379	0.0041	0.0098
29	0.0703	0.0967	0.0294	0.0936	67	0.0083	0.0367	0.0040	0.0084
30	0.0703	0.0856	0.0294	0.0843	68	0.0082	0.0360	0.0039	0.0082
31	0.0703	0.0770	0.0294	0.0771	69	0.0080	0.0353	0.0039	0.0081
32	0.0317	0.0690	0.0294	0.0699	70	0.0079	0.0344	0.0039	0.0078
33	0.0301	0.0607	0.0294	0.0623	71	0.0077	0.0336	0.0039	0.0072
34	0.0286	0.0531	0.0294	0.0554	72	0.0075	0.0330	0.0040	0.0065
35	0.0272	0.0467	0.0294	0.0495	73	0.0072	0.0329	0.0040	0.0060
36	0.0258	0.0419	0.0294	0.0445	74	0.0070	0.0328	0.0035	0.0057
37	0.0246	0.0386	0.0294	0.0402	75	0.0067	0.0322	0.0030	0.0056
38	0.0234	0.0362	0.0294	0.0355	76	0.0065	0.0309	0.0025	0.0053
39	0.0223	0.0351	0.0294	0.0313	77	0.0062	0.0288	0.0020	0.0045
40	0.0212	0.0355	0.0165	0.0285	78	0.0060	0.0268	0.0015	0.0036
41	0.0203	0.0367	0.0156	0.0269	79	0.0058	0.0258	0.0022	0.0034
42	0.0193	0.0373	0.0147	0.0261	80	0.0056	0.0257	0.0029	0.0037
43	0.0185	0.0363	0.0139	0.0256	81	0.0054	0.0255	0.0035	0.0041
44	0.0176	0.0345	0.0131	0.0252	82	0.0053	0.0255	0.0038	0.0042
45	0.0169	0.0330	0.0123	0.0248	83	0.0053	0.0260	0.0038	0.0036
46	0.0161	0.0323	0.0116	0.0240	84	0.0052	0.0270	0.0035	0.0042
47	0.0154	0.0328	0.0109	0.0237	85	0.0052	0.0282	0.0033	0.0042
48	0.0147	0.0329	0.0102	0.0229	86	0.0053	0.0292	0.0034	0.0042
49	0.0140	0.0319	0.0096	0.0214	87	0.0053	0.0297	0.0038	0.0042
50	0.0133	0.0304	0.0090	0.0201	88	0.0054	0.0295	0.0044	0.0042
51	0.0127	0.0290	0.0084	0.0190	89	0.0056	0.0289	0.0053	0.0042
52	0.0121	0.0281	0.0079	0.0176	90	0.0057	0.0291	0.0068	0.0042
53	0.0116	0.0287	0.0074	0.0171					

*** The above DoD/Treasury distinction is needed for Public Law 108-136 calculations.

RETIREE DIVORCE RATES ***

(Age Nearest Birthday)

Age	Active		Reserve		Age	Active		Reserve	
	Officer	Enlisted	Officer	Enlisted		Officer	Enlisted	Officer	Enlisted
16	0.0727	0.1143	0.0000	0.0000	50	0.0062	0.0086	0.0000	0.0000
17	0.0727	0.1143	0.0000	0.0000	51	0.0050	0.0076	0.0000	0.0000
18	0.0727	0.1143	0.0000	0.0000	52	0.0046	0.0076	0.0000	0.0000
19	0.0502	0.0790	0.0000	0.0000	53	0.0039	0.0063	0.0000	0.0000
20	0.0502	0.0790	0.0000	0.0000	54	0.0026	0.0053	0.0000	0.0000
21	0.0502	0.0790	0.0000	0.0000	55	0.0021	0.0044	0.0000	0.0000
22	0.0502	0.0790	0.0000	0.0000	56	0.0017	0.0038	0.0000	0.0000
23	0.0502	0.0790	0.0000	0.0000	57	0.0014	0.0035	0.0000	0.0000
24	0.0502	0.0790	0.0000	0.0000	58	0.0011	0.0035	0.0000	0.0000
25	0.0502	0.0438	0.0000	0.0000	59	0.0009	0.0036	0.0000	0.0000
26	0.0502	0.0438	0.0000	0.0000	60	0.0009	0.0041	0.0109	0.0133
27	0.0502	0.0438	0.0000	0.0000	61	0.0005	0.0040	0.0079	0.0065
28	0.0502	0.0438	0.0000	0.0000	62	0.0002	0.0037	0.0269	0.0165
29	0.0502	0.0307	0.0000	0.0000	63	0.0000	0.0000	0.0062	0.0031
30	0.0502	0.0307	0.0000	0.0000	64	0.0000	0.0000	0.0000	0.0000
31	0.0502	0.0307	0.0000	0.0000	65	0.0000	0.0000	0.0000	0.0000
32	0.0435	0.0307	0.0000	0.0000	66	0.0000	0.0000	0.0000	0.0000
33	0.0435	0.0307	0.0000	0.0000	67	0.0000	0.0000	0.0000	0.0000
34	0.0434	0.0307	0.0000	0.0000	68	0.0000	0.0000	0.0000	0.0000
35	0.0434	0.0307	0.0000	0.0000	69	0.0000	0.0000	0.0000	0.0000
36	0.0408	0.0307	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000
37	0.0408	0.0307	0.0000	0.0000	71	0.0000	0.0000	0.0000	0.0000
38	0.0408	0.0528	0.0000	0.0000	72	0.0000	0.0000	0.0000	0.0000
39	0.0408	0.0381	0.0000	0.0000	73	0.0000	0.0000	0.0000	0.0000
40	0.0408	0.0381	0.0000	0.0000	74	0.0000	0.0000	0.0000	0.0000
41	0.0263	0.0306	0.0000	0.0000	75	0.0000	0.0000	0.0000	0.0000
42	0.0235	0.0300	0.0000	0.0000	76	0.0000	0.0000	0.0000	0.0000
43	0.0208	0.0241	0.0000	0.0000	77	0.0000	0.0000	0.0000	0.0000
44	0.0183	0.0210	0.0000	0.0000	78	0.0000	0.0000	0.0000	0.0000
45	0.0159	0.0182	0.0000	0.0000	79	0.0000	0.0000	0.0000	0.0000
46	0.0138	0.0158	0.0000	0.0000	80	0.0000	0.0000	0.0000	0.0000
47	0.0118	0.0131	0.0000	0.0000	81	0.0000	0.0000	0.0000	0.0000
48	0.0092	0.0113	0.0000	0.0000	82	0.0000	0.0000	0.0000	0.0000
49	0.0076	0.0097	0.0000	0.0000					

*** Due to Section 647 of NDAA 2008 (P.L. 110-181) the reserve rates shown above apply in the early years of the projection. See Item 11 in the Reserve section in Appendix F for a description of the parameter used to model the phase-in to an average age 58 reserve retirement. As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

SURVIVING SPOUSE REMARRIAGE RATES

(Age Nearest Birthday)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
16	0.0634	38	0.0248
17	0.0634	39	0.0205
18	0.0634	40	0.0175
19	0.0634	41	0.0161
20	0.0634	42	0.0157
21	0.0634	43	0.0153
22	0.0634	44	0.0148
23	0.0634	45	0.0139
24	0.0634	46	0.0128
25	0.0634	47	0.0117
26	0.0634	48	0.0103
27	0.0598	49	0.0089
28	0.0573	50	0.0077
29	0.0558	51	0.0067
30	0.0548	52	0.0058
31	0.0538	53	0.0048
32	0.0523	54	0.0034
33	0.0500	55	0.0019
34	0.0465	56	0.0000
35	0.0418	57	0.0000
36	0.0362	58	0.0000
37	0.0303	59	0.0000

SURVIVING CHILD TERMINATION RATES

(Age Nearest Birthday)

<u>Age</u>	<u>Rate</u>
0	0.005
1	0.000
2	0.000
3	0.000
4	0.000
5	0.000
6	0.000
7	0.000
8	0.000
9	0.000
10	0.000
11	0.000
12	0.000
13	0.000
14	0.000
15	0.000
16	0.000
17	0.224
18	0.306
19	0.227
20	0.185
21	0.384
22	0.734
23	0.068

SURVIVOR DEATH RATES

(Age Nearest Birthday)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
0	0.00476	55	0.00497
1	0.00106	56	0.00590
2	0.00069	57	0.00682
3	0.00052	58	0.00767
4	0.00039	59	0.00796
5	0.00035	60	0.00770
6	0.00033	61	0.00771
7	0.00031	62	0.00878
8	0.00027	63	0.01070
9	0.00026	64	0.01218
10	0.00026	65	0.01260
11	0.00028	66	0.01312
12	0.00030	67	0.01420
13	0.00033	68	0.01570
14	0.00039	69	0.01739
15	0.00045	70	0.01872
16	0.00047	71	0.02039
17	0.00051	72	0.02245
18	0.00053	73	0.02509
19	0.00054	74	0.02764
20	0.00054	75	0.02987
21	0.00053	76	0.03139
22	0.00054	77	0.03346
23	0.00055	78	0.03687
24	0.00056	79	0.04117
25	0.00057	80	0.04519
26	0.00060	81	0.04880
27	0.00061	82	0.05291
28	0.00063	83	0.05918
29	0.00067	84	0.06504
30	0.00073	85	0.07224
31	0.00081	86	0.08254
32	0.00086	87	0.09428
33	0.00090	88	0.10461
34	0.00094	89	0.11623
35	0.00098	90	0.12895
36	0.00104	91	0.14306
37	0.00110	92	0.15849
38	0.00118	93	0.17626
39	0.00126	94	0.19346
40	0.00137	95	0.21006
41	0.00148	96	0.22595
42	0.00159	97	0.24366
43	0.00169	98	0.25988
44	0.00178	99	0.27560
45	0.00184	100	0.29118
46	0.00192	101	0.30829
47	0.00204	102	0.32281
48	0.00221	103	0.33614
49	0.00240	104	0.34800
50	0.00266	105	0.35860
51	0.00297	106	0.36815
52	0.00340	107	0.38599
53	0.00387	108	0.40372
54	0.00437	109	0.42198

SURVIVOR OTHER LOSS RATES

(Age Nearest Birthday)

Age	Rate	Age	Rate
0	0.00000	55	0.01061
1	0.00000	56	0.01061
2	0.00000	57	0.00962
3	0.00000	58	0.00522
4	0.00000	59	0.00709
5	0.00000	60	0.01195
6	0.00000	61	0.00927
7	0.00000	62	0.00681
8	0.00000	63	0.00981
9	0.00000	64	0.00546
10	0.00000	65	0.00699
11	0.00000	66	0.00692
12	0.00000	67	0.00651
13	0.00000	68	0.00668
14	0.00000	69	0.00718
15	0.00000	70	0.00564
16	0.00000	71	0.00570
17	0.00000	72	0.00468
18	0.00000	73	0.00538
19	0.00000	74	0.00436
20	0.00000	75	0.00384
21	0.00000	76	0.00512
22	0.00000	77	0.00439
23	0.00000	78	0.00439
24	0.00000	79	0.00439
25	0.00000	80	0.00439
26	0.00000	81	0.00439
27	0.01811	82	0.00439
28	0.01811	83	0.00407
29	0.01811	84	0.00407
30	0.01811	85	0.00407
31	0.01811	86	0.00407
32	0.01811	87	0.00407
33	0.01811	88	0.00407
34	0.01811	89	0.00619
35	0.01811	90	0.00619
36	0.01811	91	0.00619
37	0.01811	92	0.00619
38	0.01811	93	0.00619
39	0.01749	94	0.00619
40	0.01749	95	0.00619
41	0.01749	96	0.00000
42	0.01749	97	0.00000
43	0.01749	98	0.00000
44	0.01642	99	0.00000
45	0.01642	100	0.00000
46	0.01211	101	0.00000
47	0.01211	102	0.00000
48	0.01211	103	0.00000
49	0.01211	104	0.00000
50	0.01211	105	0.00000
51	0.01211	106	0.00000
52	0.01211	107	0.00000
53	0.01061	108	0.00000
54	0.01061	109	0.00000

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APPENDIX J

MORTALITY IMPROVEMENT FACTORS

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MORTALITY IMPROVEMENT FACTORS DESCRIPTION

Mortality rates in the valuation for active duty members, nondisabled retirees (from Active and Reserve Duty), and survivors are decreased (or “improved”) over time in order to reflect the long-term trend toward such declines. No mortality improvement is assumed for disabled retirees because their mortality patterns are too easily affected by economic variables, periods of war, and by the policies of administering the disability retirement program (i.e., periods of relative laxity or stringency in determining an individual’s degree of disability or recovery from disability).

Mortality improvement factors were formed using Scale AA, a trend created by the Society of Actuaries in 1995 to project the 1994 Uninsured Pensioner Mortality Table (UP-94). It is based on based on Civil Service and Social Security 1977-1993 experience.

To construct military mortality improvement factors, Scale AA was adjusted to reflect the gender mix of the military. Based on a study of nondisabled retiree mortality improvement from 1975-2007, the assumed improvement for officers is 30% higher than for enlisted. No officer vs. enlisted differential was made for factors used to improve either the active duty death rates or the survivor death rates. The factors are not year-specific; therefore, the same set is used year after year.

Even though the mortality improvement factors are based on Social Security and Civil Service data, they should apply reasonably well to the Military Retirement System. While the average military person may be somewhat healthier than the average person in these populations, the mortality improvement factors are in the form of percentages. If the mortality for relatively healthy military lives is already small, then the improvement in terms of fewer deaths is slight, even though the percentage improvement is the same as for relatively less healthy lives.

ACTIVE DUTY MORTALITY FACTORS

(Age Nearest Birthday)

<u>Age</u>	<u>Officer</u>	<u>Enlisted</u>
16	0.982	0.982
17	0.982	0.982
18	0.982	0.982
19	0.982	0.982
20	0.981	0.981
21	0.982	0.982
22	0.983	0.983
23	0.985	0.985
24	0.987	0.987
25	0.989	0.989
26	0.993	0.993
27	0.994	0.994
28	0.994	0.994
29	0.994	0.994
30	0.994	0.994
31	0.995	0.995
32	0.995	0.995
33	0.994	0.994
34	0.994	0.994
35	0.994	0.994
36	0.994	0.994
37	0.994	0.994
38	0.993	0.993
39	0.992	0.992
40	0.991	0.991
41	0.990	0.990
42	0.989	0.989
43	0.988	0.988
44	0.988	0.988
45	0.987	0.987
46	0.986	0.986
47	0.985	0.985
48	0.984	0.984
49	0.983	0.983
50	0.982	0.982
51	0.981	0.981
52	0.981	0.981
53	0.981	0.981
54	0.982	0.981
55	0.983	0.983
56	0.984	0.984
57	0.985	0.985
58	0.986	0.986
59	0.986	0.986
60	0.986	0.986

NONDISABLED RETIRED MORTALITY FACTORS

(Age Nearest Birthday)

Age	Active Duty		Reserve Duty		Age	Active Duty		Reserve Duty	
	Officer	Enlisted	Officer	Enlisted		Officer	Enlisted	Officer	Enlisted
16	1.000	1.000	1.000	1.000	64	0.983	0.987	0.982	0.986
17	1.000	1.000	1.000	1.000	65	0.983	0.987	0.982	0.986
18	1.000	1.000	1.000	1.000	66	0.984	0.988	0.984	0.987
19	1.000	1.000	1.000	1.000	67	0.984	0.988	0.984	0.987
20	1.000	1.000	1.000	1.000	68	0.983	0.987	0.982	0.986
21	1.000	1.000	1.000	1.000	69	0.983	0.987	0.982	0.986
22	1.000	1.000	1.000	1.000	70	0.982	0.986	0.981	0.985
23	1.000	1.000	1.000	1.000	71	0.982	0.986	0.981	0.985
24	1.000	1.000	1.000	1.000	72	0.982	0.986	0.981	0.985
25	1.000	1.000	1.000	1.000	73	0.982	0.986	0.981	0.985
26	1.000	1.000	1.000	1.000	74	0.982	0.986	0.981	0.985
27	1.000	1.000	1.000	1.000	75	0.983	0.987	0.982	0.986
28	1.000	1.000	1.000	1.000	76	0.983	0.987	0.982	0.986
29	1.000	1.000	1.000	1.000	77	0.984	0.988	0.984	0.987
30	0.993	0.994	0.993	0.995	78	0.985	0.989	0.985	0.988
31	0.993	0.995	0.993	0.995	79	0.986	0.989	0.986	0.989
32	0.993	0.995	0.993	0.995	80	0.987	0.990	0.987	0.990
33	0.993	0.995	0.993	0.995	81	0.989	0.991	0.988	0.991
34	0.993	0.994	0.993	0.995	82	0.990	0.992	0.990	0.992
35	0.993	0.994	0.993	0.995	83	0.990	0.992	0.990	0.992
36	0.992	0.994	0.993	0.995	84	0.991	0.993	0.991	0.993
37	0.992	0.994	0.993	0.995	85	0.991	0.993	0.991	0.993
38	0.991	0.993	0.992	0.994	86	0.991	0.993	0.991	0.993
39	0.990	0.992	0.990	0.993	87	0.992	0.994	0.992	0.994
40	0.989	0.991	0.989	0.992	88	0.994	0.995	0.994	0.995
41	0.987	0.990	0.988	0.991	89	0.994	0.995	0.994	0.995
42	0.986	0.989	0.987	0.990	90	0.995	0.996	0.995	0.996
43	0.985	0.989	0.985	0.989	91	0.995	0.996	0.995	0.996
44	0.984	0.988	0.984	0.988	92	0.996	0.997	0.996	0.997
45	0.983	0.987	0.983	0.987	93	0.996	0.997	0.996	0.997
46	0.981	0.986	0.982	0.986	94	0.996	0.997	0.996	0.997
47	0.980	0.985	0.980	0.985	95	0.997	0.998	0.997	0.998
48	0.979	0.984	0.979	0.984	96	0.997	0.998	0.997	0.998
49	0.978	0.983	0.978	0.983	97	0.998	0.998	0.997	0.998
50	0.977	0.982	0.977	0.982	98	0.999	0.999	0.999	0.999
51	0.976	0.981	0.976	0.981	99	0.999	0.999	0.999	0.999
52	0.975	0.981	0.974	0.980	100	0.999	0.999	0.999	0.999
53	0.975	0.981	0.975	0.980	101	1.000	1.000	1.000	1.000
54	0.975	0.981	0.975	0.980	102	1.000	1.000	1.000	1.000
55	0.977	0.982	0.976	0.981	103	1.000	1.000	1.000	1.000
56	0.978	0.983	0.977	0.982	104	1.000	1.000	1.000	1.000
57	0.980	0.984	0.979	0.983	105	1.000	1.000	1.000	1.000
58	0.981	0.985	0.980	0.984	106	1.000	1.000	1.000	1.000
59	0.981	0.985	0.980	0.984	107	1.000	1.000	1.000	1.000
60	0.981	0.985	0.980	0.984	108	1.000	1.000	1.000	1.000
61	0.982	0.986	0.981	0.985	109	1.000	1.000	1.000	1.000
62	0.982	0.986	0.981	0.985	110	1.000	1.000	1.000	1.000
63	0.983	0.987	0.982	0.986					

SURVIVOR MORTALITY FACTORS

(Age Nearest Birthday)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
16	0.985	64	0.995
17	0.986	65	0.995
18	0.986	66	0.995
19	0.985	67	0.995
20	0.984	68	0.995
21	0.983	69	0.995
22	0.983	70	0.995
23	0.984	71	0.994
24	0.985	72	0.994
25	0.986	73	0.993
26	0.988	74	0.993
27	0.988	75	0.992
28	0.988	76	0.992
29	0.988	77	0.993
30	0.990	78	0.993
31	0.992	79	0.993
32	0.992	80	0.993
33	0.991	81	0.993
34	0.990	82	0.993
35	0.989	83	0.993
36	0.988	84	0.993
37	0.987	85	0.994
38	0.986	86	0.995
39	0.985	87	0.996
40	0.985	88	0.996
41	0.985	89	0.997
42	0.985	90	0.997
43	0.985	91	0.997
44	0.985	92	0.997
45	0.984	93	0.998
46	0.983	94	0.998
47	0.982	95	0.998
48	0.982	96	0.998
49	0.982	97	0.999
50	0.983	98	0.999
51	0.984	99	0.999
52	0.986	100	0.999
53	0.988	101	1.000
54	0.990	102	1.000
55	0.992	103	1.000
56	0.994	104	1.000
57	0.995	105	1.000
58	0.995	106	1.000
59	0.995	107	1.000
60	0.995	108	1.000
61	0.995	109	1.000
62	0.995	110	1.000
63	0.995		

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APPENDIX K

100 YEAR PROJECTIONS

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PROJECTION NOTES

The following are relevant notes to the projections depicted in this appendix:

- Refer to the “NOTE REGARDING OPEN GROUP PROJECTIONS” in the Table 9 Footnotes for important caveats related to this appendix.
- Columns in this appendix may not add due to rounding.
- In some cases the number of personnel may show zero with the corresponding pay showing a non-zero value. This is a result of rounding the display to the nearest person.
- Future mortality improvement is assumed throughout this appendix (with the exception of disabled retirees).
- Although Combat Related Special Compensation (CRSC) is not technically considered retired pay, it is paid from the MRF; hence these projections include CRSC.
- The FY11 National Defense Authorization Act (P.L. 111-383) allowed for retired pay to be paid on the previous business day if the first of the month falls on a weekend or holiday. This is not accounted for in the projected Fund Disbursements/Outlays.
- The following economic assumptions are applied to the projection of pay only. This table is partially replicated from the Table 9 footnotes in the main text.

ANNUAL ECONOMIC ASSUMPTIONS USED IN PROJECTIONS OF BASIC PAY AND RETIRED OUTLAY

<u>Fiscal Year</u>	<u>Full COLA</u>	<u>Basic Pay</u>
2011	0.0%	1.4%
2012	0.8	2.3
2013	1.9	3.4
2014	1.9	3.4
2015	2.0	3.4
2016	2.1	3.4
2017	2.1	3.4
2018	2.1	3.4
2019	2.1	3.4
2020	3.0	3.4
2021+	3.0	3.75

ACTIVE DUTY PERSONNEL AND PAY BY FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal Year	People at Year End (September 30th)			Dollars During Fiscal Year		
	Officers	Enlisted	Total	Officers	Enlisted	Total
2010	250,296	1,242,937	1,493,233			
2011	251,289	1,247,136	1,498,425	\$17,561,271	\$38,534,074	\$56,095,345
2012	253,722	1,234,340	1,488,062	\$17,912,428	\$39,203,098	\$57,115,526
2013	251,389	1,218,840	1,470,229	\$18,470,403	\$40,166,208	\$58,636,611
2014	251,957	1,215,837	1,467,794	\$19,013,177	\$41,250,775	\$60,263,952
2015	249,149	1,194,221	1,443,370	\$19,589,240	\$42,371,361	\$61,960,601
2016	246,340	1,174,828	1,421,168	\$20,082,522	\$43,293,047	\$63,375,569
2017	246,340	1,174,828	1,421,168	\$20,621,617	\$44,410,351	\$65,031,969
2018	246,340	1,174,828	1,421,168	\$21,230,125	\$45,790,258	\$67,020,383
2019	246,340	1,174,828	1,421,168	\$21,862,681	\$47,228,787	\$69,091,468
2020	246,340	1,174,828	1,421,168	\$22,534,541	\$48,744,636	\$71,279,177
2021	246,340	1,174,828	1,421,168	\$23,329,735	\$50,477,130	\$73,806,865
2022	246,340	1,174,828	1,421,168	\$24,160,262	\$52,251,818	\$76,412,080
2023	246,340	1,174,828	1,421,168	\$25,019,839	\$54,065,085	\$79,084,923
2024	246,340	1,174,828	1,421,168	\$25,909,676	\$55,897,688	\$81,807,365
2025	246,340	1,174,828	1,421,168	\$26,845,559	\$57,789,834	\$84,635,393
2026	246,340	1,174,828	1,421,168	\$27,829,172	\$59,758,619	\$87,587,792
2027	246,340	1,174,828	1,421,168	\$28,857,034	\$61,778,128	\$90,635,162
2028	246,340	1,174,828	1,421,168	\$29,937,218	\$63,920,419	\$93,857,636
2029	246,340	1,174,828	1,421,168	\$31,078,075	\$66,203,321	\$97,281,396
2030	246,340	1,174,828	1,421,168	\$32,268,391	\$68,621,943	\$100,890,334
2031	246,340	1,174,828	1,421,168	\$33,486,923	\$71,110,220	\$104,597,143
2032	246,340	1,174,828	1,421,168	\$34,718,585	\$73,677,597	\$108,396,182
2033	246,340	1,174,828	1,421,168	\$36,011,066	\$76,394,260	\$112,405,326
2034	246,340	1,174,828	1,421,168	\$37,388,126	\$79,237,571	\$116,625,697
2035	246,340	1,174,828	1,421,168	\$38,829,848	\$82,210,937	\$121,040,786
2036	246,340	1,174,828	1,421,168	\$40,356,596	\$85,366,320	\$125,722,915
2037	246,340	1,174,828	1,421,168	\$41,937,313	\$88,650,779	\$130,588,092
2038	246,340	1,174,828	1,421,168	\$43,541,960	\$92,029,709	\$135,571,670
2039	246,340	1,174,828	1,421,168	\$45,195,124	\$95,538,539	\$140,733,663
2040	246,340	1,174,828	1,421,168	\$46,914,150	\$99,193,281	\$146,107,432
2041	246,340	1,174,828	1,421,168	\$48,695,637	\$102,973,489	\$151,669,126
2042	246,340	1,174,828	1,421,168	\$50,532,822	\$106,880,301	\$157,413,123
2043	246,340	1,174,828	1,421,168	\$52,445,387	\$110,934,924	\$163,380,311
2044	246,340	1,174,828	1,421,168	\$54,432,369	\$115,129,418	\$169,561,787
2045	246,340	1,174,828	1,421,168	\$56,483,565	\$119,469,801	\$175,953,365
2046	246,340	1,174,828	1,421,168	\$58,610,027	\$123,969,294	\$182,579,321
2047	246,340	1,174,828	1,421,168	\$60,802,106	\$128,620,272	\$189,422,378
2048	246,340	1,174,828	1,421,168	\$63,068,733	\$133,430,511	\$196,499,245
2049	246,340	1,174,828	1,421,168	\$65,424,026	\$138,419,537	\$203,843,563
2050	246,340	1,174,828	1,421,168	\$67,869,513	\$143,597,640	\$211,467,152
2051	246,340	1,174,828	1,421,168	\$70,405,331	\$148,962,929	\$219,368,260
2052	246,340	1,174,828	1,421,168	\$73,017,932	\$154,520,747	\$227,538,679
2053	246,340	1,174,828	1,421,168	\$75,720,881	\$160,287,989	\$236,008,870
2054	246,340	1,174,828	1,421,168	\$78,533,282	\$166,273,004	\$244,806,286
2055	246,340	1,174,828	1,421,168	\$81,458,740	\$172,483,605	\$253,942,345
2056	246,340	1,174,828	1,421,168	\$84,506,130	\$178,936,031	\$263,442,161
2057	246,340	1,174,828	1,421,168	\$87,674,263	\$185,636,679	\$273,310,942
2058	246,340	1,174,828	1,421,168	\$90,957,999	\$192,589,433	\$283,547,432
2059	246,340	1,174,828	1,421,168	\$94,363,901	\$199,806,785	\$294,170,686
2060	246,340	1,174,828	1,421,168	\$97,902,470	\$207,301,943	\$305,204,412

ACTIVE DUTY PERSONNEL AND PAY BY FISCAL YEAR (continued)

(Dollar Amounts in Thousands)

Fiscal Year	People at Year End (September 30th)			Dollars During Fiscal Year		
	Officers	Enlisted	Total	Officers	Enlisted	Total
2061	246,340	1,174,828	1,421,168	\$101,577,502	\$215,081,224	\$316,658,727
2062	246,340	1,174,828	1,421,168	\$105,390,260	\$223,153,168	\$328,543,428
2063	246,340	1,174,828	1,421,168	\$109,351,620	\$231,531,395	\$340,883,016
2064	246,340	1,174,828	1,421,168	\$113,468,263	\$240,225,844	\$353,694,107
2065	246,340	1,174,828	1,421,168	\$117,740,561	\$249,246,938	\$366,987,498
2066	246,340	1,174,828	1,421,168	\$122,175,046	\$258,607,759	\$380,782,805
2067	246,340	1,174,828	1,421,168	\$126,773,119	\$268,318,912	\$395,092,030
2068	246,340	1,174,828	1,421,168	\$131,539,524	\$278,391,869	\$409,931,393
2069	246,340	1,174,828	1,421,168	\$136,484,155	\$288,841,561	\$425,325,716
2070	246,340	1,174,828	1,421,168	\$141,614,691	\$299,682,926	\$441,297,617
2071	246,340	1,174,828	1,421,168	\$146,936,880	\$310,928,915	\$457,865,794
2072	246,340	1,174,828	1,421,168	\$152,451,463	\$322,593,752	\$475,045,215
2073	246,340	1,174,828	1,421,168	\$158,166,220	\$334,694,348	\$492,860,568
2074	246,340	1,174,828	1,421,168	\$164,093,046	\$347,247,267	\$511,340,313
2075	246,340	1,174,828	1,421,168	\$170,240,729	\$360,269,236	\$530,509,965
2076	246,340	1,174,828	1,421,168	\$176,619,339	\$373,778,970	\$550,398,308
2077	246,340	1,174,828	1,421,168	\$183,236,670	\$387,795,027	\$571,031,698
2078	246,340	1,174,828	1,421,168	\$190,100,102	\$402,335,940	\$592,436,041
2079	246,340	1,174,828	1,421,168	\$197,219,209	\$417,421,923	\$614,641,132
2080	246,340	1,174,828	1,421,168	\$204,605,230	\$433,074,352	\$637,679,582
2081	246,340	1,174,828	1,421,168	\$212,268,960	\$449,314,232	\$661,583,192
2082	246,340	1,174,828	1,421,168	\$220,219,294	\$466,163,337	\$686,382,631
2083	246,340	1,174,828	1,421,168	\$228,469,186	\$483,645,105	\$712,114,291
2084	246,340	1,174,828	1,421,168	\$237,032,150	\$501,783,404	\$738,815,555
2085	246,340	1,174,828	1,421,168	\$245,919,115	\$520,602,678	\$766,521,793
2086	246,340	1,174,828	1,421,168	\$255,142,328	\$540,128,656	\$795,270,984
2087	246,340	1,174,828	1,421,168	\$264,713,041	\$560,387,702	\$825,100,743
2088	246,340	1,174,828	1,421,168	\$274,643,377	\$581,406,943	\$856,050,320
2089	246,340	1,174,828	1,421,168	\$284,947,675	\$603,214,943	\$888,162,619
2090	246,340	1,174,828	1,421,168	\$295,640,682	\$625,841,425	\$921,482,107
2091	246,340	1,174,828	1,421,168	\$306,736,700	\$649,316,764	\$956,053,464
2092	246,340	1,174,828	1,421,168	\$318,248,576	\$673,672,457	\$991,921,033
2093	246,340	1,174,828	1,421,168	\$330,191,095	\$698,941,552	\$1,029,132,648
2094	246,340	1,174,828	1,421,168	\$342,581,039	\$725,158,260	\$1,067,739,299
2095	246,340	1,174,828	1,421,168	\$355,435,108	\$752,357,938	\$1,107,793,046
2096	246,340	1,174,828	1,421,168	\$368,770,852	\$780,577,478	\$1,149,348,329
2097	246,340	1,174,828	1,421,168	\$382,605,825	\$809,855,130	\$1,192,460,955
2098	246,340	1,174,828	1,421,168	\$396,958,145	\$840,230,464	\$1,237,188,609
2099	246,340	1,174,828	1,421,168	\$411,847,067	\$871,744,657	\$1,283,591,724
2100	246,340	1,174,828	1,421,168	\$427,292,899	\$904,440,562	\$1,331,733,462
2101	246,340	1,174,828	1,421,168	\$443,316,755	\$938,362,488	\$1,381,679,243
2102	246,340	1,174,828	1,421,168	\$459,939,634	\$973,556,370	\$1,433,496,004
2103	246,340	1,174,828	1,421,168	\$477,184,449	\$1,010,070,016	\$1,487,254,464
2104	246,340	1,174,828	1,421,168	\$495,075,680	\$1,047,953,014	\$1,543,028,695
2105	246,340	1,174,828	1,421,168	\$513,637,882	\$1,087,256,738	\$1,600,894,620
2106	246,340	1,174,828	1,421,168	\$532,896,499	\$1,128,034,538	\$1,660,931,038
2107	246,340	1,174,828	1,421,168	\$552,877,498	\$1,170,341,750	\$1,723,219,249
2108	246,340	1,174,828	1,421,168	\$573,607,882	\$1,214,235,724	\$1,787,843,606
2109	246,340	1,174,828	1,421,168	\$595,116,179	\$1,259,776,000	\$1,854,892,180

NONRETIRED RESERVISTS PERSONNEL AND PAY BY FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal Year	People at Year End (September 30th)			Dollars During Fiscal Year		
	Officers	Enlisted	Total	Officers	Enlisted	Total
2010	109,473	663,813	773,286			
2011	112,875	654,479	767,354	\$1,849,039	\$3,928,854	\$5,777,893
2012	117,149	651,537	768,686	\$1,945,037	\$3,999,012	\$5,944,048
2013	118,315	652,202	770,517	\$2,053,596	\$4,135,503	\$6,189,099
2014	119,034	648,622	767,656	\$2,134,202	\$4,276,320	\$6,410,522
2015	119,951	647,780	767,731	\$2,217,867	\$4,419,013	\$6,636,880
2016	119,971	647,760	767,731	\$2,302,147	\$4,575,445	\$6,877,592
2017	119,971	647,760	767,731	\$2,381,855	\$4,738,524	\$7,120,379
2018	119,971	647,760	767,731	\$2,464,948	\$4,906,154	\$7,371,101
2019	119,971	647,760	767,731	\$2,551,208	\$5,078,536	\$7,629,744
2020	119,971	647,760	767,731	\$2,640,586	\$5,255,628	\$7,896,214
2021	119,971	647,760	767,731	\$2,742,622	\$5,456,187	\$8,198,809
2022	119,971	647,760	767,731	\$2,849,109	\$5,663,709	\$8,512,818
2023	119,971	647,760	767,731	\$2,960,403	\$5,878,887	\$8,839,290
2024	119,971	647,760	767,731	\$3,076,601	\$6,102,565	\$9,179,166
2025	119,971	647,760	767,731	\$3,197,921	\$6,335,213	\$9,533,134
2026	119,971	647,760	767,731	\$3,324,335	\$6,577,056	\$9,901,391
2027	119,971	647,760	767,731	\$3,455,726	\$6,828,247	\$10,283,973
2028	119,971	647,760	767,731	\$3,590,047	\$7,081,775	\$10,671,821
2029	119,971	647,760	767,731	\$3,728,320	\$7,341,637	\$11,069,956
2030	119,971	647,760	767,731	\$3,874,359	\$7,622,197	\$11,496,556
2031	119,971	647,760	767,731	\$4,025,275	\$7,914,062	\$11,939,337
2032	119,971	647,760	767,731	\$4,181,199	\$8,216,795	\$12,397,994
2033	119,971	647,760	767,731	\$4,342,174	\$8,529,877	\$12,872,051
2034	119,971	647,760	767,731	\$4,508,433	\$8,853,390	\$13,361,823
2035	119,971	647,760	767,731	\$4,680,333	\$9,187,691	\$13,868,024
2036	119,971	647,760	767,731	\$4,858,049	\$9,533,111	\$14,391,160
2037	119,971	647,760	767,731	\$5,041,979	\$9,890,185	\$14,932,165
2038	119,971	647,760	767,731	\$5,232,259	\$10,259,494	\$15,491,752
2039	119,971	647,760	767,731	\$5,429,278	\$10,641,749	\$16,071,028
2040	119,971	647,760	767,731	\$5,633,491	\$11,037,764	\$16,671,256
2041	119,971	647,760	767,731	\$5,844,977	\$11,448,404	\$17,293,382
2042	119,971	647,760	767,731	\$6,064,294	\$11,874,855	\$17,939,149
2043	119,971	647,760	767,731	\$6,292,180	\$12,318,147	\$18,610,327
2044	119,971	647,760	767,731	\$6,528,874	\$12,779,003	\$19,307,877
2045	119,971	647,760	767,731	\$6,774,451	\$13,257,804	\$20,032,255
2046	119,971	647,760	767,731	\$7,029,308	\$13,754,630	\$20,783,938
2047	119,971	647,760	767,731	\$7,293,695	\$14,270,125	\$21,563,820
2048	119,971	647,760	767,731	\$7,567,653	\$14,805,228	\$22,372,882
2049	119,971	647,760	767,731	\$7,851,763	\$15,360,452	\$23,212,216
2050	119,971	647,760	767,731	\$8,146,521	\$15,936,416	\$24,082,937
2051	119,971	647,760	767,731	\$8,452,216	\$16,534,071	\$24,986,287
2052	119,971	647,760	767,731	\$8,769,345	\$17,154,231	\$25,923,576
2053	119,971	647,760	767,731	\$9,098,342	\$17,797,717	\$26,896,059
2054	119,971	647,760	767,731	\$9,439,651	\$18,465,313	\$27,904,964
2055	119,971	647,760	767,731	\$9,793,735	\$19,157,935	\$28,951,671
2056	119,971	647,760	767,731	\$10,161,077	\$19,876,516	\$30,037,594
2057	119,971	647,760	767,731	\$10,542,175	\$20,622,026	\$31,164,201
2058	119,971	647,760	767,731	\$10,937,546	\$21,395,475	\$32,333,021
2059	119,971	647,760	767,731	\$11,347,728	\$22,197,911	\$33,545,639
2060	119,971	647,760	767,731	\$11,773,278	\$23,030,423	\$34,803,700

NONRETIRED RESERVISTS PERSONNEL AND PAY BY FISCAL YEAR (continued)

(Dollar Amounts in Thousands)

Fiscal Year	People at Year End (September 30th)			Dollars During Fiscal Year		
	Officers	Enlisted	Total	Officers	Enlisted	Total
2061	119,971	647,760	767,731	\$12,214,776	\$23,894,138	\$36,108,913
2062	119,971	647,760	767,731	\$12,672,821	\$24,790,228	\$37,463,049
2063	119,971	647,760	767,731	\$13,148,037	\$25,719,908	\$38,867,945
2064	119,971	647,760	767,731	\$13,641,070	\$26,684,438	\$40,325,509
2065	119,971	647,760	767,731	\$14,152,591	\$27,685,127	\$41,837,718
2066	119,971	647,760	767,731	\$14,683,293	\$28,723,330	\$43,406,623
2067	119,971	647,760	767,731	\$15,233,898	\$29,800,456	\$45,034,354
2068	119,971	647,760	767,731	\$15,805,154	\$30,917,964	\$46,723,118
2069	119,971	647,760	767,731	\$16,397,834	\$32,077,374	\$48,475,208
2070	119,971	647,760	767,731	\$17,012,743	\$33,280,261	\$50,293,004
2071	119,971	647,760	767,731	\$17,650,714	\$34,528,256	\$52,178,971
2072	119,971	647,760	767,731	\$18,312,612	\$35,823,052	\$54,135,664
2073	119,971	647,760	767,731	\$18,999,333	\$37,166,402	\$56,165,736
2074	119,971	647,760	767,731	\$19,711,809	\$38,560,129	\$58,271,937
2075	119,971	647,760	767,731	\$20,451,003	\$40,006,120	\$60,457,124
2076	119,971	647,760	767,731	\$21,217,919	\$41,506,338	\$62,724,256
2077	119,971	647,760	767,731	\$22,013,594	\$43,062,815	\$65,076,409
2078	119,971	647,760	767,731	\$22,839,107	\$44,677,661	\$67,516,768
2079	119,971	647,760	767,731	\$23,695,577	\$46,353,065	\$70,048,642
2080	119,971	647,760	767,731	\$24,584,164	\$48,091,299	\$72,675,463
2081	119,971	647,760	767,731	\$25,506,073	\$49,894,718	\$75,400,791
2082	119,971	647,760	767,731	\$26,462,553	\$51,765,766	\$78,228,320
2083	119,971	647,760	767,731	\$27,454,901	\$53,706,980	\$81,161,881
2084	119,971	647,760	767,731	\$28,484,461	\$55,720,991	\$84,205,452
2085	119,971	647,760	767,731	\$29,552,629	\$57,810,528	\$87,363,157
2086	119,971	647,760	767,731	\$30,660,853	\$59,978,423	\$90,639,276
2087	119,971	647,760	767,731	\$31,810,635	\$62,227,615	\$94,038,250
2088	119,971	647,760	767,731	\$33,003,534	\$64,561,152	\$97,564,686
2089	119,971	647,760	767,731	\$34,241,166	\$66,982,197	\$101,223,363
2090	119,971	647,760	767,731	\$35,525,209	\$69,494,031	\$105,019,240
2091	119,971	647,760	767,731	\$36,857,404	\$72,100,058	\$108,957,462
2092	119,971	647,760	767,731	\$38,239,556	\$74,803,812	\$113,043,368
2093	119,971	647,760	767,731	\$39,673,539	\$77,608,956	\$117,282,495
2094	119,971	647,760	767,731	\$41,161,296	\$80,519,293	\$121,680,589
2095	119,971	647,760	767,731	\$42,704,844	\$83,538,768	\$126,243,612
2096	119,971	647,760	767,731	\$44,306,276	\$86,671,472	\$130,977,748
2097	119,971	647,760	767,731	\$45,967,761	\$89,921,653	\$135,889,414
2098	119,971	647,760	767,731	\$47,691,552	\$93,293,716	\$140,985,267
2099	119,971	647,760	767,731	\$49,479,985	\$96,792,230	\$146,272,215
2100	119,971	647,760	767,731	\$51,335,484	\$100,421,939	\$151,757,423
2101	119,971	647,760	767,731	\$53,260,565	\$104,187,762	\$157,448,327
2102	119,971	647,760	767,731	\$55,257,836	\$108,094,803	\$163,352,639
2103	119,971	647,760	767,731	\$57,330,005	\$112,148,358	\$169,478,363
2104	119,971	647,760	767,731	\$59,479,880	\$116,353,922	\$175,833,802
2105	119,971	647,760	767,731	\$61,710,376	\$120,717,194	\$182,427,569
2106	119,971	647,760	767,731	\$64,024,515	\$125,244,088	\$189,268,603
2107	119,971	647,760	767,731	\$66,425,434	\$129,940,741	\$196,366,176
2108	119,971	647,760	767,731	\$68,916,388	\$134,813,519	\$203,729,907
2109	119,971	647,760	767,731	\$71,500,753	\$139,869,026	\$211,369,779

TOTAL NUMBER OF RETIREES ON SEPTEMBER 30 OF EACH FISCAL YEAR

Fiscal Year	Nondisabled (non-CSB/Redux)			Nondisabled (CSB/Redux)			Disabled			Grand Total
	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	
2010	506,748	1,297,511	1,804,259	633	19,647	20,280	18,117	74,687	92,804	1,917,343
2011	509,076	1,299,259	1,808,336	1,140	30,937	32,077	17,350	72,878	90,228	1,930,641
2012	510,796	1,300,203	1,810,999	1,618	40,832	42,450	16,645	71,255	87,899	1,941,349
2013	518,310	1,313,295	1,831,605	2,102	50,196	52,298	15,998	69,670	85,668	1,969,572
2014	519,738	1,310,595	1,830,333	2,570	58,478	61,048	15,406	68,021	83,427	1,974,808
2015	521,161	1,307,652	1,828,812	3,033	66,053	69,086	14,882	66,576	81,458	1,979,356
2016	522,487	1,305,354	1,827,841	3,488	73,177	76,666	14,410	65,220	79,630	1,984,136
2017	523,738	1,303,396	1,827,134	3,949	80,374	84,322	13,987	63,902	77,889	1,989,345
2018	524,927	1,302,307	1,827,234	4,384	86,993	91,377	13,609	62,642	76,250	1,994,861
2019	526,224	1,302,427	1,828,651	4,790	93,019	97,809	13,272	61,449	74,721	2,001,181
2020	527,621	1,303,971	1,831,592	5,137	98,299	103,437	12,971	60,329	73,300	2,008,328
2021	529,059	1,306,197	1,835,256	5,441	102,746	108,188	12,700	59,271	71,971	2,015,415
2022	530,620	1,308,905	1,839,525	5,728	106,584	112,312	12,455	58,267	70,723	2,022,559
2023	532,349	1,312,417	1,844,767	5,971	109,783	115,754	12,232	57,323	69,555	2,030,075
2024	533,640	1,316,282	1,849,922	6,176	112,240	118,416	12,026	56,434	68,460	2,036,798
2025	534,520	1,318,240	1,852,760	6,330	113,845	120,175	11,832	55,572	67,405	2,040,339
2026	535,175	1,321,317	1,856,492	6,447	114,768	121,215	11,650	54,753	66,404	2,044,111
2027	535,358	1,322,879	1,858,237	6,536	115,264	121,800	11,478	53,965	65,443	2,045,480
2028	540,966	1,336,859	1,877,824	6,604	115,442	122,046	11,312	53,194	64,507	2,064,377
2029	540,474	1,335,533	1,876,007	6,652	115,364	122,016	11,154	52,442	63,596	2,061,620
2030	539,452	1,332,414	1,871,866	6,682	115,075	121,757	11,003	51,714	62,717	2,056,340
2031	538,564	1,329,630	1,868,194	6,697	114,602	121,299	10,862	51,030	61,891	2,051,385
2032	537,806	1,325,841	1,863,647	6,700	113,976	120,675	10,731	50,378	61,109	2,045,432
2033	536,573	1,321,381	1,857,954	6,689	113,217	119,905	10,606	49,752	60,359	2,038,218
2034	535,527	1,317,422	1,852,949	6,668	112,331	118,999	10,489	49,168	59,657	2,031,605
2035	534,194	1,312,585	1,846,779	6,636	111,319	117,955	10,379	48,615	58,994	2,023,728
2036	532,756	1,307,426	1,840,182	6,598	110,195	116,792	10,275	48,089	58,364	2,015,338
2037	531,703	1,303,282	1,834,984	6,553	108,971	115,524	10,180	47,610	57,790	2,008,298
2038	530,868	1,299,583	1,830,451	6,502	107,647	114,149	10,097	47,176	57,273	2,001,873
2039	530,111	1,295,920	1,826,031	6,445	106,221	112,666	10,022	46,782	56,804	1,995,501
2040	529,423	1,292,472	1,821,895	6,381	104,688	111,069	9,955	46,427	56,382	1,989,346
2041	528,882	1,289,366	1,818,248	6,311	103,042	109,353	9,897	46,112	56,010	1,983,611
2042	528,441	1,286,241	1,814,682	6,233	101,276	107,509	9,847	45,833	55,680	1,977,871
2043	528,046	1,283,263	1,811,309	6,147	99,381	105,528	9,804	45,588	55,392	1,972,229
2044	527,874	1,280,587	1,808,461	6,052	97,347	103,400	9,767	45,377	55,144	1,967,005
2045	527,801	1,278,095	1,805,896	5,947	95,165	101,112	9,737	45,195	54,932	1,961,940
2046	527,897	1,276,056	1,803,952	5,831	92,823	98,655	9,712	45,041	54,752	1,957,359
2047	528,197	1,274,490	1,802,687	5,703	90,314	96,017	9,692	44,911	54,603	1,953,306
2048	528,621	1,273,332	1,801,953	5,561	87,630	93,191	9,676	44,801	54,477	1,949,621
2049	529,182	1,272,545	1,801,727	5,405	84,765	90,170	9,662	44,709	54,371	1,946,268
2050	529,834	1,272,254	1,802,088	5,234	81,716	86,950	9,652	44,631	54,282	1,943,320
2051	530,646	1,272,648	1,803,294	5,048	78,482	83,530	9,643	44,566	54,209	1,941,033
2052	531,602	1,273,712	1,805,314	4,847	75,068	79,915	9,637	44,510	54,147	1,939,376
2053	532,591	1,275,404	1,807,995	4,630	71,486	76,117	9,632	44,463	54,095	1,938,206
2054	533,645	1,277,797	1,811,442	4,399	67,753	72,152	9,628	44,422	54,050	1,937,644
2055	534,710	1,280,813	1,815,523	4,154	63,888	68,042	9,625	44,386	54,010	1,937,575
2056	535,781	1,284,430	1,820,211	3,897	59,913	63,810	9,622	44,352	53,974	1,937,995
2057	536,908	1,288,680	1,825,588	3,630	55,852	59,483	9,620	44,322	53,942	1,939,013
2058	538,089	1,293,507	1,831,596	3,355	51,736	55,091	9,619	44,294	53,913	1,940,600
2059	539,303	1,298,799	1,838,102	3,076	47,600	50,676	9,619	44,268	53,887	1,942,665

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both active and reserve duty retirees, while CSB/Redux figures include only active duty retirees.

**The number of retirees projected only considers those receiving non-zero retired pay from the Military Retirement Fund.

TOTAL NUMBER OF RETIREES ON SEPTEMBER 30 OF EACH FISCAL YEAR (continued)

Fiscal Year	Nondisabled (non-CSB/Redux)			Nondisabled (CSB/Redux)			Disabled			Grand Total
	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	
2060	540,548	1,304,485	1,845,032	2,795	43,484	46,280	9,619	44,243	53,862	1,945,174
2061	541,844	1,310,501	1,852,345	2,518	39,430	41,948	9,620	44,220	53,840	1,948,133
2062	543,182	1,316,724	1,859,906	2,246	35,479	37,725	9,621	44,198	53,819	1,951,451
2063	544,540	1,323,058	1,867,598	1,985	31,670	33,655	9,623	44,178	53,800	1,955,054
2064	545,941	1,329,424	1,875,365	1,737	28,040	29,776	9,625	44,158	53,783	1,958,925
2065	547,361	1,335,717	1,883,078	1,504	24,616	26,120	9,627	44,140	53,767	1,962,965
2066	548,802	1,341,866	1,890,668	1,289	21,422	22,710	9,630	44,124	53,753	1,967,132
2067	550,265	1,347,817	1,898,082	1,093	18,474	19,566	9,633	44,109	53,742	1,971,390
2068	551,727	1,353,515	1,905,241	916	15,783	16,698	9,636	44,096	53,732	1,975,672
2069	553,181	1,358,922	1,912,103	759	13,352	14,111	9,639	44,085	53,724	1,979,939
2070	554,614	1,364,025	1,918,638	622	11,180	11,802	9,643	44,076	53,719	1,984,159
2071	556,030	1,368,829	1,924,860	504	9,259	9,763	9,646	44,069	53,716	1,988,339
2072	557,432	1,373,348	1,930,780	403	7,581	7,984	9,650	44,065	53,715	1,992,479
2073	558,803	1,377,599	1,936,401	318	6,130	6,448	9,654	44,063	53,716	1,996,566
2074	560,144	1,381,618	1,941,762	247	4,893	5,140	9,657	44,063	53,720	2,000,622
2075	561,451	1,385,436	1,946,887	190	3,850	4,040	9,660	44,064	53,725	2,004,652
2076	562,725	1,389,092	1,951,817	143	2,984	3,127	9,663	44,068	53,731	2,008,675
2077	563,971	1,392,626	1,956,597	106	2,276	2,381	9,666	44,072	53,738	2,012,716
2078	565,194	1,396,076	1,961,270	76	1,705	1,781	9,669	44,077	53,746	2,016,797
2079	566,401	1,399,477	1,965,877	54	1,253	1,307	9,671	44,083	53,754	2,020,939
2080	567,591	1,402,846	1,970,437	37	903	940	9,673	44,089	53,763	2,025,140
2081	568,769	1,406,195	1,974,964	25	636	661	9,675	44,096	53,771	2,029,395
2082	569,936	1,409,532	1,979,468	16	437	454	9,677	44,102	53,779	2,033,700
2083	571,084	1,412,856	1,983,940	10	293	303	9,678	44,107	53,786	2,038,029
2084	572,214	1,416,163	1,988,377	6	191	197	9,679	44,113	53,792	2,042,366
2085	573,321	1,419,445	1,992,766	4	121	125	9,680	44,117	53,797	2,046,688
2086	574,404	1,422,691	1,997,095	2	75	77	9,680	44,121	53,802	2,050,973
2087	575,462	1,425,893	2,001,355	1	44	45	9,681	44,125	53,805	2,055,206
2088	576,493	1,429,038	2,005,531	0	26	26	9,681	44,127	53,808	2,059,365
2089	577,496	1,432,118	2,009,613	0	14	14	9,681	44,129	53,810	2,063,438
2090	578,468	1,435,127	2,013,595	0	8	8	9,681	44,131	53,812	2,067,414
2091	579,411	1,438,060	2,017,471	0	4	4	9,680	44,132	53,812	2,071,287
2092	580,328	1,440,917	2,021,244	0	2	2	9,680	44,133	53,813	2,075,059
2093	581,219	1,443,699	2,024,918	0	1	1	9,680	44,133	53,813	2,078,733
2094	582,090	1,446,409	2,028,499	0	0	0	9,680	44,134	53,813	2,082,313
2095	582,942	1,449,052	2,031,994	0	0	0	9,679	44,134	53,813	2,085,807
2096	583,779	1,451,635	2,035,414	0	0	0	9,679	44,134	53,813	2,089,227
2097	584,604	1,454,164	2,038,767	0	0	0	9,679	44,134	53,813	2,092,581
2098	585,420	1,456,646	2,042,066	0	0	0	9,679	44,134	53,813	2,095,879
2099	586,231	1,459,089	2,045,319	0	0	0	9,679	44,134	53,814	2,099,133
2100	587,037	1,461,499	2,048,536	0	0	0	9,679	44,135	53,814	2,102,350
2101	587,843	1,463,882	2,051,725	0	0	0	9,680	44,135	53,815	2,105,540
2102	588,648	1,466,245	2,054,893	0	0	0	9,680	44,136	53,815	2,108,709
2103	589,454	1,468,592	2,058,046	0	0	0	9,680	44,136	53,816	2,111,862
2104	590,261	1,470,926	2,061,187	0	0	0	9,680	44,137	53,817	2,115,004
2105	591,067	1,473,253	2,064,320	0	0	0	9,681	44,137	53,818	2,118,138
2106	591,873	1,475,573	2,067,445	0	0	0	9,681	44,138	53,819	2,121,264
2107	592,678	1,477,887	2,070,565	0	0	0	9,681	44,139	53,820	2,124,385
2108	593,481	1,480,198	2,073,678	0	0	0	9,681	44,140	53,821	2,127,500
2109	594,281	1,482,504	2,076,785	0	0	0	9,682	44,140	53,822	2,130,607

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both active and reserve duty retirees, while CSB/Redux figures include only active duty retirees.

**The number of retirees projected only considers those receiving non-zero retired pay from the Military Retirement Fund.

TOTAL ANNUAL RETIRED PAY FOR EACH FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal Year	Nondisabled (non-CSB/Redux)			Nondisabled (CSB/Redux)			Disabled			Grand Total
	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	
2011	\$20,050,093	\$25,265,622	\$45,315,715	\$26,869	\$426,865	\$453,734	\$542,327	\$824,942	\$1,367,269	\$47,136,717
2012	\$20,362,083	\$25,511,670	\$45,873,753	\$45,921	\$650,685	\$696,606	\$519,605	\$811,486	\$1,331,091	\$47,901,451
2013	\$20,951,732	\$26,072,501	\$47,024,233	\$66,345	\$872,318	\$938,664	\$503,519	\$806,992	\$1,310,511	\$49,273,407
2014	\$21,600,223	\$26,670,249	\$48,270,472	\$88,448	\$1,091,450	\$1,179,899	\$490,150	\$804,501	\$1,294,651	\$50,745,022
2015	\$22,204,453	\$27,204,304	\$49,408,757	\$112,321	\$1,304,465	\$1,416,785	\$479,076	\$803,881	\$1,282,957	\$52,108,500
2016	\$22,847,356	\$27,790,554	\$50,637,911	\$138,039	\$1,516,383	\$1,654,422	\$470,186	\$804,716	\$1,274,902	\$53,567,235
2017	\$23,513,412	\$28,409,835	\$51,923,247	\$166,444	\$1,742,598	\$1,909,042	\$463,041	\$806,771	\$1,269,811	\$55,102,100
2018	\$24,199,100	\$29,060,683	\$53,259,783	\$196,914	\$1,977,287	\$2,174,201	\$457,674	\$809,936	\$1,267,611	\$56,701,595
2019	\$24,910,906	\$29,762,167	\$54,673,073	\$227,620	\$2,204,099	\$2,431,719	\$453,946	\$814,404	\$1,268,349	\$58,373,142
2020	\$25,819,075	\$30,721,044	\$56,540,119	\$258,554	\$2,434,176	\$2,692,730	\$454,678	\$825,452	\$1,280,130	\$60,512,979
2021	\$26,814,833	\$31,813,704	\$58,628,538	\$288,479	\$2,652,997	\$2,941,477	\$457,583	\$839,040	\$1,296,623	\$62,866,637
2022	\$27,845,386	\$32,971,073	\$60,816,460	\$318,358	\$2,860,950	\$3,179,307	\$461,663	\$853,662	\$1,315,325	\$65,311,092
2023	\$28,918,548	\$34,205,034	\$63,123,582	\$348,292	\$3,060,788	\$3,409,080	\$466,853	\$869,672	\$1,336,525	\$67,869,187
2024	\$30,025,296	\$35,526,583	\$65,551,878	\$377,350	\$3,251,846	\$3,629,196	\$473,062	\$887,380	\$1,360,442	\$70,541,516
2025	\$31,152,353	\$36,895,865	\$68,048,218	\$405,204	\$3,430,047	\$3,835,251	\$480,119	\$906,410	\$1,386,529	\$73,269,999
2026	\$32,304,240	\$38,332,646	\$70,636,886	\$432,741	\$3,597,714	\$4,030,455	\$488,006	\$926,569	\$1,414,575	\$76,081,916
2027	\$33,489,507	\$39,836,178	\$73,325,685	\$461,282	\$3,758,980	\$4,220,262	\$496,627	\$947,995	\$1,444,622	\$78,990,569
2028	\$34,814,714	\$41,492,709	\$76,307,423	\$490,699	\$3,919,844	\$4,410,543	\$505,961	\$970,230	\$1,476,191	\$82,194,157
2029	\$36,157,584	\$43,161,373	\$79,318,957	\$519,686	\$4,086,186	\$4,603,872	\$516,017	\$992,981	\$1,508,998	\$85,433,827
2030	\$37,418,488	\$44,736,583	\$82,155,071	\$547,914	\$4,269,215	\$4,817,129	\$526,791	\$1,016,460	\$1,543,251	\$88,515,451
2031	\$38,726,521	\$46,375,282	\$85,101,803	\$575,671	\$4,481,284	\$5,056,955	\$538,515	\$1,041,136	\$1,579,651	\$91,738,409
2032	\$40,098,176	\$48,074,868	\$88,173,044	\$603,194	\$4,710,664	\$5,313,858	\$551,250	\$1,067,324	\$1,618,574	\$95,105,476
2033	\$41,511,275	\$49,808,781	\$91,320,056	\$629,064	\$4,933,530	\$5,562,594	\$564,921	\$1,094,679	\$1,659,600	\$98,542,250
2034	\$42,967,431	\$51,609,277	\$94,576,708	\$652,068	\$5,134,036	\$5,786,104	\$579,456	\$1,123,271	\$1,702,727	\$102,065,539
2035	\$44,467,509	\$53,461,723	\$97,929,232	\$672,538	\$5,308,157	\$5,980,695	\$594,905	\$1,153,216	\$1,748,121	\$105,658,049
2036	\$46,000,072	\$55,348,871	\$101,348,943	\$691,289	\$5,464,967	\$6,156,256	\$611,208	\$1,184,184	\$1,795,393	\$109,300,591
2037	\$47,600,423	\$57,320,597	\$104,921,020	\$708,723	\$5,611,397	\$6,320,120	\$628,431	\$1,216,496	\$1,844,927	\$113,086,067
2038	\$49,287,673	\$59,392,278	\$108,679,951	\$725,060	\$5,748,422	\$6,473,482	\$646,981	\$1,250,889	\$1,897,870	\$117,051,303
2039	\$51,049,285	\$61,543,840	\$112,593,125	\$740,321	\$5,878,395	\$6,618,717	\$666,928	\$1,287,329	\$1,954,256	\$121,166,097
2040	\$52,882,700	\$63,776,574	\$116,659,274	\$754,374	\$6,001,852	\$6,756,226	\$688,088	\$1,325,868	\$2,013,955	\$125,429,455
2041	\$54,808,945	\$66,111,649	\$120,920,594	\$767,052	\$6,117,494	\$6,884,546	\$710,627	\$1,366,719	\$2,077,345	\$129,882,486
2042	\$56,828,242	\$68,543,121	\$125,371,364	\$778,766	\$6,224,761	\$7,003,527	\$734,558	\$1,409,814	\$2,144,371	\$134,519,262
2043	\$58,922,936	\$71,067,210	\$129,990,146	\$788,799	\$6,319,904	\$7,108,703	\$759,695	\$1,455,175	\$2,214,869	\$139,313,718
2044	\$61,114,334	\$73,702,381	\$134,816,715	\$797,115	\$6,399,084	\$7,196,199	\$786,147	\$1,502,935	\$2,289,082	\$144,301,995
2045	\$63,408,520	\$76,452,775	\$139,861,296	\$803,646	\$6,458,211	\$7,261,857	\$814,083	\$1,553,161	\$2,367,244	\$149,490,397
2046	\$65,807,477	\$79,328,623	\$145,136,101	\$808,253	\$6,492,889	\$7,301,143	\$843,387	\$1,605,907	\$2,449,293	\$154,886,537
2047	\$68,329,702	\$82,349,881	\$150,679,583	\$810,698	\$6,500,997	\$7,311,695	\$874,094	\$1,661,300	\$2,535,394	\$160,526,672
2048	\$70,972,139	\$85,522,128	\$156,494,267	\$810,711	\$6,481,438	\$7,292,149	\$906,273	\$1,719,330	\$2,625,603	\$166,412,019
2049	\$73,733,031	\$88,847,096	\$162,580,127	\$808,096	\$6,435,080	\$7,243,176	\$939,823	\$1,779,958	\$2,719,781	\$172,543,085
2050	\$76,614,863	\$92,335,245	\$168,950,108	\$802,712	\$6,364,769	\$7,167,481	\$974,729	\$1,843,129	\$2,817,858	\$178,935,448
2051	\$79,626,610	\$96,003,672	\$175,630,282	\$794,236	\$6,272,899	\$7,067,134	\$1,011,080	\$1,908,968	\$2,920,049	\$185,617,465
2052	\$82,779,700	\$99,861,900	\$182,641,601	\$782,244	\$6,159,389	\$6,941,633	\$1,048,944	\$1,977,584	\$3,026,528	\$192,609,762
2053	\$86,067,774	\$103,914,640	\$189,982,415	\$766,566	\$6,023,385	\$6,789,951	\$1,088,252	\$2,048,957	\$3,137,210	\$199,909,575
2054	\$89,490,904	\$108,174,212	\$197,665,116	\$747,134	\$5,864,695	\$6,611,829	\$1,128,992	\$2,123,132	\$3,252,124	\$207,529,069
2055	\$93,051,365	\$112,649,736	\$205,701,101	\$723,910	\$5,683,314	\$6,407,225	\$1,171,233	\$2,200,223	\$3,371,455	\$215,479,782
2056	\$96,751,574	\$117,348,137	\$214,099,711	\$696,984	\$5,479,646	\$6,176,630	\$1,214,971	\$2,280,242	\$3,495,213	\$223,771,555
2057	\$100,604,336	\$122,283,540	\$222,887,876	\$666,460	\$5,254,135	\$5,920,594	\$1,260,276	\$2,363,273	\$3,623,549	\$232,432,020
2058	\$104,619,939	\$127,466,406	\$232,086,345	\$632,541	\$5,007,378	\$5,639,918	\$1,307,289	\$2,449,477	\$3,756,767	\$241,483,030
2059	\$108,801,976	\$132,901,444	\$241,703,420	\$595,599	\$4,740,934	\$5,336,533	\$1,356,099	\$2,538,956	\$3,895,055	\$250,935,007
2060	\$113,161,906	\$138,592,710	\$251,754,616	\$556,229	\$4,457,335	\$5,013,564	\$1,406,731	\$2,631,823	\$4,038,554	\$260,806,734

*This projection includes retired from active and reserve duty.
 Non-CSB/Redux figures include both active and reserve duty retirees, while CSB/Redux figures include only active duty retirees.

TOTAL ANNUAL RETIRED PAY FOR EACH FISCAL YEAR (continued)

(Dollar Amounts in Thousands)

Fiscal Year	Nondisabled (non-CSB/Redux)			Nondisabled (CSB/Redux)			Disabled			Grand Total
	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	
2061	\$117,701,560	\$144,540,730	\$262,242,289	\$514,928	\$4,160,225	\$4,675,153	\$1,459,304	\$2,728,212	\$4,187,515	\$271,104,957
2062	\$122,432,779	\$150,749,884	\$273,182,663	\$472,363	\$3,853,972	\$4,326,335	\$1,513,965	\$2,828,306	\$4,342,271	\$281,851,269
2063	\$127,361,962	\$157,220,083	\$284,582,045	\$429,247	\$3,543,160	\$3,972,407	\$1,570,731	\$2,932,307	\$4,503,038	\$293,057,490
2064	\$132,497,415	\$163,953,152	\$296,450,567	\$386,311	\$3,232,152	\$3,618,463	\$1,629,727	\$3,040,360	\$4,670,087	\$304,739,118
2065	\$137,850,373	\$170,950,146	\$308,800,519	\$344,251	\$2,924,991	\$3,269,242	\$1,691,037	\$3,152,615	\$4,843,652	\$316,913,413
2066	\$143,426,678	\$178,213,121	\$321,639,798	\$303,710	\$2,625,317	\$2,929,027	\$1,754,722	\$3,269,282	\$5,024,004	\$329,592,830
2067	\$149,238,668	\$185,751,279	\$334,989,947	\$265,187	\$2,336,270	\$2,601,457	\$1,820,945	\$3,390,514	\$5,211,459	\$342,802,864
2068	\$155,293,028	\$193,565,812	\$348,858,840	\$229,061	\$2,060,484	\$2,289,545	\$1,889,802	\$3,516,523	\$5,406,326	\$356,554,710
2069	\$161,598,882	\$201,656,097	\$363,254,980	\$195,680	\$1,800,217	\$1,995,897	\$1,961,397	\$3,647,503	\$5,608,899	\$370,859,776
2070	\$168,163,454	\$210,029,937	\$378,193,391	\$165,276	\$1,557,275	\$1,722,550	\$2,035,805	\$3,783,621	\$5,819,426	\$385,735,367
2071	\$174,987,667	\$218,696,064	\$393,683,731	\$137,933	\$1,332,948	\$1,470,880	\$2,113,131	\$3,925,117	\$6,038,248	\$401,192,859
2072	\$182,088,209	\$227,665,933	\$409,754,142	\$113,695	\$1,128,145	\$1,241,841	\$2,193,487	\$4,072,164	\$6,265,651	\$417,261,633
2073	\$189,473,368	\$236,953,955	\$426,427,324	\$92,494	\$943,354	\$1,035,848	\$2,276,943	\$4,224,918	\$6,501,861	\$433,965,033
2074	\$197,148,884	\$246,573,552	\$443,722,436	\$74,176	\$778,712	\$852,888	\$2,363,585	\$4,383,607	\$6,747,192	\$451,322,515
2075	\$205,126,907	\$256,540,286	\$461,667,193	\$58,583	\$634,033	\$692,616	\$2,453,492	\$4,548,445	\$7,001,937	\$469,361,746
2076	\$213,414,755	\$266,872,343	\$480,287,098	\$45,503	\$508,742	\$554,245	\$2,546,777	\$4,719,638	\$7,266,415	\$488,107,758
2077	\$222,019,465	\$277,590,302	\$499,609,767	\$34,716	\$401,896	\$436,612	\$2,643,531	\$4,897,387	\$7,540,918	\$507,587,297
2078	\$230,952,360	\$288,715,724	\$519,668,084	\$25,967	\$312,238	\$338,206	\$2,743,865	\$5,081,906	\$7,825,771	\$527,832,061
2079	\$240,227,272	\$300,270,894	\$540,498,166	\$18,986	\$238,279	\$257,265	\$2,847,890	\$5,273,448	\$8,121,338	\$548,876,769
2080	\$249,855,021	\$312,277,775	\$562,132,796	\$13,541	\$178,371	\$191,912	\$2,955,722	\$5,472,236	\$8,427,958	\$570,752,666
2081	\$259,847,947	\$324,756,953	\$584,604,900	\$9,402	\$130,779	\$140,181	\$3,067,532	\$5,678,516	\$8,746,048	\$593,491,129
2082	\$270,219,929	\$337,726,447	\$607,946,376	\$6,359	\$93,760	\$100,119	\$3,183,457	\$5,892,534	\$9,075,991	\$617,122,486
2083	\$280,981,039	\$351,204,741	\$632,185,780	\$4,175	\$65,613	\$69,789	\$3,303,621	\$6,114,520	\$9,418,141	\$641,673,711
2084	\$292,144,139	\$365,210,060	\$657,354,199	\$2,644	\$44,737	\$47,381	\$3,428,150	\$6,344,750	\$9,772,900	\$667,174,480
2085	\$303,723,087	\$379,760,761	\$683,483,848	\$1,602	\$29,674	\$31,276	\$3,557,178	\$6,583,564	\$10,140,742	\$693,655,865
2086	\$315,732,306	\$394,875,801	\$710,608,107	\$942	\$19,115	\$20,058	\$3,690,901	\$6,831,260	\$10,522,161	\$721,150,325
2087	\$328,187,779	\$410,574,114	\$738,761,893	\$505	\$11,943	\$12,447	\$3,829,530	\$7,088,155	\$10,917,685	\$749,692,026
2088	\$341,105,825	\$426,874,538	\$767,980,363	\$216	\$7,227	\$7,442	\$3,973,257	\$7,354,593	\$11,327,851	\$779,315,656
2089	\$354,505,161	\$443,796,625	\$798,301,786	\$61	\$4,232	\$4,294	\$4,122,288	\$7,630,929	\$11,753,217	\$810,059,296
2090	\$368,402,966	\$461,361,790	\$829,764,756	\$0	\$2,396	\$2,396	\$4,276,827	\$7,917,543	\$12,194,370	\$841,961,523
2091	\$382,816,754	\$479,592,308	\$862,409,061	\$0	\$1,307	\$1,307	\$4,437,098	\$8,214,837	\$12,651,936	\$875,062,304
2092	\$397,769,485	\$498,511,797	\$896,281,282	\$0	\$683	\$683	\$4,603,351	\$8,523,221	\$13,126,572	\$909,408,537
2093	\$413,283,015	\$518,146,466	\$931,429,480	\$0	\$332	\$332	\$4,775,833	\$8,843,120	\$13,618,953	\$945,048,765
2094	\$429,380,567	\$538,523,759	\$967,904,326	\$0	\$134	\$134	\$4,954,794	\$9,174,981	\$14,129,775	\$982,034,235
2095	\$446,089,352	\$559,672,325	\$1,005,761,677	\$0	\$33	\$33	\$5,140,492	\$9,519,258	\$14,659,750	\$1,020,421,460
2096	\$463,435,544	\$581,623,254	\$1,045,058,798	\$0	\$0	\$0	\$5,333,197	\$9,876,425	\$15,209,622	\$1,060,268,420
2097	\$481,445,052	\$604,409,298	\$1,085,854,350	\$0	\$0	\$0	\$5,533,178	\$10,247,007	\$15,780,186	\$1,101,634,535
2098	\$500,145,985	\$628,064,600	\$1,128,210,585	\$0	\$0	\$0	\$5,740,711	\$10,631,498	\$16,372,209	\$1,144,582,794
2099	\$519,568,293	\$652,625,129	\$1,172,193,422	\$0	\$0	\$0	\$5,956,087	\$11,030,426	\$16,986,513	\$1,189,179,935
2100	\$539,741,637	\$678,128,349	\$1,217,869,987	\$0	\$0	\$0	\$6,179,601	\$11,444,341	\$17,623,942	\$1,235,493,929
2101	\$560,697,031	\$704,613,045	\$1,265,310,077	\$0	\$0	\$0	\$6,411,565	\$11,873,808	\$18,285,374	\$1,283,595,450
2102	\$582,467,733	\$732,119,608	\$1,314,587,341	\$0	\$0	\$0	\$6,652,298	\$12,319,414	\$18,971,711	\$1,333,559,052
2103	\$605,085,742	\$760,689,878	\$1,365,775,620	\$0	\$0	\$0	\$6,902,115	\$12,781,761	\$19,683,876	\$1,385,459,496
2104	\$628,583,855	\$790,367,001	\$1,418,950,856	\$0	\$0	\$0	\$7,161,337	\$13,261,490	\$20,422,828	\$1,439,373,683
2105	\$652,996,133	\$821,195,630	\$1,474,191,763	\$0	\$0	\$0	\$7,430,292	\$13,759,257	\$21,189,549	\$1,495,381,312
2106	\$678,356,997	\$853,221,884	\$1,531,578,881	\$0	\$0	\$0	\$7,709,334	\$14,275,692	\$21,985,025	\$1,553,563,906
2107	\$704,702,105	\$886,493,175	\$1,591,195,280	\$0	\$0	\$0	\$7,998,834	\$14,811,517	\$22,810,352	\$1,614,005,631
2108	\$732,068,305	\$921,058,230	\$1,653,126,535	\$0	\$0	\$0	\$8,299,178	\$15,367,458	\$23,666,636	\$1,676,793,171
2109	\$760,494,238	\$956,967,256	\$1,717,461,494	\$0	\$0	\$0	\$8,610,763	\$15,944,265	\$24,555,027	\$1,742,016,521

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both active and reserve duty retirees, while CSB/Redux figures include only active duty retirees.

RETIREE GAIN STATEMENT

Fiscal Year	Gains During the Fiscal Year						Average Starting Net Retired Pay Before CPI Increase					
	Nondisabled (non-CSB/Redux)		Nondisabled (CSB/Redux)		Disabled		Nondisabled (non-CSB/Redux)		Nondisabled (CSB/Redux)		Disabled	
	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted
2011	15,992	30,497	508	11,315	447	4,136	\$43,433	\$19,597	\$37,075	\$20,453	\$36,895	\$13,701
2012	15,434	30,536	479	9,934	444	4,086	\$43,055	\$20,135	\$40,076	\$21,754	\$37,465	\$13,991
2013	21,254	43,539	486	9,417	445	4,054	\$39,728	\$17,904	\$43,272	\$23,540	\$38,196	\$14,306
2014	15,168	28,564	469	8,352	444	4,011	\$45,966	\$21,453	\$47,234	\$25,030	\$39,081	\$14,680
2015	15,134	29,052	466	7,662	443	3,977	\$47,464	\$22,045	\$51,416	\$26,560	\$40,279	\$15,134
2016	15,008	30,390	459	7,230	441	3,934	\$48,917	\$22,848	\$54,895	\$27,656	\$41,671	\$15,699
2017	14,910	31,381	465	7,322	438	3,894	\$50,437	\$23,093	\$61,293	\$30,555	\$43,083	\$16,312
2018	14,838	32,858	440	6,768	435	3,872	\$51,974	\$23,954	\$65,315	\$31,685	\$44,548	\$16,921
2019	14,956	34,631	411	6,199	434	3,862	\$53,573	\$24,715	\$68,290	\$32,728	\$45,938	\$17,514
2020	15,086	36,578	354	5,479	432	3,864	\$54,840	\$25,402	\$71,988	\$33,597	\$47,350	\$18,091
2021	15,182	37,738	312	4,674	431	3,862	\$56,206	\$26,345	\$74,864	\$34,591	\$48,743	\$18,708
2022	15,380	38,656	296	4,096	430	3,856	\$57,471	\$27,498	\$79,450	\$36,339	\$50,264	\$19,385
2023	15,644	39,858	253	3,492	430	3,862	\$58,949	\$28,800	\$84,882	\$38,382	\$51,954	\$20,116
2024	15,320	40,574	216	2,787	430	3,873	\$61,257	\$30,440	\$88,764	\$41,389	\$53,682	\$20,904
2025	15,041	39,002	167	1,978	428	3,859	\$63,326	\$31,888	\$97,198	\$46,800	\$55,477	\$21,655
2026	14,958	40,424	132	1,341	428	3,864	\$65,503	\$33,469	\$105,348	\$54,723	\$57,351	\$22,418
2027	14,635	39,194	105	966	428	3,859	\$68,234	\$34,925	\$113,177	\$61,838	\$59,427	\$23,216
2028	20,219	51,915	86	703	426	3,844	\$61,326	\$31,301	\$121,650	\$68,746	\$61,474	\$23,940
2029	14,284	36,905	69	506	425	3,830	\$73,137	\$37,630	\$130,028	\$75,717	\$63,602	\$24,701
2030	13,908	35,357	53	360	424	3,819	\$76,939	\$39,969	\$139,082	\$82,990	\$65,899	\$25,506
2031	14,198	35,932	41	245	427	3,829	\$79,963	\$41,588	\$148,866	\$90,377	\$68,332	\$26,414
2032	14,474	35,147	31	166	429	3,827	\$82,928	\$43,223	\$157,680	\$98,567	\$71,026	\$27,367
2033	14,135	34,687	21	112	427	3,817	\$86,081	\$44,586	\$170,598	\$105,148	\$73,794	\$28,288
2034	14,451	35,399	15	68	426	3,821	\$88,660	\$46,034	\$182,200	\$112,088	\$76,408	\$29,289
2035	14,295	34,731	8	30	425	3,814	\$91,564	\$47,177	\$202,136	\$119,600	\$79,425	\$30,312
2036	14,288	34,595	5	9	423	3,803	\$94,225	\$48,626	\$219,355	\$132,906	\$82,296	\$31,339
2037	14,739	35,785	3	4	423	3,809	\$97,305	\$49,953	\$235,576	\$143,861	\$85,356	\$32,492
2038	14,984	36,373	2	2	426	3,814	\$101,202	\$51,458	\$246,248	\$151,763	\$88,935	\$33,744
2039	15,054	36,522	1	1	426	3,815	\$104,610	\$53,040	\$259,450	\$160,653	\$92,414	\$35,023
2040	15,074	36,807	0	0	425	3,817	\$109,029	\$54,949	\$0	\$166,801	\$95,900	\$36,373
2041	15,141	37,170	0	0	427	3,819	\$114,531	\$57,236	\$0	\$0	\$99,860	\$37,778
2042	15,136	37,122	0	0	426	3,820	\$118,901	\$59,352	\$0	\$0	\$103,522	\$39,215
2043	15,048	37,177	0	0	426	3,822	\$122,762	\$61,676	\$0	\$0	\$107,392	\$40,715
2044	15,123	37,321	0	0	427	3,824	\$128,461	\$64,170	\$0	\$0	\$111,589	\$42,285
2045	15,065	37,284	0	0	427	3,825	\$133,461	\$66,644	\$0	\$0	\$115,910	\$43,902
2046	15,072	37,441	0	0	427	3,826	\$139,286	\$69,338	\$0	\$0	\$120,336	\$45,591
2047	15,112	37,547	0	0	428	3,828	\$145,637	\$72,331	\$0	\$0	\$125,010	\$47,350
2048	15,083	37,528	0	0	428	3,828	\$151,153	\$75,324	\$0	\$0	\$129,868	\$49,148
2049	15,082	37,409	0	0	428	3,828	\$157,243	\$78,499	\$0	\$0	\$134,789	\$50,998
2050	15,050	37,349	0	0	428	3,827	\$162,943	\$81,762	\$0	\$0	\$139,905	\$52,915
2051	15,106	37,432	0	0	429	3,828	\$169,250	\$84,954	\$0	\$0	\$145,261	\$54,908
2052	15,167	37,458	0	0	429	3,828	\$176,000	\$88,132	\$0	\$0	\$150,782	\$56,973
2053	15,120	37,409	0	0	429	3,827	\$182,656	\$91,454	\$0	\$0	\$156,443	\$59,102
2054	15,116	37,416	0	0	429	3,827	\$189,477	\$94,915	\$0	\$0	\$162,225	\$61,309
2055	15,062	37,343	0	0	428	3,827	\$196,568	\$98,470	\$0	\$0	\$168,269	\$63,597
2056	15,006	37,262	0	0	428	3,826	\$203,970	\$102,170	\$0	\$0	\$174,467	\$65,959
2057	15,007	37,254	0	0	428	3,825	\$211,553	\$105,986	\$0	\$0	\$180,873	\$68,414
2058	15,014	37,244	0	0	428	3,825	\$219,418	\$109,937	\$0	\$0	\$187,605	\$70,967
2059	15,001	37,200	0	0	428	3,825	\$227,547	\$114,017	\$0	\$0	\$194,568	\$73,614
2060	14,986	37,172	0	0	427	3,825	\$235,978	\$118,267	\$0	\$0	\$201,747	\$76,363

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both new active and reserve duty retirements, while CSB/Redux figures include only new active duty retirements.

**Gains during the year include those people who die before year end. All figures are after total and partial VA offsets.

***The dramatic retiree gain increases in FY 2013 and FY 2028 are a result of the modeling due to section 647 of the 2008 NDAA.

Please refer to Appendix F and Appendix H for more information.

RETIREE GAIN STATEMENT

Fiscal Year	Gains During the Fiscal Year						Average Starting Net Retired Pay Before CPI Increase					
	Nondisabled (non-CSB/Redux)		Nondisabled (CSB/Redux)		Disabled		Nondisabled (non-CSB/Redux)		Nondisabled (CSB/Redux)		Disabled	
	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted	Officers	Enlisted
2061	14,990	37,175	0	0	427	3,825	\$244,813	\$122,697	\$0	\$0	\$209,278	\$79,220
2062	14,990	37,164	0	0	427	3,825	\$253,914	\$127,262	\$0	\$0	\$217,035	\$82,184
2063	14,970	37,156	0	0	427	3,825	\$263,170	\$132,000	\$0	\$0	\$225,071	\$85,261
2064	14,977	37,165	0	0	427	3,825	\$272,956	\$136,941	\$0	\$0	\$233,450	\$88,458
2065	14,970	37,164	0	0	427	3,825	\$283,048	\$142,048	\$0	\$0	\$242,190	\$91,775
2066	14,974	37,172	0	0	427	3,825	\$293,606	\$147,349	\$0	\$0	\$251,246	\$95,220
2067	14,991	37,189	0	0	427	3,825	\$304,670	\$152,882	\$0	\$0	\$260,686	\$98,798
2068	14,997	37,203	0	0	427	3,825	\$316,044	\$158,620	\$0	\$0	\$270,531	\$102,511
2069	15,003	37,208	0	0	427	3,825	\$327,930	\$164,564	\$0	\$0	\$280,722	\$106,362
2070	15,003	37,215	0	0	427	3,826	\$340,172	\$170,742	\$0	\$0	\$291,300	\$110,358
2071	15,016	37,230	0	0	427	3,826	\$352,965	\$177,160	\$0	\$0	\$302,316	\$114,505
2072	15,034	37,240	0	0	428	3,826	\$366,328	\$183,816	\$0	\$0	\$313,739	\$118,807
2073	15,039	37,245	0	0	428	3,826	\$380,123	\$190,722	\$0	\$0	\$325,590	\$123,269
2074	15,045	37,254	0	0	428	3,826	\$394,462	\$197,890	\$0	\$0	\$337,868	\$127,898
2075	15,045	37,257	0	0	428	3,826	\$409,320	\$205,323	\$0	\$0	\$350,608	\$132,700
2076	15,042	37,257	0	0	428	3,826	\$424,779	\$213,037	\$0	\$0	\$363,807	\$137,679
2077	15,043	37,258	0	0	428	3,826	\$440,803	\$221,039	\$0	\$0	\$377,475	\$142,844
2078	15,044	37,260	0	0	428	3,826	\$457,370	\$229,339	\$0	\$0	\$391,666	\$148,203
2079	15,044	37,258	0	0	428	3,826	\$474,596	\$237,944	\$0	\$0	\$406,376	\$153,761
2080	15,040	37,256	0	0	428	3,826	\$492,411	\$246,873	\$0	\$0	\$421,610	\$159,527
2081	15,039	37,256	0	0	428	3,826	\$510,936	\$256,139	\$0	\$0	\$437,419	\$165,509
2082	15,039	37,254	0	0	428	3,826	\$530,148	\$265,747	\$0	\$0	\$453,801	\$171,715
2083	15,032	37,252	0	0	428	3,826	\$549,986	\$275,712	\$0	\$0	\$470,773	\$178,153
2084	15,029	37,251	0	0	428	3,826	\$570,582	\$286,054	\$0	\$0	\$488,371	\$184,833
2085	15,025	37,250	0	0	428	3,826	\$591,921	\$296,780	\$0	\$0	\$506,637	\$191,764
2086	15,021	37,249	0	0	428	3,826	\$614,076	\$307,906	\$0	\$0	\$525,580	\$198,954
2087	15,021	37,248	0	0	428	3,826	\$637,079	\$319,452	\$0	\$0	\$545,237	\$206,415
2088	15,020	37,249	0	0	428	3,826	\$660,917	\$331,432	\$0	\$0	\$565,650	\$214,157
2089	15,019	37,249	0	0	428	3,826	\$685,652	\$343,860	\$0	\$0	\$586,828	\$222,189
2090	15,017	37,249	0	0	428	3,826	\$711,298	\$356,754	\$0	\$0	\$608,803	\$230,523
2091	15,018	37,250	0	0	428	3,826	\$737,923	\$370,134	\$0	\$0	\$631,622	\$239,169
2092	15,020	37,252	0	0	428	3,826	\$765,574	\$384,017	\$0	\$0	\$655,305	\$248,141
2093	15,021	37,253	0	0	428	3,826	\$794,252	\$398,420	\$0	\$0	\$679,888	\$257,450
2094	15,023	37,254	0	0	428	3,826	\$824,023	\$413,365	\$0	\$0	\$705,400	\$267,107
2095	15,024	37,256	0	0	428	3,826	\$854,916	\$428,870	\$0	\$0	\$731,880	\$277,128
2096	15,025	37,257	0	0	428	3,826	\$886,991	\$444,958	\$0	\$0	\$759,359	\$287,524
2097	15,027	37,258	0	0	428	3,826	\$920,284	\$461,651	\$0	\$0	\$787,870	\$298,310
2098	15,029	37,260	0	0	428	3,826	\$954,815	\$478,970	\$0	\$0	\$817,459	\$309,500
2099	15,030	37,261	0	0	428	3,826	\$990,662	\$496,938	\$0	\$0	\$848,160	\$321,111
2100	15,031	37,262	0	0	428	3,827	\$1,027,846	\$515,580	\$0	\$0	\$880,008	\$333,156
2101	15,033	37,263	0	0	428	3,827	\$1,066,441	\$534,922	\$0	\$0	\$913,053	\$345,653
2102	15,034	37,264	0	0	428	3,827	\$1,106,498	\$554,989	\$0	\$0	\$947,333	\$358,619
2103	15,034	37,265	0	0	428	3,827	\$1,148,033	\$575,808	\$0	\$0	\$982,888	\$372,070
2104	15,034	37,266	0	0	428	3,827	\$1,191,123	\$597,408	\$0	\$0	\$1,019,767	\$386,026
2105	15,034	37,266	0	0	428	3,827	\$1,235,818	\$619,818	\$0	\$0	\$1,058,024	\$400,506
2106	15,033	37,267	0	0	428	3,827	\$1,282,190	\$643,068	\$0	\$0	\$1,097,707	\$415,528
2107	15,033	37,267	0	0	428	3,827	\$1,330,302	\$667,190	\$0	\$0	\$1,138,871	\$431,113
2108	15,033	37,268	0	0	428	3,827	\$1,380,203	\$692,216	\$0	\$0	\$1,181,576	\$447,284
2109	15,033	37,268	0	0	428	3,827	\$1,431,970	\$718,180	\$0	\$0	\$1,225,877	\$464,060
Total	1,495,612	3,654,956	6,355	101,220	42,441	380,367	\$0	\$0	\$0	\$0	\$0	\$0

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both new active and reserve duty retirements, while CSB/Redux figures include only new active duty retirements.

**Gains during the year include those people who die before year end. All figures are after total and partial VA offsets.

***The dramatic retiree gain increases in FY 2013 and FY 2028 are a result of the modeling due to section 647 of the 2008 NDAA.

Please refer to Appendix F and Appendix H for more information.

TOTAL NUMBER OF SURVIVORS ON SEPTEMBER 30 OF EACH FISCAL YEAR

Fiscal Year	SBP Non-CSB/Redux	SBP CSB/Redux	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Special Survivor Indemnity Allowance	Total
2010	194,114	0	82,624	132	8,130	9,707	58,082	294,707
2011	197,252	5	84,587	115	8,234	8,993	58,347	299,186
2012	199,813	14	86,315	102	8,319	8,273	58,470	302,836
2013	201,886	27	87,994	90	8,384	7,575	58,467	305,956
2014	203,491	45	89,573	79	8,421	6,903	58,393	308,512
2015	204,637	68	91,092	70	8,430	6,259	58,237	310,556
2016	205,365	98	92,581	62	8,414	5,647	57,938	312,167
2017	205,718	136	94,068	54	8,367	5,071	57,509	313,414
2018	205,723	181	95,574	48	8,280	4,532	0	314,338
2019	205,402	237	97,127	42	8,159	4,031	0	314,998
2020	204,776	304	98,736	37	8,003	3,569	0	315,424
2021	203,870	382	100,406	32	7,820	3,147	0	315,657
2022	202,698	474	102,142	28	7,617	2,762	0	315,721
2023	201,278	580	103,941	24	7,413	2,416	0	315,652
2024	199,633	703	105,796	21	7,213	2,106	0	315,473
2025	197,794	845	107,700	18	7,026	1,830	0	315,213
2026	195,788	1,006	109,647	16	6,864	1,588	0	314,909
2027	193,651	1,189	111,621	13	6,733	1,375	0	314,582
2028	191,420	1,395	113,680	11	6,626	1,191	0	314,323
2029	189,134	1,626	115,694	10	6,539	1,032	0	314,034
2030	186,834	1,883	117,676	8	6,476	897	0	313,775
2031	184,565	2,168	119,611	7	6,433	782	0	313,565
2032	182,358	2,482	121,469	6	6,399	685	0	313,399
2033	180,240	2,826	123,233	5	6,371	604	0	313,279
2034	178,236	3,200	124,881	4	6,349	537	0	313,208
2035	176,369	3,606	126,398	3	6,332	481	0	313,189
2036	174,638	4,044	127,744	3	6,318	435	0	313,181
2037	173,042	4,513	128,886	2	6,307	396	0	313,147
2038	171,570	5,013	129,797	2	6,301	364	0	313,047
2039	170,212	5,544	130,459	1	6,298	337	0	312,851
2040	168,944	6,105	130,856	1	6,294	313	0	312,514
2041	167,748	6,695	130,991	1	6,289	293	0	312,018
2042	166,608	7,316	130,881	1	6,282	275	0	311,362
2043	165,506	7,967	130,541	1	6,273	259	0	310,546
2044	164,419	8,649	130,002	0	6,262	244	0	309,577
2045	163,332	9,362	129,297	0	6,250	230	0	308,472
2046	162,227	10,106	128,467	0	6,237	217	0	307,254
2047	161,089	10,878	127,542	0	6,224	204	0	305,939
2048	159,908	11,676	126,558	0	6,212	192	0	304,547
2049	158,674	12,497	125,545	0	6,197	180	0	303,093
2050	157,379	13,334	124,518	0	6,180	169	0	301,578
2051	156,016	14,179	123,495	0	6,160	158	0	300,007
2052	154,586	15,022	122,483	0	6,137	147	0	298,376
2053	153,090	15,851	121,477	0	6,114	137	0	296,668
2054	151,531	16,651	120,477	0	6,088	127	0	294,876
2055	149,922	17,406	119,477	0	6,062	118	0	292,986
2056	148,278	18,099	118,480	0	6,036	110	0	291,002
2057	146,621	18,713	117,496	0	6,011	102	0	288,943
2058	144,983	19,230	116,529	0	5,987	95	0	286,824
2059	143,397	19,633	115,578	0	5,963	89	0	284,659

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both survivors of active and reserve duty retirees, while CSB/Redux figures include only survivors of active duty retirees.

**The number of survivors projected only considers those receiving non-zero pay from the Military Retirement Fund.

***RCSBP survivors include all survivors of reservists, not just those electing pre-age 60 coverage.

****The Special Survivor Indemnity Allowance counts are shown for informational purposes and are not included in the Total column. They include the impact of both NDAA 2008 and P.L. 110-181.

TOTAL NUMBER OF SURVIVORS ON SEPTEMBER 30 OF EACH FISCAL YEAR (continued)

Fiscal Year	SBP Non-CSB/Redux	SBP CSB/Redux	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Special Survivor Indemnity Allowance	Total
2060	141,895	19,904	114,655	0	5,939	83	0	282,476
2061	140,511	20,028	113,766	0	5,914	78	1	280,297
2062	139,275	19,996	112,933	0	5,890	73	2	278,166
2063	138,210	19,802	112,161	0	5,865	69	3	276,107
2064	137,334	19,448	111,466	0	5,840	65	4	274,152
2065	136,658	18,940	110,870	0	5,818	62	5	272,348
2066	136,190	18,289	110,377	0	5,797	58	6	270,711
2067	135,924	17,511	109,995	0	5,776	56	7	269,261
2068	135,850	16,622	109,729	0	5,754	53	8	268,008
2069	135,948	15,644	109,572	0	5,734	51	9	266,949
2070	136,194	14,599	109,515	0	5,716	48	10	266,071
2071	136,559	13,507	109,541	0	5,698	46	11	265,352
2072	137,014	12,392	109,634	0	5,682	44	12	264,767
2073	137,527	11,273	109,778	0	5,665	43	13	264,286
2074	138,067	10,167	109,950	0	5,651	41	14	263,876
2075	138,608	9,091	110,134	0	5,638	39	15	263,510
2076	139,123	8,059	110,314	0	5,624	38	16	263,157
2077	139,598	7,082	110,476	0	5,612	36	17	262,804
2078	140,017	6,169	110,611	0	5,600	34	18	262,431
2079	140,371	5,326	110,712	0	5,589	32	19	262,031
2080	140,662	4,558	110,777	0	5,579	30	20	261,606
2081	140,896	3,866	110,806	0	5,568	28	21	261,164
2082	141,083	3,249	110,800	0	5,556	26	22	260,714
2083	141,233	2,707	110,763	0	5,545	24	23	260,272
2084	141,359	2,235	110,700	0	5,532	22	24	259,849
2085	141,476	1,830	110,617	0	5,520	20	25	259,463
2086	141,595	1,485	110,519	0	5,507	18	26	259,123
2087	141,723	1,196	110,411	0	5,492	16	27	258,838
2088	141,871	956	110,298	0	5,476	14	28	258,615
2089	142,041	759	110,183	0	5,460	12	29	258,456
2090	142,236	599	110,069	0	5,444	11	30	258,358
2091	142,457	470	109,957	0	5,426	9	31	258,319
2092	142,698	368	109,851	0	5,407	8	32	258,331
2093	142,955	287	109,749	0	5,387	6	33	258,384
2094	143,222	223	109,653	0	5,366	5	34	258,470
2095	143,492	173	109,564	0	5,345	4	35	258,579
2096	143,760	135	109,480	0	5,323	4	36	258,702
2097	144,019	105	109,402	0	5,300	3	37	258,829
2098	144,263	82	109,330	0	5,277	2	38	258,954
2099	144,489	64	109,262	0	5,254	2	39	259,070
2100	144,693	50	109,198	0	5,230	1	40	259,172
2101	144,874	40	109,138	0	5,205	1	41	259,258
2102	145,030	31	109,082	0	5,181	1	42	259,325
2103	145,162	24	109,030	0	5,156	1	43	259,373
2104	145,273	19	108,980	0	5,131	0	44	259,403
2105	145,363	15	108,933	0	5,105	0	45	259,417
2106	145,436	11	108,889	0	5,080	0	46	259,417
2107	145,495	9	108,848	0	5,054	0	47	259,407
2108	145,544	7	108,809	0	5,029	0	48	259,388
2109	145,584	5	108,773	0	5,003	0	49	259,365

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both survivors of active and reserve duty retirees, while CSB/Redux figures include only survivors of active duty retirees.

**The number of survivors projected only considers those receiving non-zero pay from the Military Retirement Fund.

***RCSBP survivors include all survivors of reservists, not just those electing pre-age 60 coverage.

****The Special Survivor Indemnity Allowance counts are shown for informational purposes and are not included in the Total column. They include the impact of both NDAA 2008 and P.L. 110-181.

TOTAL ANNUAL SURVIVOR BENEFITS FOR EACH FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal Year	SBP Non-CSB/Redux	SBP CSB/Redux	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Special Survivor Indemnity Allowance	Total
2011	\$2,891,886	\$22	\$659,057	\$903	\$70,499	\$26,887	\$49,012	\$3,698,266
2012	\$2,922,067	\$92	\$674,499	\$792	\$73,280	\$24,904	\$56,132	\$3,751,765
2013	\$2,975,635	\$218	\$695,848	\$712	\$76,917	\$22,951	\$63,145	\$3,835,425
2014	\$3,032,108	\$410	\$719,277	\$640	\$80,796	\$21,064	\$105,107	\$3,959,403
2015	\$3,086,041	\$686	\$743,502	\$576	\$84,771	\$19,245	\$139,768	\$4,074,589
2016	\$3,138,483	\$1,064	\$769,159	\$520	\$88,801	\$17,507	\$191,196	\$4,206,730
2017	\$3,187,720	\$1,562	\$796,035	\$468	\$92,794	\$15,858	\$213,935	\$4,308,373
2018	\$3,233,347	\$2,208	\$824,371	\$422	\$96,610	\$14,307	\$0	\$4,171,265
2019	\$3,275,748	\$3,041	\$854,552	\$379	\$100,133	\$12,860	\$0	\$4,246,713
2020	\$3,337,025	\$4,117	\$892,827	\$342	\$104,004	\$11,528	\$0	\$4,349,844
2021	\$3,403,291	\$5,471	\$935,980	\$309	\$107,611	\$10,315	\$0	\$4,462,977
2022	\$3,467,769	\$7,140	\$982,562	\$279	\$110,725	\$9,200	\$0	\$4,577,674
2023	\$3,530,368	\$9,175	\$1,032,708	\$251	\$113,452	\$8,185	\$0	\$4,694,138
2024	\$3,591,387	\$11,637	\$1,086,677	\$225	\$115,887	\$7,270	\$0	\$4,813,082
2025	\$3,651,079	\$14,603	\$1,144,703	\$201	\$118,050	\$6,452	\$0	\$4,935,088
2026	\$3,709,909	\$18,144	\$1,206,891	\$179	\$120,232	\$5,726	\$0	\$5,061,083
2027	\$3,768,045	\$22,347	\$1,273,325	\$159	\$122,611	\$5,086	\$0	\$5,191,572
2028	\$3,826,231	\$27,320	\$1,344,432	\$140	\$125,241	\$4,531	\$0	\$5,327,894
2029	\$3,885,252	\$33,198	\$1,420,247	\$122	\$128,044	\$4,053	\$0	\$5,470,917
2030	\$3,945,698	\$40,061	\$1,500,009	\$106	\$131,123	\$3,643	\$0	\$5,620,640
2031	\$4,008,450	\$47,930	\$1,583,960	\$92	\$134,502	\$3,296	\$0	\$5,778,229
2032	\$4,074,532	\$56,856	\$1,672,006	\$79	\$138,077	\$3,005	\$0	\$5,944,555
2033	\$4,144,822	\$66,922	\$1,763,910	\$67	\$141,811	\$2,762	\$0	\$6,120,295
2034	\$4,220,180	\$78,257	\$1,859,553	\$57	\$145,723	\$2,563	\$0	\$6,306,333
2035	\$4,301,659	\$90,976	\$1,958,655	\$49	\$149,886	\$2,400	\$0	\$6,503,625
2036	\$4,389,916	\$105,169	\$2,060,756	\$41	\$154,305	\$2,266	\$0	\$6,712,454
2037	\$4,485,326	\$120,922	\$2,165,001	\$35	\$159,013	\$2,157	\$0	\$6,932,454
2038	\$4,588,098	\$138,339	\$2,270,650	\$29	\$164,033	\$2,068	\$0	\$7,163,217
2039	\$4,698,194	\$157,573	\$2,376,855	\$24	\$169,308	\$1,994	\$0	\$7,403,948
2040	\$4,815,656	\$178,807	\$2,482,837	\$20	\$174,782	\$1,932	\$0	\$7,654,035
2041	\$4,940,348	\$202,245	\$2,588,148	\$16	\$180,495	\$1,879	\$0	\$7,913,132
2042	\$5,072,100	\$228,087	\$2,692,401	\$13	\$186,428	\$1,830	\$0	\$8,180,860
2043	\$5,210,642	\$256,547	\$2,795,119	\$11	\$192,566	\$1,786	\$0	\$8,456,670
2044	\$5,356,259	\$287,841	\$2,896,337	\$9	\$198,900	\$1,743	\$0	\$8,741,088
2045	\$5,508,835	\$322,194	\$2,996,326	\$7	\$205,436	\$1,698	\$0	\$9,034,497
2046	\$5,668,262	\$359,795	\$3,095,088	\$5	\$212,150	\$1,654	\$0	\$9,336,953
2047	\$5,834,862	\$400,795	\$3,193,082	\$4	\$219,070	\$1,607	\$0	\$9,649,420
2048	\$6,008,619	\$445,294	\$3,290,666	\$3	\$226,172	\$1,557	\$0	\$9,972,312
2049	\$6,189,567	\$493,321	\$3,388,319	\$2	\$233,406	\$1,505	\$0	\$10,306,121
2050	\$6,377,812	\$544,828	\$3,486,211	\$2	\$240,821	\$1,450	\$0	\$10,651,124
2051	\$6,573,538	\$599,659	\$3,584,740	\$1	\$248,429	\$1,393	\$0	\$11,007,760
2052	\$6,776,492	\$657,518	\$3,683,790	\$1	\$256,243	\$1,335	\$0	\$11,375,380
2053	\$6,986,627	\$717,935	\$3,783,306	\$1	\$264,279	\$1,275	\$0	\$11,753,422
2054	\$7,203,916	\$780,283	\$3,883,242	\$0	\$272,542	\$1,217	\$0	\$12,141,201
2055	\$7,428,189	\$843,737	\$3,983,809	\$0	\$281,054	\$1,160	\$0	\$12,537,949
2056	\$7,659,481	\$907,334	\$4,084,978	\$0	\$289,837	\$1,105	\$0	\$12,942,735
2057	\$7,898,054	\$969,998	\$4,187,280	\$0	\$298,944	\$1,052	\$0	\$13,355,329
2058	\$8,144,539	\$1,030,517	\$4,291,631	\$0	\$308,326	\$1,002	\$0	\$13,776,014
2059	\$8,399,961	\$1,087,480	\$4,398,326	\$0	\$318,054	\$955	\$0	\$14,204,777
2060	\$8,665,619	\$1,139,382	\$4,508,344	\$0	\$328,104	\$911	\$0	\$14,642,359

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both survivors of active and reserve duty retirees, while CSB/Redux figures include only survivors of active duty retirees.

**RCSBP survivors include all survivors of reservists, not just those electing pre-age 60 coverage.

***The Special Survivor Indemnity Allowance dollars are included in the Total column. They include the impact of both NDAA 2008 and P.L. 110-181.

TOTAL ANNUAL SURVIVOR BENEFITS FOR EACH FISCAL YEAR (continued)

(Dollar Amounts in Thousands)

Fiscal Year	SBP Non-CSB/Redux	SBP CSB/Redux	RCSBP	Minimum Income	Death on Active Duty	RSFPP	Special Survivor Indemnity Allowance	Total
2061	\$8,942,886	\$1,184,694	\$4,623,049	\$0	\$338,514	\$872	\$0	\$15,090,015
2062	\$9,233,339	\$1,222,021	\$4,743,436	\$0	\$349,357	\$836	\$0	\$15,548,989
2063	\$9,538,755	\$1,250,161	\$4,871,289	\$0	\$360,565	\$804	\$0	\$16,021,574
2064	\$9,860,841	\$1,268,196	\$5,008,147	\$0	\$372,203	\$776	\$0	\$16,510,163
2065	\$10,201,401	\$1,275,479	\$5,155,811	\$0	\$384,408	\$751	\$0	\$17,017,850
2066	\$10,562,232	\$1,271,733	\$5,315,946	\$0	\$396,959	\$729	\$0	\$17,547,599
2067	\$10,944,929	\$1,257,067	\$5,489,960	\$0	\$409,992	\$710	\$0	\$18,102,659
2068	\$11,351,000	\$1,231,900	\$5,679,282	\$0	\$423,489	\$694	\$0	\$18,686,365
2069	\$11,781,288	\$1,196,949	\$5,884,935	\$0	\$437,546	\$679	\$0	\$19,301,397
2070	\$12,236,322	\$1,153,204	\$6,107,300	\$0	\$452,119	\$667	\$0	\$19,949,611
2071	\$12,716,640	\$1,101,753	\$6,347,041	\$0	\$467,170	\$656	\$0	\$20,633,260
2072	\$13,222,181	\$1,043,799	\$6,603,914	\$0	\$482,819	\$645	\$0	\$21,353,358
2073	\$13,752,688	\$980,631	\$6,877,386	\$0	\$498,962	\$636	\$0	\$22,110,302
2074	\$14,307,615	\$913,504	\$7,167,145	\$0	\$515,732	\$627	\$0	\$22,904,623
2075	\$14,886,193	\$843,687	\$7,471,813	\$0	\$533,074	\$617	\$0	\$23,735,384
2076	\$15,487,389	\$772,441	\$7,790,814	\$0	\$550,920	\$607	\$0	\$24,602,171
2077	\$16,110,622	\$701,032	\$8,123,449	\$0	\$569,513	\$596	\$0	\$25,505,212
2078	\$16,755,548	\$630,624	\$8,468,757	\$0	\$588,672	\$583	\$0	\$26,444,185
2079	\$17,421,495	\$562,272	\$8,826,446	\$0	\$608,503	\$568	\$0	\$27,419,284
2080	\$18,108,853	\$496,854	\$9,196,118	\$0	\$629,029	\$551	\$0	\$28,431,405
2081	\$18,818,611	\$435,097	\$9,577,558	\$0	\$650,157	\$530	\$0	\$29,481,953
2082	\$19,552,097	\$377,565	\$9,970,757	\$0	\$672,045	\$508	\$0	\$30,572,971
2083	\$20,311,085	\$324,674	\$10,375,616	\$0	\$694,754	\$482	\$0	\$31,706,611
2084	\$21,097,681	\$276,685	\$10,792,426	\$0	\$718,113	\$454	\$0	\$32,885,359
2085	\$21,914,533	\$233,678	\$11,221,491	\$0	\$742,324	\$424	\$0	\$34,112,450
2086	\$22,764,171	\$195,660	\$11,663,006	\$0	\$767,316	\$393	\$0	\$35,390,546
2087	\$23,649,488	\$162,424	\$12,117,711	\$0	\$793,118	\$361	\$0	\$36,723,102
2088	\$24,572,808	\$133,724	\$12,586,056	\$0	\$819,784	\$327	\$0	\$38,112,700
2089	\$25,536,222	\$109,275	\$13,068,676	\$0	\$847,405	\$295	\$0	\$39,561,872
2090	\$26,541,735	\$88,686	\$13,566,341	\$0	\$875,868	\$263	\$0	\$41,072,892
2091	\$27,590,749	\$71,520	\$14,079,715	\$0	\$905,272	\$232	\$0	\$42,647,489
2092	\$28,684,809	\$57,395	\$14,609,590	\$0	\$935,646	\$203	\$0	\$44,287,642
2093	\$29,824,964	\$45,880	\$15,156,879	\$0	\$967,020	\$175	\$0	\$45,994,918
2094	\$31,011,755	\$36,552	\$15,722,377	\$0	\$999,452	\$150	\$0	\$47,770,287
2095	\$32,245,522	\$29,084	\$16,306,987	\$0	\$1,032,895	\$127	\$0	\$49,614,615
2096	\$33,526,762	\$23,139	\$16,911,645	\$0	\$1,067,458	\$107	\$0	\$51,529,109
2097	\$34,855,835	\$18,428	\$17,537,256	\$0	\$1,103,153	\$89	\$0	\$53,514,761
2098	\$36,233,148	\$14,703	\$18,184,784	\$0	\$1,140,021	\$73	\$0	\$55,572,730
2099	\$37,659,443	\$11,762	\$18,855,237	\$0	\$1,178,102	\$59	\$0	\$57,704,604
2100	\$39,135,228	\$9,434	\$19,549,664	\$0	\$1,217,436	\$48	\$0	\$59,911,810
2101	\$40,661,541	\$7,584	\$20,269,113	\$0	\$1,258,066	\$38	\$0	\$62,196,342
2102	\$42,239,773	\$6,104	\$21,014,676	\$0	\$1,300,037	\$30	\$0	\$64,560,620
2103	\$43,871,496	\$4,912	\$21,787,456	\$0	\$1,343,394	\$24	\$0	\$67,007,281
2104	\$45,558,846	\$3,944	\$22,588,581	\$0	\$1,388,183	\$18	\$0	\$69,539,572
2105	\$47,304,272	\$3,155	\$23,419,249	\$0	\$1,434,453	\$14	\$0	\$72,161,142
2106	\$49,110,618	\$2,508	\$24,280,632	\$0	\$1,482,253	\$10	\$0	\$74,876,021
2107	\$50,981,123	\$1,978	\$25,173,967	\$0	\$1,531,633	\$8	\$0	\$77,688,710
2108	\$52,919,201	\$1,545	\$26,100,533	\$0	\$1,582,645	\$6	\$0	\$80,603,929
2109	\$54,928,530	\$1,192	\$27,061,639	\$0	\$1,635,341	\$4	\$0	\$83,626,707

*This projection includes retired from active and reserve duty.

Non-CSB/Redux figures include both survivors of active and reserve duty retirees, while CSB/Redux figures include only survivors of active duty retirees.

**RCSBP survivors include all survivors of reservists, not just those electing pre-age 60 coverage.

***The Special Survivor Indemnity Allowance dollars are included in the Total column. They include the impact of both NDAA 2008 and P.L. 110-181.

TOTAL PROJECTED BASIC PAY AND RETIRED OUTLAYS

(Dollar Amounts in Thousands)

<u>Fiscal Year</u>	<u>Total Projected Basic Pay</u>	<u>Total Projected Outlays</u>	<u>Retired Outlays Over Basic Pay</u>
2011	\$61,873,238	\$50,834,983	82.2%
2012	\$63,059,574	\$51,653,216	81.9%
2013	\$64,825,710	\$53,108,832	81.9%
2014	\$66,674,474	\$54,704,425	82.0%
2015	\$68,597,481	\$56,183,089	81.9%
2016	\$70,253,161	\$57,773,965	82.2%
2017	\$72,152,347	\$59,410,473	82.3%
2018	\$74,391,484	\$60,872,861	81.8%
2019	\$76,721,212	\$62,619,854	81.6%
2020	\$79,175,391	\$64,862,823	81.9%
2021	\$82,005,674	\$67,329,614	82.1%
2022	\$84,924,898	\$69,888,767	82.3%
2023	\$87,924,213	\$72,563,325	82.5%
2024	\$90,986,531	\$75,354,598	82.8%
2025	\$94,168,526	\$78,205,087	83.0%
2026	\$97,489,183	\$81,142,999	83.2%
2027	\$100,919,135	\$84,182,141	83.4%
2028	\$104,529,457	\$87,522,052	83.7%
2029	\$108,351,353	\$90,904,744	83.9%
2030	\$112,386,890	\$94,136,090	83.8%
2031	\$116,536,479	\$97,516,638	83.7%
2032	\$120,794,176	\$101,050,030	83.7%
2033	\$125,277,376	\$104,662,545	83.5%
2034	\$129,987,520	\$108,371,872	83.4%
2035	\$134,908,810	\$112,161,674	83.1%
2036	\$140,114,075	\$116,013,045	82.8%
2037	\$145,520,256	\$120,018,521	82.5%
2038	\$151,063,422	\$124,214,520	82.2%
2039	\$156,804,691	\$128,570,046	82.0%
2040	\$162,778,687	\$133,083,490	81.8%
2041	\$168,962,508	\$137,795,618	81.6%
2042	\$175,352,272	\$142,700,122	81.4%
2043	\$181,990,638	\$147,770,388	81.2%
2044	\$188,869,664	\$153,043,084	81.0%
2045	\$195,985,621	\$158,524,894	80.9%
2046	\$203,363,259	\$164,223,490	80.8%
2047	\$210,986,198	\$170,176,092	80.7%
2048	\$218,872,126	\$176,384,331	80.6%
2049	\$227,055,778	\$182,849,206	80.5%
2050	\$235,550,089	\$189,586,571	80.5%
2051	\$244,354,547	\$196,625,225	80.5%
2052	\$253,462,255	\$203,985,142	80.5%
2053	\$262,904,928	\$211,662,997	80.5%
2054	\$272,711,250	\$219,670,270	80.6%
2055	\$282,894,016	\$228,017,731	80.6%
2056	\$293,479,754	\$236,714,290	80.7%
2057	\$304,475,143	\$245,787,349	80.7%
2058	\$315,880,453	\$255,259,044	80.8%
2059	\$327,716,324	\$265,139,785	80.9%
2060	\$340,008,113	\$275,449,093	81.0%

*Basic pay includes reserve and active duty basic pay; outlays include retired pay and survivor benefits.

**This projection includes retired from active and reserve duty.

***This projection includes pay for those retirees eligible for Concurrent Receipt.

****This projection is adjusted for the increase in survivor benefits due to Public Law 110-181.

TOTAL PROJECTED BASIC PAY AND RETIRED OUTLAYS (continued)

(Dollar Amounts in Thousands)

Fiscal Year	Total Projected Basic Pay	Total Projected Outlays	Retired Outlays Over Basic Pay
2061	\$352,767,640	\$286,194,972	81.1%
2062	\$366,006,476	\$297,400,259	81.3%
2063	\$379,750,961	\$309,079,064	81.4%
2064	\$394,019,615	\$321,249,280	81.5%
2065	\$408,825,216	\$333,931,263	81.7%
2066	\$424,189,428	\$347,140,428	81.8%
2067	\$440,126,384	\$360,905,523	82.0%
2068	\$456,654,511	\$375,241,075	82.2%
2069	\$473,800,924	\$390,161,173	82.3%
2070	\$491,590,621	\$405,684,978	82.5%
2071	\$510,044,765	\$421,826,120	82.7%
2072	\$529,180,879	\$438,614,991	82.9%
2073	\$549,026,304	\$456,075,334	83.1%
2074	\$569,612,250	\$474,227,138	83.3%
2075	\$590,967,088	\$493,097,131	83.4%
2076	\$613,122,565	\$512,709,929	83.6%
2077	\$636,108,106	\$533,092,509	83.8%
2078	\$659,952,809	\$554,276,245	84.0%
2079	\$684,689,774	\$576,296,052	84.2%
2080	\$710,355,045	\$599,184,071	84.3%
2081	\$736,983,983	\$622,973,082	84.5%
2082	\$764,610,950	\$647,695,457	84.7%
2083	\$793,276,172	\$673,380,322	84.9%
2084	\$823,021,007	\$700,059,840	85.1%
2085	\$853,884,950	\$727,768,316	85.2%
2086	\$885,910,261	\$756,540,871	85.4%
2087	\$919,138,993	\$786,415,128	85.6%
2088	\$953,615,006	\$817,428,356	85.7%
2089	\$989,385,981	\$849,621,168	85.9%
2090	\$1,026,501,347	\$883,034,415	86.0%
2091	\$1,065,010,927	\$917,709,793	86.2%
2092	\$1,104,964,401	\$953,696,179	86.3%
2093	\$1,146,415,143	\$991,043,683	86.4%
2094	\$1,189,419,888	\$1,029,804,521	86.6%
2095	\$1,234,036,658	\$1,070,036,074	86.7%
2096	\$1,280,326,077	\$1,111,797,529	86.8%
2097	\$1,328,350,369	\$1,155,149,296	87.0%
2098	\$1,378,173,876	\$1,200,155,524	87.1%
2099	\$1,429,863,939	\$1,246,884,539	87.2%
2100	\$1,483,490,885	\$1,295,405,739	87.3%
2101	\$1,539,127,570	\$1,345,791,793	87.4%
2102	\$1,596,848,643	\$1,398,119,672	87.6%
2103	\$1,656,732,827	\$1,452,466,777	87.7%
2104	\$1,718,862,496	\$1,508,913,256	87.8%
2105	\$1,783,322,189	\$1,567,542,455	87.9%
2106	\$1,850,199,641	\$1,628,439,927	88.0%
2107	\$1,919,585,424	\$1,691,694,341	88.1%
2108	\$1,991,573,513	\$1,757,397,100	88.2%
2109	\$2,066,261,959	\$1,825,643,228	88.4%

*Basic pay includes reserve and active duty basic pay; outlays include retired pay and survivor benefits.

**This projection includes retired from active and reserve duty.

***This projection includes pay for those retirees eligible for Concurrent Receipt.

****This projection is adjusted for the increase in survivor benefits due to Public Law 110-181.

APPENDIX L

FINANCIAL STATEMENT DISCLOSURES

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STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

Federal trust funds like the Military Retirement Fund are not subject to the same pension regulations as private sector and state/local governmental plans. Under generally accepted accounting principles (GAAP) (Financial Accounting Standards Board (FASB) 35), both private sector and state/local pension plans are required to include a table showing the “Statement of Net Assets Available for Benefits” and a “Statement of Changes in Net Assets Available for Benefits,” where assets are valued at fair market value in their accounting statements. For the Military Retirement Fund, fair market value is based on the bid prices of public issue securities with the same maturity dates and coupon rates as the special issue securities held by the Fund. These statements are included in Tables L-1 and L-2, respectively.

Measures of a retirement system’s liabilities (required for private sector plans under GAAP) are the “Accumulated Plan Benefits” and the “Market Value of Assets.” In prior years, both these items and explanatory notes were included in this appendix. Only the “Market Value of Assets” is shown for informational purposes.

The market values shown in this appendix can be found in the *Fiscal Year 2010 Military Retirement Fund Audited Financial Statements*. The financial statements are available through the website of the Office of the Under Secretary of Defense (Comptroller) at <http://www.defenselink.mil/comptroller/>.

TABLE L-1

DEPARTMENT OF DEFENSE
MILITARY RETIREMENT FUND
STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS
(\$ in millions)

	For the Plan Year Ended September 30:	
	<u>2010</u>	<u>2009</u>
<u>Assets</u>		
1) Investments, at fair market value, in U.S. Government securities: ¹	\$351,051	\$283,293
2) Accounts receivable:		
a) Accrued interest ²	\$3,122	\$2,871
b) Due from military retirees or their survivors	\$37	\$32
c) Intragovernmental	\$0	\$0
3) Cash:	\$25	\$20
<u>Total Assets (1 + 2 + 3):</u>	<u>\$354,235</u>	<u>\$286,216</u>
Accounts payable:	<u>\$(4,210)</u>	<u>\$(3,699)</u>
<u>Total Assets Available for Benefits</u>	<u>\$350,025</u>	<u>\$282,517</u>

¹ Fair market value of securities has been measured by quoted prices (bid price) in the active U.S. Government securities market. Bid price used represents the over-the-counter quotations as of 4 p.m. eastern time as reported by the U.S. Department of Treasury – Bureau of Public Debt on September 30, 2010, and September 30, 2009, respectively.

² Includes accrued interest receivable and interest purchased.

TABLE L-2

DEPARTMENT OF DEFENSE
MILITARY RETIREMENT FUND
STATEMENT OF CHANGES IN NET ASSETS
AVAILABLE FOR BENEFITS
(\$ in millions)

	For the Plan Year Ended September 30:	
	<u>2010</u>	<u>2009</u>
Net assets available for benefits at beginning of plan year:	\$282,517	\$240,344
1) Investment/Inflation income (coupons received)	\$12,251	\$4,714
2) Net appreciation (depreciation) in fair market value of investments	\$22,841	\$15,350
3) Contributions from services	\$20,377	\$17,543
4) Appropriation to amortize the initial unfunded liability	\$58,619	\$51,125
5) Appropriation for Treasury Normal Cost Contribution	\$4,516	\$3,745
Total additions (1 + 2 + 3 + 4 + 5)	<u>\$118,604</u>	<u>\$92,477</u>
Less: Benefits paid to participants ¹	<u>\$51,096</u>	<u>\$50,304</u>
Net assets available for benefits at end of plan year	<u>\$350,025</u>	<u>\$282,517</u>

¹ The statement has been revised to show benefits paid to participants on an accrual basis:

	<u>2010</u>	<u>2009</u>
Benefits paid on cash basis	\$50,585	\$49,964
Change in liability for benefits due at end of year	<u>\$511</u>	<u>\$340</u>
Benefits paid on accrual basis	\$51,096	\$50,304

COMPARISON OF DOD BOARD AND SFFAS 33 ACTUARIAL LIABILITIES

For Military Retirement Fund liabilities, DoD Office of the Actuary (OACT) performs two annual valuations. The primary one is for funding purposes—this valuation is governed by Chapter 74 of Title 10 U.S.C. and must use methods and assumptions approved by the DoD Board of Actuaries (Board). The other is for financial statement purposes and is governed by Federal Accounting Standards Advisory Board (FASAB) standards.

Historically, OACT has used Board valuation methods and assumptions to calculate liabilities for financial statement purposes. However, even using the same assumptions, liabilities from the Board valuation differ from financial statement numbers because of financial statement deadlines. For example, the September 30, 2010, actuarial liability for the financial statements was projected based on the September 30, 2009, Board valuation (it was due in early October 2010). The September 30, 2010, Board valuation (documented in this report) was performed at a later time, based on actual September 30, 2010 data, and therefore resulted in a different September 30, 2010 actuarial liability. A comparison of these respective actuarial liabilities is shown in Table L-3. Note that the ‘*Actuarial Certification*’ (page 2) only applies to Board valuation results for purposes of meeting the requirements of Chapter 74, Title 10, United State Code.

Currently, a separate financial statement valuation (i.e., with different assumptions) is necessary to satisfy a recently published financial statement regulation called the Statement of Federal Financial Accounting Standards 33 (SFFAS 33). A separate financial statement valuation is needed because SFFAS 33 requires the use of a yield curve to discount cash flows whereas the Board valuation uses a single average discount rate.

SFFAS 33 requires a minimum of five years of historical rates for the yield curve input and a consistency in the number of historical rates used from period to period. OACT used ten years of quarterly zero coupon Treasury spot rates (as published by the Office of Thrift Supervision), from June 30, 2000 to March 31, 2010 (40 quarterly interest rates), which resulted in an SFFAS single-equivalent interest rate of 5.00%. This is comparable to the Board valuation single average discount rate of 5.75%.

SFFAS 33 also directs the interest rate, underlying inflation rates, and other economic assumptions to be consistent with one another. A change in the interest rate may cause other assumptions to change as well. For the September 30, 2010, financial statement valuation, the implementation of the SFFAS equivalent rate required DoD OACT to alter the long-term inflation and salary increase assumptions to be consistent with the underlying Treasury spot rates used in the valuation.

SFFAS 33 permits the use of a single average discount rate if the resulting present value is not materially different from what would be obtained using the yield curve. Using the SFFAS 33 vice Board economic assumptions increases the MRF actuarial liability by approximately 4%.

TABLE L-3
MILITARY RETIREMENT SYSTEM
COMPARISON OF DOD BOARD AND SFFAS 33 ACTUARIAL LIABILITIES
(\$ in billions)

		Valuation For the Plan Year Ended September 30, 2010:	
		<u>DoD Board</u> ¹	<u>SFFAS 33</u> ²
1.	Present value of future benefits		
	a. Annuitants now on roll	\$768.0	-----
	b. Nonretired reservists	\$173.6	-----
	c. Active duty personnel ³	<u>\$516.5</u>	-----
	TOTAL	\$1,458.1	\$1,503.6
2.	Present value of future normal cost contributions	\$232.9	\$245.1
3.	Actuarial accrued liability	\$1,225.2	\$1,258.5
4.	Actuarial value of assets ⁴	\$321.7	\$314.4
5.	Unfunded accrued liability	\$903.5	\$944.1

¹ Reproduced from Table 7 in main text.

² Reproduced from the 'Fiscal Year 2010 Military Retirement Fund Audited Financial Statements.' The financial statements are available through the website of the Office of the Under Secretary of Defense (Comptroller) at <http://www.defenselink.mil/comptroller/>. The 'Actuarial Certification' (page 2) does not apply to these figures. Line 1 components are not displayed ("-----"). The more comparable figure is the line 1 total.

³ The future benefits of active duty personnel expected to retire as reservists are counted on line 1.b.

⁴ For DoD Board results, the actuarial value of assets is determined using the amortized cost method from Table 4 in main text. For SFFAS 33 results, the actuarial value of assets is reduced by the accounts receivable and accounts payable.

NOTE: The following long-term economic assumptions are used in computing the respective actuarial liabilities:

	<u>DoD Board</u>	<u>SFFAS 33</u>
Full COLA:	3.00%	2.40%
Basic Pay:	3.75%	3.60%
Interest:	5.75%	5.00%

APPENDIX M

TREASURY PAYMENTS

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METHOD OF AMORTIZING CHANGES IN THE UNFUNDED LIABILITY OF THE MILITARY RETIREMENT SYSTEM

Introduction

Section 1465 of Title 10 states that the Secretary of Defense shall determine amortization methods and schedules for the annual amortization of changes in the unfunded liability (UFL) of the military retirement system. The section also states that these methods and assumptions must be approved by the DoD Board of Actuaries. The resulting payments are made by the Department of the Treasury to the Military Retirement Fund and do not affect the DoD budget.

There are three causes of change in the military retirement system's unfunded liability: (1) changes in benefits, (2) annual experience gains or losses resulting from actual experience deviating from expected experience, and (3) changes in actuarial assumptions used in the projected liability calculations. When a change in the unfunded liability does not fit perfectly into one of the three categories, the Board of Actuaries will determine the most appropriate one. The following describes the technical procedure of amortizing these types of changes, as approved by the Board.

Amortization Procedure

All three types of changes in the UFL are amortized by means of payment schedules so that: (1) the annual amortization payments increase each year by the long-term basic pay scale assumption (currently 3.75 percent); (2) the payment stream completely liquidates the additional liability over 30 years; and (3) the payments are expressed to the nearest million dollars. The amortization payments increase at the same rate as the increase in the total basic payroll for a particular year—an outcome that is consistent with the way the normal cost payments and payments to amortize the system's initial UFL are determined. This method is no longer common for many private sector pension plans and has given way to an amortization schedule with level payments in order to cover interest costs. It is also required for these pension plans to amortize changes in unfunded liabilities over shorter than a 30 year schedule. However, the methods applied to the Military Retirement Fund are similar to those of other Federal and public sector pension plans.

Experience gains and losses, which create changes in the UFL, occur every year. Because these changes are usually small in relative terms, the payment streams to amortize them are combined. This produces one single payment stream for the category of experience gains and losses and eliminates the tedious tracking of up to thirty different small amortization schedules. The DoD Office of the Actuary can identify the separate segments if the need arises.

A similar method of combining amortization schedules is used for changes in the UFL caused by changes in actuarial assumptions. Beginning with the September 30, 1995, valuation, changes to the UFL due to all benefit changes are being combined and amortized in a single stream of payments. Detailed examples of how the amortization payments are calculated follow.

Actuarial gains and losses are changes in the UFL that result from actual experience in a pension plan deviating from what was expected. An actuarial gain is a *decrease* in the UFL and is therefore expressed as a negative number. Correspondingly, a loss represents an *increase* in the UFL and is expressed as a positive number. To avoid confusion, the terms negative and positive “experience changes” will be used in place of “experience gains” and “experience losses.”

The amortization payment for a negative experience change (gain) is also expressed as a negative number. These negative amortization payments reduce any positive amortization payments otherwise payable, including the (positive) payments amortizing the system’s initial UFL.

Amortization payments for changes in the UFL are structured to increase each year with the basic pay scale increase. When the payments are negative, their absolute values are made to increase. Although this means that the payments are actually decreasing mathematically, for simplicity of expression both positive and negative amortization payments are said to “increase” by the basic pay scale increase.

Benefit and Experience Changes

Below is an example of how three years’ changes in UFL due to actual experience differing from expected experience would be amortized. The amortization schedules would be identical if these changes in the UFL had been due to changes in benefits. This example is hypothetical.

In FY10 there is an assumed experience change of -\$13,800 million (representing a gain of \$13,800 million) determined as of the end of the fiscal year, or September 30, 2010. Since this is the first experience change in the example, it does not need to be combined with a schedule for a prior year. It is amortized with 30 annual payments that increase each year at the rate of the assumed annual increase in basic pay. The payment stream commences on October 1, 2011, and the last payment is made on October 1, 2040. The final payment reduces the amortization base to zero.

The amount of the first payment, -\$633 million, is determined by means of the following steps:

1. Bring forward unamortized balance with interest to September 30, 2011:

$$-\$13,800 \text{ million} \times (1 + \mathbf{i}) = -\$14,594 \text{ million}$$

2. Calculate annuity due factor for 30 years at interest rate $\mathbf{j} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1$:

$$= 23.056743$$

3. Divide unamortized balance by annuity factor to get annual payment:

$$-\$14,594 \text{ million} \div 23.056743 = -\$633 \text{ million}$$

where the annual increase in the basic pay scale $s = .0375$ and the valuation rate of interest $i = .0575$. The amortization period is 30 years. In general, the amortization interest rate, j , is defined by

$$j = [(1 + i) \div (1 + s)] - 1.$$

A hypothetical experience loss in FY11 creates a change in the UFL of +\$8,400 million, calculated as of the end of that fiscal year, or September 30, 2011. The amortization schedules for this change and for the FY10 change are combined as follows. First, the unamortized balance of the FY10 experience change is determined. After the -\$633 million amortization payment is made on October 1, 2011, the remaining unamortized balance is -\$13,961 million. This balance is calculated as $[-13,961 = (-13,800 \times 1.0575) - (-633)]$. The +\$8,400 million experience change for FY11 is then added to the -\$13,961 unamortized balance, leaving a combined balance of -\$5,561 million $(-5,561 = -13,961 + 8,400)$.

This combined balance will be amortized over a “combined amortization period.” The combined amortization period is equal to the weighted average of the remaining 29-year amortization period for the FY10 experience change and a new 30-year period for the FY11 experience change. The weights used in the calculation are the absolute values of the -\$13,961 million unamortized balance and the +\$8,400 million experience change, respectively.

Thus the combined amortization period is equal to:

$$\frac{(13,961 \times 29) + (8,400 \times 30)}{13,961 + 8,400} = 29.38 \text{ years}$$

An initial combined amortization payment of -\$259 million is determined by the following procedure:

1. Bring forward unamortized balance with interest to September 30, 2012:

$$-\$5,561 \text{ million} \times (1 + i) = -\$5,880 \text{ million}$$

2. Calculate annuity due factor for 29.38 years at interest rate $j = [(1 + i) \div (1 + s)] - 1$:

$$= 22.699155$$

3. Divide unamortized balance by annuity factor to get annual payment:

$$-\$5,880 \text{ million} \div 22.699155 = -\$259 \text{ million}$$

The payments in the amortization streams will increase at 3.75 percent (the annual increase in the basic pay scale) per year. The payment at the end of the 29th year is -\$726 million. A final, partial payment will be made at the end of the 30th year and is equal to the unamortized balance, or -\$285 million.

Because experience changes normally occur every year, the only payment that would actually be made under this particular combined schedule is the -\$259 million on October 1, 2012. A new combined amortization schedule covering FY10, FY11, and the new UFL caused by experience changes in FY12 is determined as follows.

First, the combined FY10 and FY11 amortization base of -\$5,561 million is increased by one year's interest and credited with the payment of -\$259 million. The remaining unamortized balance as of October 1, 2011, is -\$5,621 million [$-5,621 = (-5,561 \times 1.0575) - (-259)$]. This amount (-\$5,621) is then combined with an assumed FY12 experience change of +\$10,300 million, resulting in a new combined unamortized balance of \$4,679 million ($4,679 = -5,621 + 10,300$). This combined amortization base of \$4,679 million is then amortized over a new combined amortization period of 29.43 years, which is equal to the weighted average of the 28.38 years remaining for the old schedule and the 30-year period for the FY12 change. The new combined amortization period is calculated as follows:

$$\frac{(5,621 \times 28.38) + (10,300 \times 30)}{5,621 + 10,300} = 29.43 \text{ years}$$

The October 1, 2013, payment to amortize the new combined base of \$4,679 million is \$218 million and is determined by means of the following procedure:

1. Bring forward unamortized balance with interest to September 30, 2013:

$$\$4,679 \text{ million} \times (1 + i) = \$4,948 \text{ million}$$

2. Calculate annuity due factor for 29.43 years at interest rate $j = [(1 + i) \div (1 + s)] - 1$:

$$= 22.728433$$

3. Divide unamortized balance by annuity factor to get annual payment:

$$\$4,948 \text{ million} \div 22.728433 = \$218 \text{ million}$$

This is the payment to amortize the combined experience changes for all three years.

Table M-1 shows the schedule of amortization payments for the experience changes in FY10; FY10 and FY11 combined; and FY10, FY11, and FY12 combined.

<u>Date</u>	<u>Payment on the FY10 Experience Change</u>	<u>Payment on the Combined FY10 and FY11 Experience Change</u>	<u>Payment on the Combined FY10, FY11 and FY12 Experience Change</u>
10/1/11	\$ -633		
10/1/12	-657	\$ -259	
10/1/13	-681	-269	\$ 218
10/1/14	-707	-279	226
10/1/15	-733	-289	234
10/1/16	-761	-300	243

Changes in Actuarial Assumptions

The third type of change in the UFL is due to changes in actuarial assumptions. These assumption changes are amortized by the same method used for experience gains and losses and for benefit changes, i.e., by means of a combined schedule with initial 30-year payments that increase at the rate of the assumed basic pay scale increases.

If changes in economic assumptions include a change in either the valuation interest rate or the assumed basic pay scale increase, the amortization payments that have already been scheduled for all three categories of change in the UFL will be modified. Specifically, new series of payments will be determined to amortize the current amortization bases over their remaining periods, with payments that increase with the new basic pay scale assumption and are computed using the new valuation interest rate. The following example illustrates how this is done.

Suppose that on October 1 of a particular fiscal year, an amortization base is \$27,405 million, calculated immediately after the scheduled amortization payment is made. Say the remaining amortization period is 18 years. Also suppose that the valuation interest rate is changed to 5.5 percent and that the basic pay scale increase is changed to 3.0 percent.

The initial, revised payment, to be made on the following October 1, is determined by the following procedure:

1. Bring forward unamortized balance with interest to September 30 of next year:

$$\$27,405 \text{ million} \times (1 + \mathbf{i}) = \$28,912 \text{ million}$$

where in this case, $\mathbf{i} = .055$

2. Calculate annuity due factor for 18 years at interest rate $\mathbf{j} = [(1 + \mathbf{i}) \div (1 + \mathbf{s})] - 1$:

$$= 14.794469$$

where $\mathbf{i} = .055$ and $\mathbf{s} = .03$

3. Divide unamortized balance by annuity factor to get annual payment:

$$\$28,912 \text{ million} \div 14.794469 = \$1,954 \text{ million}$$

The second and succeeding payments will increase at the rate of 3.0 percent per year, which is the new basic pay scale increase. The \$27,405 million amortization base will be credited with 5.5 percent interest. This new series of amortization payments will reduce the \$27,405 million amortization base to zero at the end of the 18th year.

**CALCULATION OF THE OCTOBER 1, 2011,
TREASURY PAYMENT**

The following pages (Tables M-2 through M-6) display the calculation of the October 1, 2011, Treasury payment based on the September 30, 2010, valuation results and on amortization methods and assumptions approved by the DoD Board of Actuaries. In order to avoid a projected shortfall in the Military Retirement Fund, the Board determined that, beginning with the FY98 payment, the total amortization period of the initial unfunded liability would be decreased from 60 to 50 years. The Board again shortened the initial unfunded liability amortization period in 2007 to 42 years in order for the payments to cover interest on the unfunded liability each year.

Public Law 108-136 required the Department of Treasury to pay for the increase in the normal cost due to Concurrent Receipt. Beginning with FY05, Treasury includes the annual normal cost payment due to Concurrent Receipt along with the unfunded liability payment in the October 1st contribution. For the October 1, 2011, Treasury payment, the amount due to Concurrent Receipt totals \$5.376 billion. This is computed using the full- and part-time normal cost percentages (NCPs) in Table 7 of the main text (item 7). The NCPs are multiplied against the DoD Comptroller budgeted FY12 full- and part-time basic payroll, \$57.3 billion and \$9.2 billion, respectively. Hence, \$5.376 billion is the sum of \$57.3 billion x 8.8% and \$9.2 billion x 3.6% (The numbers may not add due to rounding).

TABLE M-2
 TOTAL TREASURY PAYMENT
 OCTOBER 1, 2011 AND OCTOBER 1, 2010

(\$ in billions)

	<u>October 1, 2011</u>	<u>October 1, 2010</u>
Amortization payment for:		
1. Initial unfunded liability	\$75.757	\$73.018
2. Changes in benefits	\$7.643	\$7.367
3. Gains and Losses Amortization		
a. Changes in actuarial assumptions	\$0.171	\$(1.012)
b. Actuarial experience	\$(18.820)	\$(17.969)
Total amortization payment	<u>\$64.751</u>	<u>\$61.404</u>
Normal cost payment	<u>\$5.376</u>	<u>\$4.950</u>
Total Treasury payment	<u>\$70.127</u>	<u>\$66.354</u>

TABLE M-3

CALCULATION OF OCTOBER 1, 2011,
PAYMENT ON INITIAL UNFUNDED LIABILITY (UFL)

(\$ in billions)

1.	Unamortized balance of initial UFL (10/1/09 balance \times 1.0575)	9/30/10	\$ 1,016.346
2.	Payment on UFL	10/1/10	\$ 73.018
3.	Unamortized balance of initial UFL (1. - 2.)	10/1/10	\$ 943.328
4.	Balance on 9/30/11 (3. \times 1.0575)	9/30/11	\$ 997.569
5.	Number of Annual Payments Remaining	9/30/11	15
6.	Value of an annuity due for remaining amortization period at interest rate equal to $(1.0575 \div 1.0375) - 1$		13.168
7.	Payment on initial UFL due 10/1/11 (4. \div 6.)		<u>\$ 75.757</u>

TABLE M-4

CALCULATION OF OCTOBER 1, 2011,
PAYMENT ON UNFUNDED LIABILITY (UFL)
RESULTING FROM BENEFIT CHANGES

(\$ in billions)

1. Unamortized UFL balance due to benefit changes (10/1/09 balance x 1.0575)	9/30/10	\$ 143.487
2. Payment on UFL	10/1/10	\$ 7.367
3. Unamortized UFL balance after payment (1. - 2.)	10/1/10	\$ 136.120
4. Additional (new) UFL due to benefit changes	9/30/10	\$ 0.000
5. Unamortized UFL balance due to benefit changes (3. + 4.)	10/1/10	\$ 136.120
6. Balance on 9/30/11 (5. × 1.0575)	9/30/11	\$ 143.947
7. Total number of years of prior amortization schedule		24.06
8. Remaining number of years of prior amortization schedule (7. - 1)		23.06
9. Total number of years of new amortization schedule (absolute values used for all numbers) [(3. × 8.) + (4. × 30)] ÷ (3. + 4.)		23.06
10. Value of an annuity due for remaining amortization period at interest rate equal to (1.0575 ÷ 1.0375) - 1		18.834
11. Payment on UFL due to benefit changes (6. ÷ 10.)	10/1/11	<u>\$ 7.643</u>

TABLE M-5

CALCULATION OF OCTOBER 1, 2011,
PAYMENT ON UNFUNDED LIABILITY (UFL)
RESULTING FROM ASSUMPTION CHANGES

(\$ in billions)

1. Unamortized balance of UFL due to assumption changes (10/1/09 balance \times 1.0575)	9/30/10	\$ (19.810)
2. Payment on UFL	10/1/10	\$ (1.012)
3. Unamortized UFL balance after payment (1. - 2.)	10/1/10	\$ (18.798)
4. Additional (new) UFL	9/30/10	\$ 22.225
5. Unamortized UFL balance due to assumption changes (3. + 4.)	10/1/10	\$ 3.427
6. Balance on 9/30/11 (5. \times 1.0575)	9/30/11	\$ 3.624
7. Number of years in prior amortization schedule		24.21
8. Remaining number of years in prior amortization schedule (7. - 1)		23.21
9. Number of years in new amortization schedule (absolute values used for all numbers) [(3. \times 8.) + (4. \times 30)] \div (3. + 4.)		26.89
10. Value of an annuity due for remaining amortization period at interest rate equal to (1.0575 \div 1.0375) - 1		21.231
11. Payment on UFL due to assumption changes (6. \div 10.)	10/1/11	<u>\$ 0.171</u>

TABLE M-6

CALCULATION OF OCTOBER 1, 2011,
PAYMENT ON UNFUNDED LIABILITY (UFL)
RESULTING FROM EXPERIENCE GAINS AND LOSSES

(\$ in billions)

1. Unamortized UFL balance due to experience gains and losses (10/1/09 balance \times 1.0575)	9/30/10	\$ (241.223)
2. Payment on UFL	10/1/10	\$ (17.969)
3. Unamortized UFL balance after payment (1. - 2.)	10/1/10	\$ (223.254)
4. Additional (new) UFL	9/30/10	\$ (17.564)
5. Unamortized UFL balance due to experience gains and losses (3. + 4.)	10/1/10	\$ (240.817)
6. Balance on 9/30/11 (5. \times 1.0575)	9/30/11	\$ (254.664)
7. Number of years in prior amortization schedule		15.34
8. Remaining number of years in prior amortization schedule (7. - 1)		14.34
9. Number of years in new amortization schedule (absolute values used for all numbers) [(3. \times 8.) + (4. \times 30)] \div (3. + 4.)		15.48
10. Value of an annuity due for remaining amortization period at interest rate equal to $(1.0575 \div 1.0375) - 1$		13.532
11. Payment on UFL due to experience gains and losses (6. \div 10.)	10/1/11	<u>\$ (18.820)</u>

OACT ENDNOTES

VISION STATEMENT **DoD OFFICE OF THE ACTURY**

To be the leading professionals in the measurement of contingent events and risk related to military benefits and to provide world-class actuarial support to the Department and other stakeholders on matters related to military benefits.

MISSION STATEMENT **DoD OFFICE OF THE ACTURY**

The Office of the Actuary is responsible for performing annual valuations and providing actuarial cost estimates by applying theories, methods and techniques of actuarial science to the Department for four trust funds: the Military Retirement Fund, Medicare-Eligible Retiree Health Care Fund, Education Benefits Fund, and Voluntary Separation Incentive Fund. We provide requisite actuarial support to the DoD Boards of Actuaries, and are responsible for calculating actuarial liabilities and providing actuarial input for the Department's and government-wide financial statements, producing actuarial analysis and products for the Survivor Benefit Plan, developing quarterly incurred claim reserves for the Medicare-Eligible Retiree Health Care Fund, and providing statistical information about the military retirement system for analysts and other interested offices and individuals.

CONTACT INFORMATION **DoD OFFICE OF THE ACTURY**

Located in the 'Actuarial Certification' section of this report (page 2).

VALUATION OF THE MILITARY RETIREMENT SYSTEM **SEPTEMBER 30, 2011**

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